

# Appendices





## **APPENDIX B: GLEN CANYON NATIONAL RECREATION AREA MANAGEMENT AND OPERATIONS**

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## APPENDIX B: GLEN CANYON NATIONAL RECREATION AREA MANAGEMENT AND OPERATIONS

Management of recreational uses, including off-road use, requires the participation of every Glen Canyon division. Glen Canyon staff provides the full scope of functions and activities to accomplish management objectives and meet the requirements of law enforcement, emergency services, public health and safety, scientific research, resource protection and management, visitor services, interpretation and education, community services, utilities, housing, and fee collection. Management of Glen Canyon occurs across six functional areas: (1) Park Management and Planning, (2) Business Management and Administration, (3) Science and Resource Management, (4) Interpretation, Education, and Partnerships, (5) Visitor and Resource Protection, and (6) Facility Management. Although not every functional area expends resources directly on the management of off-road use, every division at a minimum provides support to those divisions and individual employees who do have a direct role in the management of off-road use in Glen Canyon.

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*Glen Canyon staff provides the full scope of functions and activities to accomplish management objectives.*

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### STAFF AND FUNDING

Operating on an annual budget of approximately \$11.8 million in fiscal year 2015 (October 2014–October 2015), the staff of Glen Canyon provides the full scope of activities and functions needed to accomplish management objectives and fulfill the mission of Glen Canyon. Although staff numbers fluctuate from year to year and vary seasonally, Glen Canyon operates under mandated staffing ceilings for permanent and temporary employees, with “full-time equivalent (FTE)” as the unit of measurement. One FTE is roughly equal to one person working 2,080 hours per year. Table B1 shows the actual staffing level (as opposed to number of approved or occupied positions) by function in a recent year.

**TABLE B1: STAFFING LEVELS (FTE) AT GLEN CANYON NATIONAL RECREATION AREA (FISCAL YEAR 2015)**

| STAFF TYPE | PARK<br>MGMT AND<br>PLANNING | BUSINESS<br>MGMT / ADMIN | SCIENCE AND<br>RESOURCE<br>MGMT | INTERPRETATION,<br>EDUCATION, AND<br>PARTNERSHIPS | VISITOR AND<br>RESOURCE<br>PROTECTION | FACILITY MGMT | TOTAL |
|------------|------------------------------|--------------------------|---------------------------------|---|---------------------------------------|---------------|-------|
| Permanent  | 4.79                         | 9.77                     | 6.73                            | 5.11  | 27                                    | 28.92         | 82.32 |
| Temporary  | 0.33                         | 10.08                    | 6.49                            | 16.68   | 14                                    | 10.27         | 57.85 |

### PARK MANAGEMENT AND PLANNING

This functional area is responsible for the full scope of managing Glen Canyon and its employees, and maintains relationships with people, agencies, and organizations interested in Glen Canyon. The Superintendent’s Office also develops short- and long-term plans for resource protection and visitor management and conducts environmental compliance.

### BUSINESS MANAGEMENT AND ADMINISTRATION

This functional area provides oversight and management of all concession contracts, commercial use authorizations and other business ventures within Glen Canyon. The staff also issues and monitors special use permits, rights-of-way, and commercial film permits, and would administer any off-road vehicle (ORV) permit system established in this plan/FEIS. Administrative services are provided in the areas of budget, finance, information technology, property management, radio/telephone communications and

geographical information systems (GIS). Staff manage the fee collection program and also serve as the liaison to National Park Service (NPS) human resource and contracting offices.

## **FACILITY MANAGEMENT**

Along with their normal duties, facility management employees are responsible for a variety of functions and services related to off-road use in Glen Canyon. These activities include, but are not limited to: facility upkeep, sign construction and repair, sanitation services, road maintenance, construction and maintenance of fences and other structures designed to control access, and restoration of disturbed areas. Facility management employees are stationed throughout Glen Canyon at the developed areas.

Several ORV accessible shoreline sites currently have limited facilities in place. Lone Rock Beach, Stanton Creek, and the currently closed Bullfrog North and South sites have restroom facilities, gates or fencing, and trash receptacles. Lone Rock Beach has an outdoor shower facility, enclosed restrooms and multiple vault toilets. Many of the ORV accessible shoreline sites have signs to provide information and inform visitors about Glen Canyon regulations. All these facilities are routinely inspected and maintained.

The majority of road maintenance for the unpaved general management plan (GMP) roads is performed by the counties on a limited and intermittent basis, and generally involves grading the roadbed. Glen Canyon does maintain the switchbacks on the Flint Trail in the Orange Cliffs Special Management Unit, and a number of high-use gravel roads (e.g., Sunset Overlook, Chains Area, Stanton Creek Access Road, Bullfrog North/South Access Road, and a number of administrative roads).

## **INTERPRETATION, EDUCATION, AND PARTNERSHIPS**

This functional area is responsible for the development and dissemination of materials related to visitor activities and visitor use, Glen Canyon rules and regulations, and area resources. It also maintains partnerships with organizations to provide stewardship of Glen Canyon resources and facilitates visitor enjoyment of these resources. The staff also disseminates information pertaining to Glen Canyon resources and visitor activities through nonpersonal media such as the Glen Canyon newspaper, park brochure, social media, and website ([www.nps.gov/glca](http://www.nps.gov/glca)).

## **SCIENCE AND RESOURCE MANAGEMENT**

The Science and Resource Management division is charged with the inventory and monitoring of all natural and cultural resources within Glen Canyon to ensure that resources remain unimpaired by impacts due to visitor use. The staff includes terrestrial and aquatic ecologists and biologists, ethnographic and cultural resource experts, and archeologists. The Science and Resource Management division would have the responsibility of restoring areas that have been damaged or otherwise impacted due to illegal off-road driving.

## **VISITOR AND RESOURCE PROTECTION**

This functional area and specifically the commissioned law enforcement officers are responsible for enforcing Glen Canyon rules and applicable federal and state regulations, conducting frontcountry and backcountry patrols, and monitoring resource conditions and visitor use areas. These responsibilities include operations related to off-road use in Glen Canyon.

Staff members are stationed throughout Glen Canyon. Ranger stations with the primary responsibility of patrolling backcountry use areas and roads are located at the Wahweap developed area in Arizona, the

Halls Crossing, Bullfrog, and Hite uplake developed areas in Utah, and the Escalante interagency visitor center in Escalante, Utah.

The distribution of Visitor and Resource Protection staff is based on the levels of visitor use and the frequency of problems. Table B2 illustrates the distribution of Visitor and Resource Protection staff during the summer of a typical year; staff members often are reallocated throughout the year as needs arise.

**TABLE B2: DISTRIBUTION OF COMMISSIONED VISITOR AND RESOURCE PROTECTION STAFF IN GLEN CANYON NATIONAL RECREATION AREA**

| DISTRICT              | NUMBER OF STAFF |          | ESTIMATED ROAD MILES (%) |
|-----------------------|-----------------|----------|--------------------------|
|                       | PERMANENT       | SEASONAL |                          |
| Wahweap               | 7               | 5        | 24%                      |
| Bullfrog              | 5               | 4        | 13%                      |
| Halls Crossing / Hite | 3               | 2        | 53%                      |
| Escalante             | 1               | 0        | 6%                       |
| Lees Ferry            | 2               | 0        | 2%                       |
| Dangling Rope         | 1               | 3        | <2%                      |
| Headquarters          | 4               | 0        | <2%                      |

Backcountry patrols can be difficult and time-consuming. Many areas are remote, with limited access and rough roads requiring high-clearance, 4-wheel-drive vehicles for passage. A remote area such as Wilson Mesa or Copper Canyon may be patrolled by vehicle only twice a year, although overflights by Glen Canyon aircraft occur more frequently.

Glen Canyon is a proprietary jurisdiction recreation area. State laws and federal regulations applicable to motor vehicle operation, registration, and licensing are enforced. NPS rangers as well as state and local law enforcement officials enforce motor vehicle requirements throughout Glen Canyon.

## **MANAGEMENT AND OPERATION CONSIDERATIONS FOR ALTERNATIVE A**

Under alternative A, no changes in staff numbers would be expected to occur for the four functional areas which are primarily involved in activities related to ORV management: Facility Management; Interpretation, Education, and Partnerships; Science and Resource Management; and Visitor and Resource Protection.

Use levels at the accessible shorelines would be expected to remain static as a result of the authorization of the current vehicle use at 15 existing accessible shorelines, including Lone Rock Beach and Lone Rock Beach Play Area. Two unauthorized areas (Nokai Canyon and Paiute Farms) would be closed. Conventional motor vehicles, off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) would be authorized to operate on approximately 54 miles of designated ORV routes in Ferry Swale and other locations. Street-legal ATVs would join conventional motor vehicles in using all GMP roads.

Facility Management would continue to be responsible for sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures designed to control access at accessible shoreline ORV areas. Staff would be responsible for the installation and maintenance of road barriers and exclusionary fences at Nokai Canyon and Paiute Farms which would be

restored to natural conditions. Staff would have limited responsibilities related to sign construction and maintenance along GMP roads and ORV routes.

Interpretation, Education, and Partnerships would continue to have limited responsibilities for disseminating information regarding off-road use rules and regulations to visitors.

Science and Resource Management would continue the limited efforts at monitoring resource conditions and measuring the impacts of off-road use at and near ORV areas and routes. The cultural resource staff would inventory for cultural resources along unsurveyed ORV routes in Ferry Swale and other locations as required by existing law.

Visitor and Resource Protection would continue to conduct daily patrols and maintain an enforcement presence at Lone Rock Beach and the Lone Rock Beach Play Area and along GMP roads and ORV routes in Ferry Swale and other locations. Routinely accessing the remote ORV areas along the southern shore of Lake Powell would remain beyond the scope of limited staffing resources. If the Bullfrog North and South and the Crosby Canyon ORV areas are open for use due to higher water levels at Lake Powell, past experience with visitor use at these popular sites would dictate a greatly expanded ranger presence for education, enforcement and visitor use management.

**TABLE B3: STAFF ACTIVITIES FOR ALTERNATIVE A: NO ACTION**

|   |   |
|---|---|
| Park Management and Planning                | Continue limited involvement in ORV management activities and related agency liaison, policy interpretation and public relations.   |
| Business Management and Administration      | Limited support for payroll administration, human resource functions and contracting/purchasing.  |
| Facility Management                         | Continue limited involvement in sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures.     |
| Interpretation, Education, and Partnerships | Limited information would be disseminated through, newspaper articles, website and social media messaging.  |
| Cultural Resource Management                | Conduct limited monitoring of archeological sites. Archeological inventories undertaken at ORV routes that have not previously been surveyed.                                 |
| Natural Resource Management                 | Conduct limited monitoring of park roads and ORV areas and routes for the presence of listed noxious weeds and special-status species and the condition of natural resources. |
| Visitor and Resource Protection             | Conduct patrols and maintain a limited enforcement presence along GMP roads and at ORV areas and routes.  |

## **MANAGEMENT AND OPERATION CONSIDERATIONS FOR ALTERNATIVE B**

Under alternative B, limited changes in staff numbers would be expected to occur for Facility Management; Interpretation, Education, and Partnerships; Science and Resource Management; and Visitor and Resource Protection functional areas. Substantial implementation costs would be incurred to close and monitor existing areas of off-road use. It is likely that additional funding would be needed.

Facility Management would continue to be responsible for sign construction and maintenance along GMP roads. Staff would be responsible for the installation and maintenance of road barriers and exclusionary fences at former off-road use areas along the Lake Powell shoreline and in Ferry Swale that are being restored to natural conditions.

Interpretation, Education, and Partnerships would continue to be responsible for disseminating information regarding off-road use rules and regulations to visitors.



Science and Resource Management would develop an ORV Management Plan / Monitoring Plan to adaptively manage ORV use and the actions required to mitigate resource impacts. Staff would continue to be responsible for monitoring resource conditions at or near former off-road areas and routes. Cultural resource staff would conduct periodic monitoring of National Register eligible archeological sites. The natural resource staff would prepare restoration plans to re-establish native vegetation at unauthorized routes, monitor areas and routes slated for restoration for listed noxious weeds and new invasive plant species, and implement an early detection and rapid response system to minimize the establishment and spread of new invasive species. Natural and cultural resource staff would also conduct compliance activities for sites designated for the restoration and for the installation of signs, barriers and information infrastructure.

Visitor and Resource Protection would continue to conduct daily patrols and maintain an enforcement presence along GMP roads and at or near former off-road use areas and routes.

**TABLE B4: STAFF ACTIVITIES FOR ALTERNATIVE B: NO OFF-ROAD USE**

|   |  |
|---|--|
| Park Management and Planning                | ORV management activities and related agency liaison, policy interpretation and public relations.  |
| Business Management and Administration      | Administrative support for payroll administration, human resource functions and contracting/purchasing.  |
| Facility Management                         | Sign construction and maintenance and the installation and maintenance of road barriers and exclusionary fences at former off-road use areas.  |
| Interpretation, Education, and Partnerships | Information disseminated through newspaper articles, website and social media messaging.   |
| Cultural Resource Management                | Prepare ORV Management Plan / Monitoring Plan. Conduct periodic monitoring of archeological sites. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers and information infrastructure.  |
| Natural Resource Management                 | Prepare ORV Management Plan / Monitoring Plan. Prepare vegetation restoration plan for closed ORV use areas. Monitor former off-road use areas and routes for listed noxious weeds and new invasive plant species and minimize the establishment and spread of new invasive species. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers or information infrastructure. |
| Visitor and Resource Protection             | Conduct patrols and maintain an enforcement presence along GMP roads and at or near former off-road use areas and routes.  |

## **MANAGEMENT AND OPERATION CONSIDERATIONS FOR ALTERNATIVE C**

Under alternative C, Glen Canyon would require substantial additional funding and staff to address all ORV management activities called for in the plan/FEIS. It is likely that additional funding would be sought. A special use permit system would be established to partially recover costs incurred by the education, enforcement, monitoring, site improvement and other actions called for in the plan/FEIS.

Use levels at the accessible shorelines would be expected to increase as a result of the authorization of 15 accessible shorelines to conventional motor vehicles, OHVs, and street-legal ATVs. Because conventional motor vehicles, OHVs, and street-legal ATVs would be authorized to operate on approximately 22 miles of designated ORV routes in Ferry Swale and other locations and on approximately 388 miles of GMP roads (including roads in the Orange Cliffs Special Management Unit), responsibilities for all operations functions would increase. Additional costs would be incurred to close and restore approximately 32 miles of ORV routes in Ferry Swale to natural conditions.

Business Management and Administration would be responsible for issuing permits to all authorized vehicles for the ORV areas at Lone Rock Beach, Lone Rock Beach Play Area, and the accessible shorelines, and for the ORV routes at Ferry Swale and other locations, which would create an additional workload.

Facility Management would continue to be responsible for sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures designed to control access at accessible shoreline ORV areas. Staff would have increased responsibilities related to sign construction and maintenance along GMP roads and ORV routes. Staff would be responsible for the installation and maintenance of road barriers and exclusionary fences at former off-road routes in Ferry Swale that are being restored to natural conditions.

Interpretation, Education, and Partnerships would continue to be responsible for disseminating information regarding off-road use rules and regulations to visitors. Informational and educational material would be developed for on-site kiosks at ORV areas and along GMP roads and ORV routes. Information site bulletins, newspaper and magazine articles, website development, and social media messaging would all be components of an increased public awareness campaign. Partnerships would be established and nurtured with neighboring agencies, local jurisdictions, chambers of commerce, national organizations, and user groups to accomplish the plan/FEIS objectives. Staff would have increased responsibilities for monitoring the quality of the visitor experience in and near ORV areas and routes.

Science and Resource Management would develop an ORV Management Plan / Monitoring Plan to adaptively manage ORV use and the actions required to mitigate resource impacts. Staff would continue to be responsible for monitoring resource conditions and measuring the impacts of off-road use at and near ORV areas and routes. Cultural resource staff would conduct semi-annual monitoring of National Register-eligible archeological sites. Archeological inventories would be undertaken at ORV routes that have not previously been surveyed. The natural resource staff would prepare restoration plans to re-establish native vegetation at unauthorized routes, monitor designated ORV areas and routes as well as routes slated for restoration for listed noxious weeds and new invasive plant species, and implement an early detection and rapid response system to minimize the establishment and spread of new invasive species. Aerial and ground surveys would be conducted in order to monitor visitor use and the effectiveness of mitigation measures instituted to protect natural resources. Special-status species would be monitored in and near off-road use areas. Natural and cultural resource staff would conduct compliance activities for sites designated for the installation of signs, barriers or information infrastructure.

Visitor and Resource Protection division would continue to conduct daily patrols and maintain an enforcement presence at Lone Rock Beach and the Lone Rock Beach Play Area. Accessing the remote accessible shoreline areas along the southern shore of Lake Powell would require additional staffing resources. If the Bullfrog North and South and the Crosby Canyon ORV areas are open for use due to higher water levels at Lake Powell, past experience with visitor use at this popular site would dictate a greatly expanded ranger presence for education, enforcement and visitor use management. Staff would have increased responsibilities for monitoring visitor health and safety in and near ORV areas and routes.

**TABLE B5: STAFF ACTIVITIES FOR ALTERNATIVE C: INCREASED MOTORIZED ACCESS**

|   |   |
|---|---|
| Park Management and Planning                | ORV management activities and related agency liaison, policy interpretation and public relations.   |
| Business Management and Administration      | Administrative support for payroll administration, human resource functions and contracting/purchasing. Implement special use permit system for the issuance of ORV permits.  |
| Facility Management                         | Sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures.   |
| Interpretation, Education, and Partnerships | Informational and educational material would be developed for on-site kiosks at ORV areas and along GMP roads and ORV routes. Staff would develop information site bulletins, newspaper and magazine articles, website development and social media messaging. Partnerships would be established and nurtured.  |
| Cultural Resource Management                | Prepare ORV Management Plan / Monitoring Plan. Conduct semi-annual monitoring of archeological sites. Archeological inventories would be undertaken at ORV areas and routes that have not previously been surveyed. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers, or information infrastructure.  |
| Natural Resource Management                 | Prepare ORV Management Plan / Monitoring Plan. Prepare vegetation restoration plan for closed ORV use areas. Monitor ORV areas and routes for listed noxious weeds and new invasive plant species and minimize the establishment and spread of new invasive species. Aerial and ground surveys would be conducted in order to monitor visitor use and the effectiveness of mitigation measures instituted to protect natural resources. Special-status plant and animal species would be monitored. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers or information infrastructure. |
| Visitor and Resource Protection             | Conduct patrols and maintain an enforcement presence at ORV areas and routes. Some sites would require a greatly expanded ranger presence for education, enforcement, visitor use management and monitoring visitor health and safety.  |

## **MANAGEMENT AND OPERATION CONSIDERATIONS FOR ALTERNATIVE D**

Under alternative D, Glen Canyon would require additional funding and staff to address all ORV management activities called for in the plan/FEIS. A special use permit system would be established to partially recover costs incurred by the education, enforcement, monitoring, site improvement and other actions called for in the plan/FEIS. It is likely that additional funding would be sought.

Use levels at the accessible shorelines would be expected to decrease moderately as a result of only authorizing five accessible shorelines to conventional motor vehicles. Additional costs would be incurred to close and restore to natural conditions the existing user-created ORV routes in Ferry Swale and other locations.

Business Management and Administration would be responsible for issuing permits to all authorized vehicles for the ORV areas at Lone Rock Beach, Lone Rock Beach Play Area, and the accessible shorelines, and for the ORV routes at Ferry Swale and other locations, which would create an additional workload.

Facility Management would continue to be responsible for sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures designed to control access at accessible shoreline ORV areas. Staff would have increased responsibilities related to sign construction and maintenance along GMP roads and ORV routes. Staff would be responsible for the installation and maintenance of road barriers and exclusionary fences at former off-road routes in Ferry Swale that are being restored to natural conditions.

Interpretation, Education, and Partnerships would continue to be responsible for disseminating information regarding off-road use rules and regulations to visitors. Informational and educational material would be developed for on-site kiosks at ORV areas and along GMP roads and ORV routes. Information site bulletins, newspaper and magazine articles, website development, and social media messaging would all be components of an increased public awareness campaign. Partnerships would be established and nurtured with neighboring agencies, local jurisdictions, chambers of commerce, national organizations, and user groups to accomplish the plan/FEIS objectives. Staff would have increased responsibilities for monitoring the quality of the visitor experience in and near ORV areas and routes.

Science and Resource Management would develop an ORV Management Plan / Monitoring Plan to adaptively manage ORV use and the actions required to mitigate resource impacts. Staff would continue to be responsible for monitoring resource conditions and measuring the impacts of off-road use at and near ORV areas and routes. Cultural resource staff would conduct semi-annual monitoring of National Register-eligible archeological sites. Archeological inventories would be undertaken at ORV routes that have not previously been surveyed. The natural resource staff would prepare restoration plans to re-establish native vegetation at unauthorized routes, monitor designated ORV areas and routes as well as routes slated for restoration for listed noxious weeds and new invasive plant species, and implement an early detection and rapid response system to minimize the establishment and spread of new invasive species. Aerial and ground surveys would be conducted in order to monitor visitor use and the effectiveness of mitigation measures instituted to protect natural resources. Special-status species would be monitored in and near off-road use areas. Natural and cultural resource staff would conduct compliance activities for sites designated for the installation of signs, barriers or information infrastructure.

Visitor and Resource Protection division would continue to conduct daily patrols and maintain an enforcement presence at Lone Rock Beach. The division would continue to conduct daily patrols and maintain an enforcement presence along GMP roads and at or near former off-road use areas and routes.



**TABLE B6: STAFF ACTIVITIES FOR ALTERNATIVE D: DECREASED MOTORIZED ACCESS**

|   |   |
|---|---|
| Park Management and Planning                | ORV management activities and related agency liaison, policy interpretation and public relations.   |
| Business Management and Administration      | Administrative support for payroll administration, human resource functions and contracting/purchasing. Implement special use permit system for the issuance of ORV permits.  |
| Facility Management                         | Sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures.   |
| Interpretation, Education, and Partnerships | Informational and educational material would be developed for on-site kiosks at ORV areas and along GMP roads and ORV routes. Staff would develop information site bulletins, newspaper and magazine articles, website development and social media messaging. Partnerships would be established and nurtured.  |
| Cultural Resource Management                | Prepare ORV Management Plan / Monitoring Plan. Conduct semi-annual monitoring of archeological sites. Archeological inventories would be undertaken at ORV areas and routes that have not previously been surveyed. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers, or information infrastructure.  |
| Natural Resource Management                 | Prepare ORV Management Plan / Monitoring Plan. Prepare vegetation restoration plan for closed ORV use areas. Monitor ORV areas and routes for listed noxious weeds and new invasive plant species and minimize the establishment and spread of new invasive species. Aerial and ground surveys would be conducted in order to monitor visitor use and the effectiveness of mitigation measures instituted to protect natural resources. Special-status plant and animal species would be monitored. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers or information infrastructure. |
| Visitor and Resource Protection             | Conduct patrols and maintain an enforcement presence along GMP roads and at designated ORV areas, and at or near former off-road use areas and routes.  |

## **MANAGEMENT AND OPERATION CONSIDERATIONS FOR ALTERNATIVE E**

Under alternative E, Glen Canyon would require substantial additional funding and staff to address all ORV management activities called for in the plan/FEIS. It is likely that additional funding would be sought. A special use permit system would be established to partially recover costs incurred by the education, enforcement, monitoring, site improvement and other actions called for in the plan/FEIS.

At current staffing levels, Glen Canyon would require additional funding and staff to address all ORV management activities called for in the plan/FEIS. Use levels at the accessible shorelines would be expected to increase as a result of the authorization of 14 accessible shorelines to conventional motor vehicles and street-legal ATVs (with OHV use continuing at Lone Rock Beach and Lone Rock Beach Play Area). Because conventional motor vehicles, OHVs, and street-legal ATVs would be authorized to operate on 21 miles of designated ORV routes in Ferry Swale and other locations, and on 220 miles of unpaved GMP roads, responsibilities for all operational divisions would increase. Additional costs would be incurred to close and restore 33 miles of ORV routes in Ferry Swale.

Business Management and Administration would be responsible for issuing permits to all authorized vehicles for the ORV areas at Lone Rock Beach, Lone Rock Beach Play Area, and the accessible shorelines, and for the ORV routes at Ferry Swale and other locations, which would create an additional workload.

Facility Management would continue to be responsible for sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures designed to control access at accessible shoreline ORV areas. Staff would have increased responsibilities related to

sign construction and maintenance along GMP roads and ORV routes. Staff would be responsible for the installation and maintenance of road barriers and exclusionary fences at former off-road routes in Ferry Swale that are being restored to natural conditions.

Interpretation, Education, and Partnerships would continue to be responsible for disseminating information regarding off-road use rules and regulations to visitors. Informational and educational material would be developed for on-site kiosks at ORV areas and along GMP roads and ORV routes. Information site bulletins, newspaper and magazine articles, website development, and social media messaging would all be components of an increased public awareness campaign. Partnerships would be established and nurtured with neighboring agencies, local jurisdictions, chambers of commerce, national organizations, and user groups to accomplish the plan/FEIS objectives. Staff would have increased responsibilities for monitoring the quality of the visitor experience in and near ORV areas and routes.

Science and Resource Management would develop an ORV Management Plan / Monitoring Plan to adaptively manage ORV use and the actions required to mitigate resource impacts. Staff would continue to be responsible for monitoring resource conditions and measuring the impacts of off-road use at and near ORV areas and routes. Cultural resource staff would conduct semi-annual monitoring of National Register-eligible archeological sites. Archeological inventories would be undertaken at ORV routes that have not previously been surveyed. The natural resource staff would prepare restoration plans to re-establish native vegetation at unauthorized routes, monitor designated ORV areas and routes as well as routes slated for restoration for listed noxious weeds and new invasive plant species, and implement an early detection and rapid response system to minimize the establishment and spread of new invasive species. Aerial and ground surveys would be conducted in order to monitor visitor use and the effectiveness of mitigation measures instituted to protect natural resources. Special-status species would be monitored in and near off-road use areas. Natural and cultural resource staff would conduct compliance activities for sites designated for the installation of signs, barriers or information infrastructure.

Visitor and Resource Protection division would continue to conduct daily patrols and maintain an enforcement presence at Lone Rock Beach and the Lone Rock Beach Play Area. Accessing the remote accessible shoreline areas along the southern shore of Lake Powell would require additional staffing resources. If the Bullfrog North and South and the Crosby Canyon ORV areas are open for use due to higher water levels at Lake Powell, past experience with visitor use at this popular site would dictate a greatly expanded ranger presence for education, enforcement and visitor use management. Staff would have increased responsibilities for monitoring visitor health and safety in and near ORV areas and routes.

**TABLE B7: STAFF ACTIVITIES FOR ALTERNATIVE E: MIXED USE (NPS PREFERRED ALTERNATIVE)**

|   |   |
|---|---|
| Park Management and Planning                | ORV management activities and related agency liaison, policy interpretation and public relations.   |
| Business Management and Administration      | Administrative support for payroll administration, human resource functions and contracting/purchasing. Implement special use permit system for the issuance of ORV permits.  |
| Facility Management                         | Sign construction and repair, sanitation services, site maintenance, and the construction and maintenance of fences and other structures.   |
| Interpretation, Education, and Partnerships | Informational and educational material would be developed for on-site kiosks at ORV areas and along GMP roads and ORV routes. Staff would develop information site bulletins, newspaper and magazine articles, website development and social media messaging. Partnerships would be established and nurtured.  |
| Cultural Resource Management                | Prepare ORV Management Plan / Monitoring Plan. Conduct semi-annual monitoring of archeological sites. Archeological inventories would be undertaken at ORV areas and routes that have not previously been surveyed. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers, or information infrastructure.  |
| Natural Resource Management                 | Prepare ORV Management Plan / Monitoring Plan. Prepare vegetation restoration plan for closed ORV use areas. Monitor ORV areas and routes for listed noxious weeds and new invasive plant species and minimize the establishment and spread of new invasive species. Aerial and ground surveys would be conducted in order to monitor visitor use and the effectiveness of mitigation measures instituted to protect natural resources. Special-status plant and animal species would be monitored. Conduct compliance activities for sites designated for restoration and for the installation of signs, barriers or information infrastructure. |
| Visitor and Resource Protection             | Conduct patrols and maintain an enforcement presence at ORV areas and routes. Some sites would require a greatly expanded ranger presence for education, enforcement, visitor use management and monitoring visitor health and safety.  |

**TABLE B8: MANAGEMENT AND OPERATIONS COSTS BY ALTERNATIVE**

|   | ALTERNATIVE A | ALTERNATIVE B | ALTERNATIVE C | ALTERNATIVE D | ALTERNATIVE E |
|---|---------------|---------------|---------------|---------------|---------------|
| <b>Management and Administration</b>              |               |               |               |               |               |
| One-time costs                                    |               |               |               |               |               |
| Recurring costs                                   |               | 15,600        | 83,000        | 45,800        | 82,800        |
| <b>Business Management</b>                        |               |               |               |               |               |
| One-time costs                                    |               |               | 47,300        | 47,300        | 47,300        |
| Recurring costs                                   |               |               | 75,800        | 75,800        | 75,800        |
| <b>Facility Management</b>                        |               |               |               |               |               |
| One-time costs                                    |               | 642,400       | 778,100       | 741,100       | 769,600       |
| Recurring costs                                   |               | 30,100        | 73,600        | 48,700        | 71,300        |
| <b>Interpretation, Education and Partnerships</b> |               |               |               |               |               |
| One-time costs                                    |               | 6,300         | 62,500        | 18,400        | 58,800        |
| Recurring costs                                   |               | 16,500        | 138,400       | 138,400       | 138,400       |
| <b>Cultural Resource Management</b>               |               |               |               |               |               |
| One-time costs                                    |               |               | 113,600       | 113,600       | 113,600       |
| Recurring costs                                   |               | 8,300         | 38,300        | 8,300         | 38,300        |
| Sect 106 compliance for ground disturbance        |               | 112,300       | 81,600        | 107,500       | 83,400        |
| <b>Natural Resource Management</b>                |               |               |               |               |               |
| One-time costs                                    |               | 166,100       | 166,100       | 166,100       | 166,100       |
| Recurring costs                                   |               | 101,500       | 63,300        | 85,600        | 63,900        |
| <b>Visitor and Resource Protection</b>            |               |               |               |               |               |
| One-time costs                                    |               |               | 98,000        | 93,000        | 98,000        |
| Recurring costs                                   |               |               | 440,300       | 101,100       | 440,300       |
| <b>Total Start-up Costs (First Two Years)</b>     |               | 1,272,400     | 3,091,000     | 2,186,900     | 3,075,000     |
| <b>Total Recurring Annual Costs</b>               |               | 172,000       | 912,700       | 503,700       | 910,800       |

## IMPLEMENTATION PLANNING

NPS requires the identification of future potential funding needs. GLCA has identified a number of funding needs for implementation of the ORV Management Plan, pending the final selected action. The selected action would determine how these funding sources would ultimately be used. If the selected action includes no ORV routes, certain funds identified below may not be necessary. Some of these funding components, such as cultural resource management, endangered species monitoring, and wilderness management are consistent with current management (alternative A). Excerpts from the project statements are listed below.



***219133 - Enhance Visitor Access along Backcountry Roads and Off-road Vehicle Routes***

Funding is requested to install fencing, vehicle barriers, regulatory signs, and wilderness markers along the designated 388-mile park road network and along 20 miles of ORV routes. Funding would be used to hire seasonal employees or contract outside labor to construct and install the visitor access facilities as outlined in the related work orders. Approximately 115 regulatory signs and 1,000 route and wilderness markers would be installed with this project. Fencing and/or vehicle barriers would be installed at approximately 30 locations.

***219139 - Enhance Visitor Access to Designated Off-road Vehicle Areas***

Funding is requested to install fencing, informational signs, and interpretive kiosks at 16 designated ORV areas. Funding would be used to hire seasonal employees or contract outside labor to construct and install the visitor access facilities as outlined in the related work orders. Approximately 60 regulatory signs and 17 interpretive kiosks would be installed with this project. Fencing would be installed at 15 locations.

***218209 - Develop Cultural Resource Stewardship Plan for Backcountry Roads and ORV Routes/Areas –***

This project would continue cultural resource inventories in areas of potential effect and provide funding to develop a stewardship plan to protect nationally-significant cultural resources along backcountry roads and ORV routes/areas.

***218845 - Increase Stewardship of Wilderness Resources Adjacent to Backcountry Roads and ORV Routes/Areas***

This project would provide funding to protect wilderness resources along backcountry roads and ORV routes/areas during the first two years of implementation of the ORV Management Plan. Seasonal employees would identify and mark proposed wilderness boundaries which are adjacent to or near 388 miles of backcountry roads, 16 ORV areas and 15-20 miles of ORV routes.

***218715 - Provide Resource Stewardship and Visitor Safety in Backcountry and on ORV Routes/Areas***

This project would increase ranger presence to provide visitor use management, visitor protection, medical services, search and rescue and ORV permit education and enforcement during the first two years of ORV Management Plan implementation. Visitor and Resource Protection personnel would have increased responsibilities for health and safety in and near ORV areas and routes and along 388 miles of backcountry roads. Resource and visitor protection objectives and needs would be evaluated after the first two years of plan implementation and additional ongoing needs would be targeted for funding through the ORV permit program. The increased staff would consist of three GS7/5 and two GS5/8 park rangers for two years of intensive interaction with visitors on backcountry roads and designated ORV routes/areas.

***212251 - Increase Visitor Understanding Along Backcountry Roads and at Designated ORV Routes/Areas***

Funding is requested to create and produce visitor information guides, interpretive kiosk media and outreach education products in order to implement portions of the ORV Management Plan. A variety of new interpretive media would address current park themes and use new technology to more actively engage the public and improve the condition of park backcountry areas. Publications and websites would be created or updated to better educate the public about the parks. Funding would be used to hire seasonal assistance for the design and production of interpretive media. This staffing assistance would also provide the ability to develop partnerships with off-highway user groups and to interact with local businesses, local media, tourism bureaus and agencies. These partnerships would be integral to coordinating visitor information and publicizing visitor opportunities that pertain to ORV use in the park and in adjacent areas. Partnerships would include youth organizations. Active volunteers, including youth volunteers

would be recruited during the second phase of the project. A Junior Ranger program would be developed for the park backcountry, to include appropriate actions for use of roads and ORV routes/areas.

***199138 - Utilize Innovative Audio Technology to Survey for Mexican Spotted Owls at Six Intermountain Region Parks (includes Glen Canyon)***

A survey protocol endorsed by the USFWS has been used for over 20 years to determine owl habitat occupancy. The protocol requires multiple surveys and nighttime work by trained biologists, typically in remote and rugged terrain, and only under optimum weather conditions. Full protocol surveys are expensive and contracting the work is cost-prohibitive. An innovative method using portable audio recorders has recently been pilot tested which addresses these concerns and improves owl detection rates. Compared to the currently accepted method, passive audio surveys are similar in initial cost, but likely lower over subsequent work seasons. The project would enhance NPS ability to survey for owls using a method that is safer, does not require specialized field training, increases work flexibility and efficiency, improves owl detectability, and reduces direct disturbance to owls.

**APPENDIX C: PROGRAMMATIC AGREEMENT AMONG  
THE NATIONAL PARK SERVICE, THE ARIZONA STATE  
HISTORIC PRESERVATION OFFICE, AND THE UTAH  
STATE HISTORIC PRESERVATION OFFICE REGARDING  
OFF-ROAD MANAGEMENT PLAN FOR GLEN CANYON  
NATIONAL RECREATION AREA**

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**Programmatic Agreement**

**Among  
The National Park Service  
The Arizona State Historic Preservation Office  
And  
The Utah State Historic Preservation Office**

**Regarding  
Off-road Vehicle Management Plan for Glen Canyon National Recreation Area**

**WHEREAS**, the National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan to manage off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon); and

**WHEREAS**, the U.S. Congress established Glen Canyon on October 27, 1972 "...to provide for public outdoor recreation use and enjoyment of Lake Powell and lands adjacent thereto in the States of Arizona and Utah and to preserve scenic, scientific, and historic features contributing to public enjoyment of the area" (Public Law 92-593); and

**WHEREAS**, Executive Orders 11644 and 11989 (Use of off-road vehicles on public lands) and NPS laws, regulations and policies direct that the designation of areas and routes for the use of ORVs be based on the protection of resources of the public lands, promotion of the safety of all users of those lands, and minimization of conflicts among the various uses of those lands, and that these areas and routes be located to minimize impacts to soil, watershed, vegetation or other resources of the public lands; and

**WHEREAS**, NPS regulation 36 CFR §4.10 provides for the designation of areas and routes for ORV use and prohibits the operation of motor vehicles except on park roads, in parking areas, and on designated ORV routes and areas; and

**WHEREAS**, NPS completed responsibilities under applicable laws and regulations for prior planning efforts relevant to the current undertaking to include an Environmental Impact Statement and General Management Plan (GMP) (1979) designating the current GMP road system and shoreline areas where road access would be permitted within Glen Canyon; an Environmental Assessment and Development Concept Plan for Lone Rock Beach (1981) to provide management actions and visitor facilities for recreational use of the beach and to designate a 180-acre ORV high-intensity use area contiguous to the beach; and an Environmental Assessment and Development Concept Plan for Lake Powell's Accessible Shorelines (1988) to manage 20 shoreline sites with road access in order to reduce resource degradation, visitor use conflicts, and safety hazards; and

**WHEREAS**, NPS, in response to the current undertaking, has prepared an Off-road Vehicle Management Plan/Draft Environmental Impact Statement (DEIS) to evaluate the suitability of conventional and non-conventional motor vehicle use at accessible shorelines, to evaluate the designation of ORV routes in other areas of Glen Canyon, and to evaluate the use of OHVs and street-legal ATVs on Glen Canyon's designated road system, and has examined the relative effects of the proposed alternatives on known historic properties; and

**WHEREAS**, NPS is responsible for complying with the National Historic Preservation Act (NHPA) (16 U.S.C. 470 et seq.) and has determined that the development of the ORV Management Plan and the designation and use of ORV areas and routes are in the aggregate, an undertaking subject to Section 106

of NHPA and its implementing regulations at 36 CFR Part 800, and that the undertaking has the potential to cause direct, indirect, and cumulative effects which may result in adverse effects to historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP); and

**WHEREAS**, NPS prepared the document entitled “Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement” to provide guidance for compliance with Section 106 concerning designation and management of areas for ORV use, with attention toward defining the area of potential effects (APE) and the appropriate level of effort for identification of historic properties within the APE; and

**WHEREAS**, the APE, as described below in Stipulation II, encompasses all elements of the undertaking to include the designation and use of ORV areas and routes; and

**WHEREAS**, the responsibilities of the State Historic Preservation Office under Section 106 of the NHPA and 36 CFR Part 800 are to advise, assist, review, and consult with Federal agencies as they carry out their historic preservation responsibilities and to respond to Federal agency’s requests for review and comment;

**WHEREAS**, NPS has entered into Section 106 consultation with the Arizona State Historic Preservation Officer (AZSHPO), the Utah State Historic Preservation Officer (UTSHPO), associated Indian tribes, and additional consulting parties inclusive of Traditionally Associated Peoples (Appendix A) regarding the designation of an APE for this undertaking (36 CFR §800.4(a)(1)), the appropriate level of effort for identification of historic properties within the APE (36 CFR §800.4(b)(1)), and determinations of eligibility (36 CFR §800.4(c)(2)) and effect (36 CFR 800.5); and

**WHEREAS**, NPS received concurrence from the AZSHPO and the UTSHPO on the designation of the APE, the recommended reasonable and good-faith efforts to carry out appropriate identification efforts, and the determinations of eligibility and effect; and

**WHEREAS**, NPS completed the proposed inventories consisting of Class I inventory of the APE provided in the Off-road Vehicle Management Plan/DEIS, Class II and Class III inventory of the primary area of impact at accessible shorelines provided in “Archaeological Inventory of the Glen Canyon National Recreation Area Accessible Shorelines”, and Class III inventory of proposed routes provided in “Cultural Resources Inventory and Significance Evaluations in Ferry Swale, Glen Canyon National Recreation Area, Coconino County, Arizona and Kane County, Utah”; and

**WHEREAS**, NPS identified that portions of the APE and surrounding area have been subject to multiple cultural resources inventories in the past and contain historic and prehistoric archeological sites and properties of traditional religious and cultural significance determined to be eligible for listing to the NRHP, and that those properties have the potential to be adversely affected by the undertaking; and

**WHEREAS**, NPS determined that some portions of the APE having not received Class III inventory may contain additional historic properties, inclusive of Traditional Cultural Properties (TCPs), as well as other properties of traditional religious and cultural importance, sacred sites, and/or cultural items that have the potential to be adversely affected by the undertaking; and

**WHEREAS**, NPS, pursuant to 36 CFR §800.6(a)(1), has notified the Advisory Council on Historic Preservation (ACHP) on June 13, 2014 of a finding of adverse effect for the ORV Management Plan undertaking, provided the documentation specified in 36 CFR §800.11(e), and has invited the ACHP to participate in consultations on the undertaking and the ACHP has declined the invitation on August 28, 2014; and

**WHEREAS**, 36 CFR §800.14(b)(3) provides for developing a programmatic agreement (PA) for complex or multiple undertakings and 36 CFR §800.14(b)(1)(i)-(ii) provide for developing a PA when effects on historic properties are multi-state in scope and cannot be fully determined prior to approval of an undertaking; and

**WHEREAS**, 36 CFR §800.4(b)(2) provides for phased identification and evaluation of historic properties where alternatives consist of large land areas, and for the deferral of final identification and evaluation of historic properties when provided for in a PA executed pursuant to 36 CFR §800.14(b); and

**WHEREAS**, the NPS has determined through 106 consultation that a phased process for compliance with Section 106 of NHPA is appropriate for the ORV Management Plan such that completion of the identification and evaluation of historic properties, determinations of effect on historic properties, and consultation concerning measures to avoid, minimize, or mitigate any adverse effects will be carried out in phases, as set forth in this PA; and

**WHEREAS**, NPS has consulted with the Navajo Nation, the Hopi Tribe, the Kaibab Band of Paiute Indians, the San Juan Southern Paiute Tribe, the Ute Mountain Ute Tribe, the Paiute Indian Tribe of Utah, and the Pueblo of Zuni regarding places of religious and cultural significance that may be affected by the undertaking and has invited these tribes to participate in the PA as concurring parties; and

**WHEREAS**, NPS has provided adequate opportunities for public involvement pursuant to 36 CFR §800.2(d)(3) through use of agency procedures under the National Environmental Policy Act (NEPA) and documented the comments and views of the public through the NEPA process, which include in part concerns for Ancestral Puebloan, recent American Indian and pioneer homesteading resources; concern for effects of dust on rock art; concern for increased access to historic properties; concern for resources at adjacent or nearby NPS units; concern for the efficacy of signing and enforcement; concern about increased access leading to vandalism and theft of cultural resources; and concern for inadequate inventory of historic properties; and

**WHEREAS**, unless defined in this PA at Appendix B, all terms are used in accordance with 36 CFR Part 800; and

**WHEREAS**, the AZSHPO and UTSHPPO are signatory parties to this PA;

**NOW, THEREFORE**, the signatory parties and the concurring parties (the Parties) agree that the ORV Management Plan undertaking shall be administered in accordance with the terms of this PA to take into account the effect of the undertaking on historic properties and to satisfy the Section 106 requirements for all aspects of the undertaking.

### STIPULATIONS

The NPS will ensure that the following stipulations are implemented:

#### I. REQUIREMENTS

- 1) NPS will be the responsible federal agency for implementing this PA. Its roles and responsibilities include ensuring that the Parties carry out their responsibilities, as applicable; consulting with American Indian tribal governments; overseeing all cultural resource work; issuing requests for review and comment from the Parties on eligibility, effect, and resolution of

adverse effects, as needed; and preparation of treatment plans, reports of findings, and other relevant documents.

- 2) Nothing in this PA would affect the programmatic guidance for other activities related to the Section 106 compliance process provided within the 2008 Servicewide Programmatic Agreement (Appendix C) among the NPS, the ACHP, and the National Conference of State Historic Preservation Officers for compliance with Section 106 of the NHPA. However, this PA does supersede the 1988 Programmatic Agreement (Appendix D) between the NPS, AZSHPO, UTSHPO, and ACHP for the purpose of further delineating their respective responsibilities with respect to the Development Concept Plan for Lake Powell's Accessible Shorelines.
- 3) NPS will implement this PA in accordance with its responsibilities for the undertaking under:
  - a. The National Park Service Organic Act of 1916 (16 U.S.C. 1)
  - b. Sections 106 and 110 of the National Historic Preservation Act of 1966 (16 U.S.C 470 et seq.), and the Section 106 implementing regulations at 36 CFR Part 800
  - c. The National Environmental Policy Act of 1969 (42 U.S.C 4321 et seq.)
  - d. Redwoods National Park Expansion Act of 1978 (amending 16 U.S.C. 1a-1)
  - e. Archaeological Resources Protection Act of 1979 (16 U.S.C. 470 et seq.) and its implementing regulations at 43 CFR Part 7
  - f. The Native American Grave Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq.) and its implementing regulations at 43 CFR Part 10
  - g. The Programmatic Agreement among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act (2008)
  - h. Executive Orders 11644 and 11989 (Use of off-road vehicles on public lands)
  - i. Executive Order 13007 (Indian Sacred Sites)
  - j. Executive Order 13175 (Government-to-Government Consultation)
- 4) NPS will ensure that all cultural resources investigations performed under the terms of this PA will abide by the following standards and guidelines:
  - a. The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (1983, as amended and annotated)
  - b. The Glen Canyon National Recreation Area Resource Management Plan, Cultural Component (1987)
  - c. National Register Bulletin 38: Guidelines for Documenting and Evaluation Traditional Cultural Properties (1990)

- d. The Glen Canyon National Recreation Area Archaeological Resources Protection Plan (2002, as amended)
  - e. National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (Revised 1997)
  - f. NPS-28: Cultural Resource Management Guideline (1998)
  - g. National Park Service Management Policies: Cultural Resource Management (2006)
  - h. Operating Procedures for Submission of Archaeological and Building Survey Reports to the Utah SHPO as part of consultation under Section 106 of the National Historic Preservation Act and / or Utah Code 9-8-404 (2007)
  - i. Consultation with Indian tribes in the Section 106 Process: A Handbook (2008)
  - j. Arizona Reporting Standards for Cultural Resources (2012)
  - k. Memorandum of Understanding among the U.S. Department of Defense, U.S. Department of the Interior, U.S. Department of Agriculture, U.S. Department of Energy, and the Advisory Council on Historic Preservation Regarding Interagency Coordination and Collaboration for the Protection of Indian Sacred Sites (2012)
- 5) NPS will further ensure that all research, field work, documentation, analysis, and report production performed under the terms of this PA will be conducted by, or under the supervisions of, a qualified professional. A qualified professional meets the Secretary of the Interior's qualifications for archeology, architectural history, historic architecture, cultural anthropology or history, as appropriate [Federal Register: June 20, 1997 (Volume 62, Number 119)][Page 33707-33723].
- 6) NPS will be responsible for ensuring that the consulting parties are kept informed regarding the ORV Management Plan undertaking and the performance of this PA. The Parties to this agreement will assist NPS in meeting its responsibilities over the life of the undertaking.

## II. AREA OF POTENTIAL EFFECT (APE) FOR THE ORV MANAGEMENT PLAN

- 1) The NPS, in consultation with the AZSHPO, UTSHPO, and other consulting parties, has defined and documented the APE based on direct, indirect, and cumulative effects. The APE will encompass all lands that may be affected by elements of the undertaking to include the designation and use of ORV areas and routes. The NPS may modify the APE in accordance with provisions (6) and (7) of this stipulation.
- 2) The APE is defined as follows (See maps in Appendix E):
  - a. Accessible Shoreline ORV Areas: The area including the 1988 ORV area designations at full pool elevation (3,700') for Lake Powell and extending below to the current and fluctuating shorelines, and limited by a 35 degree slope as the restricting limit of accessibility for ORV use to define the primary area of impact (PAI) plus an additional 0.5 mile buffer zone extending beyond these limits to define the secondary area of impact (SAI).

- b. Lone Rock Beach Play Area: The fence-enclosed 180-acre area that is open to high-intensity ATV and motor vehicle use.
  - c. Park Roads and Designated ORV Routes: An area 120 meters wide, measured as 60 meters on either side of the centerline, and extending the length of the road or route.
- 3) Direct effects are anticipated to occur within the accessible shoreline primary areas of impact, within the entire Lone Rock Beach Play Area, within the footprint of the travel lane of roads extending up to 10 meters from either side of the centerline, and within the travel lane of ORV routes extending up to four meters from either side of the centerline.
- 4) Indirect effects may occur within the accessible shoreline secondary areas of impact, within the area outside of the travel lane of roads between 10 meters and 60 meters on either side of the centerline, and within the area outside of the travel lane of ORV routes between four meters and 60 meters on either side of the centerline.
- 5) For the purposes of this PA, the consideration of cumulative effects is the same as that for direct and indirect effects. The cumulative effects may be direct and indirect and result from incremental effects related to the undertaking over time, e.g., an increase in authorized and unauthorized access because of new routes and off-road use by an additional class of motor vehicle.
- 6) Should NPS propose changes to the APE, NPS shall then consult with the applicable Parties to the PA for concurrence with the changes, and continue consultation to identify and evaluate any historic properties in the amended portion of the APE that may be affected and to resolve any adverse effects.
- 7) Any of the Parties to this PA may propose that the APE be modified. The NPS shall send all Parties to this PA a description and a map of the modification and consult with them for no more than 30 days in an effort to reach consensus on the proposal. Agreement to amend the APE will not require an amendment to the PA. If all the Parties cannot agree to a proposal for the modification of the APE, then the NPS will consider their concerns and will render a final decision.

### III. IDENTIFICATION AND EVALUATION

- 1) Pursuant to 36 CFR §800.4, the NPS shall identify additional historic properties, including TCPs and/or sacred sites, that may be affected by the undertaking and gather sufficient information to evaluate the eligibility of these properties for the NRHP. Information shall be obtained through cultural resources inventories and/or other appropriate investigations inclusive of consultation with appropriate parties. Identification of historic properties shall follow the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716), applicable SHPO guidelines, and agency programs and guidelines to meet the requirements of Section 110(a)(2) of NHPA. NPS shall ensure that professional historians, archaeologists and cultural anthropologists meeting the professional qualifications requirements cited in Stipulation I (5) will conduct the cultural resources inventories. The NPS shall also depend upon the expertise of the Indian tribes in determining what is significant to tribes.

- 2) The NPS shall continue to develop Geographic Information Systems (GIS) databases to create zonal management models that will inform the prioritization of the phasing of identification and evaluation efforts. The following two models will be developed and validated prior to making determinations about the location and timing of cultural resources inventory and site evaluation protocols within different probability/sensitivity zones or in response to triggering parameters.
  - a. *Archeological Sensitivity Model*: The basis for an archeological sensitivity model is to inform the location and timing of cultural resources inventory and site evaluation protocols for those portions of GMP roads and ORV routes that have not received adequate identification efforts. This type of GIS model will allow for the examination of associations between a range of archeological and environmental variables that are thought to influence human behavior and the selection of site locations. Cultural resources inventory and site evaluation protocols may then be determined and prioritized based on different probability/sensitivity zones.
  - b. *Trigger-Point Model*: The basis for a trigger-point model is to inform the location and timing of cultural resources inventory and site evaluation protocols for Lone Rock Beach and accessible shorelines at Glen Canyon in response to the potential for decreasing water elevations of Lake Powell and the exposure of documented and previously unidentified cultural resources. This type of GIS model will allow for the quantification of shoreline exposure, where cultural resources inventory and site evaluation protocols may be triggered by established parameters derived from the analysis of topographic and environmental variables, and the exposure of documented historic and prehistoric archeological sites inundated by the filling of Lake Powell.
- 3) Initial model development and validation efforts will be completed within one year of promulgating the special regulations under 36 CFR §4.10 describing the routes and areas designated for ORV use. Ongoing validation and refinement efforts will occur as new data is generated. Based on the results of the GIS-based zonal management models, the NPS in consultation with the Parties will determine appropriate cultural resources inventory and site evaluation protocols. Implementation of the protocols will begin within one year of their determination and continue in prioritized order until completed. Demonstration of annual progress will be available for review by the consulting parties following the provisions in Stipulations III (6) and VI (8).
- 4) Where the NPS has determined through Section 106 consultation that the agency's identification and evaluation obligations have been met at specific locations through Class III inventory, the following areas will not require additional inventory and evaluation efforts unless modifications to the APE occur below 3600 feet in elevation following Stipulations II (6) and (7):
  - a. Lone Rock Beach Play Area
  - b. Dirty Devil Accessible Shoreline - PAI
  - c. White Canyon Accessible Shoreline - PAI
  - d. Paiute Canyon Accessible Shoreline – PAI
  - e. Neskahi Accessible Shoreline – PAI

f. Copper Canyon Accessible Shoreline – PAI

g. Ferry Swale ORV Routes

- 5) Following inventory, NPS, in consultation with the Parties, shall determine the NRHP eligibility of all newly recorded cultural resources in the APE in accordance with 36 CFR §800.4(c). Where previously documented historic properties occurring within the APE have not been evaluated for eligibility to the NRHP, the NPS shall utilize the identification efforts described in Stipulation III (1) to update site information and evaluate historic significance through application of the National Register Criteria. NPS shall also follow the *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* and the *National Register Bulletin 38: Guidelines for Documenting and Evaluation Traditional Cultural Properties*. Evaluation of previously documented sites will begin within one year of the execution of this PA.
- 6) NPS shall ensure that copies of inventory reports containing recommendations of NRHP eligibility are submitted for initial review to the Parties. The review period for identification and evaluation will be 30 calendar days. Any comments NPS receives within the review period will be considered in making revisions to the inventory report. If by the end of that period NPS receives no response from one or more Parties, NPS will assume that those Parties have no objections to the inventory reports as submitted and the NRHP eligibility determinations as proposed.
- 7) If comments are received during the initial review, NPS will revise the inventory reports as necessary and provide the revised reports to the appropriate Parties for a final review. The review period for identification and evaluation will be 30 calendar days. Any comments NPS receives within the review period will be considered in making its final determination. If by the end of that period NPS receives no response from one or more Parties, NPS will assume that those Parties have no objections to the inventory reports as submitted and the NRHP eligibility determinations as proposed.
- 8) Any signatory party with whom NPS consults under this PA may object to NPS' NRHP determinations by submitting the objection in writing to NPS. NPS will attempt to resolve the objection following the provisions for dispute resolution in Stipulation VI (5). If, however, those efforts are unsuccessful, NPS shall request a formal determination from the Keeper of the National Register. The Keeper's determination will be final.
- 9) If the NPS and applicable Parties agree that the cultural resource is not eligible for listing in the NRHP, no further review or consideration under this PA will be required for such cultural resource.
- 10) If the NPS and applicable Parties agree that the cultural resource is eligible for listing in the NRHP, then effect determinations will be made in accordance with Stipulation IV.

#### IV. ASSESSMENT OF EFFECTS

- 1) After applying the criteria of adverse effect, NPS has determined that this undertaking possesses the potential to adversely affect documented and previously unidentified historic properties. These effects are anticipated to occur at some (but not all) of the historic properties located within and adjacent to GMP roads and proposed ORV routes, and within proposed ORV areas at accessible shorelines.



- 2) While NPS recognizes that authorizing the use of additional classes of vehicles on existing GMP roads, proposed ORV routes, and within proposed ORV areas at accessible shorelines has the potential to adversely affect historic properties, the nature, severity, and timing of those effects are anticipated to vary by context. The extent of effects is expected to be most apparent where the roads, routes, and areas intersect with site boundaries. Sites located outside of the GMP roads, proposed ORV routes, and ORV areas are expected to be less susceptible to direct impacts from motorized vehicle use, although indirect impacts from visitation may increase.
- 3) Motorized vehicle operation within the previously disturbed footprint of existing GMP roads and proposed ORV routes is not anticipated to result in adverse effects beyond those that have already occurred through historic use, except in cases where subsurface cultural materials may be impacted at historic properties where they occur within the transportation alignment. Sites located on exposed slickrock or possessing shallow depositional contexts have experienced relatively minor disturbances from motorized vehicle use. On the other hand, sites located in more substantial and loosely consolidated depositional contexts have experienced a greater severity of disturbance from road bed incision and increased erosion resulting in altered surface assemblages or disturbed subsurface remains. Reasonably foreseeable direct effects may occur if existing transportation alignments shift, such as in response to natural impacts or obstacles impeding travel, or where unauthorized off-road use departs from the existing GMP roads or proposed ORV routes.
- 4) Furthermore, NPS recognizes that motorized vehicle use may increase the accessibility of historic properties in the vicinity of the existing GMP roads and proposed ORV routes and areas which may result in reasonably foreseeable indirect impacts by visitors through unintentional and intentional vandalism. Intentional vandalism may occur as site damage or destruction from illegal excavation, graffiti, and the collection of surface artifacts. Unintentional vandalism may result from the development of social trails, unauthorized camping, littering, and any other recreation impacts at sites with fragile features or components.
- 5) Whenever feasible, NPS shall ensure that management and recreation activities avoid or minimize effects to historic properties within the APE. Avoidance and minimization will be achieved through the following procedures:
  - a. Avoidance: Activities that may cause effect will be conducted outside a 100 foot buffer around each historic property. The NPS may use fencing or other temporary barriers to achieve avoidance provided there will be no effect to historic properties. Temporary barriers will be removed after the activity has ceased. If through avoidance an unanticipated archaeological discovery is made, the operator will follow the procedures in Stipulation VI (3).
  - b. Monitoring: Activities that may cause effect that are outside of the defined limits of the historic property but within the 100 foot buffer area will be monitored by a qualified professional. The NPS will ensure that a qualified professional is in position to monitor the activity. Monitors will be granted the authority to guide the activity to ensure avoidance. If through monitoring an unanticipated archaeological discovery is made, the operator will follow the procedures in Stipulation VI (3).
- 6) NPS further recognizes the need to use a phased process in applying the criteria of adverse effect consistent with the phased identification and evaluation efforts conducted pursuant to 36 CFR §800.4(b)(2).

- 7) NPS shall assess and determine the effects of the undertaking on historic properties subject to this agreement in accordance with 36 CFR Part 800. NPS will make one of three possible findings:
- a. A finding of *No Historic Properties Affected* would result when no historic properties are present or when there are historic properties present but the undertaking will have no effect upon them; or
  - b. A finding of *No Adverse Effect* would result when the undertaking will have an effect on a historic property within the APE, but the effect will not diminish the aspects of integrity nor the characteristics that make the property eligible for listing in the NRHP; or
  - c. A finding of *Adverse Effect* would result when the undertaking alters any characteristic of a historic property that qualifies the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.
- 8) For findings of *No Historic Properties Affected* and *No Adverse Effect*, the NPS shall provide documentation of the finding to the appropriate SHPO and notify the remaining Parties without further review or additional consultation provided that:
- a. NPS findings are not subject to objection as provided for in Stipulation IV (10).
  - b. NPS has completed review to ensure identification and evaluation of historic properties in the APE has been completed according to Stipulation III, and that adequate information has been compiled to identify and evaluate the effects of the undertaking on historic properties.
  - c. NPS has consulted with the appropriate Indian Tribe(s) and additional consulting parties as appropriate regarding possible effects to properties of traditional religious and cultural importance and/or sacred sites that may not be eligible for inclusion in the NRHP.
  - d. NPS has determined that the undertaking will not affect or will not adversely affect historic properties in accordance with the criteria of adverse effect at 36 §CFR 800.5.
- 9) For findings of *Adverse Effect*, NPS shall consult further to resolve the adverse effect pursuant to 36 §CFR 800.6 and as described in Stipulation V.
- 10) NPS shall consult with the appropriate SHPO, Indian Tribe(s), additional consulting parties inclusive of Traditionally Associated Peoples and/or the NPS Department of Interior for National Historic Landmarks (NHLs), and shall, where appropriate, invite ACHP participation when any of the following criteria are met:
- a. The undertaking affects NHLs, or properties of national significance listed on the NRHP.
  - b. The undertaking affects a human burial.
  - c. The undertaking adversely affects TCPs or properties of traditional religious and cultural importance and/or sacred sites that may not be eligible for inclusion in the NRHP.

- d. The undertaking adversely affects the physical integrity, or restricts access to or ceremonial use, of a sacred site.
- 11) The period for reviewing NPS finding of effects will be 30 calendar days. Any comments NPS receives within the review period will be considered in making its assessment. If by the end of that period NPS receives no comments from one or more Parties, NPS will assume that those Parties have no objections to the findings of effects as proposed.
- 12) Any Party with whom NPS consults under this PA may object to NPS's finding of effects by submitting the objection in writing to NPS. NPS shall resolve the objection following the provisions for dispute resolution in Stipulation VI (5).

#### V. RESOLUTION OF ADVERSE EFFECTS

- 1) NPS shall make every reasonable effort to avoid adverse effects to historic properties identified according to Stipulation III. NPS will also implement the following elements of the ORV Management Plan as proactive approaches to resolve potential adverse effects:
  - a. Develop communication strategy.
    - i. Conduct outreach to visitors pre-visit through several governmental and non-governmental sources to provide information about where to operate ORVs in Glen Canyon; the laws and regulations pertaining to ORV use and resource protection; safety information and training related to ORV use; and how ORV use can impact cultural resources. These sources may include but are not limited to the Glen Canyon website, social media and information from the public information office.
    - ii. Develop partnerships with governmental and non-governmental off-roading groups and other appropriate entities to develop community awareness regarding on- and off-road ATV and OHV use and the stewardship of Glen Canyon's resources and values.
    - iii. Post information signs and/or bulletin boards on park roads and at designated ORV areas and routes.
    - iv. Develop a volunteer stewardship program in partnership with governmental and non-governmental entities to enlist volunteers in the stewardship of cultural resources within Glen Canyon that can include, but is not limited to:
      - 1. Posting of signs
      - 2. Closing undesignated ORV routes
      - 3. Assisting with the reestablishment of native vegetation for disturbed areas and closed routes
      - 4. Assisting with monitoring activities.
  - b. Post signs at designated areas for off-road use.
    - i. Identify use rules and regulations.
    - ii. Indicate the status of a road segment as open or closed.
    - iii. Delineate the designated travel routes.
  - c. Close undesignated ORV routes.
    - i. Utilize signs, boulders, or other physical barriers.
    - ii. Reestablish native vegetation in appropriate areas to restore natural conditions except for putting new vegetation within the boundaries of historic properties.

- d. Develop monitoring procedures.
    - i. Identify changes and trends in resource condition.
    - ii. Assess the effectiveness of current management actions.
    - iii. Inform future management actions to reduce, minimize, or mitigate impacts.
    - iv. Include areas exposed at shoreline ORV areas due to reductions in the level of Lake Powell.
    - v. Provide annual reporting of monitoring efforts and any mitigation undertaken to Glen Canyon management and the Parties.
    - vi. Utilize revenues from ORV permit system (if adopted) and other sources to conduct the monitoring and annual reporting.
    - vii. Invite assistance in monitoring from governmental and non-governmental organizations who have offered to provide qualified volunteer assistance.
    - viii. Involve the Glen Canyon Visitor and Resource Protection Division in the monitoring of cultural resources.
- 2) NPS stipulates the following provisions that will guide its strategy for resolution of adverse effects:
- a. NPS will conduct intensive archeological inventory prior to surface disturbing actions as needed during implementation of the ORV Management Plan.
  - b. NPS will evaluate archeological sites identified during Class I inventory that have not been previously evaluated for National Register eligibility in consultation with Parties.
  - c. NPS will develop an archeological monitoring program to monitor historic properties within the APE on a systematic basis.
  - d. Where changes in resource condition are observed at historic properties, NPS will take steps to correct the situation to avoid adverse effects in consultation with Parties.
  - e. Where changes in resource condition are assessed as adverse, NPS will resolve those effects in consultation with the Parties.
- 3) If and when a proposed activity may result in an adverse effect to historic properties NPS, in consultation with the Parties, shall resolve the adverse effect through one or more of the following treatments, or other treatments identified through consultation, in accordance with an approved Historic Property Treatment Plan (HPTP):
- a. Reduction of use during particular times of the year and/or at specific locations based on surface conditions
  - b. Relocation or closure of road segments that are threatening or causing resource damages
  - c. Improved signs and communication/education with partners and users
  - d. Preservation treatments to stabilize resources that are damaged or threatened by damage

- e. Revegetation and/or drainage control to stabilize the resource-supporting sediment matrix that is damaged or threatened by damage
  - f. Detailed documentation or data recovery
- 4) NPS shall ensure that the HPTP is prepared and implemented to meet the applicable standards for the treatment of historic properties and properties of religious and cultural importance cited in Stipulation I to address resolution of adverse effects.
- 5) At a minimum, an HPTP shall include the following topics for the treatment of adverse effects to historic properties:
  - a. A description of the historic property (or properties), its integrity and character defining features and an explanation of its NRHP eligibility
  - b. A summary of previous research and applicable research issues
  - c. Proposed research questions and data needs
  - d. Field methods and justification in terms of research questions
  - e. Special analyses and justification in terms of research questions
  - f. Schedule and work effort needed to perform tasks (hours, budget, etc.)
  - g. Native American consultation regarding the research issues and questions
- 6) At a minimum, the HPTP shall include the following topics for the treatment of adverse effects to properties of religious and cultural significance:
  - a. A summary of the results of ethnographic inventory, its methods, and findings
  - b. A description of the identified property (or properties) of religious and cultural significance and their cultural values
  - c. The potential effects of the undertaking's related activities to the characteristics that make the property (or properties) of religious and cultural significance important to the affected tribal people
  - d. Recommendations for resolving the potential effects of the undertaking to the property (or properties) of religious and cultural significance including culturally appropriate means of compensating for loss of use or access to these places
  - e. Schedule and work effort needed to perform tasks (hours, budget, etc.)
- 7) NPS, in consultation with the Parties, will develop the proposed HPTP to resolve adverse effects. The proposed HPTP will be submitted to the Parties for 30-day review. If by the end of that period NPS receives no comments from one or more Parties, NPS will assume that those Parties have no objections to the proposed HPTP. Any comments NPS receives within the review period will be considered in preparing a final HPTP.

- 8) NPS shall ensure that a report or reports are prepared documenting the results of treatment carried out in accordance with the HPTP. A draft report will be submitted to the Parties for 30-day review. Any comments NPS receives within the review period will be considered in making revisions. Multiple drafts of the report or reports may be needed, each with a 30 calendar day review period. In all cases, if by the end of the 30-day review period NPS receives no comments from one or more Parties, NPS will assume that those Parties have no objections to the report or reports as drafted.
- 9) Any Party with whom NPS consults under this PA may object to the development and implementation of the HPTP by submitting the objection in writing to NPS. NPS shall resolve the objection following the provisions for dispute resolution in Stipulation VI (5).

## VI. GENERAL TERMS AND STIPULATIONS

### 1) Curation

- a. Cultural resources collected in the execution of this PA shall be the property of the federal landowner on whose land these resources are recovered.
- b. Curation for artifacts and all records, data base files, photographs, negatives, maps, field notes, artifacts, reports (both a hard copy and electronic copy) and other materials collected or developed for any identification, evaluation, or treatment activities on federal land shall follow the Regulations for the Curation of Federally Owned and Administered Archeological Collections at 36 CFR Part 79.

### 2) Confidentiality

- a. In recognition of the sensitive nature of information that may be obtained through cultural resources investigations carried out under the terms of this PA, particularly those associated with properties of traditional religious and cultural importance, NPS shall ensure that public access to this information is restricted as provided for under Section 304 of the National Historic Preservation Act.
- b. NPS, in coordination with the responsible federal land managing agency or agencies shall ensure that public access to information about the nature and location of archaeological sites on federal or tribal lands is restricted as provided for under Section 9 of the Archaeological Resources Protection Act.

### 3) Unanticipated Archeological Discoveries

- a. If unanticipated archaeological resources are discovered during project related activities, NPS shall cease all ground disturbing activities, secure the discovery location, and using the contact list in Appendix F, report the discovery to the proper authority within 24 hours.

### 4) Unanticipated Discovery of Human Remains

- a. If an unmarked human burial or unregistered grave is encountered during project related activities, NPS shall ensure that any and all human remains, sacred objects, and objects of cultural patrimony will be treated with dignity and respect. All ground disturbing activity

shall cease, the discovery location shall be secured, and NPS shall make the proper notifications using the contact list in Appendix F.

5) Dispute Resolution

- a. NPS will attempt to resolve disputes in consultation with the objecting Party. Should any Party to this PA object in writing within 30 days to any actions proposed pursuant to this PA, NPS shall consult with the objecting Party to resolve the objection and notify the appropriate SHPO of the objection. If NPS determines that the objection cannot be resolved, NPS shall forward all documents relevant to the dispute to the ACHP and notify the other Parties about the nature of the dispute. NPS will ask the ACHP to either:
  - i. Provide NPS with recommendations on the resolution of the objection within 30 days of receiving adequate documentation, which NPS shall take into consideration in reaching a final decision regarding the dispute; or
  - ii. Notify NPS that it shall comment within an additional 30 days pursuant to 36 CFR 800.7(a).
- b. Any ACHP comment provided in response to such a request shall be taken into account by NPS with reference only to the subject of the dispute. NPS's responsibility to carry out all actions under this PA, other than those that are not subject of the dispute, will remain unchanged.
- c. Prior to reaching a final decision on the dispute, NPS will consult with the Parties regarding this dispute. NPS shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and the signatory Parties and provide them with a copy of this written response. NPS will then proceed according to its final decision.

6) Amendments

- a. Any signatory party to this PA may request that the PA and/or any of its appendices be amended. The party proposing the amendment will notify NPS and request an amendment. The proposed amendment shall be submitted in draft form with the request. NPS will consult with the signatory parties to review and consider the amendment. Where there is consensus, the amendment will be effective on the date a copy signed by all of the signatory parties is filed with the ACHP. Where no consensus is reached among the signatory parties the PA will not be amended. The amendment proponent may seek to terminate the PA under Stipulation VI (7).

7) Termination

- a. Any signatory party to this PA may terminate it by providing 30-day notice to the other signatory parties, provided that the signatory parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination.
- b. In the event of termination, NPS will coordinate with its federal, state, and tribal partners to ensure compliance with 36 CFR Part 800 with regard to individual undertakings covered by this PA or in regard to all remaining actions under this PA.

8) Periodic PA Review

- a. NPS will be responsible for ensuring that the Parties are kept informed regarding the ORV Management Plan undertaking and the performance of this PA. The Parties to this agreement will assist NPS in meeting its responsibilities over the life of the undertaking.
- b. Every year, for the first five years, NPS shall meet with the signatory parties within 30 calendar days of the anniversary of the execution of this PA. Thereafter, NPS shall meet with the signatory parties every five years. The annual reporting of monitoring efforts and any mitigation undertaken will be provided to the Parties for review and comment prior to the meeting with signatory parties. The purpose of these meetings will be to review the performance of this agreement and determine if amendments are needed to improve its performance and effectiveness. If amendments are agreed to, then the PA will be amended in accordance with Stipulation VI (6). Where there is no agreement, the PA shall remain in its present form.
- c. The signatory parties may review the PA as needed at any time outside of the regular scheduled review times provided that all signatory parties agree to the meeting in advance.

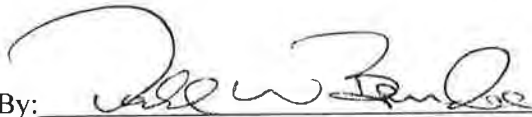
9) PA Duration

The PA will remain in effect for the life of the undertaking unless it is terminated in accordance with Stipulation VI (7).



**SIGNATORIES:**

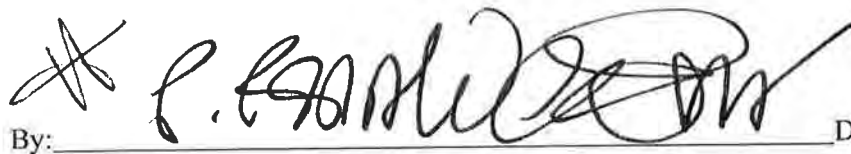

**NATIONAL PARK SERVICE**

By:  Date: 1/29/2015  
Todd W. Brindle, Superintendent, Glen Canyon National Recreation Area

**ARIZONA STATE HISTORIC PRESERVATION OFFICE**

By: James Garrison AZSHPO Date: 2/27/15  
Jim Garrison, Director

**UTAH STATE HISTORIC PRESERVATION OFFICE**

By:  Date: 2/04/2015  
 Brad Westwood, Director

Appendices

Appendix A: List of Consulting Parties

Appendix B: List of Terms and Definitions

Appendix C: Servicewide Programmatic Agreement (2008)

Appendix D: Accessible Shoreline Programmatic Agreement (1988)

Appendix E: Area of Potential Effect for Alternative E

Appendix F: Points of Contact for all participants in the undertaking



## **Appendices**

**(A through F) for the Programmatic Agreement Related to the  
Off-road Vehicle Management Plan for Glen Canyon National Recreation Area**



## Appendix A

### List of consulting parties

#### State Historic Preservation Officer

| Prefix | First Name | Last Name | Title                                      | Company Name                      |
|--------|------------|-----------|--|-----------------------------------|
| Ms.    | Lori       | Hunsaker  | Deputy State Historic Preservation Officer | Utah Historic Preservation Office |
| Ms.    | James      | Garrison  | State Historic Preservation Officer        | Arizona State Parks               |

#### Indian Tribes

| Tribe         | Chapter/Band    | Name                          | Title  |
|---------------|-----------------|-------------------------------|--|
| Navajo Nation | N/A             | Ben Shelly                    | President                                      |
| Navajo Nation | N/A             | Tim Begay                     | Navajo Cultural Specialist                     |
| Navajo Nation | N/A             | Tony Joe                      | Navajo Traditional Cultural Program Manager    |
| Navajo Nation | N/A             | Fred White                    | Deputy Director, Division of Natural Resources |
| Navajo Nation | N/A             | Ron Maldonado                 | Acting Tribal Historic Preservation Office     |
| Navajo Nation | N/A             | Effie Yazzie                  | Lake Powell Navajo Tribal Park                 |
| Navajo Nation | N/A             | Kelly Francis                 | Navajo Cultural Specialist                     |
| Navajo Nation | Kaibeto         | Kelsey Begay                  | Chapter President                              |
| Navajo Nation | Kaibeto         | Peter Corbell                 | Chapter Manager                                |
| Navajo Nation | Lechee          | Irene Nez-Whitekiller         | Chapter President                              |
| Navajo Nation | Oljato          | Herman Daniels, Jr.           | Chapter President                              |
| Navajo Nation | Ts'ah Bii Kin   | Martha Tate                   | Chapter President                              |
| Navajo Nation | Shonto          | Elizabeth Whitethorne-Benally | Chapter President                              |
| Navajo Nation | Navajo Mountain | Alex Bitsinnie                | Chapter President                              |
| Navajo Nation | Navajo Mountain | Willie Greyeyes               | Elder  |
| Navajo Nation | Coppermine      | Floyd Stevens                 | Chapter President                              |

| Tribe                       | Chapter/Band        | Name                 | Title   |
|-----------------------------|---------------------|----------------------|---|
| Navajo Nation               | Gap/Bodaway         | Billy Arizona        | Chapter President                               |
| Hopi                        | N/A                 | Herman Honanie       | Chairman  |
| Hopi                        | N/A                 | Terry Morgart        | Research Assistant                              |
| Hopi                        | N/A                 | Leigh Kuwanwisiwma   | Director Cultural Historic Preservation Office  |
| Hopi                        | N/A                 | Stewart Koyiyumptewa | Hopi Cultural Preservation                      |
| Kaibab Paiute               | N/A                 | Manuel Savala        | Chariman  |
| Kaibab Paiute               | N/A                 | Charley Bullets      | Director, Southern Paiute Consortium            |
| San Juan Southern Paiute    | N/A                 | May Preston          | Chairwoman                                      |
| San Juan Southern Paiute    | N/A                 | Natalie Edgewater    | Council Member                                  |
| Ute Mountain Ute            | N/A                 | Manuel Heart         | Chairman  |
| Ute Mountain Ute            | N/A                 | Terry Knight, Sr.    | Tribal Historic Preservation Officer            |
| Ute Mountain Ute            | N/A                 | Lynn Hartman         | ALP Cultural Resources Contractor Administrator |
| Ute Mountain Ute            | White Mesa Ute Band | Malcolm Lehi         | Council Representative                          |
| Paiute Indian Tribe of Utah | N/A                 | Gari Lafferty        | Chairperson                                     |
| Paiute Indian Tribe of Utah | N/A                 | Jeanine Borchardt    | Vice Chairperson                                |
| Paiute Indian Tribe of Utah | Koosharem Band      | Elliott Yazzie       | Band Chairman                                   |
| Paiute Indian Tribe of Utah | Shivwits Band       | Georgetta Wood       | Band Chairwoman                                 |
| Paiute Indian Tribe of Utah | Kanosh Band         | Corrina Bow          | Band Chairwoman                                 |
| Pueblo of Zuni              | N/A                 | Arlen Quetawki Sr.   | Governor  |
| Pueblo of Zuni              | N/A                 | Kurt Dongoske        | Tribal Historic Preservation Officer            |

### Additional Consulting Parties

| Prefix | First Name | Last Name    | Title   | Company Name   |
|--------|------------|--------------|---|--|
| Mr.    | Nick       | Sandberg     | County Planner                                  | San Juan County  |
| Mr.    | Brian      | Bremner      | County Engineer                                 | Garfield County  |
| Mr.    | Jeff       | Prince       | OHV Program Coordinator                         | Arizona State Parks  |
| Mr.    | Chris      | Haller       | OHV Coordinator                                 | Utah Parks and Recreation  |
| Ms.    | Sue        | Fivecoat     | Manager   | BLM Henry Mountains Field Station                                      |
| Mr.    | Jared      | Lundell      | Archeologist                                    | BLM Richfield Field Office   |
| Ms.    | Christine  | Goetze       | Cultural Resource Program Manager               | Southeast Utah Group   |
| Ms.    | Rose       | Chilcoat     | Associate Director                              | Great Old Broads for Wilderness  |
| Ms.    | Shelley    | Silbert      | Executive Director                              | Great Old Broads for Wilderness  |
| Ms.    | Laura      | Welp         | Ecosystems Specialist                           | Western Watersheds Project   |
| Mr.    | Jonathan   | Ratner       | Director  | Western Watersheds Project - WY Office                                 |
| Mr.    | John       | Fellmeth     | President                                       | San Juan Public Entry and Access Rights (SPEAR)                        |
| Mr.    | Jerry      | Spangler     | Executive Director                              | Colorado Plateau Archaeological Alliance                               |
| Ms.    | Sonia      | Hutmacher    | Vice-President, Government Affairs and Research | Utah Professional Archeological Council                                |
| Mr.    | James      | Page         | President, Armijo Chapter                       | Old Spanish Trail Association  |
| Mr.    | Benjamin   | Pykles Ph.D. | Curator   | Church Historic Sites, The Church of Jesus Christ of Latter-day Saints |





## APPENDIX B

### LIST OF TERMS AND DEFINITIONS

Unless defined differently in this PA, all terms are used in accordance with 36 CFR Part 800.

The following definitions clarify the vehicle terminology commonly used throughout the Glen Canyon ORV Management Plan/DEIS and found in this PA.

- 1) **Conventional Motor Vehicle:** The term “conventional motor vehicle” is used throughout this plan/DEIS to distinguish motor vehicles designed primarily for use and operation on streets and highways and are licensed and registered for interstate travel but can be used off-road, from non-conventional vehicles primarily designed for offroad use. Automobiles, vans, highway motorcycles, sport utility vehicles, recreational vehicles (RVs), pickup trucks, or buses for which the primary purpose of manufacture is transportation and/or commerce are examples of conventional motor vehicles. Conventional motor vehicles do not include OHVs, ATVs, or snowmobiles.
- 2) **General Management Plan (GMP) Road:** Roads (paved and unpaved) open to motor vehicle travel as designated in the Glen Canyon 1979 General Management Plan (figure 1). All other roads are closed to public motor vehicle travel. Park roads in Glen Canyon are the same as GMP roads.
- 3) **Motor Vehicle:** NPS defines a motor vehicle as every vehicle that is self-propelled and every vehicle that is propelled by electric power, but not operated on rails or upon water, except a snowmobile and a motorized wheelchair (36 CFR 1.4).
- 4) **Non-conventional Motor Vehicle:** The term “non-conventional motor vehicle” is used throughout this plan/DEIS to distinguish ATVs, OHVs, dirt bikes, sand rails, side-by-sides, dune buggies, and other vehicles primarily designed for off-road use from conventional motor vehicles. When necessary to distinguish a road or area designated for a specific category of motor vehicles, non-conventional motor vehicles are further divided into two categories: OHVs and street-legal ATVs. Snowmobiles are not included in this term.
  - a. **Off-highway Vehicle (OHV):** NPS has no definition of OHVs in the federal code. Glen Canyon overlaps two state jurisdictions (Arizona and Utah) with distinct vehicle codes that define OHV operator and vehicle requirements; see the “Conventional Motor Vehicle Operator Requirements” section in “Chapter 2: Alternatives.” In Utah, Utah State Park regulations define OHVs as follows:
    - i. “Off-highway vehicle” means any snowmobile, all-terrain type I vehicle, all-terrain type II vehicle, or motorcycle. (this plan/DEIS would not authorize snowmobile use at Glen Canyon)
    - ii. “All-terrain type I vehicle” means any motor vehicle 52 inches or less in width, having an un-laden dry weight of 1500 pounds or less, traveling on three or more low pressure tires, having a seat designed to be straddled by the operator, and designed for or capable of travel over unimproved terrain. (effective July 1, 2009)

- iii. (a) “All-terrain type II vehicle” means any other motor vehicle, not defined in Subsection (2), (10), or (21), designed for or capable of travel over unimproved terrain.
- iii. (b) “All-terrain type II vehicle” does not include golf carts, any vehicle designed to carry a disabled person, any vehicle not specifically designed for recreational use, or farm tractors as defined under Section 41-1a-102.

The Arizona Game and Fish Department and Arizona State Parks define OHVs as follows:

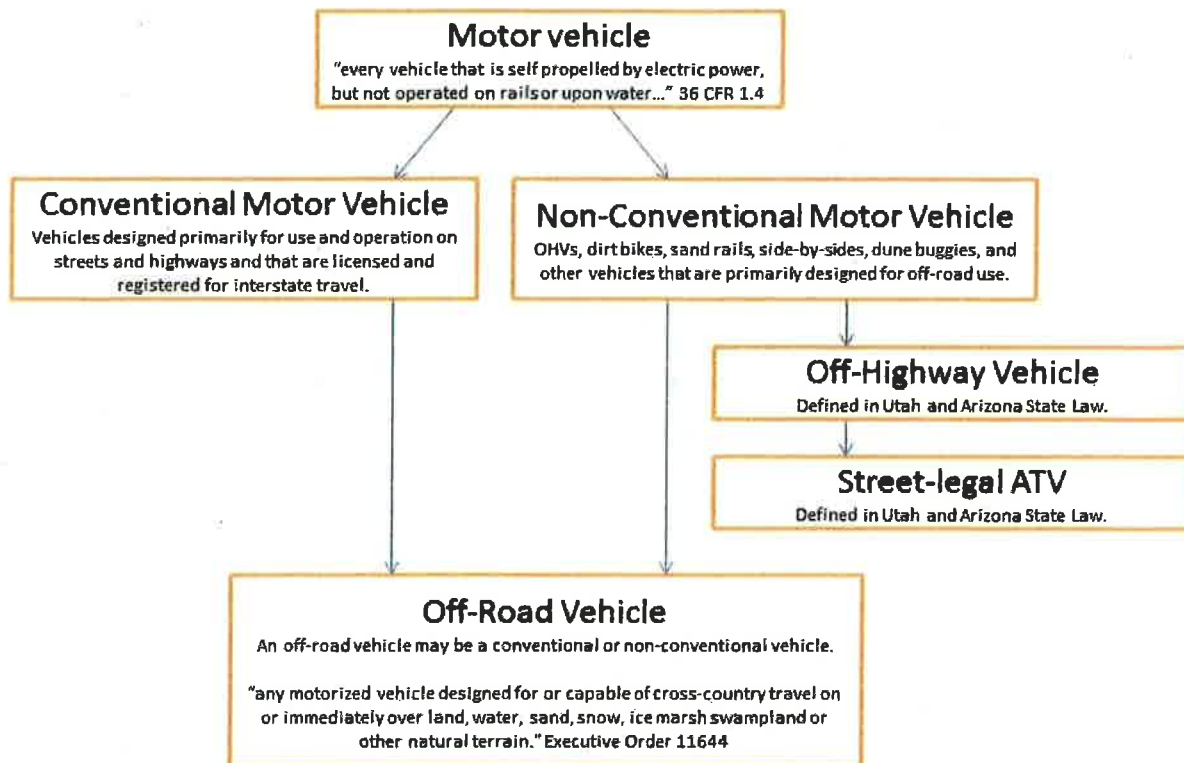
- i. A motorized vehicle when operated primarily off of highways on land, water, snow, ice or other natural terrain or on a combination of land, water, snow, ice or other natural terrain. (this plan/DEIS would not authorize snowmobile use at Glen Canyon).
  - ii. Includes a two-wheel, three-wheel or four-wheel vehicle, motorcycle, four-wheel drive vehicle, dune buggy, amphibious vehicle, ground effects or air cushion vehicle, and any other means of land transportation deriving motive power from a source other than muscle or wind.
  - iii. Does not include a vehicle that is either designed primarily for travel on, over or in the water, or used in installation, inspection, maintenance, repair or related activities involving facilities for the provision of utility or railroad service.
- 5) **Street-legal All-terrain Vehicle (ATV):** NPS has no definition of ATVs in the federal code. Glen Canyon overlaps two state jurisdictions (Arizona and Utah) with distinct vehicle codes. In Utah, ATVs are legal to operate on a road or highway, with the exception of an interstate freeway<sup>1</sup> or a limited access highway, if they meet the “street-legal” definition under the Utah state motor vehicle and traffic code, currently described at UCA 41-6a-1509, “Street-legal all-terrain vehicle — Operation on highways — Registration and licensing requirements — Equipment requirements.”
- 6) **Off-road Use:** The terms “off-road use or off-road travel” refers to the driving of any motor vehicle off of paved or unpaved roads. Operating a motor vehicle off of park roads or parking areas within the National Park System is illegal unless it is authorized by a special regulation.
- 7) **Off-road Vehicle (ORV):** NPS defines ORVs broadly as “any motorized vehicle designed for or capable of crosscountry travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain” (Executive Order 11644). Because the federal definition is so broad, the term “ORV” is not sufficient to describe the full scope of management activities in this plan/DEIS. This plan/DEIS distinguishes between conventional motor vehicles (e.g., automobiles, trucks, cars, and other vehicles that are licensed and registered for interstate travel), and non-conventional motor vehicles (e.g., all-terrain vehicles (ATVs), dirt bikes, sand rails, side-by-sides, dune buggies, etc.), which generally are not licensed for interstate travel.

In Arizona, ATVs are legal to operate on a road or highway if they meet the “street-legal” definition under the Arizona state motor vehicle and traffic code, currently described at ARS 28-1171–1181 (Article 20 – Offhighway Vehicles). Street-legal ATVs must comply with the same requirements as a road motorcycle for registration, titling, odometer statement, vehicle

identification number, license plates, registration fees, and county motor vehicle emissions inspection and maintenance programs. Street-legal ATVs must also comply with the same requirements as conventional motor vehicles for motor vehicle insurance and safety inspection requirements.

- 8) **Off-road Vehicle (ORV) Area:** NPS has no definition of ORV areas in the federal code. This plan/DEIS uses the term "ORV area" as referenced in 36 CFR 4.10 to describe an area designated for off-road use.
- 9) **Off-road Vehicle (ORV) Route:** NPS has no definition of ORV routes in the federal code. This plan/DEIS uses the term "ORV route" as referenced in 36 CFR 4.10 to describe a specific linear corridor designated for off-road motor vehicle travel between identified points or locations.
- 10) **Park Road:** NPS defines a park road as the main-traveled surface of a roadway open to motor vehicles, owned, controlled or otherwise administered by NPS (36 CFR 1.4), see also Park Road Standards (NPS 1984).

The following diagram shows the relationship between conventional and non-conventional vehicles and OHVs and street-legal ATVs that guides the use of these terms for the purposes of Glen Canyon ORV Management Plan/DEIS.



The following additional definitions clarify terminology commonly used throughout this PA that are not defined above or at 36 CFR Part 800.

- 1) **Archaeological Site:** A location that contains the physical evidence of past human behavior that allows for its interpretation, that is at least 50 years of age, and for which a boundary can be established.
- 2) **Avoidance:** Modification of a project or other undertaking so that effects on cultural resources that would have resulted from the originally proposed actions do not occur.
- 3) **Cultural Items:** Human remains, associated funerary objects, unassociated funerary objects, sacred objects, cultural patrimony [25 USC 3001 (3)].
- 4) **Cultural Resources:** The National Historic Preservation Act recognizes five property types: districts, sites, buildings, structures, and objects. As called for in the act, these categories are used in the National Register of Historic Places, the preeminent reference for properties worthy of preservation in the United States. To focus attention on management requirements within these property types, the NPS Management Policies categorizes cultural resources as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources.
  - a. **Archeological Resources:** The remains of past human activity and records documenting the scientific analysis of these remains. Archeological resources include stratified layers of household debris and the weathered pages of a field notebook, laboratory records of pollen analysis and museum cases of polychrome pottery. Archeological features are typically buried but may extend above ground; they are commonly associated with prehistoric peoples but may be products of more contemporary society. What matters most about an archeological resource is its potential to describe and explain human behavior. Archeological resources have shed light on family organization and dietary patterns, they have helped us understand the spread of ideas over time and the development of settlements from place to place.
  - b. **Cultural Landscapes:** Settings we have created in the natural world. They reveal fundamental ties between people and the land—ties based on our need to grow food, give form to our settlements, meet requirements for recreation, and find suitable places to bury our dead. Landscapes are intertwined patterns of things both natural and constructed: plants and fences, watercourses and buildings. They range from formal gardens to cattle ranches, from cemeteries and pilgrimage routes to village squares. They are special places: expressions of human manipulation and adaptation of the land.
  - c. **Structures:** Material assemblies that extend the limits of human capability. Without them we are restricted to temperate climates, the distances we can walk, and the loads we can carry. With them we can live where we choose, cross the continent in hours, and hurl a spacecraft at the moon. Structures are buildings that keep us warm in winter's worst blizzard and bridges that keep us safe over raging rivers; they are locomotives that carry us over vast prairies and monuments to extend our memories. They are temple mounds and fishing vessels, auto factories and bronze statues—elaborations of our productive ability and artistic sensitivity.
  - d. **Museum Objects:** Manifestations and records of behavior and ideas that span the breadth of human experience and depth of natural history. They are evidence of technical development and scientific observation, of personal expression and curiosity about the

past, of common enterprise and daily habits. Museum objects range from a butterfly collection to the woven fragments of a prehistoric sandal. They include the walking cane of an American president, a blacksmith's tools, and the field notes of a marine biologist. They encompass fossilized dinosaur bones and business journals, household furnishings and love letters bound with a faded ribbon. They are invaluable—samples and fragments of the world through time and the multitude of life therein.

- e. **Ethnographic Resources:** Basic expressions of human culture and the basis for continuity of cultural systems. A cultural system encompasses both the tangible and the intangible. It includes traditional arts and native languages, religious beliefs and subsistence activities. Some of these traditions are supported by ethnographic resources: special places in the natural world, structures with historic associations, and natural materials. An ethnographic resource might be a riverbank used as a Pueblo ceremonial site or a schoolhouse associated with Hispanic education, sea grass needed to make baskets in an African-American tradition or a 19th-century sample of carved ivory from Alaska. Management of ethnographic resources acknowledges that culturally diverse groups have their own ways of viewing the world and a right to maintain their traditions.
- 5) **Curation:** “The practice of documenting, managing, preserving, and interpreting museum collections according to professional museum and archival practices.” [62 Federal Register 33707, 6-20-97. Secretary of the Interior’s Historic Preservation Professional Qualification Standards: Curation]
- 6) **Effective Date of the Agreement:** The date of the last Signatory to sign the Agreement.
- 7) **Human Remains and Associated Funerary Objects:** The physical remains of the body of a person of Native American ancestry. The term does not include remains or portions of remains that may reasonably be determined to have been freely given or naturally shed by the individual from whose body they were obtained, such as hair made into ropes or nets. For the purposes of determining cultural affiliation, human remains incorporated into a funerary object, sacred object, or object of cultural patrimony must be considered as part of that item. [43 CFR 10.2 (d)(1)]. Funerary objects are those objects that, as a part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later.
- 8) **Inventory:** The process of locating cultural resources and gathering information about them through archeological surveys, ethnographic fieldwork, or archival searches.
- 9) **Mitigation:** Measures carried out to avoid or reduce the effects of undertakings on cultural resources. These measures may include relocation or other modifications of the undertaking itself or recovery of materials and data from the cultural resource site to be affected.
- 10) **Native American:** “Of, or relating to, a tribe, people, or culture that is indigenous to the United States.” [Native American Graves Protection and Repatriation Act, Section 2(9)]
- 11) **Properties of Traditional Religious and Cultural Importance:** Cultural resources with attached religious and cultural importance from traditional communities and groups regardless of qualification for eligibility of inclusion on the National Register of Historic Places.
- 12) **Properties of Traditional Religious and Cultural Significance:** Cultural Resources with attached religious and cultural importance from traditional communities and groups that are

eligible for inclusion on the National Register of Historic Places as Traditional Cultural Properties.

- 13) **Repository:** “A facility such as a museum, archeological center, laboratory or storage facility managed by a university, college, museum, other educational or scientific institution, a Federal, State or local Government agency or Indian tribe that can provide professional, systematic and accountable curatorial services on a long term basis.” [36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, Section 79.4(j)]
- 14) **Sacred Sites:** Any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site.
- 15) **Site:** The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historical or archaeological value regardless of the value of any existing structure [36 CFR Part 60, NRHP, Section 60.3 (1)]
- 16) **Traditionally Associated Peoples:** Social/cultural entities such as tribes, communities, and kinship units, as well as park neighbors, traditional residents, and former residents who remain attached to a park area despite having relocated, are “traditionally associated” with a particular park when (1) the entity regards park resources as essential to its development and continued identity as a culturally distinct people; (2) the association has endured for at least two generations (40 years); and (3) the association began prior to the establishment of the park. [NPS *Management Policies* (2006:159)]
- 17) **Traditional Cultural Property:** A property associated with the cultural practices, beliefs, the sense of purpose, or existence of a living community that is rooted in that community’s history or is important in maintaining its cultural identity and development as an ethnically distinct people. Traditional cultural properties are ethnographic resources eligible for listing in the National Register. [NPS *Management Policies* (2006:159)]

**APPENDIX C**  
**SERVICEWIDE PROGRAMMATIC AGREEMENT (2008)**

**PROGRAMMATIC AGREEMENT AMONG THE  
NATIONAL PARK SERVICE  
(U.S. DEPARTMENT OF THE INTERIOR),  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,  
AND THE NATIONAL CONFERENCE OF STATE HISTORIC  
PRESERVATION OFFICERS FOR COMPLIANCE WITH SECTION 106  
OF THE NATIONAL HISTORIC PRESERVATION ACT**

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**PROGRAMMATIC AGREEMENT AMONG THE  
NATIONAL PARK SERVICE  
(U.S. DEPARTMENT OF THE INTERIOR),  
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PRESERVATION OFFICERS FOR COMPLIANCE WITH SECTION 106  
OF THE NATIONAL HISTORIC PRESERVATION ACT**

**WHEREAS**, the National Park Service (NPS) plans for, operates, manages, and administers the National Park System (System) and is responsible for identifying, preserving, maintaining, and interpreting the historic properties of the System unimpaired for the enjoyment of future generations in accordance with the 1916 National Park Service Organic Act, the NPS Management Policies (2006), and applicable NPS Directors Orders; and

**WHEREAS**, the operation, management, and administration of the System entail undertakings that may affect historic properties (as defined in 36 CFR Part 800), which are therefore subject to review under Sections 106, 110(f) and 111(a) of the National Historic Preservation Act as amended (NHPA) (16 USC 470 *et seq.*) and the regulations of the Advisory Council on Historic Preservation (ACHP) (36 CFR Part 800); and

**WHEREAS**, the NPS has established management policies, director's orders, standards, and technical information designed for the identification, evaluation, documentation, and treatment of historic properties consistent with the spirit and intent of the NHPA; and

**WHEREAS**, the NPS has a qualified staff of cultural resource specialists to carry out programs for historic properties; and

**WHEREAS**, the purpose of this Programmatic Agreement (PA) is to establish a program for compliance with Section 106 of the NHPA and set forth a streamlined process when agreed upon criteria are met and procedures are followed; and

**WHEREAS**, signature and implementation of this PA does not invalidate park-, Region-, or project-specific memoranda of agreement (MOA) or programmatic agreements negotiated for Section 106 purposes prior to the effective date of this PA; and

**WHEREAS**, Federally recognized Indian Tribes are recognized by the U.S. government as sovereign nations in treaties and as unique political entities in a government-to-government relationship with the United States; and

**WHEREAS**, the NPS has conducted a series of "listening" meetings with Indian Tribes, has requested the input of a number of Native Advisors in the process of preparing this PA, and has held consultation meetings with Federally recognized Indian Tribes, Native Hawaiian organizations, and other parties on the content of the PA; and

**WHEREAS**, 36 CFR 800.2 (c)(2)(i)(A) and (B) provide for consultation with Indian Tribes on the same basis as the State Historic Preservation Officer (SHPO) when an undertaking will occur on or affect historic properties on tribal lands; and

**WHEREAS**, in accordance with 36 CFR 800.14(b)(2)(iii), a PA shall take effect on tribal lands only when the designated representative of the tribe is a signatory to the agreement; and

**WHEREAS**, for those parks located partly or wholly within tribal lands, the NPS has invited the applicable Tribal Historic Preservation Officer (THPO) or Indian Tribe to sign this PA as an Invited Signatory; and

**WHEREAS**, the NPS has consulted with the NCSHPO and the ACHP regarding ways to ensure that NPS operation, management, and administration of the Parks provide for management of the Parks' historic properties in accordance with the intent of NPS policies, director's orders and Sections 106, 110, 111, and 112 of the NHPA.

**NOW, THEREFORE**, the NPS, the NCSHPO, the ACHP, and the signatory tribes mutually agree that the NPS will carry out its Section 106 responsibilities with respect to operation, management, and administration of the Parks in accordance with the following stipulations.

#### **PURPOSE AND NEED**

NPS park operations, management, and administration require a large number of low-impact or repetitive activities on a daily basis that have the potential to affect properties listed in or determined eligible for the National Register of Historic Places and require consultation under Section 106. This PA provides an efficient process for compliance with Section 106 for daily NPS park operations, management, and administration activities. It establishes two processes for Section 106 review: a "streamlined" review process for designated undertakings that meet established criteria and a "standard" review process for all other undertakings. This PA also provides programmatic procedures and guidance for other activities related to the Section 106 compliance process, including identification of resources, consultation, and planning.

The NPS shall ensure the following measures are implemented.

#### **I. RESPONSIBILITIES, QUALIFICATIONS, AND TRAINING**

The following sections list the responsibilities and required qualifications for those individuals responsible for implementing this PA.

## **A. Responsibilities**

### **1. Director, National Park Service**

The Director has policy oversight responsibility for the agency's historic preservation program. The Director, through the Deputy Director for Operations, executes this PA for the NPS and provides policy level oversight within the NPS to ensure that stipulations of the PA are met.

### **2. Associate Director for Cultural Resources**

The Associate Director for Cultural Resources (ADCR) provides national leadership for policy implementation through establishing standards and guidance for managing cultural resources within the Parks. The ADCR works with the NPS regions and parks to ensure and support compliance with the stipulations of this PA and provides accountability to the signatories of this PA with regard to its implementation. The ADCR is responsible for working with Regions and Parks to develop and fund training needs related to Section 106 and the implementation of the PA. The ADCR in cooperation with the regions and parks, is responsible for issuing a guidance document for this agreement within 12 months of its execution. At the time of execution of this PA, the ADCR also holds the title of Federal Preservation Officer (FPO).

### **3. Regional Directors**

The Regional Director is the line manager for all Superintendents within his/her region. The Regional Director is responsible for policy oversight, strategic planning, and direction for parks and programs within the region and reports to the Director through the NPS Deputy Director for Operations. Review and support of Park and Superintendent implementation of this PA and training to achieve Section 106 compliance is the responsibility of the Regional Director.

### **4. Regional Section 106 Coordinators**

The Regional Section 106 Coordinators work with parks and other NPS offices to provide support for Section 106 compliance and implementation of this PA. The Regional Section 106 Coordinators provide guidance materials and technical assistance for implementing the PA and assist the parks to meet the training, reporting, and consultation requirements of the PA.

### **5. Superintendents**

Superintendents are the responsible agency officials as defined in 36 CFR 800.2(a) for purposes of Section 106 compliance and the implementation of this PA.

Each Superintendent shall do the following within his/her park:

- a. Designate a Park Section 106 Coordinator and a Cultural Resource Management (CRM) Team meeting the necessary qualifications;
- b. Develop and maintain relationships with Federally recognized Indian Tribal governments and Native Hawaiian organizations (if applicable);
- c. Develop and maintain relationships with SHPOs/THPOs;
- d. Ensure early coordination among the Section 106 Coordinator, the CRM Team, and other park and regional staff, concessioners, park partners, neighboring communities, groups affiliated with park resources, and others in the planning of projects and activities that may affect historic properties;
- e. Ensure that Section 106 consultation with the SHPO/THPO and other consulting parties is initiated early in the planning stages of any given undertaking, when the widest feasible range of alternatives is available for consideration;
- f. Ensure that the Park Section 106 Coordinator, CRM Team Members and the park cultural resources staff receives the NHPA training needed to carry out their responsibilities. Provide opportunities for other involved staff to receive NHPA training as funding and opportunities permit.

#### **6. Park Section 106 Coordinator**

The Park Section 106 coordinator provides day-to-day staff support for Section 106 activities and serves as liaison among park personnel, the NPS Regional Office, NPS Centers, and others involved in undertakings. The coordinator makes recommendations to the Superintendent regarding the appropriate course of action under this PA, including whether a project constitutes a Section 106 undertaking.

#### **7. Cultural Resource Management (CRM) Team**

The CRM Team shall provide expertise and technical advice to the Superintendent and the Park Section 106 Coordinator for purposes of Section 106 compliance and implementation of this PA.

### **B. Qualifications**

#### **1. Park Section 106 Coordinator**

The Superintendent shall designate at least one (1) person to act as the park's Section 106 Coordinator, whose Section 106 responsibilities are specified, as appropriate. The designee may be chosen from the park staff, other NPS parks, NPS archeological and preservation centers, and the NPS Regional Office. The Park Section 106 Coordinator shall have an appropriate combination of professional training and/or experience to effectively carry out the responsibilities of the position.

## **2. Cultural Resource Management (CRM) Team**

The Superintendent shall designate a CRM Team with expertise to fulfill and implement the requirements of this PA, whose Section 106 responsibilities are specified, as appropriate.

- a. Subject matter experts chosen must be appropriate to the resource types found in the park. Therefore, the number of individuals who comprise the CRM Team is not static and will be appropriate to include all necessary disciplines. Multi-disciplinary reviews of proposed undertakings are recommended.
- b. CRM Team members may be on the park staff or in other parks, or from NPS Regional Offices, NPS Centers, Federally recognized Indian Tribes, Native Hawaiian organizations, or elsewhere in the public or private sector.
- c. CRM Team members who are federal employees shall meet the qualifications for the applicable discipline as defined in Appendix E to NPS-28: Cultural Resource Management Guideline. CRM Team members who are representing Federally recognized Indian Tribes may be traditional cultural authorities, elders, and others experienced in the preservation of tribal culture. All other CRM team members, who are not federal employees or representing a Federally recognized Indian Tribe, must meet the Professional Qualification Standards in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

## **C. Training**

Periodic training on Section 106 compliance issues and the provisions of this PA is needed to maintain an understanding of the requirements of each. Such training may be accessed through the NPS, the ACHP, SHPOs/THPOs, Indian Tribes, Native Hawaiian organizations, other Federal or state agencies or private industry. Training may be in a classroom setting, electronic media, meetings, or other formats that allow for the conveyance of information. The NPS Washington Office, in consultation with the NPS parks, regions, and training centers, will work with the ACHP and NCSHPO to establish options for training in accordance with this PA, within 12 months from the time of execution of this PA.

1. All Superintendents and Section 106 coordinators will be notified of the opportunity to receive training on the provisions of this programmatic agreement once it has been made available by the NPS Washington Office. The NPS ADCR will work with the Regional 106 coordinators to accomplish this training throughout the Regions and parks within 12 months of its availability.
2. Superintendents will report on Section 106 training received by Superintendents and park staff as part of the biennial report (Section VIII.B of this agreement).

## **II. CONSULTATION**

### **A. Consultation with Federally Recognized Indian Tribes and, THPOs, and Native Hawaiian Organizations**

Government-to-government consultation with Federally recognized Indian Tribes and consultation with Native Hawaiian organizations shall occur at the Superintendent level and be initiated during planning and prior to undertaking an activity, program or project that may affect historic properties of significance to Federally recognized Indian tribes or Native Hawaiian organizations. Maintaining an on-going consultative relationship with THPOs and/or staff of Federally recognized Indian Tribes and Native Hawaiian organizations is essential.

#### **1. Consultation on Undertakings off Tribal Lands**

Superintendents shall identify, compile a list of, and consult with Federally recognized Indian Tribes, THPOs and Native Hawaiians that are known to have aboriginal lands within the park boundaries, assert an interest in historic properties within the park boundaries, or have lands or interest in lands adjacent to the park.

- a. Such consultation will be in accordance with 36 CFR 800.2(c)(2)(ii), NPS Director's Order 75A: Public Engagement and Public Involvement, and with Sections III and IV of this PA.
- b. Each Superintendent, with the assistance of park and Regional Office ethnographers, will be responsible for identifying aboriginal lands within the park boundary, working cooperatively with the appropriate Federally recognized Indian Tribes and Native Hawaiian organizations.
- c. Superintendents, in consultation with the Park Section 106 Coordinator and the CRM Team, shall establish a process and develop consultation agreements, where appropriate, that provide for early coordination between the park and Federally recognized Indian tribes, THPOs, and/or Native Hawaiian organizations in identification and evaluation of historic properties and the planning of projects and activities that may affect historic properties.
- d. Identification and evaluation of historic properties on aboriginal lands must be based upon consultation with the appropriate traditionally associated communities.

#### **2. Consultation on Undertakings on Tribal Lands**

For those undertakings that either occur on tribal lands or will otherwise have the potential to affect historic properties on tribal lands, including cumulative impacts from collectively significant actions taking place over a period of time, the Superintendent shall consult with that tribe on the same basis as he or she consults with the SHPO.

- a. Where the Tribe has assumed the SHPO's responsibility for Section 106 pursuant to Section 101(d)(2) of the NHPA, the Superintendent shall consult with the THPO in lieu of the SHPO, except as provided for in Section 101(d)(2)(D)(iii).
- b. Where the Tribe has not assumed the SHPO's responsibility for Section 106, the Superintendent shall consult with the Tribe's designated representatives in addition to and on the same basis as the SHPO. The Tribe shall have the same rights of consultation and concurrence as the SHPO.

**3. Applicability of this PA on Tribal Lands**

When a park is located partly or wholly within the boundaries of tribal lands, and the tribe has not signed this PA as an Invited Signatory, any undertaking that may occur on those tribal lands shall require consultation with the Tribe and/or THPO in accordance with 36 CFR Part 800, and the provisions of this PA are not applicable.

A tribe may sign this PA by written notification to the Director of such intent, signed by the THPO, Indian tribe, or a designated representative of the tribe. Once such a written and signed notification is received by the Director, the provisions of this PA will be applicable to undertakings occurring on those lands where a park is located partly or wholly within the boundaries of that particular tribe's tribal lands.

**4. Development of Agreements to Facilitate Government-to-Government Consultation with Federally recognized Indian Tribes and Consultation with Native Hawaiian Organizations**

Development of consultation protocols, memoranda of agreement and programmatic agreements is encouraged. Such agreements may be negotiated between Superintendents and Federally recognized Indian Tribes, THPOs, or Native Hawaiian organizations and may be independent of or supplement this PA. For example, such agreements may be specific to a project, plan, or park activity, or may set forth specific consultation protocols between the park and a specific tribe or group of Native peoples. Superintendents will provide an informational copy of all agreements to the Regional Section 106 Coordinator and to the ACHP and appropriate SHPO/THPO in accordance with 36 CFR 800.2(c)(2)(ii)(E).

**B. Consultation with SHPOs**

Consultation with SHPOs on projects reviewed in accordance with the Standard Review Process will occur in accordance with the procedures set forth in Section IV of this PA. Consultation with SHPOs on implementation of this PA will occur biennially in accordance with Section VIII of this PA.



**C. Consultation with Local Governments and Applicants for Federal Assistance, Licenses, Permits, and Other Approvals**

Where appropriate, the Superintendent shall actively seek the views and comments of local governments and certified local governments. Those seeking Federal assistance, licenses, permits, or other approvals are entitled to participate as a consulting party as defined in 36 CFR 800.2(c)(4) and will be consulted, as applicable.

**D. Consultation with the Public**

Superintendents will consult with interested members of the public.

**E. General Consultation Provisions**

**1. Section 110 Inventory of Historic Properties**

The parks implement a program to identify, evaluate, and, when appropriate, nominate historic properties to the National Register of Historic Places in accordance with Section 110(a)(2)(d) of the NHPA. Research and testing of all types of historic properties for purposes of identification and evaluation must be limited to the minimum necessary to obtain the required inventory and evaluative information. Early coordination on the identification and evaluation of historic properties should be undertaken with Federally recognized Indian Tribes or Native Hawaiian organizations, as appropriate, utilizing tribal knowledge and expertise wherever applicable. Knowledge and data from appropriate sources of expertise should be utilized, including SHPOs, local governments, Indian Tribes, Pacific Islanders, and national and local professional and scientific organizations. Inventory records should be periodically reviewed and updated, as necessary, to ensure data on historic properties, including condition information, is current, and any previous evaluations of significance remain accurate.

**2. Information Sharing: Historic Property Inventories**

Parks, NPS Regional Offices, NPS Centers, and SHPOs will share information with each other regarding inventories of historic properties and historic contexts developed, as well as other reports and research results related to historic properties in the parks, whenever such studies become available. In addition, parks, NPS Regional Offices, and NPS Centers will make such information available to interested Federally recognized Indian Tribes, THPOs, and Native Hawaiian organizations. Federally recognized Indian Tribes who are signatories to this PA will, likewise, make such information available to NPS parks and Regional Offices, as appropriate. Information will be shared with the understanding that sensitive information will be withheld by the recipient of the information from public disclosure pursuant to Section 304 of NHPA and other applicable laws. Procedures for information sharing and format for information (i.e. electronic, hard copy, etc.) should be agreed upon between the parties.

3. **Notification of Park Section 106 Coordinator**

The National Park Service will provide contact information on Section 106 coordinators to Indian Tribes, SHPOs/THPOs, and Native Hawaiian organizations for each park through the Regional Office from the Regional 106 Coordinator within six months of this PA and updated biennially.

4. **Review and comment on guidance and training documents**

The ADCR will consult with the ACHP and NCSHPO in the development of training materials and guidance for this PA.

**F. Development of Agreements to Facilitate Consultation**

Development of consultation protocols, memoranda of agreement, and programmatic agreements is encouraged. Such agreements may be negotiated between Superintendents and organizations or governments and may be independent of or supplement this PA. For example, such agreements may be specific to a project, plan, or park activity, or may set forth specific consultation protocols between the park and a specific group, state, or local government. Superintendents will provide an informational copy of all agreements to the Regional Section 106 Coordinator and to the ACHP and appropriate SHPO/THPO in accordance with 36 CFR 800.2(c)(2)(ii)(E).

**III. STREAMLINED REVIEW PROCESS**

Where the Park Section 106 Coordinator determines the following criteria are met for a proposed undertaking, no further consultation is required unless otherwise specifically requested by the SHPO/THPO, Federally recognized Indian Tribe(s) or Native Hawaiian organization(s), or the ACHP.

**A. Criteria for Using the Streamlined Review Process**

All of the following criteria must be met in order to use the Streamlined Review Process:

1. The proposed undertaking must be an activity eligible for streamlined review, listed in Section III.C of this PA. These undertakings shall be known as "streamlined activities" for purposes of reference and replace the term "nationwide programmatic exclusions" set forth in the 1995 Programmatic Agreement between the NPS, the ACHP, and the NCSHPO; and
2. Identification and evaluation of all types of historic properties within the project area of potential effect (APE) must have been previously undertaken, sufficient to assess effects on those resources (with the exception of V.C (16)). Identification and evaluation of historic properties of religious and cultural significance to Indian tribes and Native Hawaiian organizations must be based upon consultation

with those entities. All properties within the APE must have previously been evaluated for eligibility to the National Register of Historic Places and the SHPO/THPO must have concurred with the eligibility determination. Inventory records should be periodically reviewed and updated, as necessary, to ensure data on historic properties, including condition information, is current, and any previous evaluations of significance remain accurate; and

3. The Section 106 Coordinator, in consultation with appropriate members of the CRM Team must have reviewed the project and certified that the effects of the proposed undertaking on historic properties on or eligible for the National Register will not be adverse based on criteria in 36 CFR 800.5, including consideration of direct, indirect, and cumulative effects. The Effect Finding must be "No Historic Properties Affected" or "No Adverse Effect".

#### **B. Streamlined Review Process**

1. *Evaluate Whether the Proposed Undertaking is Eligible for Streamlined Review:* The Park Section 106 Coordinator, in consultation with appropriate members of the CRM Team, determines whether the proposed undertaking is an activity listed as an undertaking eligible for streamlined review in Section III.C of this PA. If not, compliance for the undertaking must be accomplished through the Standard Review Process, outlined in Section IV of this PA.
2. *Identify the Undertaking's Area of Potential Effect (APE):* The Park Section 106 Coordinator, in consultation with members of the CRM Team with expertise in the appropriate discipline(s), determines the project's APE, taking into account direct, indirect, and cumulative effects.
3. *Identify Historic Properties within APE:* The Park Section 106 Coordinator, in consultation with members of the CRM Team with expertise in the appropriate discipline(s), identifies the location, number, and significance of historic properties within the APE. If properties are located within the APE that have not yet been documented or evaluated for eligibility for the National Register of Historic Places, or if the SHPO/THPO has not yet concurred with the eligibility determination, compliance for the undertaking must be accomplished through the Standard Review Process, outlined in Section IV of this PA.
4. *Evaluate Effect of Undertaking on Historic Properties in APE:* The Park Section 106 Coordinator, in consultation with members of the CRM Team with expertise in the appropriate discipline(s), evaluates the effect of the proposed undertaking and cumulative effects on historic properties, applying the Criteria of Adverse Effect set forth in 36 CFR 800.5(a)(1)
5. *Document Streamlined Review Process:* If, after following steps one through four (1-4) listed above, the Park Section 106 Coordinator determines no historic properties are within the APE, or the proposed undertaking would result in a

determination of "no historic properties affected" or "no adverse effect", no further consultation is required. The Park Section 106 Coordinator shall document the determination as follows:

- a. The Streamlined Review process will be documented using the NPS "Assessment of Actions Having an Effect on Cultural Resources" form, or another appropriate format. Parks are encouraged to use Servicewide automated project planning and tracking systems, such as the NPS Planning, Environment and Public Comment (PEPC) system, to track and document Section 106 compliance activities.
- b. Documentation will include the comments of each member of the CRM Team involved in the review process and the signature of the Superintendent. Electronic signatures are acceptable.
- c. Documentation will be permanently retained by the Park Section 106 Coordinator for review by consulting parties and to facilitate the preparation of the Annual Report.
- d. Annual Report: An annual report of all undertakings reviewed using the Streamlined Review process will be prepared by the Park Section 106 Coordinator, using existing and readily available data sources and reporting systems such as the NPS Planning, Environment and Public Comment (PEPC) system, for transmittal to the SHPO/THPO.

### **C. Undertakings Eligible for Streamlined Review**

1. **Preservation Maintenance and Repair of Historic Properties:** The Streamlined Review Process is intended to be used for:

- Mitigation of wear and deterioration of a historic property to protect its condition without altering its historic character;
- Repairing when its condition warrants with the least degree of intervention including limited replacement in-kind;
- Replacing an entire feature in-kind when the level of deterioration or damage of materials precludes repair; and
- Stabilization to protect damaged materials or features from additional damage.

Use of the Streamlined Review Process is limited to actions for retaining and preserving, protecting and maintaining, and repairing and replacing in-kind, as necessary, materials and features, consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) and the accompanying guidelines.

Emergency stabilization, including limited replacement of irreparably damaged features or materials and temporary measures that prevent further loss of historic

material or that correct unsafe conditions until permanent repairs can be accomplished, may use the Streamlined Review Process. For archeological sites and cultural landscapes, the Streamlined Review Process may also be used for work to moderate, prevent, or arrest erosion.

If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

The Streamlined Review Process may be used for routine repairs necessary to continue use of a historic property, but it is not intended to apply to situations where there is a change in use or where a series of individual projects cumulatively results in the complete rehabilitation or restoration of a historic property. If an approved treatment plan exists for a given historic property (such as a historic structure report, cultural landscape report, or preservation maintenance plan), the proposed undertaking needs to be in accordance with that plan. This streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. Removal of non-historic debris from an abandoned building.
- b. Cleaning and stabilizing of historic structures, features, fences, stone walls, plaques, and cannons using treatment methods that do not alter or cause damage to historic materials.
- c. Repainting in the same color as existing, or in similar colors or historic colors based upon an approved historic structure report, cultural landscape report, or a historic paint color analysis.
- d. Removal of non-historic, exotic species according to Integrated Pest Management principles when the species threatens cultural landscapes, archeological sites, or historic or prehistoric structures.
- e. Energy improvements limited to insulation in the attic or basement, and installation of weather stripping and caulking.
- f. In-kind repair and replacement of deteriorated pavement, including, but not limited to, asphalt, concrete, masonry unit pavers, brick, and stone on historic roads, paths, trails, parking areas, pullouts, etc.
- g. Repair or limited in-kind replacement of rotting floorboards, roof material, or siding. Limited in-kind replacement refers to the replacement of only those elements of the feature that are too deteriorated to enable repair, consistent with the Standards.
- h. In-kind replacement of existing gutters, broken or missing glass panes, retaining walls, and fences.

2. Rehabilitation and/or Minor Relocation of Existing Trails, Walks, Paths, and Sidewalks: The Streamlined Review Process may be used for undertakings proposed on existing non-historic trails, walks, paths, and/or sidewalks that are

located within previously disturbed areas and do not exceed the depth of the previous disturbance. The Streamlined Review Process may also be used for undertakings proposed on existing historic trails, walks, paths, and/or sidewalks, provided that the proposed undertaking is conducted in accordance with an approved treatment plan (such as a historic structure report, cultural landscape report, or preservation maintenance plan).

If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

This streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. In-kind regrading, graveling, repaving, or other maintenance treatments of all existing trails, walks and paths within existing disturbed alignments.
- b. Minor realignment of trails, walks, and paths where the ground is previously disturbed as determined by a qualified archeologist.
- c. Changing the material or color of existing surfaces using materials that are recommended in an approved treatment plan or in keeping with the cultural landscape.
- d. Construction of water bars following the recommendations of an approved treatment plan or in keeping with the cultural landscape.

3. Repair/Resurfacing/Removal of Existing, Roads, Trails, and Parking Areas:

The Streamlined Review Process may be used as follows:

- a. Existing roads, trails, parking areas, and associated features that have been determined not eligible for the National Register in consultation with the SHPO/THPO, may be repaired or resurfaced in-kind or in similar materials as long as the extent of the project, including staging areas, is contained within the existing surfaced areas. The repair or resurfacing cannot exceed the area of the existing road surface and cannot exceed the depth of existing disturbance.
- b. Existing roads, trails, parking areas, and associated features, that have been determined eligible for the National Register in consultation with the SHPO/THPO, may be repaired or resurfaced in-kind. The project, including staging areas, cannot exceed the area of the existing surface and cannot exceed the depth of existing disturbance.
- c. Existing surfaced areas may be expanded or new surfaces constructed if the extent of new surfacing can be demonstrated to occur on land that has been disturbed by prior excavation or construction and has been shown not to contain buried historic properties. New or expanded surface may not be

an addition to, or continuation of, existing surfaces that are listed in or eligible for the National Register and all project activities, including staging areas, must be located in non-historic areas to be eligible for streamlined review.

- d. Existing surfaced areas may be removed if the surfaced area is not a historic property, it is not located within a historic property and all project activities, including staging areas, will occur on land that has been disturbed by prior excavation or construction and has been shown not to contain buried historic properties.

- 4. **Health and Safety Activities:** The Streamlined Review Process may be used for health and safety activities that do not require the removal of original historic elements or alteration of the visual character of the property or area.

If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

This streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. Sampling/testing historic fabric to determine hazardous content, e.g. lead paint, asbestos, radon.
- b. Limited activities to mitigate health and safety problems that can be handled without removal of historic fabric, surface treatments, or features that are character-defining elements, or features within previously disturbed areas or areas inventoried and found not to contain historic properties.
- c. Testing of soil and removal of soil adjacent to buried tanks, provided the project does not exceed the area of existing disturbance and does not exceed the depth of existing disturbance, as determined by a qualified archeologist.
- d. Removal of oil or septic tanks within previously disturbed areas or areas inventoried and found not to contain historic properties.
- e. Removal of HAZMAT materials within previously disturbed areas or areas inventoried and found not to contain historic properties.
- f. Safety activities related to black powder regulations.
- g. Replacement of septic tanks and systems in previously disturbed areas, or areas inventoried and found not to contain historic properties.
- h. Common pesticide treatments.
- i. Removal of both natural and anthropogenic surface debris following volcanic activity, tropical storms, hurricanes, tornados, or similar major weather events, provided removal methods do not include ground disturbance or otherwise cause damage to historic properties.

5. **Routine Grounds Maintenance:** The Streamlined Review Process may be used for routine grounds maintenance activities. If an approved treatment plan exists for a given historic property (such as a historic structure report, cultural landscape report, or preservation maintenance plan), the proposed undertaking needs to be in accordance with that plan.

If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

This streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. Grass replanting in same locations with approved species.
- b. Woodland and woodlot management (including tree trimming, hazard tree removal, thinning, routine removal of exotic species that are not a significant component of a cultural landscape, stump grinding).
- c. Maintaining existing vegetation on earthworks, trimming trees adjacent to roadways and other historic roads and trails.
- d. Routine maintenance of gardens and vegetation within cultural landscapes with no changes in layout or design.
- e. Routine grass maintenance of cemeteries and tombstones with no tools that will damage the surfaces of stones (i.e. weed whips).
- f. Trimming of major specimen trees needed for tree health or to address critical health/safety conditions.
- g. Routine roadside and trail maintenance and cleanup with no ground disturbance.
- h. Planting of non-invasive plant species in non-historic areas.
- i. Removal of dead and downed vegetation using equipment and methods that do not introduce ground disturbance.
- j. Replacement of dead, downed, overgrown, or hazard trees, shrubs, or other vegetation with specimens of the same species.
- k. Replacement of invasive or exotic landscape plantings with similar non-invasive plants.
- l. Routine lawn mowing, leaf removal, watering, and fertilizing.
- m. Routine orchard maintenance and pruning.

6. **Battlefield Preservation and Management:** The Streamlined Review Process *may be used only if* the park has approved planning documents (General Management Plan, cultural landscape report, treatment plan) that specify preservation and management protocols for the subject battlefield.



If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

Consistent with that plan(s), activities include:

- a. Maintenance and preservation work limited to retaining, protecting, repairing, and replacing in-kind materials and features that contribute to the National Register significance of the battlefield landscape.
- b. Earthworks maintenance to prevent erosion and ensure preservation of existing profile, based on current and accepted practices identified in "Sustainable Military Earthworks Management" found on the NPS Cultural Landscape Currents website.
- c. Removal of hazard trees with no ground disturbance and with use of stump grinding provided the grinding is limited to the diameter of the stump and a depth of no greater than 6 inches.
- d. Repairing eroded or damaged sections of earthworks in-kind following archeological documentation and recordation in appropriate NPS inventory and management databases resulting in complete, accurate, and reliable records for those properties.
- e. Maintaining a healthy and sustainable vegetative cover.

7. Hazardous Fuel and Fire Management: The Streamlined Review Process *may be used only if* the park has an approved fire management plan or forest management plan.

If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

Following completion of activities under this section, post-burn inspection and monitoring should be conducted by a qualified archeologist to ensure no archeological sites were impacted or previously unknown sites revealed.

Consistent with the approved fire management plan or forest management plan, this streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. Removal of dead and downed vegetation, outside of historic districts, cultural landscapes, and archeological sites, using equipment and methods that do not introduce ground disturbance beyond documented natural or historic disturbance.

- b. Removal of dead and downed vegetation, as well as trees and brush located within historic properties, if the vegetation does not contribute to the significance of the historic property and equipment and methods are used that do not introduce ground disturbance beyond documented natural or historic disturbance.
  - c. Forest management practices, including thinning of tree stands, outside of historic districts, cultural landscapes, and archeological sites, using equipment and methods that do not introduce ground disturbance beyond documented natural or historic disturbance.
  - d. Restoration of existing fire line disturbances, such as hand lines, bulldozer lines, safety areas, helispots, and other operational areas.
  - e. Slope stabilization, to include reseeding with native seeds, replanting with native plants and/or grasses, placement of straw bales, wattles, and felling of dead trees when the root ball is left intact and in situ.
8. Installation of Environmental Monitoring Units: The Streamlined Review Process may be used for the placement of small-scale, temporary or permanent monitoring units, such as weather stations, termite bait stations, water quality, air quality, or wildlife stations, in previously disturbed areas, as determined by a qualified archeologist, or areas inventoried and found not to contain historic properties. Borings must be limited to pipes less than 2 inches in diameter and surface samples to less than 12 inches in size and minimal in number.
9. Maintenance or Replacement of Non-Historic Utility Lines, Transmission Lines, and Fences: If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

This streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. Maintenance or replacement of buried linear infrastructure in previously disturbed areas. The area of previous disturbance must be documented by a qualified archeologist and must coincide with the route of the infrastructure in its entirety.
- b. Replacement of non-historic materials, provided the undertaking will not impact adjacent or nearby historic properties and is not located in a historic property, or visible from an above-ground historic property.
- c. Maintenance or replacement of infrastructure, such as old water distribution systems, that has been determined to be not eligible for the National Register, in consultation with the SHPO/THPO.
- d. Maintenance of above-ground infrastructure.

- e. Replacement of above-ground infrastructure provided the undertaking is not located in a historic property or visible from an above-ground historic property.
  - f. Enhancement of a wireless telecommunications facility, including the updating of mechanical equipment, provided the activities do not involve excavation nor any increase to the size of the existing facility.
10. **Erection of Signs, Wayside Exhibits, and Memorial Plaques:** If an approved treatment plan exists for a given historic property (such as a historic structure report, cultural landscape report, or preservation maintenance plan), the proposed undertaking needs to be in accordance with that plan. If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.

This streamlined activity includes the following undertakings, as well as others that are comparable in scope, scale, and impact:

- a. Replacement of existing signage in the same location with similar style, scale and materials.
  - b. New signs that meet NPS standards, e.g. at entrance to the park or related to the park's interpretive mission, provided the sign is not physically attached to a historic building, structure, or object (including trees) and the sign is to be located in previously disturbed areas or areas inventoried and found not to contain historic properties.
  - c. Replacement of interpretive messages on existing signs, wayside exhibits, or memorial plaques.
  - d. Small developments such as paved pads, benches, and other features for universal access to signs, wayside exhibits, and memorial plaques in previously disturbed areas or areas inventoried and found not to contain historic properties.
  - e. Temporary signage for closures, repairs, detours, safety, hazards, etc. in previously disturbed areas or areas inventoried and found not to contain historic properties.
  - f. Memorial plaques placed within established zones that allow for such placement.
11. **Culvert Replacement:** The Streamlined Review Process may be used when culvert replacement will occur within existing cut and fill profiles, and:
- a. The existing culvert and/or associated road, rail bed, or cultural landscape has been determined not eligible for the National Register, either individually or as a contributing element to a historic district or cultural landscape, in consultation with the SHPO/THPO; or

- b. The existing culvert is less than 50 years old.

12. **Reburial of Human Remains and Other Cultural Items Subject to the Native American Graves Protection and Repatriation Act (NAGPRA):** The Streamlined Review Process may be used for the reburial of human remains and other cultural items subject to NAGPRA. The Streamlined Review Process may only be used when:

- a. The reburial is in previously disturbed areas and does not introduce ground disturbance beyond documented disturbance; or
- b. The reburial is in previously inventoried areas found to not contain historic properties.

Any reburial in NPS-administered areas must be in conformance with NPS policies on cemeteries and burials including cultural resource policies.

13. **Meeting Accessibility Standards in Historic Structures and Cultural Landscapes:** The Streamlined Review Process may only be used for the following undertakings intended to meet accessibility standards:

- a. Reconstruction or repair of existing wheel chair ramps and sloped walkways provided the undertaking does not exceed the width or depth of the area of previous disturbance.
- b. Upgrading restroom interiors in historic structures within existing room floor area to achieve accessibility, unless the historic features and/or fabric of the restroom contribute to the historic significance of the structure.

14. **Mechanical, Electrical and Plumbing Systems:** The Streamlined Review Process may be used as follows for activities related to mechanical, electrical, and plumbing systems. Such systems may include HVAC systems, fire detection and suppression systems, surveillance systems, and other required system upgrades to keep park lands and properties functional and protected.

- a. Park areas, landscapes, buildings, and structures that have been determined not eligible for the National Register in consultation with the SHPO/THPO, may undergo installation of new systems or repair/upgrading of existing systems in accordance with the Streamlined Review Process.
- b. Properties that have been determined eligible for the National Register in consultation with the SHPO/THPO may undergo limited upgrading of mechanical, electrical, and plumbing systems. However, the Streamlined Review Process may not be used for the installation of new systems or complete replacement of these systems. If proposed activities include the removal of original historic elements or alter the visual character or the property's character-defining materials, features, and spaces, then the Streamlined Review Process may not be used.

- c. If the project activities include ground disturbance, archeological monitoring may be appropriate throughout the ground disturbing activities, in accordance with any recommendation of the CRM Team. When monitoring is recommended, members of any appropriate Federally recognized Indian Tribes or Native Hawaiian organizations may be invited to participate in monitoring.
- 15. Acquisition of Lands for Park Purposes: The Streamlined Review Process may be used for the acquisition of land for park purposes, including additions to existing parks. The second criterion for use of the Streamlined Review Process (identification and evaluation of all types of historic properties within the project APE; see Section III.A.2) does not apply to this activity, provided the acquisition does not include any further treatment or alteration of properties, since access to land for inventory and evaluation prior to NPS acquisition may be limited. Any known or potential historic properties on the land acquired should be protected from demolition by neglect. Pursuant to 36 CFR 800.5(a)(2)(vi), demolition by neglect constitutes an adverse effect. If any undertakings are proposed in conjunction with the acquisition that have the potential to affect historic properties, the Streamlined Review Process may not be used.
- 16. Leasing of Historic Properties: The Streamlined Review Process may be used provided all treatment of historic properties proposed in relation to the leasing action is consistent with undertakings eligible for Streamlined Review, set forth in Section III.C of this PA. The Streamlined Review Process may not be used where there is a change of use or where a series of individual projects cumulatively results in the complete rehabilitation or restoration of a historic property.

#### **D. Adding to List of Undertakings Eligible for Streamlined Review**

Any proposed additions or revisions to the list of undertakings eligible for streamlined review must be developed through a region-, state- or park-specific Programmatic Agreement and pursuant to 36 CFR 800.14(b). The Regional Director or Superintendent, as appropriate, will develop such agreements with SHPOs/THPOs, in consultation with Federally recognized Indian Tribes and the ACHP or others, as appropriate. If such an agreement is developed by the Superintendent, s/he will notify the Regional Director. Regional Directors will report the development of supplemental, region-, state-, or park-specific programmatic agreements to the Director on an annual basis. The NPS FPO will maintain records on supplemental agreements and provide annual notification of any such agreements to all signatories to this agreement.

#### **IV. STANDARD REVIEW PROCESS**

All undertakings that do not qualify for streamlined review as described in Section III above, will be reviewed in accordance with 36 CFR Part 800. Superintendents are responsible for compliance with these regulations. Compliance may also be accomplished through park- and/or project-specific programmatic agreements. Specific activities required will be undertaken by the

Park Section 106 Coordinator, in consultation with appropriate members of the CRM Team. Parks are encouraged to use Servicewide automated project planning and tracking systems, such as the NPS Planning, Environment and Public Comment (PEPC) system, to track and document Section 106 compliance activities and to make such automated systems accessible to compliance partners, including SHPOs/THPOs, Federally recognized Indian Tribes, Native Hawaiian organizations, and/or the ACHP. If a park executes a MOA or PA with consulting parties to resolve adverse effects, the Superintendent will provide an informational copy of the agreement to the Regional Section 106 Coordinator.

## **V. NATIONAL HISTORIC LANDMARKS**

The NHPA provides heightened protection for designated National Historic Landmarks (NHLs) through Section 110(f) and the NHPA's implementing regulations (36 CFR 800.10). Specifically, the NHPA requires that Federal agencies shall, to the maximum extent possible, undertake planning and actions necessary to minimize harm to any NHL that may be directly and adversely affected by an undertaking.

Where the other criteria as listed in Section III.A are met, proposed undertakings that may affect a designated NHL may follow the Streamlined Review Process. Where preliminary planning activities indicate that a proposed undertaking has the potential to have an adverse effect on an NHL, prior to initiating a formal consultation process, the Superintendent will initiate an internal review process in accordance with NPS Management Policies to determine alternatives to avoid or minimize the adverse effects and to assess the possibility of impairment.

## **VI. INADVERTENT DISCOVERIES**

In the event that historic properties are inadvertently encountered during an undertaking for which review has been previously conducted and completed under Section III or Section IV of this PA, or through other events such as erosion or animal activity, the Superintendent will notify the SHPO/THPO, Federally Recognized Indian Tribe(s), and or Native Hawaiian organization, as appropriate, within 48 hours, or as soon as reasonably possible. The Superintendent in consultation with the Section 106 Coordinator and the appropriate members of the CRM Team, will make reasonable efforts to avoid, minimize, or mitigate adverse effects on those historic properties in consultation with the SHPO/THPO, Federally recognized Indian Tribe (s), and/or Native Hawaiian organization (s), as appropriate. If human remains or other cultural material that may fall under the provisions of NAGPRA are present, the Superintendent will comply with NAGPRA and ARPA. The Superintendent will ensure that any human remains are left in situ, are not exposed, and remain protected while compliance with NAGPRA, ARPA, or other applicable federal, state, and/or local laws and procedures is undertaken.

## **VII. EMERGENCY ACTIONS**

Emergencies are those actions deemed necessary by the Superintendent as an essential and immediate response to a disaster or emergency declared by the President, a tribal government, or the Governor of a State, or another immediate threat to life or property. Emergency actions are only those actions required to resolve the emergency at that time and they are limited to undertakings that will be started within thirty (30) days after the emergency has been declared. Such emergency actions will be consistent with the NPS Environmental Safeguards Plan for All-Hazards Emergencies and any other approved servicewide emergency response plans. The Superintendent will notify the SHPO/THPO within 24 hours of the declared emergency or as soon as conditions permit.

## **VIII. REVIEW AND MONITORING OF PA IMPLEMENTATION**

The purpose of the PA review and monitoring process is to ensure NPS protection of historic properties in its stewardship. This is accomplished through the review of undertakings that were completed during the reporting period, review of programmed undertakings, review of implementation of the PA, and review of completion of training requirements.

### **A. Superintendents Biennial Review and Monitoring Meeting**

In order to foster cooperative relations, each Superintendent will, at a minimum, invite consulting parties to a review meeting every two years (biennial), with the first meeting initiated within six months of the signing of this PA by all parties. If all parties agree that such a meeting is not necessary at that time, the meeting may be waived. However, Superintendents shall remain responsible for initiating biennial meetings in subsequent years. More frequent meetings may be appropriate based on specific park circumstances and therefore an alternative meeting schedule may be established, if mutually agreed upon by the parties.

1. Meetings may be conducted in any mutually agreeable location and/or format, including in- person, video conferencing or teleconferencing.
2. The primary invitees to each park's biennial review and monitoring meeting will include the applicable SHPO/THPO, Federally recognized Indian Tribes, and Native Hawaiian organizations with an interest in that park's properties. Superintendents may also consider inviting other interested parties, including Pacific Islanders, concessioners, lessees, friends groups, historic societies, or gateway communities, as appropriate.
3. Superintendents may instead choose to meet individually with some parties, particularly those that have strong interest in specific historic properties.
4. Attendance and meeting minutes will be recorded and distributed to all invited parties after the conclusion of the meeting.

5. Specific discussion items may include the following:
  - a. Any documentation pursuant to this PA.
  - b. Any inventories of historic properties developed in the previous two years, or opportunities for future inventory and research, as well as other reports and research results related to historic properties.
  - c. Programmed undertakings that are scheduled, or are likely to be scheduled, for the next two fiscal years.
  - d. Provisions of this PA as well as any project- or program-specific Memoranda of Agreement or Programmatic Agreements.
  - e. Training received by park staff during the reporting period and opportunities for cooperative training arrangements.
  - f. Names of and contact information for the Park Section 106 Coordinator and the CRM Team Members.

**B. Superintendents Reporting to NPS Regional Directors**

In order to inform park program review and potential ACHP evaluation of PA implementation, Superintendents will report biennially to Regional Directors on implementation of the PA. The Biennial Report shall include the streamlined review data prescribed in Section III B of this PA, training completed and basic data demonstrating compliance with the provisions of this PA as outlined in the guidance document for this agreement (Section I.A.2). ACHP, SHPOs, or THPOs may request hard copies of biennial reports.

**C. Park Section 106 Program Review by NPS Regional Directors, SHPOs, THPOs, and the ACHP**

1. The Regional Director may, at his/her discretion, initiate a review of a park's implementation of this PA. The ACHP, either at its own discretion, or upon request of a Federally recognized Indian Tribe, SHPO/THPO, or Native Hawaiian organization, may at any time raise with the appropriate Regional Director any programmatic or project matters where they wish the Regional Director to review a Park Superintendent's Section 106 decisions. The Regional Director will consult with the ACHP, and the Regional Director shall provide a written response to the ACHP, and where applicable, the SHPO or THPO, that documents the outcome of the consultation and the resolution. The Regional Director has the option to suspend a park's use of this PA, and subsequently reinstate it as appropriate.
2. Documentation of NPS Section 106 reviews not already provided to SHPOs, THPOs, and the ACHP will be available for review by the ACHP and the appropriate SHPO/THPO upon request. Individual SHPOs/THPOs who wish to review this documentation are responsible for specifying scheduling, frequency, and types of undertakings of concern to them.



#### **D. NPS Regional Directors Reporting to the Director of the NPS**

Regional Directors will report biennially to the Director on implementation of this PA within his/her region. Each Regional Biennial Report will be submitted within six (6) months following receipt of Park Biennial Reports by the Regional Director as required in Section VIII.B of this PA. A hardcopy of the biennial reports will be sent to the ACHP and upon request from a SHPO or THPO.

#### **IX. SUBSEQUENT AGREEMENTS**

A. Upon execution of this PA, Superintendents are encouraged to evaluate their park's programs and discuss with SHPOs/THPOs, Federally recognized Indian Tribes, Native Hawaiian organizations, and/or the ACHP ways to develop supplemental programmatic agreements for park undertakings that would otherwise require numerous individual requests for comments.

B. Development of programmatic agreements specific to a project, plan, or park may be negotiated between Superintendents and SHPOs/THPOs, Federally recognized Indian Tribes, Native Hawaiian organizations, the ACHP, and/or other consulting parties where appropriate, pursuant to 36 CFR 800.14(b), and may be independent of or supplement this PA. Superintendents will provide an informational copy of all agreements to the Regional Section 106 Coordinator.

C. Memoranda of agreement developed to resolve adverse effects for specific projects shall be negotiated between Superintendents and SHPOs/THPOs, Federally recognized Indian Tribes, Native Hawaiian organizations, and/or the ACHP, pursuant to 36 CFR 800.6(c), and shall be independent of this PA. Superintendents will provide an informational copy of all agreements to the Regional Section 106 Coordinator.

#### **X. DISPUTE RESOLUTION**

A. Should disputes arise, the Superintendent, SHPO/THPO, and/or the ACHP will consult with the objecting parties to resolve the objection. All work that is the subject of the dispute will stop until the dispute is resolved in accordance with the procedures in this section. If the dispute cannot be resolved, all documentation relevant to the dispute will be forwarded to the parties named above. If the SHPO/THPO objects to a Park Superintendent's decision, the information will be forwarded to the Regional Director. If the National Park Service objects to the SHPO/THPO's opinion, the information will be forwarded to the ACHP. If the Regional Director cannot resolve a SHPO/THPO objection, the Regional Director will forward to the ACHP relevant documentation not previously furnished to the ACHP and notify the Director of the dispute. Within thirty (30) days after receipt of all pertinent documentation, the ACHP will either:

1. Provide the Regional Director with a recommendation, with an information copy provided to the Director, which the Regional Director will take into account in reaching a final decision regarding the dispute; or
2. Notify the Regional Director that it will comment to the Director pursuant to the provisions of 36 CFR 800.7 and proceed to comment. Any ACHP comment provided in response to such a request will be taken into account by the NPS with reference to the subject of the dispute.

B. In the event the ACHP does not respond within thirty (30) days of receipt of all pertinent documentation, the Regional Director may proceed with his or her recommended resolution.

C. At the request of any individual, agency, or organization, the ACHP may provide the NPS with an advisory opinion regarding the substance of any finding, determination, or decision made in accordance with this PA or regarding the adequacy of the NPS' compliance with Section 106 and this PA.

## **XI. MONITORING AND TERMINATION**

A. The NPS will convene a meeting of the signatories to this PA within two (2) years of execution of the PA and as needed thereafter, to review implementation of the terms of this PA and determine whether revisions or amendments are needed. Meetings may be conducted in any mutually agreeable location and/or format, including in-person, video conferencing, or teleconferencing. If revisions or amendments are needed, the parties will consult in accordance with 36 CFR 800.14.

B. This PA may be amended when such an amendment is agreed to in writing by all signatories. When major revisions are proposed to NPS policies that will affect the manner in which the NPS carries out its Section 106 responsibilities, the signatories shall consult to determine whether an amendment to this PA is needed. Any amendments will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

C. Any party to this PA may terminate it by providing ninety (90) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination by any Federally recognized Indian Tribe signatory will be limited to termination of this PA on the tribal lands of the subject tribe. In the event of termination, the NPS will comply with 36 CFR Part 800 with regard to individual undertakings otherwise covered by this PA.

## **XII. SEVERABILITY**

A. If any section, subsection, paragraph, sentence, clause, or phrase in this PA is, for any reason, held to be unconstitutional or invalid or ineffective, such decision shall not affect the validity or effectiveness of the remaining portions of this PA.

B. If any section, subsection, paragraph, sentence, clause, or phrase in this PA is, for any reason, held to be unconstitutional or invalid or ineffective, the signatories shall consult to determine whether an amendment to this PA is needed.

### XIII. ANTI-DEFICIENCY ACT STATEMENT

The stipulations of this Agreement are subject to the provisions of the Anti-Deficiency Act (31 U.S.C. 1341 (1998)). If compliance with the Anti-Deficiency Act alters or impairs NPS ability to implement the stipulations of this Agreement, NPS will consult in accordance with the dispute resolution, amendment or termination stipulations as specified in Sections X and XI of this PA.

#### ADVISORY COUNCIL ON HISTORIC PRESERVATION

BY:   
CHAIRMAN

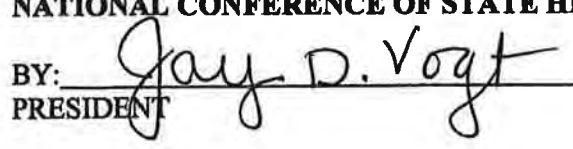
DATE: 11/14/08

#### NATIONAL PARK SERVICE

BY:   
DIRECTOR

DATE: 11/14/08

#### NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS

BY:   
PRESIDENT

DATE: 11-14-2008



**APPENDIX D**  
**ACCESSIBLE SHORELINE PROGRAMMATIC AGREEMENT (1988)**



United States Department of the Interior  
NATIONAL PARK SERVICE  
ROCKY MOUNTAIN REGIONAL OFFICE  
12795 W. Alameda Parkway  
P.O. Box 25287  
Denver, Colorado 80225-0287



IN REPLY REFER TO:

H3015 (RMR-PR)

FEB 8 1989

Memorandum

To: Superintendent, Glen Canyon National Recreation Area

From: Associate Regional Director, Planning and Resource Preservation,  
Rocky Mountain Region

Subject: Programmatic Agreement regarding Management/Development Concept  
Plans for Lake Powell's Accessible Shorelines at Glen Canyon  
National Recreation Area, Utah and Arizona

Enclosed for your information and files is a copy of the recently executed subject Programmatic Agreement. This agreement delineates the respective responsibilities of the National Park Service, the Utah and Arizona State Historic Preservation Officers, and the Advisory Council on Historic Preservation with respect to the Management/Development Concept Plan for Lake Powell's Accessible Shorelines while satisfying our responsibilities under Section 106 compliance.

If you have further questions regarding the implementation of this agreement, please contact Regional Historian Michael G. Schene at FTS 327-2875.

Richard A. Strait

Enclosure

cc:

WASO-400, Jerry Rogers  
WASO-418, Ben Levy  
Supt., Southeast Utah Group  
Chief, MWAC  
DSC-TCE, Ron Johnson  
RMR-PP, Mike Snyder

**Advisory  
Council On  
Historic  
Preservation**

The Old Post Office Building  
1100 Pennsylvania Avenue, NW. #809  
Washington, DC 20004

Reply to: 730 Simms Street, Room 450  
Golden, Colorado 80401

December 27, 1988

Ms. L. Lorraine Mintzmyer  
Rocky Mountain Regional Director  
ATTN: Michael G. Schene, Regional Historian  
Division of Cultural Resources  
National Park Service  
P. O. Box 25287  
Denver, CO 80225

REF: Programmatic Agreement regarding Management/Development  
Concept Plans for Lake Powell's Accessible Shorelines at  
Glen Canyon National Recreation Area, Utah and Arizona

Dear Ms. Mintzmyer:

The enclosed Programmatic Agreement has been executed by the Council. This document constitutes the comments of the Council required by Section 106 of the National Historic Preservation Act and the Council's regulations. As requested, we are returning three of the original copies of this Agreement to you for your records and for distribution to the Arizona and Utah State Historic Preservation Officers.

The Council appreciates your cooperation in reaching a satisfactory resolution of this matter.

Sincerely,



Robert Fink  
Director, Western Office  
of Project Review

Enclosure

**PROGRAMMATIC AGREEMENT  
BETWEEN THE  
NATIONAL PARK SERVICE, ROCKY MOUNTAIN REGION  
THE  
ARIZONA STATE HISTORIC PRESERVATION OFFICER,  
THE  
UTAH STATE HISTORIC PRESERVATION OFFICER,  
AND THE  
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

WHEREAS, the National Park Service (Service) is responsible for managing Glen Canyon National Recreation Area (OLCA), a large portion of which is Lake Powell.

WHEREAS, The Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shorelines (DCP) address management of visitation at a number of shoreline access areas (Fig. 1).

WHEREAS, the complementary responsibilities of the Service, the Arizona and Utah State Historic Preservation Officers (SHPOs), and the Advisory Council on Historic Preservation (Council) are set forth in 36 CFR Part 800, and further delineated in the Secretary of the Interior's Standards for Archeology and Historic Preservation (Secretary's Standards), and

NOW THEREFORE, The Service, the SHPOs, and the Council, for the purposes of further delineating their respective responsibilities under applicable laws and regulations, with respect to the Development Concept Plan for Lake Powell's Accessible Shoreline, hereby agree as follows:

**I. DEFINITIONS:**

For the purposes of this Agreement, the definitions found in 36 CFR 800.2, and the following additional definitions shall be followed:

"High priority area": an open shoreline access destination point that means there is (are) (s) known site(s) within the primary impact area.

"Medium priority area": an open shoreline destination point that has no known site(s) within primary impact zones but there is (are) a site(s) within secondary impact area.

"Low priority area": an open shoreline destination point that contains no known sites within primary or secondary impact zones.

"Primary impact area": a shoreline destination point that identified in the DCP where access by vehicle will be permitted.

"Secondary Impact Area": an area adjacent to a Primary Impact Area where vehicle traffic is not permitted but to which visitors can walk during daytime recreation.



## II. BACKGROUND:

Uncontrolled visitation to Lake Powell has resulted in environmental degradation visibly represented by human waste and trash accumulations, unauthorized two track roads, and off-road vehicle trails and wastelands where nothing grows. The Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shorelines (DCP) address these problems as they can be related to and managed by overland access as all portions of the Lake shore remain accessible by water. Recommended actions in the DCP include closing overland access to certain areas (Table 1), barriers to off-road and all terrain vehicle travel, and installation of vault toilets and trash receptacles. (Shoreline access areas identified in Figure 1 except Navajo also include those whose management was discussed in other documents. Rincon was closed per the General management Plan. Neskahi and Piute Canyon will remain open, with management coordinated with the Navajo Nation.) This plan should result in a decrease in overall environmental degradation for Lake Powell but areas which remain open will continue to receive high visitation related impacts. Implementation of the various plan elements are dependant upon funding and are expected to be phased over a number of years.

Table 1: Shoreline Areas Closed to Overland Access

| Cottonwood | Mansen | Lake | Last Chance |
|------------|--------|------|-------------|
|------------|--------|------|-------------|

A literature review and reconnaissance archeological inventory gathered information for the preparation of the DCP and identified approximately 15 sites. With the exception of a rock art panel, a rock shelter, and a trail, these sites were open camps/knapping locations that contain chipped stone debris, and limited amounts of ceramics and ground stone. The majority of these sites have not been recorded, and those few that have, need to have their current condition evaluated.

Depending on whether the archeological sites were within the shoreline recreation areas or adjacent to them, areas have been identified as high, medium or low priority for site recordation and evaluation (Table 2).

Table 2: Open Shoreline Areas by Priority

| <u>High</u>        | <u>Medium</u>  | <u>Low</u>   |
|--------------------|----------------|--------------|
| ✓ Bullfrog Creek   | ✓ Clay Mills   | ✓ Warm Creek |
| ✓ Chains           | ✓ Crosby       | ✓ Red Canyon |
| ✓ Farley           | ✓ Halls Cove 4 | ✓ Blue Notch |
| ✓ Dirty Devil      | ✓ White Canyon |              |
| ✓ Stanton          |                |              |
| ✓ Hole-in-the-Rock |                |              |

- hangout  
- last chance  
- cottonwood  
- lake canyon

## III. The Service areas:

1. GLCA will perform intensive archeological inventories prior to surface disturbing actions as needed during the implementation of the DCP. This particularly means for the installation of pit toilets and road barriers (including guard rails).

2. The archeological sites identified during the literature review and reconnaissance inventory will be recorded and evaluated to Secretary of the Interior Standards. The appropriate SHPO will be consulted regarding Determinations of Eligibility and sites that do not meet National Register criteria will not be considered further under this Programmatic Agreement. If the site recordation/evaluation must be spread over more than one calendar year from the date of this agreement, sites will be recorded in the high priority areas first and then for the medium priority areas.

3. With the exception of a rock art panel and a rock shelter, these sites were characterized as open lithic artifact scatters. The park will develop a method for monitoring non-structural sites building on the in-place monitoring system for architectural sites. This method for monitoring non-structural sites will be used to record the condition of the sites every six months.

4. If a significant change is seen in those sites evaluated as National Register eligible, steps will be taken to correct this situation. The NPS will consult with the SHPO about appropriate measures.

5. No new inventories or documentation of any kind are required by this agreement at closed areas (Table 1) or other management areas (Cove, Wahweap, Copper Canyon, Rincon, Neskahi, Piute Canyon, or Navajo).

#### IV. Dispute Resolution

At any time during the implementation of the measures stipulated in the Agreement, should an objection be raised by the Council, SHPO, local or state government, other Federal Agency official, or member of the public, the Service shall consult with the objecting party to resolve the objection. If the objection cannot be satisfactorily resolved, the Service shall forward all documentation relevant to the dispute to the Council. Within 30 days after receipt of all pertinent documentation, the Council shall:

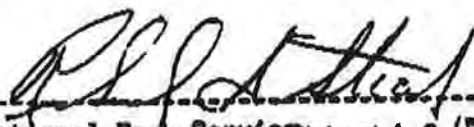
- A. Notify the Service that it concurs in the Service's position regarding the objection;
- B. Advise the Service of changes that would make the Service's position acceptable, agreement with which the Service would resolve the objection;
- C. Notify the Service that it will consent pursuant to 36 CFR 800.6(b) when there is no agreement.

#### V. Changes

If any signatory to this Agreement determines that the terms of this Agreement cannot be met or believes that a change is necessary, the signatory shall immediately request the consulting parties to consider voiding, amending, or effecting an addendum to this Agreement. Such an amendment or addendum will be executed in the same manner as the original Agreement.

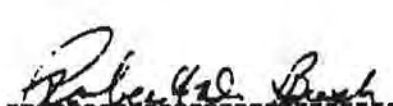
**VI. Limitations**

- A. This Agreement may be amended only by written agreement of the Service, the SHPO, and the Council.
- B. This Agreement shall continue in force unless terminated by the Service, the SHPO, or the Council, after thirty (30) calendar days written notice to the other parties.

  
-----  
National Park Service (Date)  
Rocky Mountain Region Richard A. Smith

  
-----  
Arizona State Historic (Date)  
Preservation Officer

  
-----  
Utah State Historic (Date)  
Preservation Officer 10-20-84

  
-----  
Advisory Council on (Date)  
Historic Preservation 12/20/84



## **APPENDIX E**

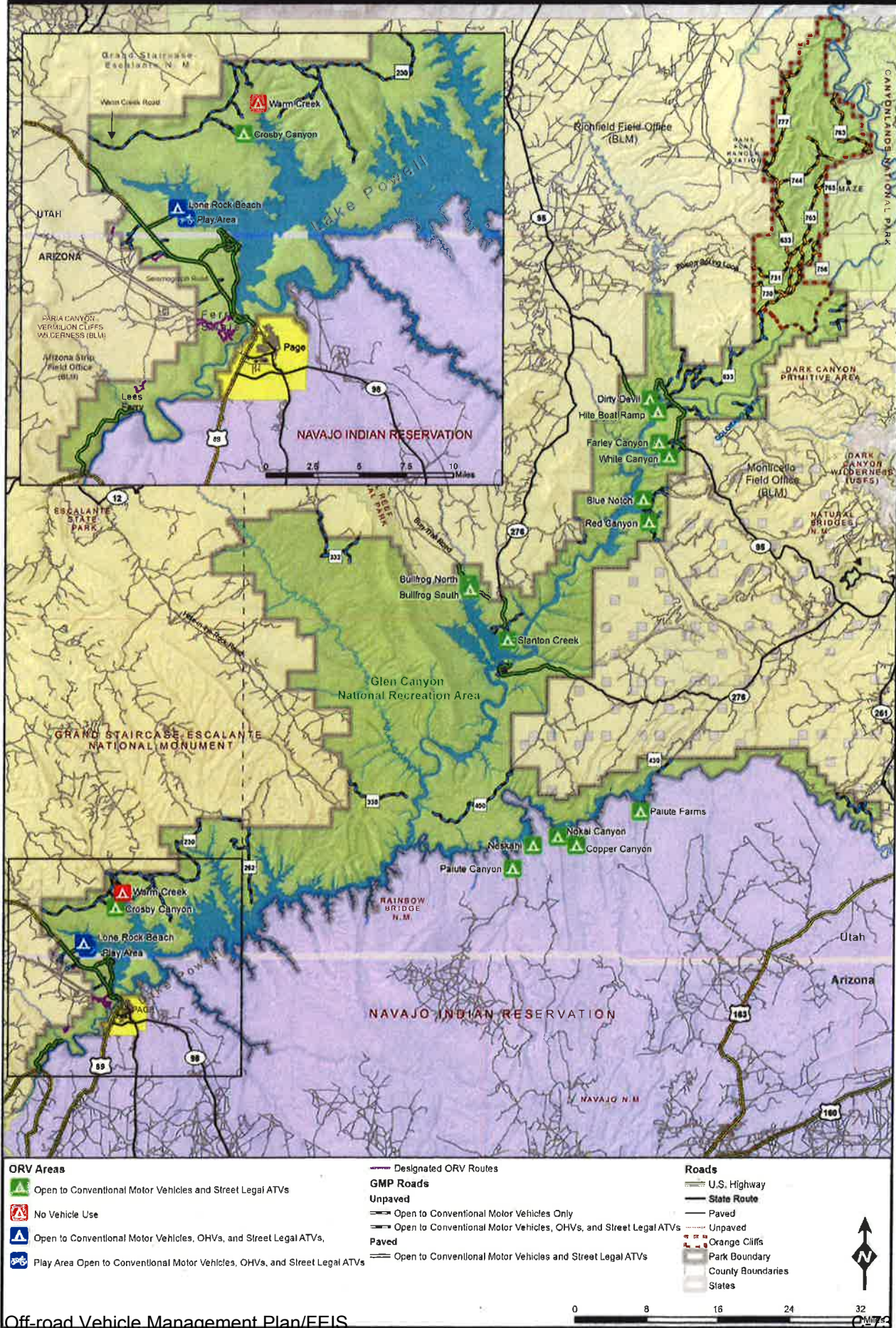
### **AREA OF POTENTIAL EFFECTS**







# Alternative E: Mixed Use







**Appendix F**  
**Points of Contact for Unanticipated Archeological Discoveries**  
**And**  
**Discoveries of Human Remains**

This list of contacts will be undated and redistributed to all consulting parties as changes occur in any point of contact. The identified Federal agency will be responsible for contacting the appropriate offices and interested Tribes.

Federal Agency:

Glen Canyon National Recreation Area  
691 Scenic View Road  
P.O. Box 1507  
Page, AZ 86040  
(928) 608-6200 or (928) 608-6301

Rosemary Sucec  
Cultural Resources Program Manager  
(928) 608-6277  
[rosemary\\_sucec@nps.gov](mailto:rosemary_sucec@nps.gov)

Thann Baker  
Archeologist  
(928) 608-6263  
[thann\\_baker@nps.gov](mailto:thann_baker@nps.gov)

State Historic Preservation Offices:

Utah Division of State History  
300 S. Rio Grande Street (450 West)  
Salt Lake City, UT 84101  
(801) 245-7225

Brad Westwood  
Utah State Historic Preservation Officer  
(801) 245-7248  
[bradwestwood@utah.gov](mailto:bradwestwood@utah.gov)

Lori Hunsaker  
Utah Deputy State Historic Preservation Officer  
(801) 245-7241  
[lhunsaker@utah.gov](mailto:lhunsaker@utah.gov)

Arizona State Parks  
1300 W. Washington Street  
Phoenix, AZ 85007  
(602) 542-4174 or (800) 285-3703

James Garrison  
Arizona State Historic Preservation Officer  
(602) 542-4009  
[jgarrison@azstateparks.gov](mailto:jgarrison@azstateparks.gov)

David Jacobs  
Arizona State Historic Preservation Office  
Compliance Specialist/Archaeologist  
(602) 542-7140  
[djacobs@azstateparks.gov](mailto:djacobs@azstateparks.gov)

Tribes:

**Hopi Tribe**

Hopi Cultural Preservation Office  
P.O. Box 123  
Kykotsmovi, AZ 86039  
(928) 734-3619

Lee Wayne Lomayestewa  
Repatriation Coordinator  
(928) 734-3613  
[llomayestewa@hopi.nsn.us](mailto:llomayestewa@hopi.nsn.us)

**Kaibab Paiute Tribe**

Kaibab Band of Paiute Indians Tribal Office  
#1 North Pipe Spring Rd.  
Fredonia, AZ 86022  
(928) 643-7245

Charley Bullets  
Director, Southern Paiute Consortium  
HC 65 Box 2  
Fredonia, AZ 86022  
(928) 643-6278  
[cbullets74@gmail.com](mailto:cbullets74@gmail.com)

**Navajo Nation**

Navajo Historic Preservation Department  
P.O. Box 4950  
Window Rock, Arizona 86515  
(928) 871-7198

Tim Begay  
Navajo Cultural Specialist  
928-871-7152  
[timothy\\_begay@yahoo.com](mailto:timothy_begay@yahoo.com)

**Paiute Indian Tribe of Utah**

Paiute Indian Tribe of Utah Tribal Office  
440 North Paiute Drive  
Cedar City UT 84721  
(435)-586-1112

Dorena Martineau  
Cultural Resource Director  
435-586-1112  
[dorena.martineau@ihs.gov](mailto:dorena.martineau@ihs.gov)

### **Pueblo of Zuni**

Pueblo of Zuni  
PO Box 339  
1203B State HWY. 53  
Zuni, NM 87327  
(505) 782-7000

Gerald Hooee  
Councilman  
505-782-7025  
[ghooee@ashiwi.org](mailto:ghooee@ashiwi.org)

Mark Martinez  
Councilman  
505-782-7022  
[mmarti@ashiwi.or](mailto:mmarti@ashiwi.or)

### **San Juan Southern Paiute**

San Juan Southern Paiute Council Office  
P. O. Box 1989  
Tuba City, AZ 86045  
(928) 283-5530

May Preston  
Chairwoman  
P. O. Box 2862  
Tuba City, AZ 86045  
928-514-6261  
[sjspt.prez@gmail.com](mailto:sjspt.prez@gmail.com)

### **Ute Mountain Ute**

Ute Mountain Ute Tribal Office  
124 Mike Wash Rd.  
Towaoc, CO 81334  
(970) 565-3751

Terry Knight, Sr.  
NAGPRA Representative/THPO  
P.O. Box 468  
Towaoc, CO 81334  
970-564-5727  
[tknight@utemountain.org](mailto:tknight@utemountain.org)

Lynn Hartman  
Contractor Administrator  
P.O. Box 468  
Towaoc, CO 81334  
970-564-5731  
[hartman@utemountain.org](mailto:hartman@utemountain.org)

### **County Medical Examiners**

#### **Coconino**

Sheriff William B. Pribil (928) 774-4523  
Coroner's Office: (928) 679-8775

Garfield

Sheriff James D. Perkins Jr. (435) 676-2678  
Coroner: Raymond Gardner (425) 691-0591

Kane

Sheriff Lamont W. Smith (435) 644-4916  
Coroner: Rob Russel (630) 232-5915

San Juan

Sheriff Ken Christensen (505) 334-4248  
Coroner: (505) 272-3035

Wayne

Sheriff Kurt R. Taylor (435) 836-1308  
[wcsa@wayne.utah.gov](mailto:wcsa@wayne.utah.gov)

-0-

**APPENDIX D: OFF-ROAD VEHICLE MANAGEMENT  
PLAN AND ENVIRONMENTAL IMPACT STATEMENT  
BIOLOGICAL ASSESSMENT**

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***OFF-ROAD VEHICLE MANAGEMENT PLAN AND  
ENVIRONMENTAL IMPACT STATEMENT  
BIOLOGICAL ASSESSMENT***

***GLEN CANYON NATIONAL RECREATION AREA***

***NOVEMBER 14, 2016***

**NATIONAL PARK SERVICE – U.S. DEPARTMENT OF INTERIOR**

**Prepared by:**

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Glen Canyon NRA Chief Scientist

Date:

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## 1.0 Introduction

The Endangered Species Act of 1973 (16 U.S.C. 153 *et seq.*), as amended (ESA or Act) in section 7(a)(1) directs federal agencies to conserve and recover listed species and use their authorities in the furtherance of the purposes of the Act by carrying out programs for the conservation of endangered and threatened species so that listing is no longer necessary (50 CFR §402). Furthermore, the Act in section 7(a)(2) also directs federal agencies to consult (referred to as section 7 consultation) with the U.S. Fish and Wildlife Service (USFWS) when their activities “may affect” a listed species or designated critical habitat. Additionally, NPS Management Policy (2006) directs the NPS to “inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species to the greatest extent possible”.

### 1.1 Purpose of this Biological Assessment

This biological assessment (BA) analyzes the potential effects of the proposed Off-road Vehicle (ORV) Management Plan and Environmental Impact Statement (plan/EIS) in the Glen Canyon National Recreation Area (Glen Canyon) on federally listed threatened, endangered, proposed *animal (wildlife and fish)* and plant species, and critical habitats, pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended (ESA). Federally listed threatened and endangered animal and plant species and critical habitat meeting the following criteria are addressed in this assessment:

1. Known to occur in the Park based on confirmed sightings;
2. May occur in the Park based on unconfirmed sightings;
3. Potential habitat exists for the species in the Park; or
4. Potential effects may occur to these species.

### 1.2 Current Management Direction

Current management direction for federally listed and proposed threatened and endangered species can be found in the following documents, filed at our office:

- Endangered Species Act of 1973, as amended (ESA or Act)
- 1916 NPS Organic Act
- NPS General Authorities Act of 1978
- NPS Management Policies 2006
- Migratory Bird Treaty Act (MBTA)
- National Environmental Policy Act (NEPA)
- Species-specific recovery plans which establish population goals for recovery
- Species management plans, guides, or conservation strategies
- Glen Canyon National Recreation Area (1979)

## 2.0 Consultation History

During initial scoping for the plan/EIS in August 2007, a scoping newsletter was sent to the USFWS Ecological Service Field Offices in both Utah and Arizona. The Arizona Ecological Services Field Office sent the NPS a letter dated October 5, 2007, which provided a list of threatened and endangered species that occur in or close to Glen Canyon. On January 7, 2008, the NPS requested species and habitat information from the Utah Ecological Services Field Office. Email communication follow-up occurred

later that month. On November 3, 2010, the Arizona Ecological Services Office sent a letter reiterating the information from the 2007 letter, providing additional information on California condors, and recommending additional communication with the Arizona Game and Fish Department (AZGFD) and affected tribes with regards to sensitive species.

On November 18, 2014, NPS provided a biological assessment to the USFWS addressing the effects of proposed management actions on species listed under the Endangered Species Act. Additional information on the Mexican spotted owl was provided on December 10, 2014. Location specific information on the California condor and bald and golden eagles was discussed telephonically with the USFWS in mid-December 2014. In response to a request from the USFWS for Applicant Committed Conservation Measures made on December 19, 2014, NPS updated the biological assessment and created a separate document that outlined the Applicant Committed Conservation Measures proposed for the plan. This was transmitted to USFWS on January 20, 2015.

After review of the updated biological assessment, USFWS requested additional information on February 5, 2015. Telephonic and email consultation with representatives of the USFWS Arizona and Utah Ecological Services Field Offices continued, with both offices providing comments on February 11, 2015. The NPS updated the biological assessment and transmitted the modified biological assessment with Applicant Committed Conservation Measures on March 24, 2015. The NPS held a conference call with representatives of the USFWS Arizona and Utah Ecological Services Field Offices to discuss the biological assessment. An updated list of federal listed species was requested from and provided by the USFWS on October 19, 2015 using the Information for Planning and Conservation (IPaC) project planning tool.

The NPS submitted a revised biological assessment to USFWS on December 24, 2015. A conference call was held on January 28, 2016 to discuss the revised biological assessment. The USFWS provided written feedback and additional questions to the NPS on February 5, 2016. The NPS has made further revisions to the biological assessment in response and is submitting a further revised biological assessment to USFWS to request concurrence.

## **3.0 Proposed Management Action and Alternatives Considered**

### **3.1 General Description**

The purpose of the Glen Canyon Off-road Vehicle Management Plan (plan/EIS) is to evaluate off-road use by conventional and non-conventional motor vehicles along designated routes and within designated areas, and on-road use by non-conventional motor vehicles and to develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system. The plan/EIS presents four action alternatives and assesses the impacts that could result from continuing current management (the no-action alternative) or implementation of any of the action alternatives.

Figures 1-4 (the No-Action Alternative as described in the plan/EIS) represents the current use of motor vehicles in Glen Canyon. The figure also includes current levels of off-road use in the Ferry Swale area and certain other areas which the NPS has allowed, in some cases by posting signage and information about access to that area.

Table 1 summarizes current management for motor vehicle use (No-Action Alternative) and the proposed changes in this use (Alternate E. Preferred Alternative).

The Preferred Alternative of the plan/EIS manages off-road use of all motorized vehicles on designated routes and in designated areas, and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs). **The plan/EIS does not propose the physical construction or development of any new roads, routes, or areas. Roads, routes, and areas described in the plan/EIS currently exist and are currently being used by motor vehicles.** Areas identified below are existing use areas within the action area. Figures 5-9 (the preferred alternative as described in the plan/EIS) depict the geographic scope of the proposed actions. In summary, the preferred alternative proposes the following actions in Glen Canyon:

- Conventional motor vehicles, OHVs and street-legal ATVs would be authorized for use within the designated area at Lone Rock Beach (~250 acres) and within the designated Lone Rock Beach Play Area (~180 acres) only by permit. A safety flag would be required to be displayed on vehicles used at Lone Rock Beach Play Area.
- Conventional motor vehicles and street-legal ATVs would be authorized for use at 14 designated accessible shoreline ORV areas (~7170 acres) only by permit, subject to water-level closures. Seasonal closures to street-legal ATVs would be implemented from November 1 through February 28 at eight of these ORV areas.
- Vehicle-free areas would be designated at Lone Rock Beach, Bullfrog North and South, and Stanton Creek ORV Areas.
- Street-legal ATVs would be authorized for use on existing paved park roads with the exception of the Lees Ferry Access Road. Only conventional motor vehicles would continue to be allowed on the Lees Ferry Access road.
- Street-legal ATVs and OHVs would be authorized for use on most existing unpaved park roads.
- No street-legal ATVs or ORVs would be authorized on park roads in the Orange Cliffs Unit, with the exception of the eight miles of the Poison Spring Loop.
- Approximately twenty miles of existing ORV routes would be designated for use by conventional motor vehicles, street-legal ATVs and OHVs, primarily in the Ferry Swale area.

Appendix A lists the specific elements of the plan/EIS including any new motor vehicle use requirements and changes in motor vehicle use at existing accessible shoreline ORV areas and on existing park roads and proposed ORV routes.

**Table 1: Current and Proposed Actions from the Plan/EIS.**

| LOCATION                                | ALTERNATIVE A:<br>NO ACTION   | ALTERNATIVE E:<br>MIXED USE (NPS PREFERRED<br>ALTERNATIVE)   |
|---|---|--|
| <b>Lone Rock Beach</b>                  | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs occurs on app. 250 acres. Speed limit of 15 mph.   | Same as Alternative A except an off-road permit would be required and NPS would designate app. 20 acres as a vehicle-free zone during seasons of highest use and would vary the size and location of these zones in relation to the fluctuating lake level.  |
| <b>Lone Rock Beach Play Area</b>        | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs occurs on app. 180 acres.  | Same as Alternative A except an off-road permit and safety flag would be required.   |
| <b>Accessible Shoreline Areas</b>       | <p>Off-road use by conventional vehicles occurs on app. 5,950 acres at 13 existing areas, subject to water-level closures:</p> <ul style="list-style-type: none"> <li>• Blue Notch – app. 325 acres</li> <li>• Bullfrog North and South – app. 2,250 acres</li> <li>• Copper Canyon – app. 30 acres</li> <li>• Crosby Canyon – app. 450 acres</li> <li>• Dirty Devil – app. 75 acres</li> <li>• Farley Canyon – app. 275 acres</li> <li>• Hite Boat Ramp – app. 50 acres</li> <li>• Neskahi – app. 15 acres</li> <li>• Paiute Canyon – app. 100 acres</li> <li>• Red Canyon – app. 50 acres</li> <li>• Stanton Creek – app. 675 acres</li> <li>• Warm Creek – app. 50 acres</li> <li>• White Canyon – app. 325 acres</li> </ul> | <p>Off-road use by conventional motor vehicles and street-legal ATVs on app. 7,170 acres at 12 existing areas plus Nokai Canyon (app. 275 acres) and Paiute Farms (app. 1,000 acres) would be authorized, only by off-road permit, subject to water-level closures.</p> <p>Eight areas (Blue Notch, Bullfrog North and South, Crosby Canyon, Dirty Devil, Farley Canyon, Red Canyon, Stanton Creek and White Canyon) would be closed to street-legal ATV use from November 1 through March 1.</p> <p>Off-road use at Warm Creek would be discontinued and the area restored to natural conditions.</p> <p>NPS would designate vehicle-free zones (~20 acres) at both Bullfrog North and South and Stanton Creek during seasons of highest use and would vary the size and location of these zones in relation to the fluctuating lake level.</p> |
| <b>GMP Roads</b>                        | On-road use by conventional motor vehicles and street-legal ATVs occurs on app. 75 miles of paved roads and 228 miles of unpaved roads, with a prohibition on the use of all ATVs on the app. 85 miles of roads in the Orange Cliffs Unit. Speed limits are posted.   | <p>Same as Alternative A except:</p> <ul style="list-style-type: none"> <li>• Street-legal ATVs would be prohibited on seven miles of paved roads accessing the Lees Ferry developed area</li> <li>• On-road use of OHVs would be authorized on app. 228 miles of unpaved roads outside of the Orange Cliffs Unit</li> <li>• On-road use of OHVs and street-legal ATV would be authorized on app. eight miles of roads within the Orange Cliffs Unit which form a portion of the larger Poison Spring Loop on neighboring public lands</li> </ul>  |
| <b>Ferry Swale and other ORV routes</b> | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs occurs on app. 54 miles of user-created ORV routes.  | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would be authorized on app. 19 miles of designated ORV routes. App. 35 miles of existing user-created routes would be closed to vehicle use and restored to natural conditions. Speed limit would be 25 mph or as posted.   |



**Figure 1. Current motor vehicle use at Glen Canyon National Recreation Area – Park-wide.**

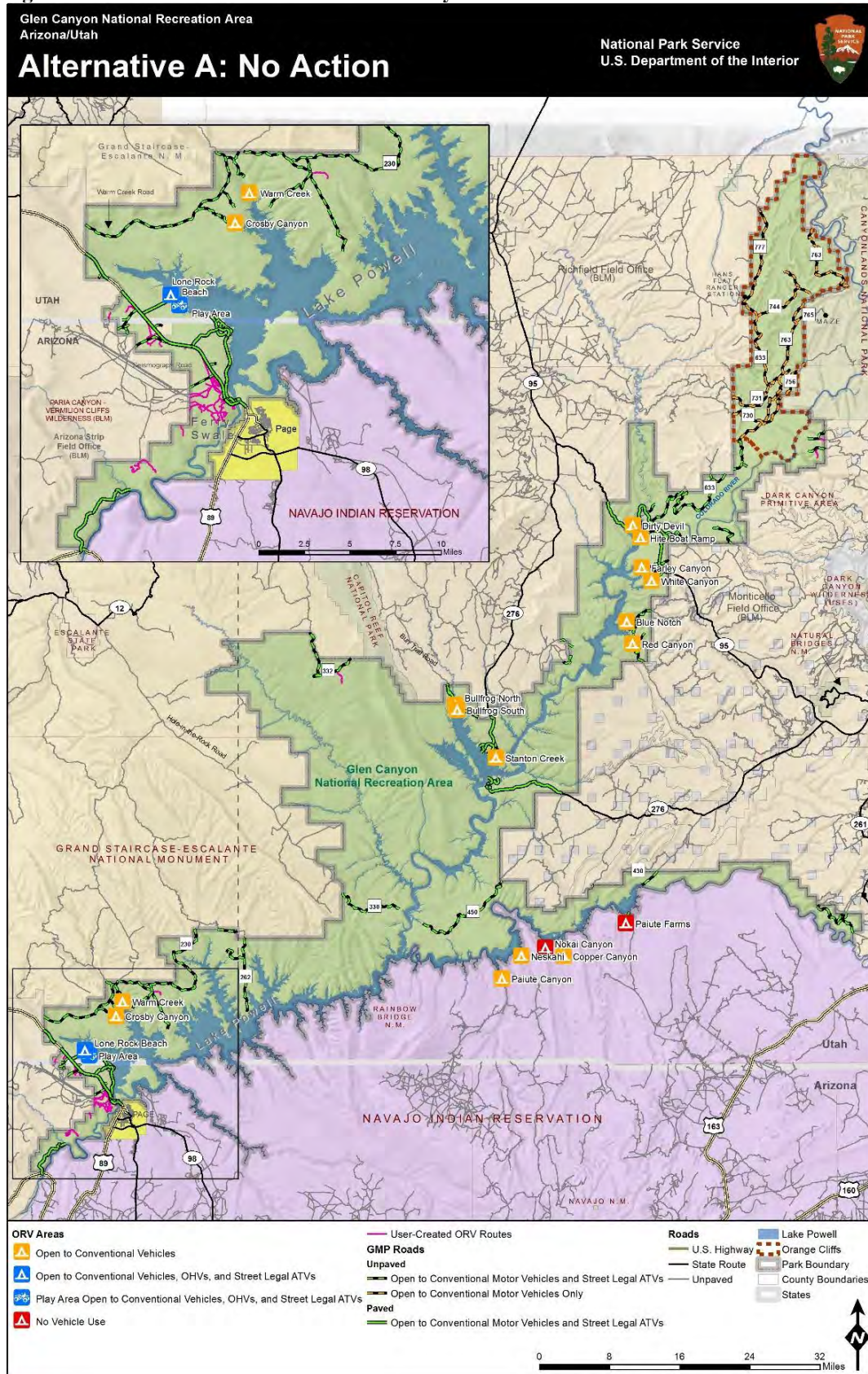
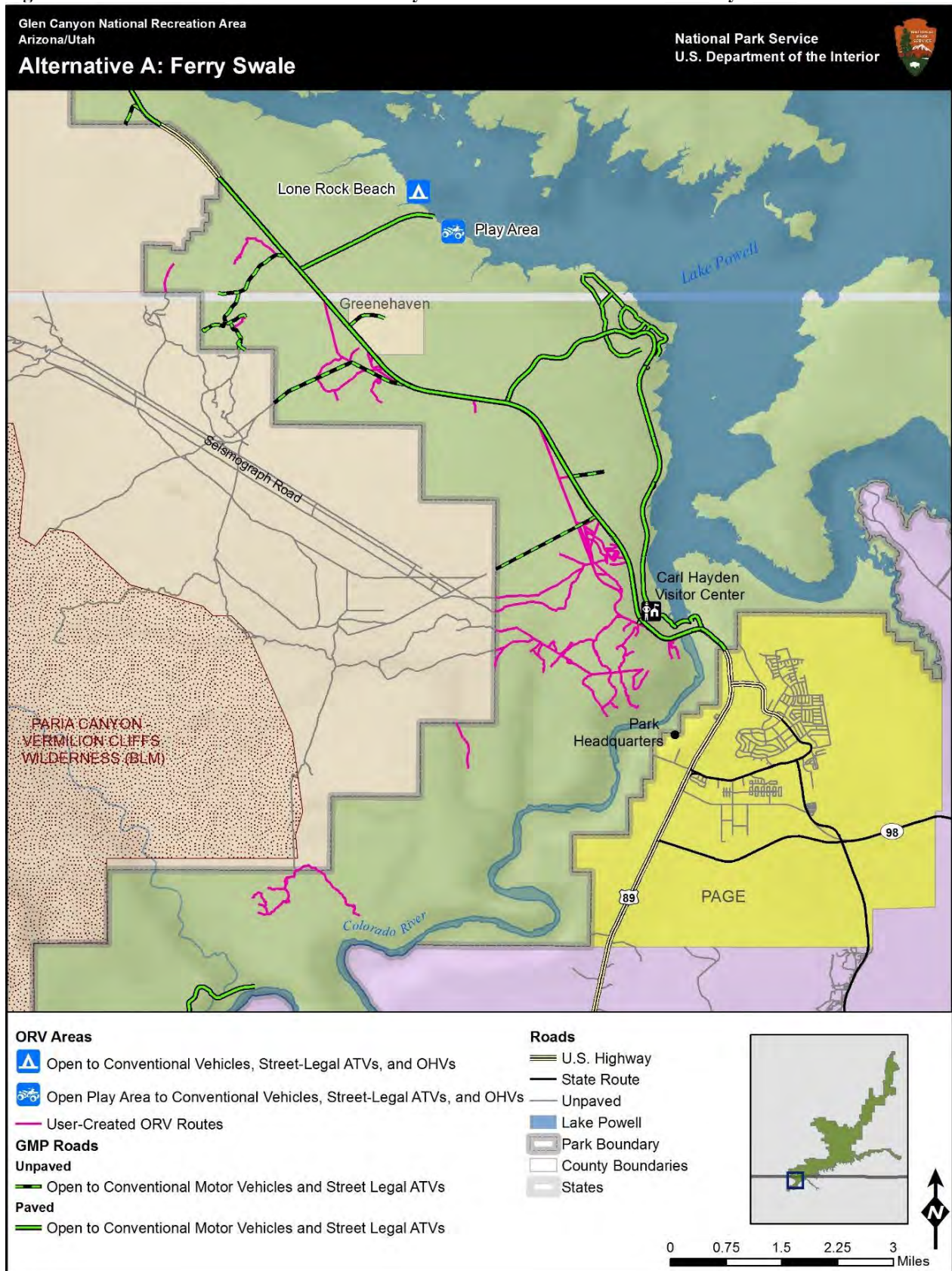


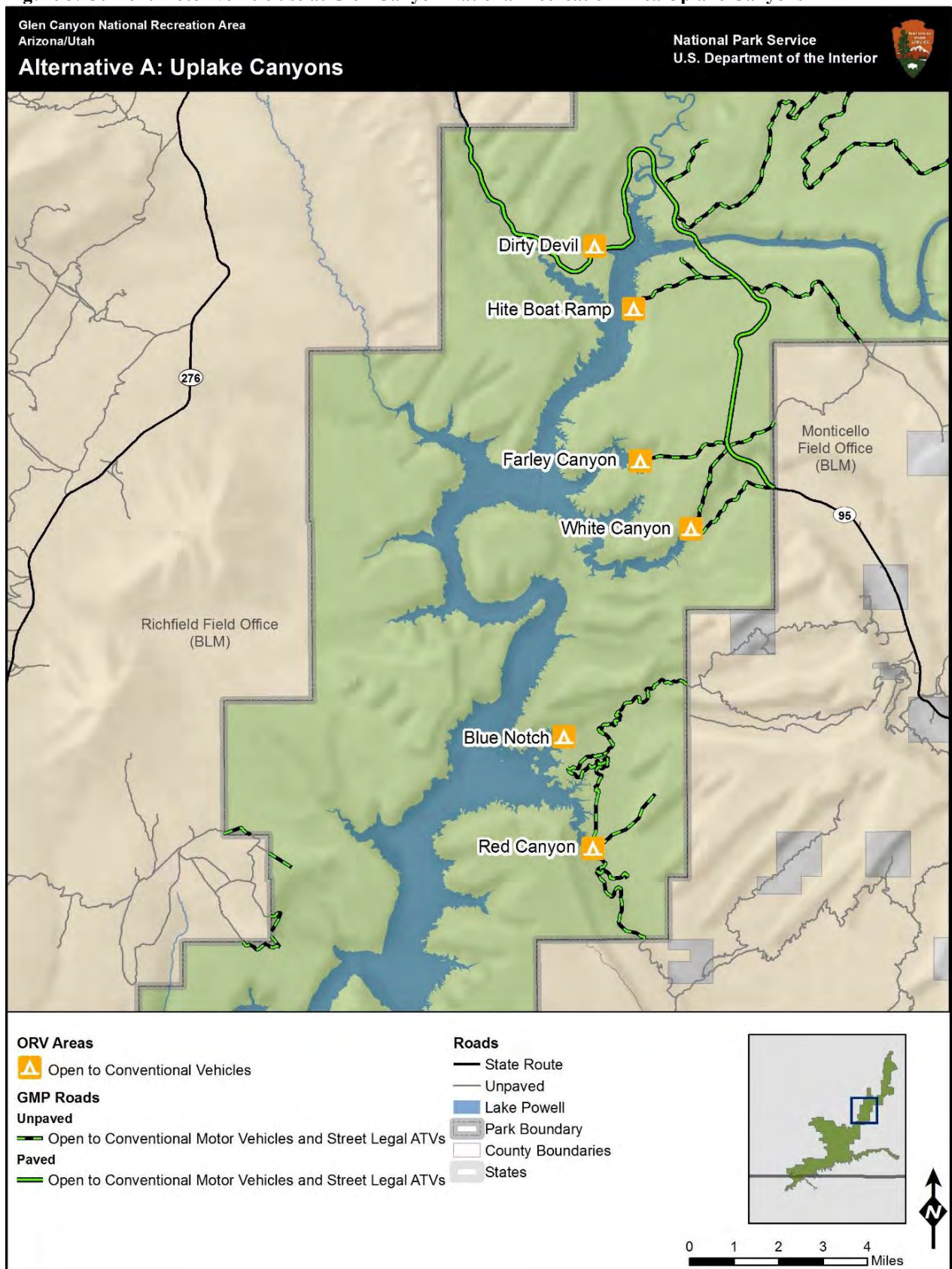


Figure 2. Current motor vehicle use at Glen Canyon National Recreation Area in Ferry Swale Area.





**Figure 3. Current motor vehicle use at Glen Canyon National Recreation Area Uplake Canyons**



**Figure 4. Current motor vehicle use at Bullfrog-Halls Crossing Area in Glen Canyon.**

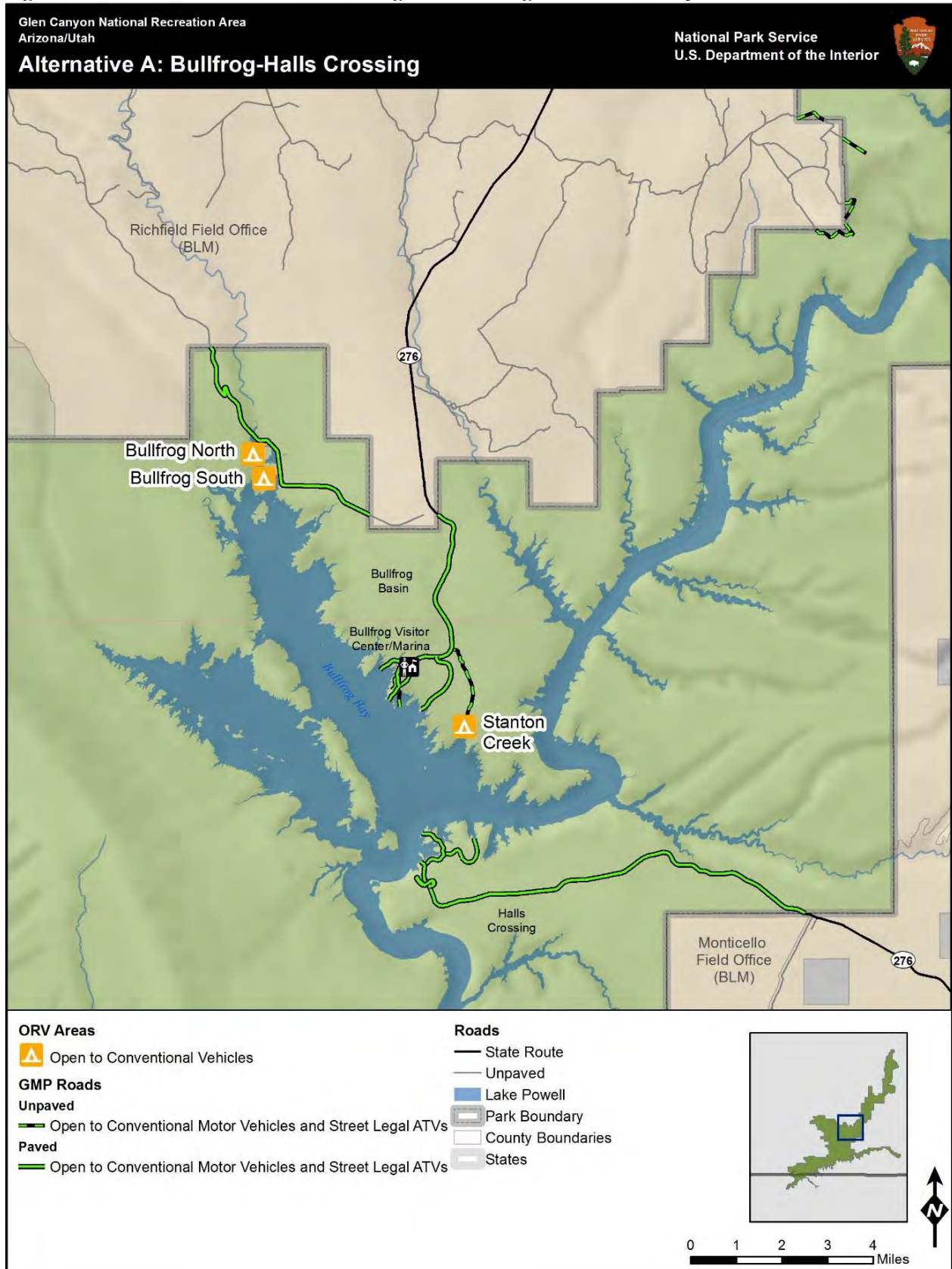
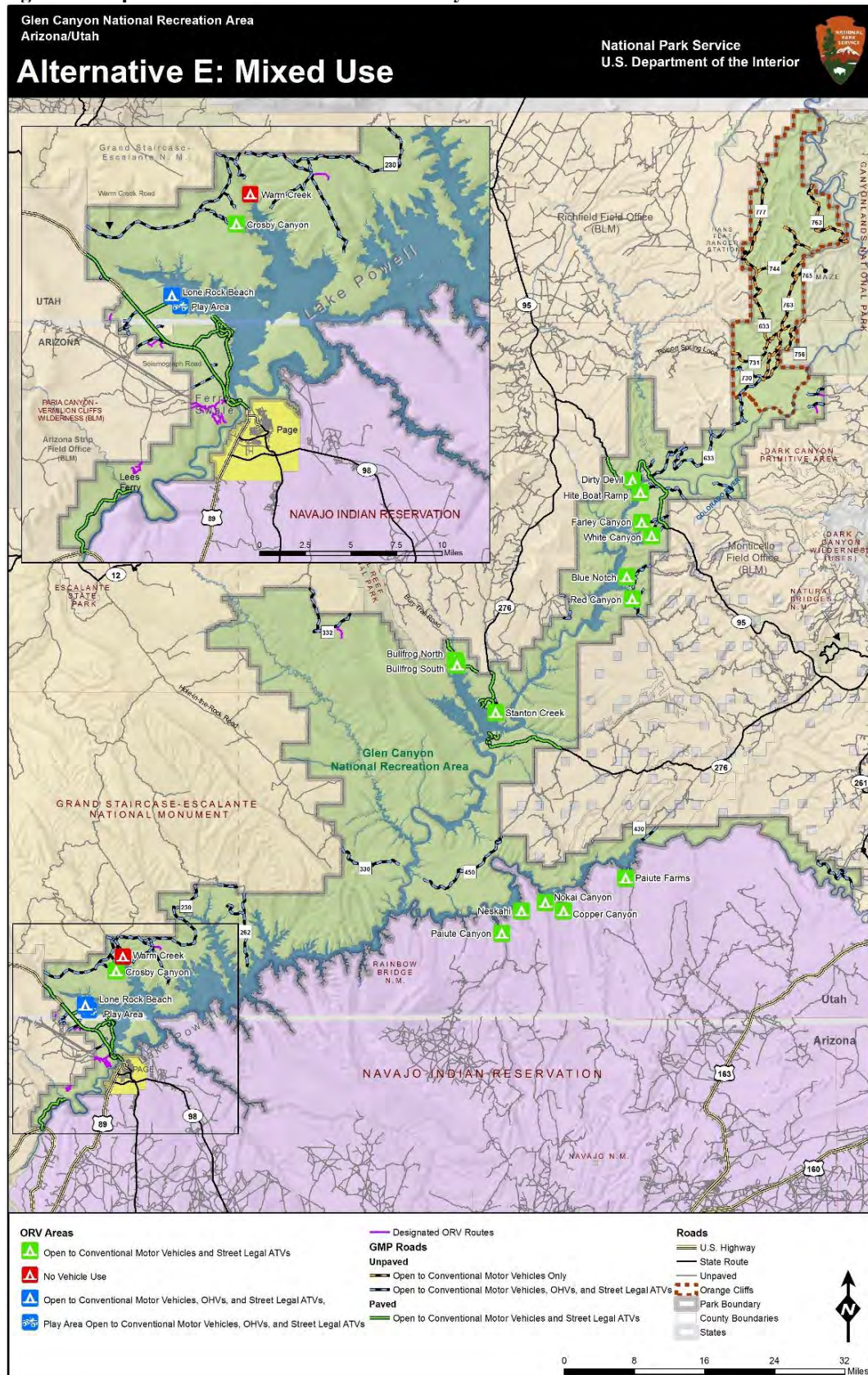




Figure 5. Proposed motor vehicle use at Glen Canyon National Recreation Area – Park-wide.





**Figure 6. Proposed motor vehicle use at Glen Canyon National Recreation Area in Ferry Swale Area.**

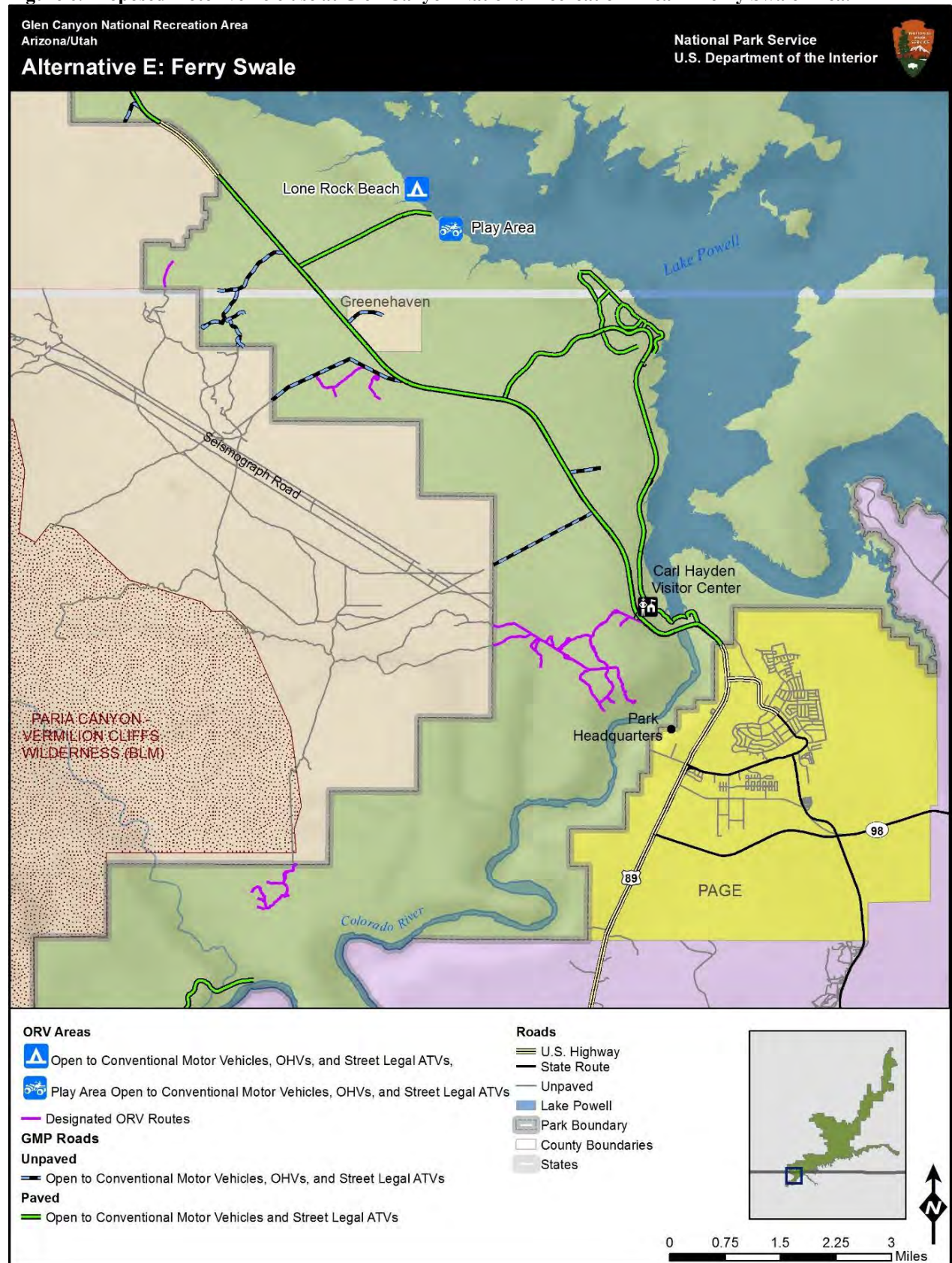


Figure 7. Proposed motor vehicle use at Glen Canyon National Recreation Area Uplake Canyons.

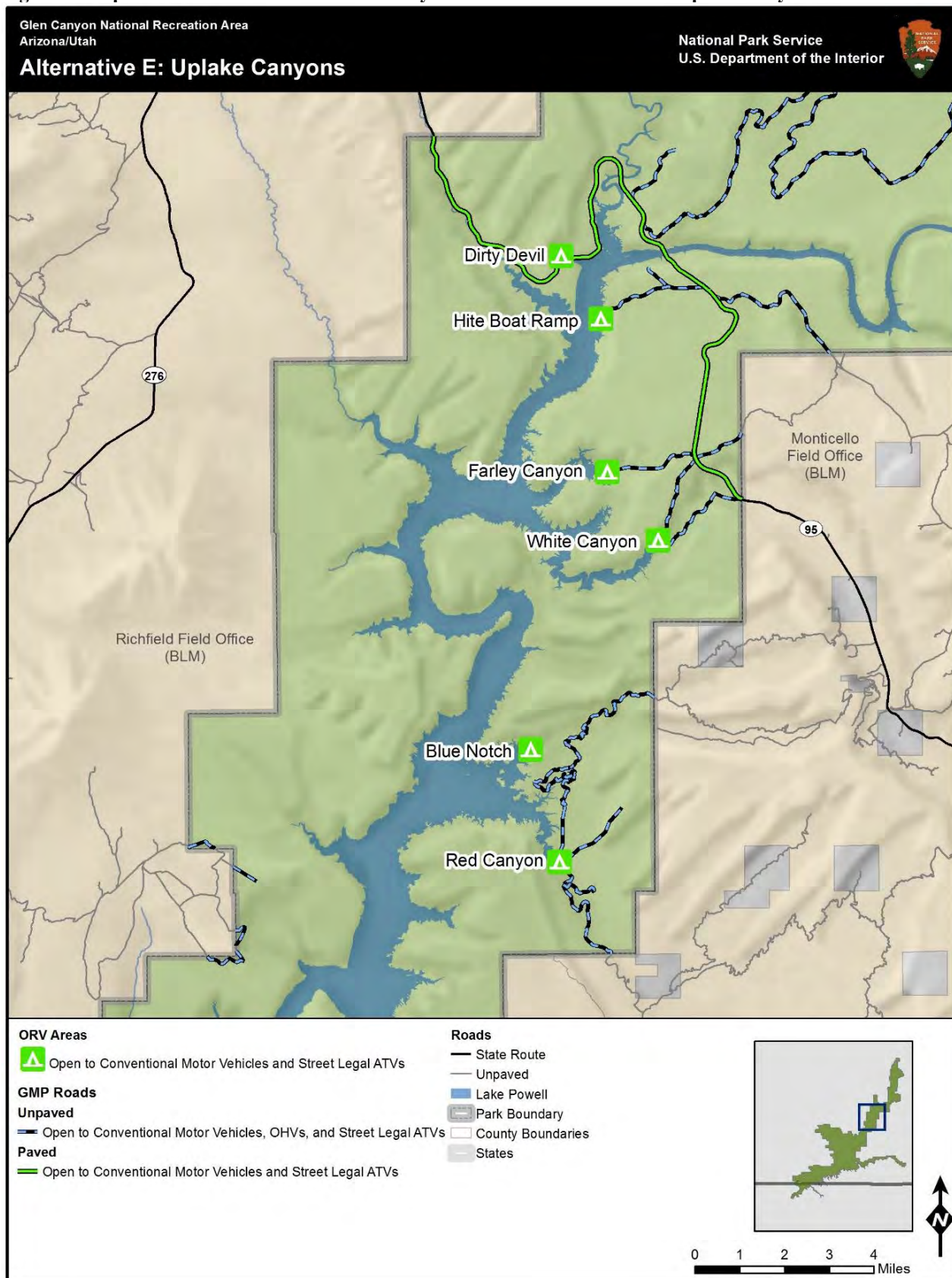




Figure 8. Proposed motor vehicle use for Bullfrog-Halls Crossing Area in Glen Canyon.

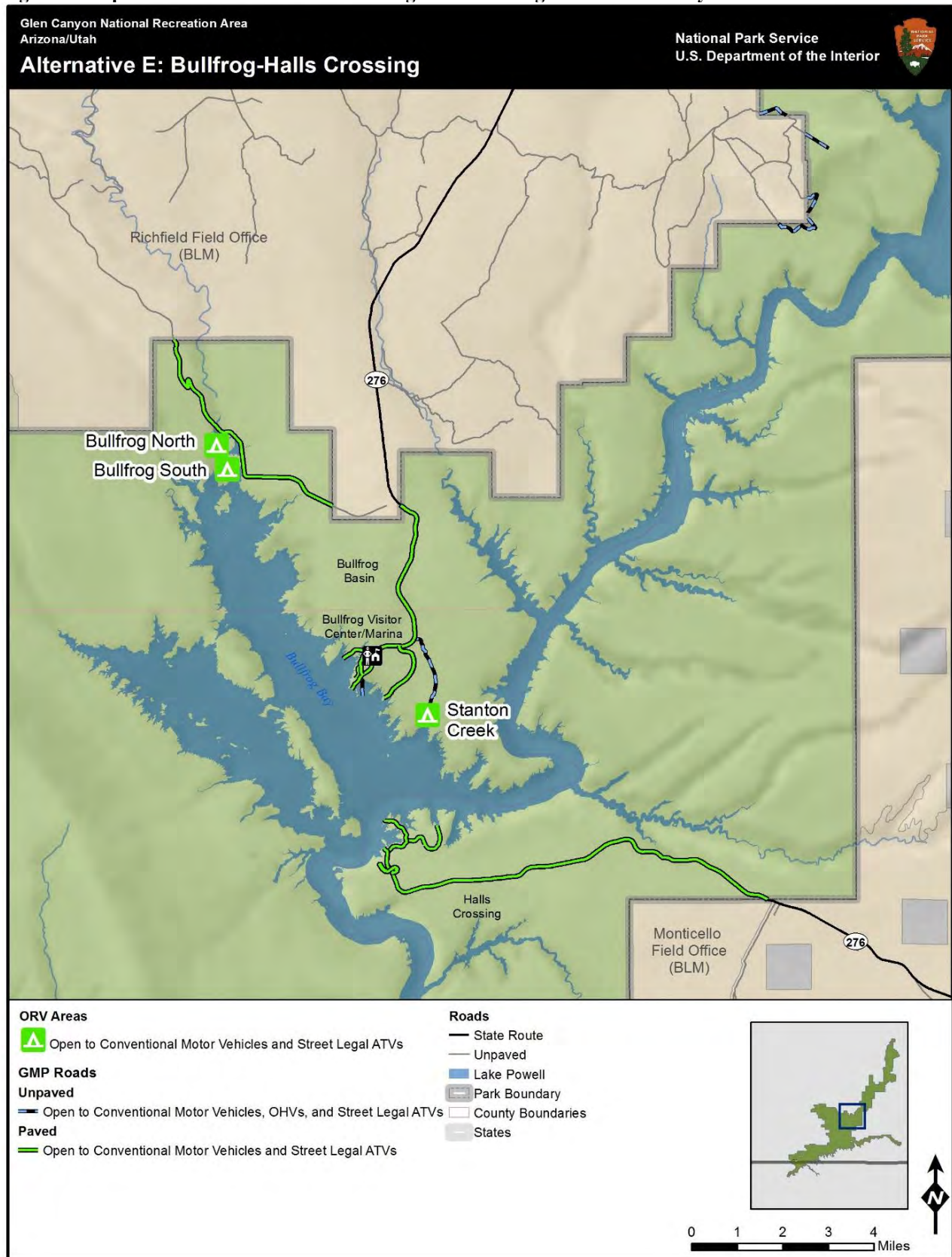
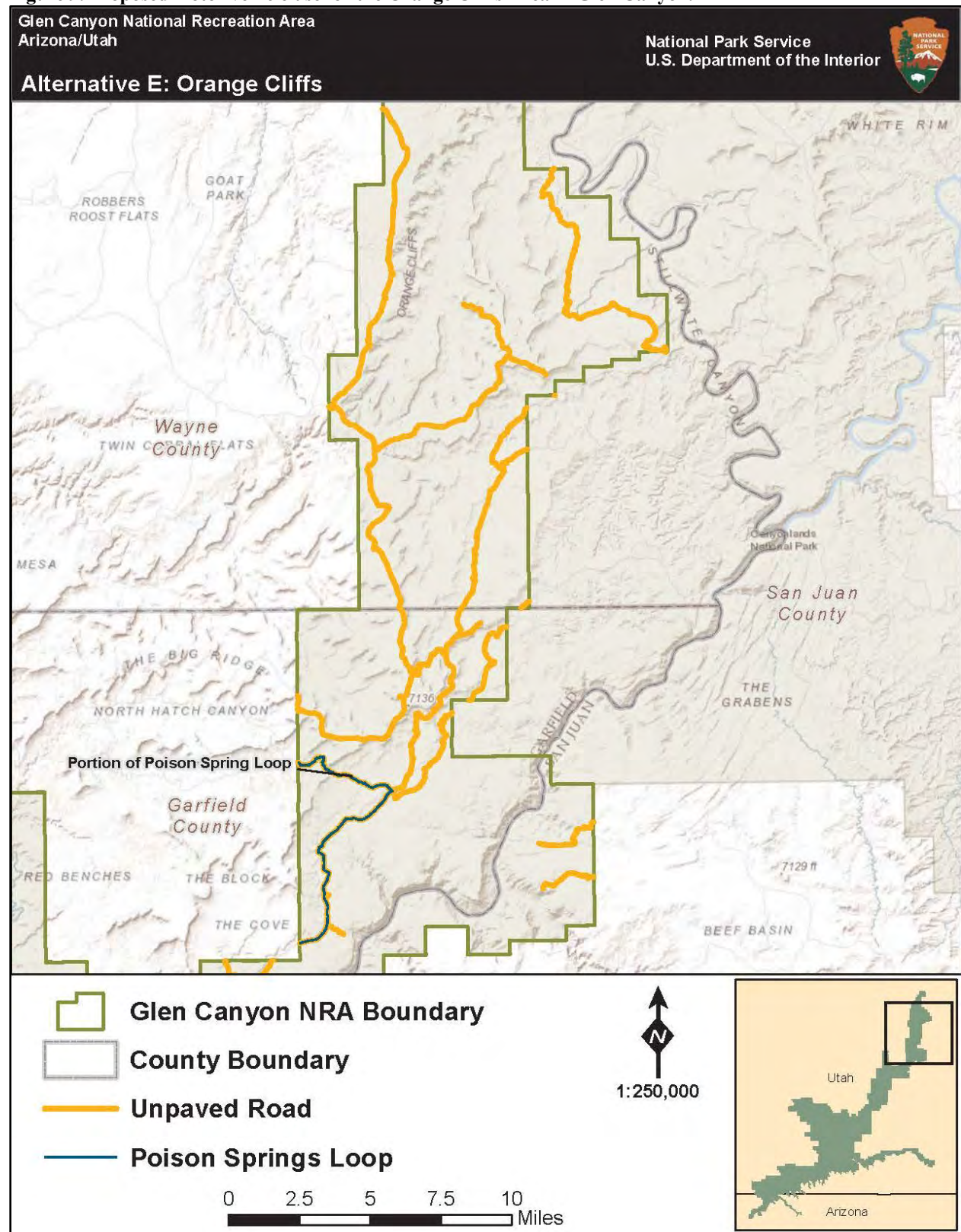


Figure 9. Proposed motor vehicle use for the Orange Cliffs Area in Glen Canyon.





## 3.2 General Conservation Measures

### *Monitoring*

Monitoring procedures for the plan/EIS will be developed during implementation of the ORV Management Plan to identify resource impacts, assess and document the extent of disturbance, and mitigate impacts or restore areas affected by off-road use and disturbance. Glen Canyon staff will monitor indicators to determine when to take additional management actions as described in Table 2. Monitoring and subsequent management actions include both species populations and habitat connected to species-specific protection measures listed in this section.

Monitoring techniques will include staff observations and documentation of indicators, such as the presence of social routes (tracks outside ORV routes and areas and off of designated roads) and expansion of areas designated for off-road use, which will be monitored periodically by aerial photography. Glen Canyon staff will regularly monitor the number of motor vehicle accidents, vandalism, and other compliance issues resulting from off-road use and on-road use of OHVs and street-legal ATVs.

Management actions described in Table 2 will be implemented if monitoring indicates that off-road use or on-road use is impacting resources, or if trends are negative and resources are at risk. The decision to implement a specific management action will be based on feedback provided by the monitoring program, consultation with outside experts, the professional judgment of NPS staff and management, and the authorities available to the NPS.

Species-specific proposed conservation measures are listed under the species accounts for California condor, Mexican spotted owl, southwestern willow flycatcher, yellow-billed cuckoo, Jones cycladenia, Brady pincushion cactus, and Siler pincushion cactus.

**Table 2. Indicators for Monitoring and Management Actions**

| RESOURCE OR VALUE  | INDICATORS   | WHAT DOES IT POTENTIALLY INDICATE / WHAT IS THE CAUSE FOR CONCERN?  | MANAGEMENT ACTIONS  |
|--|--|---|---|
| Soils  | Tire tracks outside designated use areas or off-road | Areas designated for off-road use may be poorly defined and identified. Changes in soil structure due to crushing and shearing affect ecological processes and functions, cause erosion, crush burrows and impact ground-dwelling and burrowing animals, affect vegetation, and can lead to increases in invasive plants. | Improve signs and communication/education with partners and users; install physical barriers; enhance NPS presence; restore native plants; and implement closures.  |
| RESOURCE OR VALUE  | INDICATORS   | WHAT DOES IT POTENTIALLY INDICATE / WHAT IS THE CAUSE FOR CONCERN?  | MANAGEMENT ACTIONS  |
| <b>Vegetation (including threatened and endangered vegetation)</b> | Crushing or other damage to native plants            | Areas designated for off-road use may be poorly defined or identified. Impacts on plants can lead to losses in productivity, increases in impacts on soils, loss of habitat for wildlife, and increased susceptibility to invasive plants.  | Improve signs and communication/education with partners and users; install physical barriers; enhance NPS presence; restore native plants; implement closures; and additional restrictions on vehicle type or other alterations to use. |

| RESOURCE OR VALUE                                  | INDICATORS  | WHAT DOES IT POTENTIALLY INDICATE / WHAT IS THE CAUSE FOR CONCERN?   | MANAGEMENT ACTIONS   |
|--|---|--|--|
| <b>Recreation Resources and Visitor Experience</b> | Litter / sanitation / vandalism / evidence of vehicle maintenance / evidence of hazardous materials                 | These indicate site degradation and ineffective communication of rules or problems with user behavior.   | Improve signs and communication/education with partners and users and enhance NPS presence; and implement closures.  |
|  | Expansion of ORV areas and routes   | The expansion of designated ORV routes and areas indicates inappropriate forms of use, poor site design, or problems with user behavior.   | Improve signs and communication/education with partners and users; install physical barriers; enhanced NPS presence; restoration of native plants; and implement closures.   |
|  | Social routes   | The creation of social routes indicates inappropriate user behavior, poor site design, ineffective enforcement, and degradation of resources.  | Improve signs and communication/education with partners and users; install physical barriers; enhance NPS presence; restore native plants; and implement closures.   |
|  | Air quality and visual impacts  | Impacts on air quality and visual resources could indicate increased dust at certain times of the year, such as spring and early summer.   | Photographic monitoring using permanent photo points may require changes including closures at certain times of year or certain routes.  |
| <b>Invasive Plants</b>                             | Increase in invasive plants   | Increases in invasive plants may indicate disturbance to soils or native vegetation, changes in resource conditions, or transport of seeds by off-road use.  | Improve signs and communication/education with partners and users; install physical barriers; enhance NPS presence, restore native plants; implement closures; and additional restrictions on vehicle type or other alterations to use.                      |
| <b>Special-status Species</b>                      | Declines in special-status species through evidence of direct mortality (animals) or declines in abundance (plants) | Declines of special-status species along roads may be linked to increased mortality (direct collisions, dust emissions, etc.), indicating disturbance and impacts caused by increased off- road use. | Develop and implement monitoring plans for species that survey data suggest may be affected; use education, physical barriers, enhanced NPS presence, or closures.<br>Closure or seasonal closure for lambing areas for Desert Bighorn Sheep at Ferry Swale. |
| <b>Compliance</b>                                  | Number of incidents   | Poor compliance may be due to poor site design, selection, monitoring, and/or enforcement.   | Improve signs and communication/education with partners and users; install physical barriers; enhance NPS presence; and implement closures.  |

### ***Communication to the Public***

During implementation of the plan/EIS, the NPS will provide information on federally listed species and their protection as part of the communication strategy for the plan/EIS. Glen Canyon will provide information about the ORV Management Plan on the internet, including detailed information regarding the authorized activities or prohibited use implemented the selected alternative. Online-based information will be included on the park website, social media and other sources. Glen Canyon will produce informational publications describing the ORV Management Plan and appropriate behavior. These will be provided to the public. Brochures, newspaper articles, trail guides, trailhead signs, videos, maps and other publications will be utilized. NPS interpretive and law enforcement staff will be informed and equipped to answer visitor questions and concerns regarding the ORV Management Plan. NPS will develop partnerships with Tread Lightly! off-roading groups, and other appropriate entities in the community to

improve communications, distribute information, and develop community awareness. These partnerships will enhance communications regarding on- and off-road ATV and OHV use on designated routes and within designated areas and the stewardship of Glen Canyon's resources and values.

### ***ORV Permit System***

A permit system will be implemented as a means to better manage the ORV plan. Requiring all operators desiring to travel off-road in Glen Canyon to obtain a permit will provide a means to monitor use as well as educate operators about designated routes and areas, rules and regulations, safety, and resource protection. Permit fees will be used to recover NPS costs for managing areas designated for off-road use. Costs include monitoring, signs, education programs, and partnerships, as well as the costs associated with administering the permits. Permits will be required for off-road use at accessible shoreline ORV areas, Lone Rock Beach ORV Area, and Lone Rock Beach Play Area ORV Area, and on designated ORV routes in Ferry Swale and other locations. Permits will be available for sale on-site at several locations within Glen Canyon and on-line via a web-based system. ORV permits will be issued per vehicle. The ORV permit will provide access for the permitted vehicle to all designated ORV routes and areas within Glen Canyon. A permit will be available for sale for a short-term visit or on an annual basis. The annual number of ORV permits that will be issued is not capped at this time. Permits could be revoked for violation of applicable regulations or terms and conditions of the permit.

## **3.3 Applicant Committed Conservation Measures**

The NPS has designed a variety of conservation measures in the project to protect federally listed species and their habitats. The following design criteria are intended to avoid or minimize potential for adverse impacts. These measures will be carried out by trained Glen Canyon staff and project personnel using applicable U.S. Fish and Wildlife Service (USFWS) protocols. In addition, education will be an important component of these measures for all species (see Communication to the Public).

### ***California Condor***

- Glen Canyon staff will communicate and cooperate with the Peregrine Fund and state wildlife agencies as these organizations monitor condor locations and movements to determine the locations and status of condors in the plan area.
- Park staff and visitors are instructed to avoid interaction with condors and to immediately contact Glen Canyon Division of Resource Management staff at (928-608-6267) and the Peregrine Fund (208-362-3716) if and when condor(s) occur in the plan area.
- Permits issued for off-road vehicle use will include information about the condor and applicable restrictions.
- The speed limit on accessible shoreline ORV areas will be lowered to 25 mph or lower to decrease the possibility of collisions.
- If condors consistently occur in a portion of the plan area the NPS will consult with USFWS to determine if additional conservation measures are necessary. Glen Canyon staff will report condor occurrence in the plan area to the USFWS in a timely manner, and will facilitate implementation of any necessary management actions by Glen Canyon in consultation with the USFWS.
- Condor nesting in the vicinity of the project area is unlikely. However, if condor nesting activity occurs within 1.0 mile of the project area additional conservation measures may be necessary. Glen Canyon will report any such occurrences to the USFWS in a timely

manner, and will facilitate implementation of any necessary management actions by Glen Canyon in consultation with the USFWS. Temporary closures to recreational use of affected areas would be put in place if condor nesting activity occurs in the area.

- The NPS will provide visitor education via permit and other outreach efforts regarding proper and legal behaviors to protect natural and cultural resources when recreating on park roads, and on ORV routes and within ORV areas. This will include information about the importance of the area as habitat for a variety of sensitive species, including Mexican spotted owl, western yellow-billed cuckoo, southwestern willow flycatcher, the California condor, Jones cycladenia, and the Brady pincushion cactus.

### ***Mexican Spotted Owl***

- NPS will institute additional USFWS protocol surveys for owls in 2017 for a minimum of three consecutive years through 2019 around designated ORV areas and routes, GMP roads, historical nesting sites, and where there is potential for nesting, roosting or foraging activities.
- NPS will develop a long-term monitoring strategy in coordination with USFWS to further guide implementation of the plan. This includes monitoring of suitable habitat in or near existing park roads, ORV areas and routes to inform subsequent management actions (e.g. change in size or location of designated ORV areas, modification of park operations or visitor use activities).
- If new owl presence is detected, NPS will modify ORV areas and routes in such a manner that off-road activity is restricted to areas >0.5 miles from known or suspected owl nesting sites. In the unlikely event that a temporary closure is not possible, the NPS will engage in additional consultation with USFWS to identify appropriate mitigation measures.
- NPS will report consistent owl occurrence in the plan area to the USFWS in a timely manner and will facilitate implementation of any necessary changes to management actions in consultation with the USFWS.
- Management actions will be coordinated to ensure that noise levels are at or below 69 dBA within 50 meters of nest sites.
- NPS will discontinue off-road use at the existing Warm Creek ORV area due to a range of management objectives. This closure will eliminate potential for disturbance from motorized vehicular access to adjacent suitable habitat for the Mexican spotted owl.
- The NPS will provide visitor education via permit and other outreach efforts regarding proper and legal behaviors to protect natural and cultural resources when recreating on park roads, and on ORV routes and within ORV areas. This will include information about the importance of the area as habitat for a variety of sensitive species, including Mexican spotted owl, western yellow-billed cuckoo, southwestern willow flycatcher, the California condor, Jones cycladenia, and the Brady pincushion cactus.
- NPS will lower the speed limit to 25 mph or less on unpaved park roads where street-legal ATVs and OHVs are permitted to decrease the possibility of collisions with wildlife, including sensitive species.
- Current accessible shorelines that are closed (Bullfrog North and South, White Canyon) due to low lake levels will remain closed while MSO surveys are completed.
- The following guidelines apply to occupied breeding habitat during the MSO

breeding season (1 Mar - 31 Aug). If non-breeding is confirmed that year per the accepted survey protocol, temporary restrictions on noise disturbances may be relaxed depending on the nature and extent of the proposed activity.

- Provide a 0.5 mile vehicle buffer around known activity centers and nest sites to provide adequate protection against disturbance of roosting or nesting owls.
- Ensure that no construction of new facilities (e.g., fencing, signage) occurs during the breeding season in suitable or designated critical habitat.
- When implementing activities related to modification or maintenance of existing facilities pertaining to public health, safety, and routine maintenance, use all measures possible to avoid potential effects to owls and their designated critical or suitable habitat (e.g., use least disruptive machinery, time activity to minimize disturbance, modify type of equipment used, conduct work in non-breeding season).
- Implement seasonal closures of all or portions of ORV areas and ORV routes to maintain a 0.5 mile buffer from occupied nest sites.

### ***Southwestern Willow Flycatcher***

- Glen Canyon staff will survey using USFWS protocols along accessible shorelines and any associated riparian zones where riparian vegetation may occur that could be used during migration and breeding to determine the locations and status of flycatchers in the plan area. Evidence for Southwestern willow flycatchers will consist of presence during three or more survey times between 15 May and 17 July, and will be conducted in consecutive years from 2017 through 2019, with periodic surveys afterwards using USFWS protocols.
- NPS will develop a long-term monitoring strategy in coordination with USFWS to further guide implementation of the plan. This includes monitoring of suitable habitat in or near existing park roads, ORV areas and routes to inform subsequent management actions (e.g. change in size or location of designated ORV areas, modification of park operations or visitor use activities).
- The speed limit on ORV routes and accessible shorelines ORV areas will be lowered to 25 mph or less to decrease the possibility of collisions.
- The NPS will provide visitor education via permit and other outreach efforts regarding proper and legal behaviors to protect natural and cultural resources when recreating on park roads, and on ORV routes and within ORV areas. This will include information about the importance of the area as habitat for a variety of sensitive species, including Mexican spotted owl, western yellow-billed cuckoo, southwestern willow flycatcher, the California condor, Jones cycladenia, and the Brady pincushion cactus.
- NPS will report consistent southwestern willow flycatcher occurrence in the plan area to the USFWS in a timely manner and will facilitate implementation of any necessary changes to management actions in consultation with the USFWS.
- Temporary closures to recreational use of affected areas will be put in place if activity occurs within 0.5 miles of nesting areas during the breeding season (May to August).
- When implementing activities related to modification or maintenance of existing facilities pertaining to public health, safety, and routine maintenance, use all measures possible to avoid potential effects to flycatchers and their suitable habitat (e.g., use least disruptive machinery, time activity to minimize disturbance, modify

type of equipment used, and conducting work in non-breeding season).

- Flycatcher nesting is extremely unlikely within the plan area due to the absence of high quality habitat within the plan area. However, if nesting activity occurs within 0.5 mile of the plan area, most likely at or near accessible shoreline ORV areas, additional conservation measures will be implemented in consultation with USFWS. This includes temporary closures to recreational use within 0.5 miles of any active nest sites or regularly used foraging areas during the breeding season.

### ***Yellow-Billed Cuckoo***

- Glen Canyon staff will survey using USFWS protocols accessible shorelines and any associated riparian zones where riparian vegetation may occur that could be used during migration and breeding to determine the locations and status of any cuckoos. Evidence for yellow-billed cuckoo will consist of voice or sight records. Surveys will be conducted at appropriate times based on USFWS protocols and will be conducted in consecutive years from 2017 to 2019, with periodic surveys afterwards
- NPS will develop a long-term monitoring strategy in coordination with USFWS to further guide implementation of the plan. This includes monitoring of suitable and designated critical habitat in or near existing park roads, ORV areas and routes to inform subsequent management actions (e.g. change in size or location of designated ORV areas, modification of park operations or visitor use activities).
- The speed limit on unpaved roads and accessible shorelines where street-legal ATVs and OHVs are permitted will be lowered to 25 mph or lower to decrease the possibility of collisions.
- The NPS will provide visitor education via permit and other outreach efforts regarding proper and legal behaviors to protect natural and cultural resources when recreating on park roads, and on ORV routes and within ORV areas. This will include information about the importance of the area as habitat for a variety of sensitive species, including Mexican spotted owl, western yellow-billed cuckoo, southwestern willow flycatcher, the California condor, Jones cycladenia, and the Brady pincushion cactus.
- NPS will report consistent yellow-billed cuckoo occurrence in the plan area to the USFWS in a timely manner and will facilitate implementation of any necessary changes to management actions in consultation with the USFWS.
- Temporary closures to recreational use of affected areas will be put in place if activity occurs within 0.5 miles of nesting areas during the breeding season (June to September).
- When implementing activities related to modification or maintenance of existing facilities pertaining to public health, safety, and routine maintenance, use all measures possible to avoid potential effects to cuckoos and their designated critical or suitable habitat (e.g., use least disruptive machinery, time activity to minimize disturbance, modify type of equipment used, and conducting work in non-breeding season).
- Yellow-billed cuckoo nesting in the vicinity of the plan area is unlikely due to the absence of high quality nesting habitat. However, if nesting activity occurs within 0.5 mile of the plan area, primarily in dense stands of riparian vegetation associated with the Colorado and San Juan Rivers and accessible shorelines, additional conservation measures will be implemented in consultation with USFWS. This includes temporary closures to recreational use within 0.5 miles of any active nest sites or regularly used

foraging areas during the breeding season.

### ***Jones' Cycladenia***

- Glen Canyon staff will continue to survey suitable habitat at accessible shorelines for the species prior to project implementation using survey protocols recommended by the USFWS. If populations are found they will be protected by closures or barriers to prevent vehicle access. A 300-foot minimum buffer will be established using closures and barriers around located plants.
- Any plan activity that may cause adverse effect to located populations and plants will cease until qualified personnel can assess the situation and determine the correct course of action in consultation with the USFWS.
- The NPS will provide visitor education via permit and other outreach efforts regarding proper and legal behaviors to protect natural and cultural resources when recreating on park roads, and on ORV routes and within ORV areas. This will include information about the importance of the area as habitat for a variety of sensitive species, including Mexican spotted owl, western yellow-billed cuckoo, southwestern willow flycatcher, the California condor, Jones cycladenia, and the Brady pincushion cactus.

### ***Brady pincushion cactus***

- No plan activities or projects will be authorized in suitable or occupied habitat for this species
- NPS will develop a long-term monitoring strategy in coordination with USFWS to further guide implementation of the plan. This includes monitoring of suitable habitat in or near existing park roads, ORV areas and routes to inform subsequent management actions (e.g. change in size or location of designated ORV areas, modification of park operations or visitor use activities).
- Glen Canyon staff will monitor the Lees Ferry paved road regularly to prevent illegal off-road activity.
- The NPS will provide visitor education via permit and other outreach efforts regarding proper and legal behaviors to protect natural and cultural resources when recreating on park roads, and on ORV routes and within ORV areas. This will include information about the importance of the area as habitat for a variety of sensitive species, including Mexican spotted owl, western yellow-billed cuckoo, southwestern willow flycatcher, the California condor, Jones cycladenia, and the Brady pincushion cactus.

### ***Siler pincushion cactus***

- Glen Canyon staff will continue to survey suitable habitat at accessible shorelines for the species prior to project implementation. If populations are found they will be protected by closures or barriers to prevent vehicle access. A 300-foot minimum buffer will be established using closures and barriers around located plants.
- Any project activity that may cause adverse effects to located populations and plants will cease until qualified personnel can assess the situation and determine the correct course of action in consultation with the USFWS.

## 4.0 Action Area Description

The plan/EIS affects all components of public motor vehicle use in Glen Canyon. The specific components of the plan/EIS described in Table 1 in Section 3.0 and in Appendix B were buffered by a larger area of potential impact in order to create the action area used for the purposes of this assessment. The action area thus defined consists of:

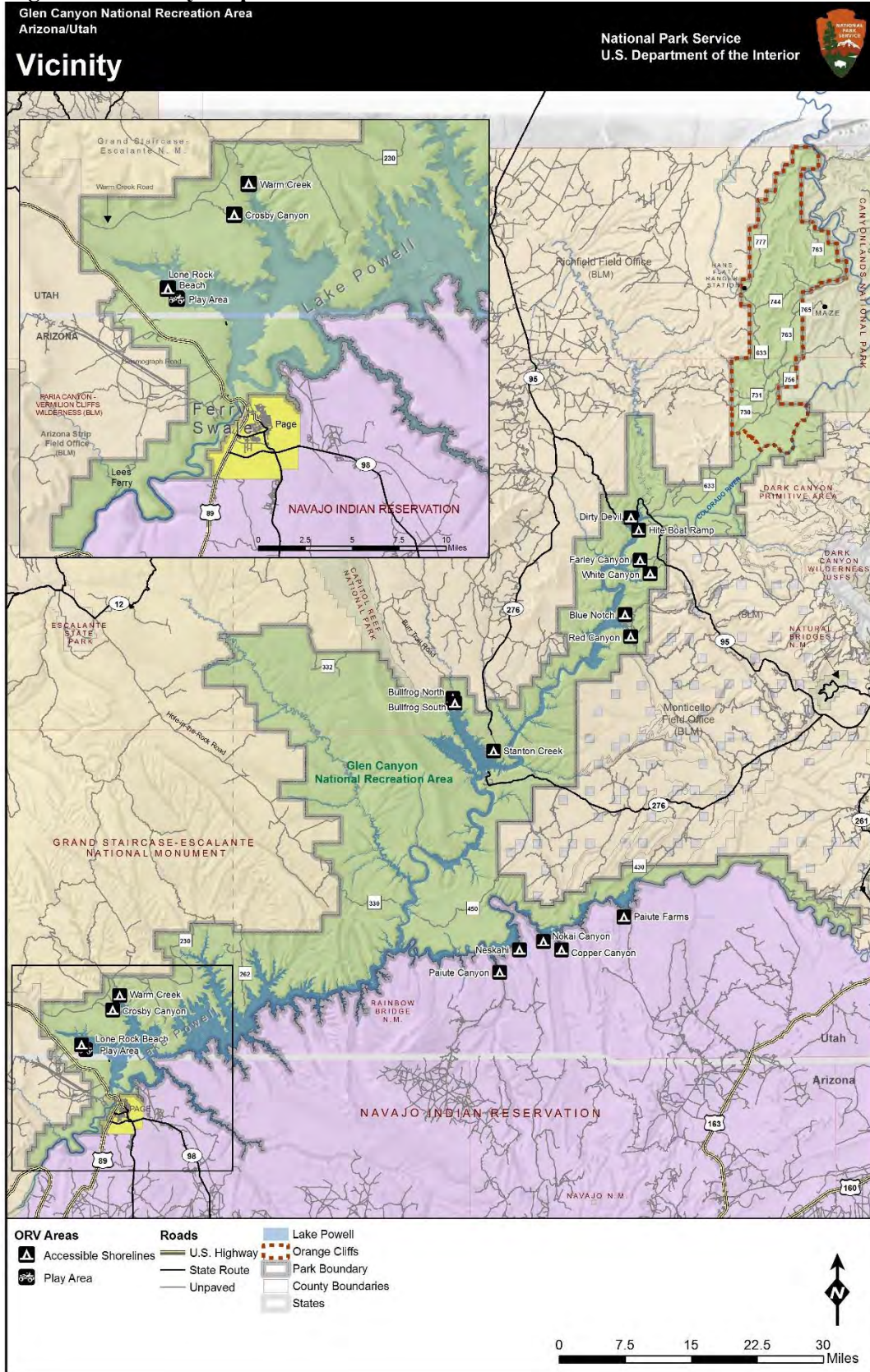
- 75 miles of paved road (estimated 66' width of roadway and roadsides) and buffer area one mile wide on both sides of the centerline
- 313 miles of unpaved road (estimated 24' width of roadway and roadsides) and buffer area one mile wide on both sides of the centerline
- 19 miles of ORV routes (estimated 24' width of roadway and roadsides) and buffer area one mile wide on both sides of the centerline
- 15 accessible shoreline areas of varying size totaling approximately 5,950 acres and buffer area one mile wide from all sides of the area
- One ORV area (Lone Rock Play Area) of 180 acres and buffer area one mile wide from all sides of the area.

The action area includes the land, water and air in the project area and the adjacent one mile buffer zone.

Glen Canyon, located in the Colorado Plateau physiographic province, extends more than 200 miles from the Green River in southern Utah to Lees Ferry in Arizona. It is a desert region of rock, arid shrublands, grasslands, and low-growing pinyon/juniper woodlands. As shown in the "Vicinity" map (Figure 10), Glen Canyon is bordered by Canyonlands National Park to the northeast; the Red Rock Plateau to the east; the Henry Mountains to the north; Grand Staircase–Escalante National Monument, Dixie National Forest, and Capitol Reef National Park to the northwest and west; and the Navajo Indian Reservation to the south.



**Figure 10. Vicinity Map.**





## 4.1 Description of Water in Action Area

Glen Canyon surrounds Lake Powell (Figure 11) which was formed by the inundation of the Colorado River following the construction of the Glen Canyon Dam between 1960 and 1963. The 186-mile-long Lake Powell formed along the courses of the Colorado River and three tributaries: the Escalante, San Juan, and Dirty Devil Rivers. Lake Powell is the second-largest reservoir by volume in North America, and the largest reservoir in North America by surface acreage, length, and shoreline length. The lake includes parts of Arizona and Utah.



**Figure 11. View of Lake Powell towards Navajo Mountain.**

The Bureau of Reclamation manages the Glen Canyon Dam. It was designed to accommodate lake levels ranging from 3,490 feet to 3,700 feet above sea level. As the water level changes, the surface of Lake Powell varies in area from 52,000 acres to 163,000 acres and the shoreline fluctuates from 990 miles to 1,960 miles in length. Usually, the lake surface is about 160,000 acres, which represents approximately 13% of Glen Canyon. Annual fluctuations in lake levels typically are about 25 vertical feet. The lake level rises in the spring as water from snowmelt runoff collects behind the dam. It then declines throughout the rest of the year, particularly during summer and early fall as water is released for electrical power generation and irrigation.

The remaining 87% of Glen Canyon consists of upland desert incised by deep canyons, dry washes, and steep cliffs, as well as talus, and clay or slickrock badlands. Much of the lake's shoreline consists of steep slopes and cliff walls. Elevations in Glen Canyon vary from approximately 3,600 feet (at low lake levels)



to over 7,500 feet above sea level.

Natural topographical features generally contain the accessible shoreline areas, and therefore these shoreline areas are limited in extent and easily described in terms of resource conditions. The designated road system (GMP roads [paved and unpaved]), however, encompasses nearly 400 miles of park roads that are situated across the vast expanses of Glen Canyon in areas of rock, arid shrublands, grasslands, and low-growing pinyon/juniper woodlands (Figure 12).



**Figure 12. Overlook of Flint Trail in the Orange Cliffs.**

## **4.2 Description of Air in Action Area**

The EPA, the Arizona Department of Environmental Quality, and the Utah Department of Environmental Quality regulate air quality in Glen Canyon through the implementation of the Clean Air Act. The EPA has established primary and secondary National Ambient Air Quality Standards for six criteria pollutants: carbon monoxide, nitrogen dioxide, particulate matter, ozone, sulfur dioxide, and lead. In addition to the National Ambient Air Quality Standards, the Clean Air Act contains a “Prevention of Significant Deterioration” title (42 USC 7470–7492) to place ceilings on additional amounts of pollution over baseline levels based on the classification of an area. The program outlines three types of airshed classification areas: Class I, Class II, and Class III. Glen Canyon is classified as a Class II area. Currently, Glen Canyon is located in a designated EPA air quality attainment area, which means air quality standards are being met. Neighboring national park units, including Capitol Reef, Canyonlands, and

Grand Canyon National Park, are Class I areas. Off-road use can have an adverse impact on ambient air quality through its destabilizing effects on soils and through mobile source emissions. Additionally, impacts of fugitive dust due to off-road activity can be problematic.

### **4.3 Description of Geology in Action Area**

The geology of Glen Canyon represents a spectacular example of exposed Colorado Plateau rocks (Sprinkle et al. 2000) and is characterized by relatively flat-lying Mesozoic and Paleozoic sedimentary rocks. This area of high-standing crustal blocks is largely pristine due to a lack of rock deformation over the last 300 million years. The area stands in stark contrast to the highly deformed Southern Rocky Mountains region to the northeast and the Basin and Range regions to the west and south.

The bedrock units of Glen Canyon range in age from 300 million years (Late Pennsylvanian) to 85 million years (Late Cretaceous). Vigorous downcutting of the Colorado and San Juan River systems has exposed more than 8,500 feet of sedimentary rock strata. The strata contain a visible record of marine, marginal marine, coastal, and alluvial plain, vast desert, and small oasis conditions over a vast period. Glen Canyon consists primarily of sedimentary strata of the Triassic and Jurassic ages. The majority of Glen Canyon is of the Moenkopi and Chinle Formations of the Triassic, and the Glen Canyon Group of the Jurassic.

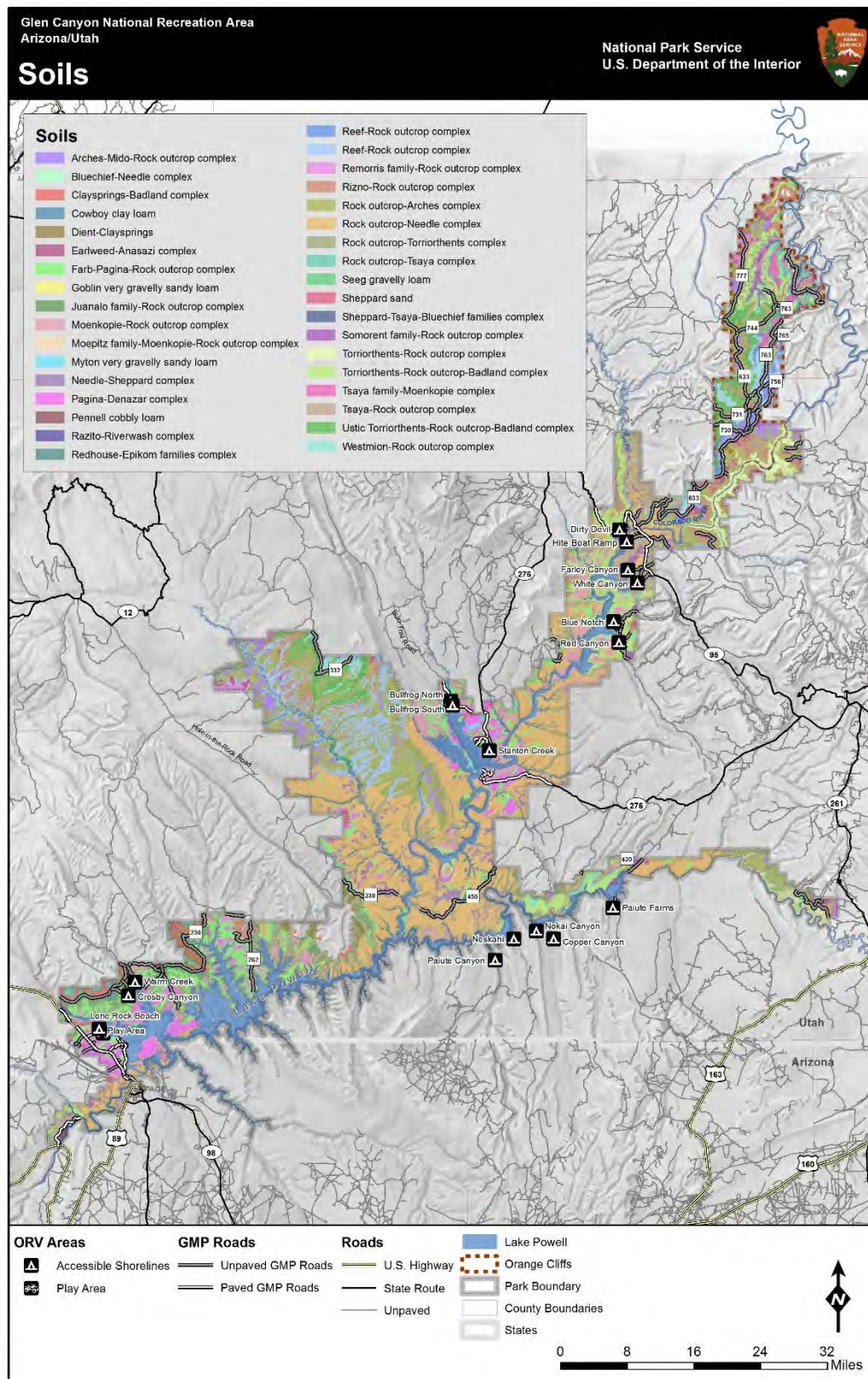
### **4.4 Description of Soils in Action Area**

Approximately one-third (400,000 acres) of Glen Canyon is exposed bare rock and the disintegrated shale and sandstone that make up canyon walls and plateau edges (NRCS 2010). The weathering of rock in flat areas such as plateaus and mesas, along with introduced windblown sand, may create a thin, noncontinuous soil mantle over the rock. This thin cover often has pockets of deeper soils in indented or sheltered areas, which frequently shift due to wind and erosion. These thin, shifting, constantly disturbed soils cover most of the remaining area. Because much of the soil in Glen Canyon is transported by water and wind, most of the deeper soils are present in protected areas such as dry streambeds, alluvial zones, former and existing canyons, and cliff bases. Deeper, more established soils make up a fraction of Glen Canyon (1,850 acres) (NRCS 2010). Figure 13 provides a map of the soil types found in Glen Canyon.

Soils in Glen Canyon are generally sandy, with most upland areas containing variants of sandy loam, loamy sand, and sand. There are also areas of high clay content, known as clay barrens, and areas with high mineral concentrations (NRCS 2010). Clay and silt loams may be found in alluvial areas or the shoreline area of Lake Powell where soil deposits are left behind by retreating waters. In sections of the shoreline where soils are occasionally inundated, flooding creates anaerobic conditions and limits the development of biological crusts or vegetation. Shoreline areas and dry washes that are rarely covered in water may support increased vegetation because of deeper, more fertile alluvial or windborne soil deposits, protection from erosive forces, and/or increased moisture availability. Alluvial soil deposits and associated vegetation commonly occur at the edge of the high water line, especially in protected stream beds or canyons. Upland areas that contain sandy soils or sand mixed with clay and minerals may form either biological or physical crusts. Deeper, established soils are also found at the base of rock outcrops or cliffs (above the high water line and/or protected from water run-off). These areas may contain biological crusts and vegetation, and are subject to less wind and water erosion because these features fix the soil in place.



Figure 13. Map of Soils in Glen Canyon National Recreation Area.



Biological crusts (or biotic crusts) are a key component of the ecosystem formed on the thin soils of Glen Canyon and across the Colorado Plateau region, where up to 70% of living ground cover may consist of biological crusts (Belnap 1994). Biological crusts are composed of a community of specialized organisms including cyanobacteria, green algae, lichens, mosses, microfungi, and other bacteria, and appear as dark, sponge-like-textured pinnacles of soil (Belnap and Lange 2001). The soil is stabilized when filaments of cyanobacteria and microfungi extend into the upper few millimeters of soil and secrete a gel-like substance that binds the soil particles together to form a cohesive matrix (Belnap and Gardner 1993; Belnap 1993).

Soils in Glen Canyon may form biological crusts in areas free from historic or current nonnatural disturbance, with shallow soil and limited water and wind erosion. Biological crust cover generally increases in areas with low vascular plant cover, at lower elevation, and with more loosely embedded rocks, shallower soils, and fine soil texture (Belnap and Lange 2001). Biological crust formation is limited because over one-third of Glen Canyon consists of bare rock, and one-third has thin, shifting soils, with wide swathes containing high concentrations of minerals. Additionally, areas of Glen Canyon in the “bathtub ring” of Glen Canyon (the land around Lake Powell bleached by high water), or in dry streambeds and canyons, are subject to inundation during high water events. Flooded soils create anaerobic conditions, which inhibit the development of biological crusts due to the intolerance of lichen for low-oxygen or no-oxygen conditions (Winward 1980).

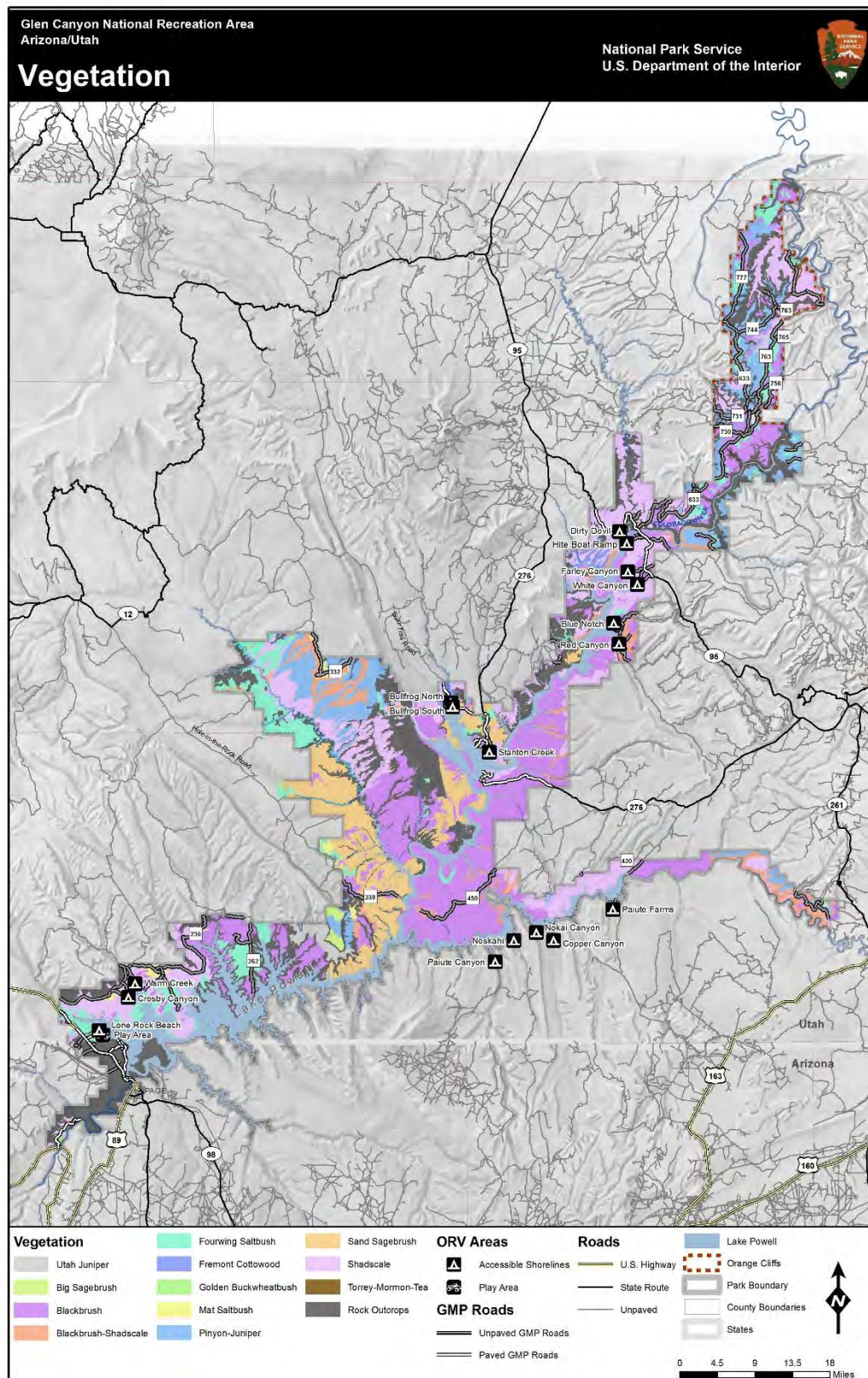
Nonbiotic crusts, known as physical crusts, also commonly occur in Glen Canyon. These crusts are primarily formed by raindrop impact, which breaks down the soil and fixes small-diameter silt and clay particles to the surface, creating strong, dense, soil layers ranging in thickness from one millimeter to three centimeters. The crusts have low infiltration rates, which limits drainage, resulting in increased water runoff and soil erosion, and in reduced germination and emergence rates of vascular plants (Belnap and Lange 2001). Aerial images of Glen Canyon show large areas of physical crusts, often indicated by white expanses of salts, lime, and silica, which are deposited at the surface during evaporation. Impermeable soils are also formed through trampling by livestock or through wheeled vehicle passage, which compact and shear the soil, resulting in more surface runoff along with the destruction of soil pores and structure (Adams et al. 1982; Payne et al. 1983).

## **4.5 Description of Vegetation in Action Area**

Glen Canyon lies in the Colorado Plateau Floristic Region. This region is roughly centered on the “four corners” region of the southwestern United States, occupying Arizona, Colorado, New Mexico, and Utah. The vegetation of Glen Canyon is highly diverse and typical of the Colorado Plateau Region, consisting of a variety of arid and semiarid plant communities (Figure 14). The majority of Glen Canyon below 5,000 feet is considered shrubland and grasslands, with areas above 5,000 feet being recognized as woodlands.



Figure 14. Map of Vegetation in Glen Canyon National Recreation Area.



Generally, the majority of Glen Canyon below 5,000 feet above sea level is dominated by blackbrush shrubland on shallow rocky soils. Typically, surrounding these areas shadscale, a mixture of shadscale and blackbrush, sand sagebrush, and Cutler-Mormon-tea (*Ephedra cutleri*) can be found. Sandy soils support a mosaic of shrubland and grassland types. Clay barrens are common and generally vegetated by ephemeral annual forbs or dwarf shrubland that is dominated by species of saltbush (*Atriplex* spp.), including mat saltbush (*A. corrugata*) and four-wing saltbush. In areas along streams, Fremont cottonwood (*Populus fremontii*) can be frequently found. Areas above 5,000 feet above sea level are dominated by pinyon/juniper woodlands composed of stands of pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*), interspersed with meadows dominated by big sagebrush (*Artemisia tridentata*)

Shrubland areas include upland arid and semiarid, northern desert shrublands, upland dwarf shrublands, and riparian shrublands. In addition to shrublands, Glen Canyon is home to two woodland vegetation communities: upland and riparian. Additionally, Glen Canyon has springs and hanging gardens, a number of nonnative species, and relict plant communities.

The accessible shorelines of Lake Powell are typified by lower elevations and low to moderate sand slopes. Sand shrub communities typically include sand sagebrush, four-wing saltbush, Vanclevea (*Vanclevea stylosa*), Torrey-Mormon-tea, and plains beavertail (*Opuntia erinacea*). Grasses include Indian ricegrass (*Achnatherum hymenoides*) and dropseeds (*Sporobolus* spp.). A variety of forbs occur, including globemallow (*Sphaeralcea grossulariifolia*), bird's beak (*Cordylanthus wrightii*), pallid evening-primrose (*Oenothera pallida*), annual sunflower (*Helianthus petiolaris*), and numerous additional annual species. Biological soil crusts are typically common on sandy soils in these communities, especially under and around the shrubs.

### ***Upland Shrubland***

Upland arid and semiarid, northern desert shrublands and upland dwarf shrublands form the dominant vegetation in Glen Canyon. A variety of shrub species have adapted to the arid hot summer and cold winter climate of the region. Differences in species composition between shrublands are primarily related to soil characteristics, aspect, and elevation. Blackbrush is the dominant shrub species over extensive areas in upland shrublands.

Blackbrush grows on nonsaline, sandy or stony loams of old pediment slopes and terraces with caliche layers. Blackbrush sites with shallow soils are often found with well-developed biological soil crusts, which are highly susceptible to surface disturbance. Accessible shorelines where blackbrush is present include White Canyon, Blue Notch, Hite Boat Ramp, Red Canyon, and Warm Creek (Figure 15).

Shadscale is another relatively abundant evergreen shrub found throughout Glen Canyon. Shadscale stands often cover sites with finer-textured, relatively saline soils. This community covers less of Glen Canyon than blackbrush because the shale and siltstone formations that favor shadscale are less common in the area compared to the sandstone-derived soils that support blackbrush and sand shrub vegetation. Shadscale is often found in association with galleta and Indian ricegrass in shallow sandy clay loams, but where the clay content is high it coexists with mat saltbush. Accessible shorelines where



**Figure 15. Vegetation at the Warm Creek Area.**



shadscale is found include Dirty Devil, White Canyon, Farley Canyon, Bullfrog South, Stanton Creek, Crosby Canyon, and Warm Creek.

### ***Riparian Shrublands***

In Glen Canyon two types of riparian shrublands occur, one associated with permanent water or a shallow water table and the second associated with ephemeral or intermittent streams. Along permanent streams, coyote willow (*Salix exigua*) and seepwillow (*Baccharis salicina*) are dominant, with understories that typically include horsetail (*Equisetum hyemale*), wiregrass (*Juncus balticus*), or species of bulrush (*Scirpus* spp.). Along the original Colorado River corridor, stands of arrowweed (*Tessaria sericea*) are common, with some patches still found below Glen Canyon Dam and in side canyons off Lake Powell.



**Figure 16. Vegetation at the Alstrom Point Area.**

A facultative riparian species-rich shrubland can develop along intermittent or ephemeral stream channels. Dominant species include Apache plume (*Fallugia paradoxa*), cliffrose (*Purshia stansburiana*), and various species of rabbitbrush (*Chrysothamnus nauseosus* and *C. viscidiflorus*). The understory of these stands is typically composed of upland species found in the adjacent upland vegetation (Figure 16).

Many riparian shrublands in Glen Canyon have been invaded by nonnative species, primarily tamarisk (*Tamarix ramosissima*), Russian olive (*Elaeagnus angustifolia*), Ravenna grass (*Saccharum ravennae*), camelthorn (*Alhagi maurorum*), and Russian knapweed (*Acroptilon repens*). In many areas, tamarisk has become the dominant species. These areas then become susceptible to fire, which increases the dominance of the fire-adapted tamarisk.

### ***Upland Woodlands***

The pinyon/juniper alliance is the principal woodland community in Glen Canyon, consisting of the small pinyon pine and Utah juniper trees. These woodlands typically occur between 5 – 7,500 feet above sea level. They are highly variable depending on soil type, aspect, slope, and elevation. Many examples of the pinyon/juniper alliance are fairly open, with a sparse shrub understory. In a few areas, including the Orange Cliffs and Navajo Point, very dense stands of large old-growth pinyon/juniper exist. In these cases there is very little understory other than a few low shrubs and forbs (NPS 1993). In addition, the pinyon/juniper alliance has associated shrub species typically found in nearby meadows, including big sagebrush, Utah serviceberry (*Amelanchier utahensis*), mountain mahogany (*Cercocarpus intricatus*), blackbrush, singleleaf ash (*Fraxinus anomala*), and roundleaf buffaloberry (*Shepherdia rotundifolia*).

Grazing is the most prevalent disturbance in pinyon/juniper woodlands, but recreation, including off-road driving, can also impact these areas. Disturbed stands often have high concentrations of cheatgrass (*Bromus tectorum*) and other nonnative annuals in their understory, and markedly reduced species diversity.

## ***Riparian Woodlands***

Stands of Fremont cottonwood (Figure 17) occur throughout Glen Canyon along streams and sometimes in association with springs. There is typically a series of stands of this species of differing ages related to flooding, ranging from young dense congregations of saplings along recent stream channels to older, larger trees on high terraces. They are classified as woodlands rather than forests because most examples are rather open, with fairly low canopy cover. Fremont cottonwood is a critically important component in both breeding and migratory habitat for many bird species, with the majority found along the Escalante River. Stands of cottonwood also occur in alliance with Goodding willow (*Salix gooddingii*), or more rarely, box elder (*Acer negundo*).



**Figure 17. Fremont Cottonwood.**

On upper stream terraces and in somewhat drier sites, Fremont cottonwood is the sole tree species present, typically with a dense understory of upland shrubs, especially of rabbitbrush. Locations with cottonwood stands are attractive to recreationists because the trees provide cover and are associated with water. Heavy use of these areas can lead to soil compaction and erosion, the exposure of root systems, the trampling of understory vegetation, and direct damage to the trees from wood collection and other activities. Flooding is also a common disturbance in riparian woodlands stands.



A number of riparian woodlands in Glen Canyon have been invaded by nonnative species, primarily tamarisk (*Tamarix ramosissima*), sweet clover (*Melilotus* spp.), Russian olive, alfalfa (*Medicago sativa*), Russian thistle, rip gut brome (*Bromus diandrus*), Japanese brome (*Bromus japonicus*), and cheatgrass.

### ***Springs and Hanging Gardens***

Spring- and seep-supported plant communities (Figure 18) are rare in the Colorado Plateau physiographic province, but occur with enough frequency in Glen Canyon that explorer John Wesley Powell named the area Glen Canyon due to the abundance of these glens, or hanging gardens. There are approximately 50 acres of hanging gardens (spring-fed colonies of plants found clinging to vertical cliff walls) in Glen Canyon.



**Figure 18. Spring Site near San Juan River.**

The springs are derived from a local aquifer primarily supplied by winter precipitation. The water supply moves through a porous sandstone unit until it reaches a less permeable layer of rock, such as the Kayenta Formation. At this point, the water begins to flow laterally, seeping out of the stone and flowing over the cliff face. This water source provides suitable habitat for a rich array of plants to grow directly from the cliff face. Hanging gardens support a rich variety of water-loving plant species, such as ferns, lilies, sedges, and orchids. About 35 species of Colorado Plateau–endemic plants are associated with hanging gardens and related spring communities. These gardens are also hot spots of biodiversity, supporting many species of plants and associated terrestrial invertebrates, aquatic invertebrates, birds, mammals, and amphibians. Hanging gardens are very fragile and are easily damaged by cattle grazing, recreation, and

other impacts that can damage the vegetation or soils on which these gardens depend.

Many other types of springs also occur in Glen Canyon, including limnocrenes, slope springs, gushettes, wetland springs, and mound springs. Biodiversity varies across these spring types, but overall tends to be lower than in hanging gardens.

### ***Nonnative Species***

NPS has identified 83 nonnative plant species in Glen Canyon. Of these known nonnative species, nine are controlled because of the threat they pose to native plants and plant habitats: Russian knapweed, African mustard (*Brassica tournefortii*), Russian olive, camelthorn, tamarisk (salt cedar), giant reed (*Arundo donax*), Uruguayan pampas grass (*Cortaderia selloana*), perennial peppergrass (*Lepidium latifolium*), and Ravenna grass. The remaining nonnative plant species are not prone to being invasive and are not a threat, or they are too abundant and too difficult to control, such as Russian thistle and cheatgrass.

## **4.6 Description of Wildlife in Action Area**

Glen Canyon supports a complex and fragile ecosystem, with plants and wildlife that have developed unique adaptations to the arid conditions of their environments. Typical of the Colorado Plateau, the highly diverse vegetation of Glen Canyon creates important habitat for a diverse range of vertebrate animals, including mammals, fish, reptiles and amphibians, and birds (NPS 2007c). Within the boundaries of Glen Canyon, approximately 438 vertebrate species have been documented, including 64 species of mammals (NPS 2007d), 25 species of fish (NPS n.d.a), 31 species of reptiles (Drost et al. 2008), 6 species of amphibians (NPS n.d.b), and 316 species of birds (Spence, LaRue, and Grahame 2011). The Glen Canyon Off-road Vehicle Management Draft Environmental Impact Statement (2014) contains additional information on many of these vertebrate animals. In addition, an unknown but potentially large number of arthropod species could be found in Glen Canyon.

## **4.7 Description of Project Area Regions in Action Area**

### ***GMP Road System***

Planning for the Glen Canyon recreational road system began soon after Congress established Glen Canyon National Recreation Area in 1972. During the development of the 1979 Glen Canyon GMP, the issue of road access and circulation was thoroughly reviewed. As a result of the GMP planning effort, 86.3 miles of unpaved roads were closed, and 313 miles of unpaved roads and approximately 75 miles of paved roads remained open to allow for public use and circulation through Glen Canyon (NPS 1979). The open roads designated through the GMP are the only roads in Glen Canyon authorized for public travel (NPS 1989 memorandum). Most of the roads that were closed were primitive unimproved tracks associated with early mineral prospecting, sheep and cattle grazing, or social exploration and were not in public use at the time of GMP planning. A few roads were closed to protect proposed wilderness areas or to preserve the integrity of the natural zone of Glen Canyon.

Glen Canyon has undertaken several extensive road inventories since the development of the GMP. A road inventory was conducted in 1984 in response to the unauthorized expansion of Glen Canyon's designated road network. This inventory resulted in two actions. The first was a decision to physically close all unauthorized Glen Canyon roads, which was generally accomplished by placing orange Carsonite stakes on all unauthorized roads, or by placing obstructions such as boulders on the road. The second action was the development of a specific three-digit road numbering system for Glen Canyon.

This road numbering system remains in place today.

The desert landscape of Glen Canyon is a dynamic, ever-changing environment. Primitive and infrequently maintained roads tend to be unstable. Natural events may block or obliterate a road and the road is rapidly reclaimed by nature. County road crews may alter the road alignment around a new obstacle to make the road passable.

### ***Accessible Shoreline Areas***

The previously designated accessible shorelines areas in Glen Canyon are intended to provide public motor vehicle access to the Lake Powell shoreline for the purposes of recreational use in a primitive setting. The 1979 Glen Canyon GMP 32 identified shoreline sites where road access is permitted or can be considered (NPS 1979). The 1981 Environmental Assessment / Development Concept Plan for Lone Rock Beach (Lone Rock EA/DCP) provided management actions and visitor facilities for a more controlled and maintainable type of recreational use of the beach (NPS 1981). The Lone Rock EA/DCP also designated a distinct 180-acre ORV high-intensity use area that runs contiguous to the Lone Rock Beach shoreline. In 1988, a management plan for Glen Canyon was developed to provide intensive management actions and site improvements at high-use accessible shorelines areas while maintaining other selected areas with road access for low-to-moderate levels of visitor use (NPS 1988).

### ***Regions***

For the purposes of the plan/EIS, the project area has been divided into regions (Figure 19): Warm Creek–Grand Bench, Escalante, Wilson Mesa, San Juan, Hite, and Orange Cliffs and Ferry Swale–Vermilion Cliffs in Arizona. Each region offers unique recreational opportunities, ranging from boating and camping to hiking and sightseeing. Several areas allow off-road use.

#### **Ferry Swale–Vermilion Cliffs Region**

Located just west of Page, Arizona, is the Ferry Swale–Vermilion Cliffs region (Figure 20). The area extends west along U.S. Highway 89 to the top of the Vermilion Cliffs and is crossed by a network of primitive roads that are used for recreation, access to hiking areas, access to grazing leases, and the maintenance of utilities. The area is popular with local residents from Page and is easily accessed directly from U.S. Highway 89. Grazing occurs on an allotment that includes this region.

The region is recognizable by the 3,000-foot escarpment of the Vermilion Cliffs, which dominates the horizon to the west of Page, and is characterized by blows and deposits and shallow, undeveloped soils over Navajo Sandstone. Minimal biological or physical soil crusts and very little, if any, vascular vegetation cover exist in these portions of Ferry Swale due to the physical disturbance from tire passes. Soils in Ferry Swale include easily disturbed Farb-Pagina type soils. Other soil types include Juanalo, Needle-Sheppard, and Pagina-Denazar.

Vegetation in the Ferry Swale area is slightly different than vegetation throughout the remainder of Glen Canyon in that the majority of Ferry Swale is composed of rock outcrops. Rock outcrops dominate the landscape in the southwest and northwest portion of Ferry Swale. Some shadscale and golden buckwheat bush exist intermittently in the southwest portion, while the western, eastern, and central portion of Ferry Swale consists primarily of shadscale and fourwing saltbrush as well as some smaller areas of mat saltbrush.



Figure 19. Plan/EIS Regions in Glen Canyon National Recreation Area.

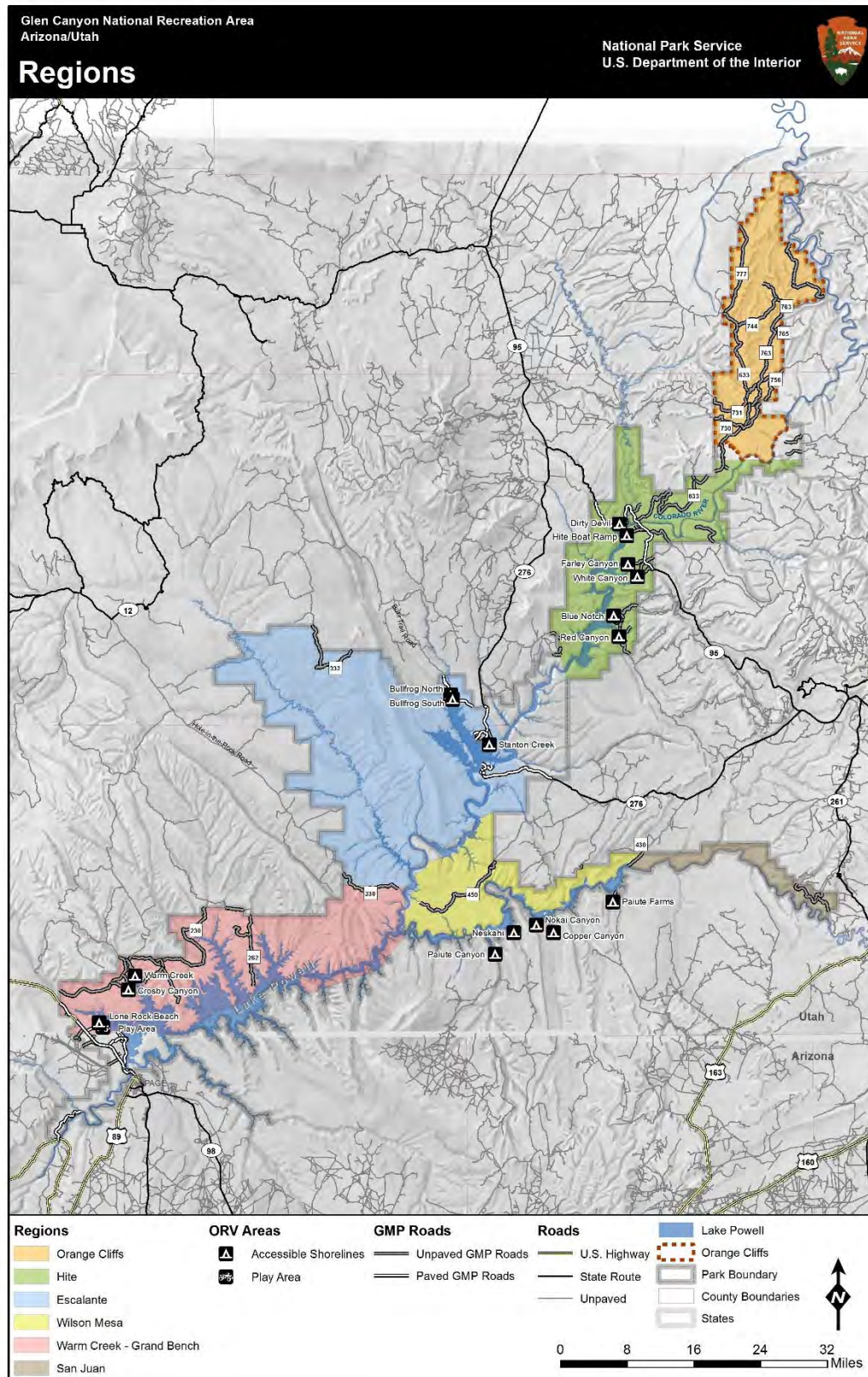
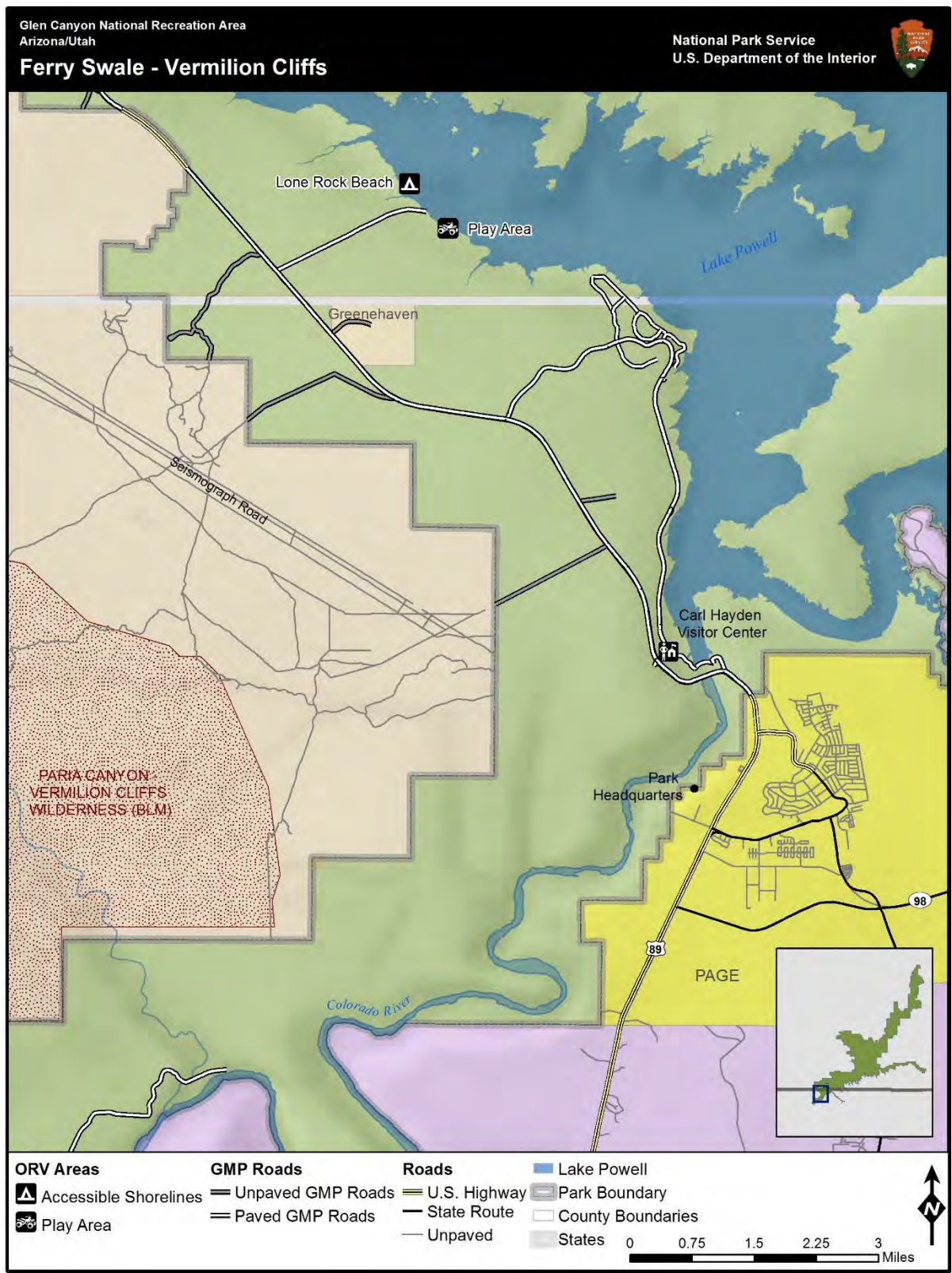




Figure 20. Ferry Swale – Vermilion Cliffs Region in Glen Canyon National Recreation Area



Four unpaved GMP roads enter the area from U.S. Highway 89; these roads connect Glen Canyon to BLM property in the Arizona Strip Field Office and Vermilion Cliffs National Monument (Figure 21). These roads have not been designated with NPS road numbers. These roads cross blackbrush-dominated areas of deep sand and slickrock. The roads are lightly traveled but remain popular with a subset of locals from Page. During the construction of the Glen Canyon Dam and associated road and facility maintenance facilities, additional informal access routes were established in this area. Over the years, new routes extending from existing GMP roads have been established by users. Some of these routes connect Glen Canyon to existing BLM routes and roads while others do not. A utility corridor has been established through this region and numerous powerlines and associated access roads cross NPS- and BLM-managed property in this region.



**Figure 21. View from Seismograph Road.**

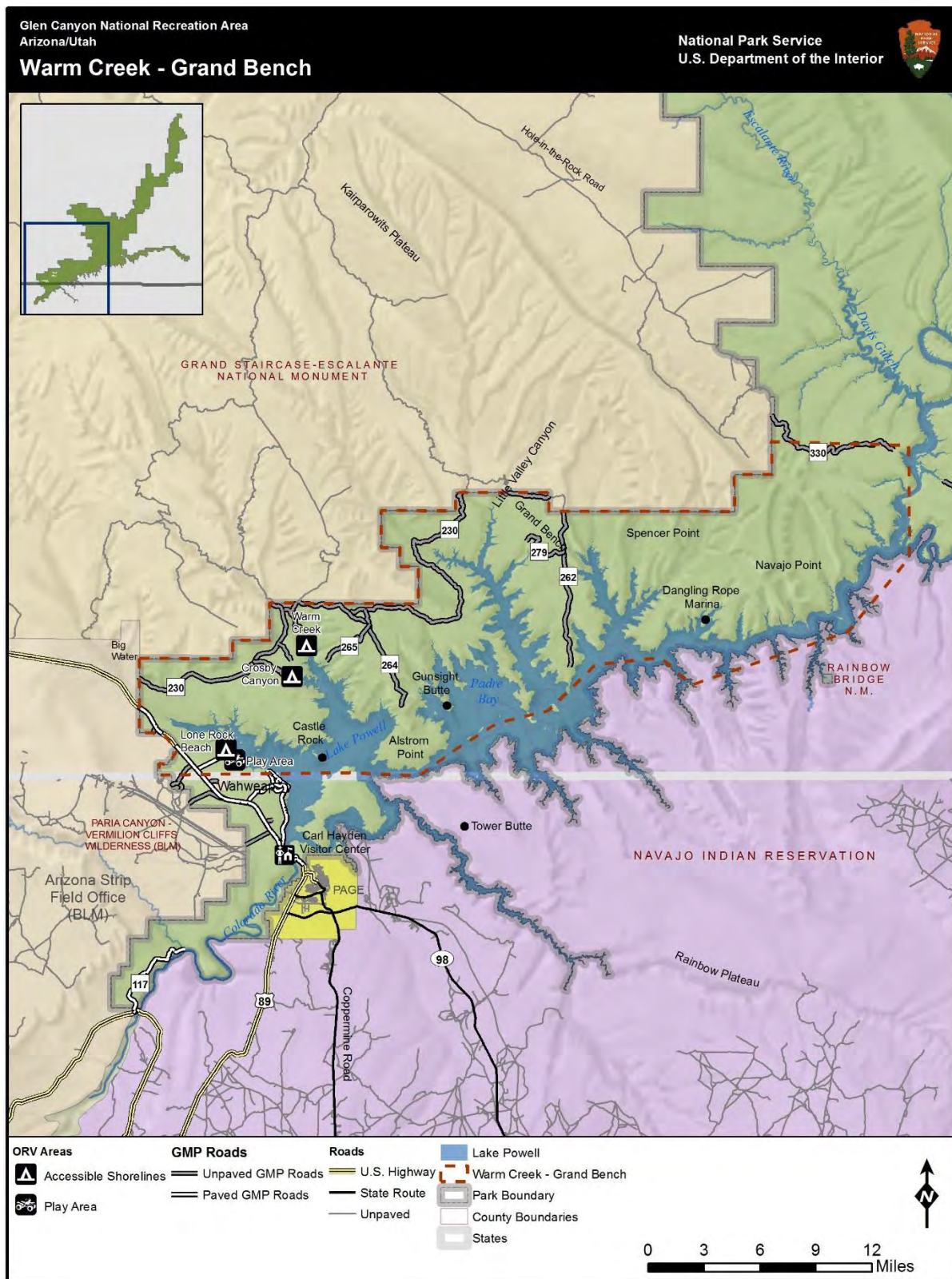
### Warm Creek to Grand Bench Region

This region is moderately used by recreationists and grazing occurs on several allotments that cover this region. The Warm Creek area (Figure 22) stretches from Big Water, Utah, along the southern tip of the Kaiparowits Plateau, and up to the Hole-in-the-Rock Road and the Escalante region to the north. The Wahweap area is the most easily accessible section of Glen Canyon and includes a marina, boat launches, and a restaurant/lodge. The Glen Canyon Dam area, located 5 miles south of Wahweap, includes the Carl Hayden Visitor Center.

Further upstream is the Padre Bay area, which offers extraordinary views of Lake Powell. Alstrom Point, accessed by NPS 264, is a high mesa (500 feet above Lake Powell) providing expansive views of Lake Powell and Padre Bay and formations including Gunsight Butte, Castle Rock, and Tower Butte. The area is a destination for day users, sightseers, photographers, and the occasional overnight camping party. The Grand Bench, accessed by NPS 262, is extremely remote and difficult to access due to the degraded roadbed crossing at Little Valley Canyon. Dangling Rope Marina, accessible only by water, is located north of Grand Bench.



Figure 22. Warm Creek – Grand Bench Region in Glen Canyon National Recreation Area



The viewshed of the Warm Creek area includes some of the most dramatic aesthetic features of Glen Canyon. The most visible feature in this region is the Kaiparowits Plateau, a giant upland rising abruptly from the Escalante and Colorado River drainages. With an elevation of approximately 7,500 feet, its southernmost tip at Navajo and Spencer Points provides a dramatic panorama of the entire canyon country and Lake Powell. Southwest of the plateau, the Warm Creek area is characterized by the sharply defined high cliff faces alternating with talus slopes and benches of shale and mudstone within Grand Staircase–Escalante. These forms give rise to numerous high mesas, plateaus, and buttes.

Warm Creek Road (NPS 230), an unpaved GMP road, connects with several roads that lead into Grand Staircase–Escalante and locations north, including the town of Escalante, Utah. These roads include Tibbett Canyon (BLM 325), Smoky Hollow (BLM 330) (Figure 23), Smoky Mountain (BLM 300), and Croton (BLM 340) roads. The proximity to Page, Arizona, makes the area popular with local ATV owners and tourists who are interested in the relatively easy access the Warm Creek Road provides to the Glen Canyon and Grand Staircase–Escalante backcountry. The Warm Creek Road is well maintained and passable by 2-wheel-drive vehicle during most of the year, although driving conditions can degrade rapidly following heavy rains.



**Figure 23. Junction of Smoky Hollow and Smoky Mountain Roads**

NPS has experienced some illegal off-road driving in this area, particularly along the section of Warm Creek Road that crosses flat areas of Tropic Shale just beyond Big Water. A section of state land between the Glen Canyon boundary and the town of Big Water is a hot spot for local off-road enthusiasts, and is crisscrossed with the tracks of ATVs and other vehicles. The impacts associated with this off-road activity have spilled into Glen Canyon via the Warm Creek Road.



Alstrom Point (Figure 24) is accessible via unpaved GMP road NPS 264. The area is a popular destination for day users, sightseers, photographers, and the occasional overnight camping party. The point provides panoramic and expansive views of Lake Powell and the surrounding region, and drivers have left the main roadway to seek the most advantageous view, resulting in a spiderweb of unauthorized roads and minor resource impacts.

Only one paved GMP road is located in this area: the upper portion of U.S. Highway 89 once it exits the Ferry Swale area. Additional unpaved GMP roads in this area include NPS 330, NPS 279, NPS 262, and NPS 265. The unpaved GMP road to Grand Bench (NPS 262) in particular is extremely difficult to traverse, as are often some of the roads diverging from Warm Creek and leading into Grand Staircase–Escalante.



**Figure 24. View from Alstrom Point.**

Lone Rock Beach (Figure 35), Glen Canyon’s principal ORV area, is located on the western shore of Lake Powell, 2 miles south of Big Water, Utah, and 12 miles north of Page, Arizona, at the Utah/Arizona border. Lone Rock Beach is the primary access to Lake Powell for the nonboating public and is approximately 250 acres, depending on lake levels. Accessible by U.S. Highway 89 and Lone Rock Road and approximately two miles northwest of Wahweap, Lone Rock Beach includes recreational activities such as swimming, fishing, boating, and camping. There is limited hard-surfaced road, with the majority of access to Lake Powell on sandy roads or beach. Beyond the entrance station is a recreation vehicle dump station, parking area, and rest area. Along the shoreline is a primitive camping area.

Lone Rock Beach is the most popular of the off-road use areas in Glen Canyon. According to NPS visitation statistics, in 2007 there were 12,445 overnight camping groups on the beach, and nearly 23,000 motor vehicles entering Lone Rock Beach. Entrance records indicate that a small percentage of visitors recreate using ATVs at Lone Rock. Since 2003, the number of ATVs recorded entering Lone Rock has ranged from 1,065 (2004) to 498 (2007).



**Figure 25. Aerial View of Lone Rock Beach.**

Further inland and to the south is the Lone Rock Beach Play Area, separated from the camping area by a post and cable fence. Restrooms and outdoor showers are available just outside the play area. The play area is the only location in Glen Canyon where off-highway vehicles (OHVs) and street-legal ATVs (in addition to conventional motor vehicles) are allowed to be operated off-road. It is a 180-acre fenced area intended as a location where motor vehicle operators can challenge themselves, develop riding skills, operate at high speeds, perform jumps and hill climbs, and so on.

Lone Rock Beach is located in a highly disturbed area with heavy impacts caused by visitors traveling off designated trails, ORV traffic, and camping. Vegetation is minimal and sparse and primarily consists of blackbrush and shadscale. In areas that are occasionally or seasonally inundated during high water levels, soil disturbance and compaction leads to increased erosion and runoff. Biological crusts are uncommon due to existing disturbance levels, and trails and associated compaction related to foot traffic and off-road use are omnipresent. Although some patches of vegetation, including four-wing saltbush (*Atriplex canescens*) and Russian thistle (*Salsola pestifer*), exist on older portions of the beach, soils are primarily thin and sandy with little vascular vegetation cover. Shoreline soils may contain deposits of fine clay or loam, with anaerobic conditions and occasional inundation, both of which limit plant growth.

Lone Rock Beach Play Area is highly disturbed by off-road use, leading to erosion and compaction. Minimal biological or physical soil crusts and very little, if any, vascular vegetation cover exist in this area due to the physical disturbance from tire passes. ORV traffic results in increased soil loss due to disturbance from these vehicles, which loosens and kicks up soil, and subsequent wind action, which transports it away from the area.

Crosby Canyon (Figure 26) and Warm Creek are two accessible shoreline areas that provide access to Warm Creek Bay. Both are located close to Page, Arizona, and offer a more primitive setting compared to

nearby Lone Rock Beach. Neither shoreline contains any facilities. Both sites have been closed since 2003, when lake elevations dropped drastically during a prolonged drought, to control illegal off-road driving beyond the designated areas. Crosby Canyon is approximately 450 acres; Warm Creek is 50 acres.



**Figure 26. Crosby Canyon Accessible Shoreline ORV Area.**

Access to Crosby Canyon is by NPS 231 off the Warm Creek Road (NPS 230). The Crosby Canyon Road is an infrequently graded, four-wheel-drive road that follows the drainage bottom. The area is subject to flash flooding. Warm Creek is accessed by an unmarked and active ephemeral desert wash channeling through the Dakota, Morrison, and Entrada Formations.

Crosby Canyon had received a moderate amount of use before closing in 2003. Originally there were two main camping areas along the road. Evidence of these sites exists in the form of old fire rings and trash. Currently, some illegal use occurs as individuals drive past a road closure sign and down along the lakeshore. A prominent vehicle track is visible and extends for miles below the high water mark and along the lakeshore. There is limited evidence of illegal off-road use beyond this track.

Warm Creek has always experienced minimal use, and therefore has been lightly impacted by activity. At higher lake elevations, a campsite was available on a small knoll surrounded by steep cliffs. Currently, two barbed-wire livestock fences across the wash bottom preclude access to the site and there is little evidence of recent visitor use of the area.

Vegetation at these accessible shorelines is minimal and sparse and primarily consists of blackbrush and shadscale. Soils found in both of these areas are of the Pagina–Farb–rock outcrop association and rock outcrop–Needle association, which are generally shallow, fine, and sandy soils derived from sandstone and deposited by the wind. Such soils are easily disturbed. There are also areas of exposed rock and sandy

deposits, indicating that wind is a strong shaping force in the soils in the vicinity, and many of the soils are therefore transient and shallow.

These areas contain a mixture of deeper, better-established, and loamy Pagina soils, and shallow, shifting, sandy Torriorthents–rock outcrop. As with many shoreline areas around Glen Canyon, rock outcroppings make up about a third of the surface area, with shallow soils prevalent and deeper soils occurring on flatter plateaus and structural benches. The deeper soils present in these areas are somewhat rare and may contain better established vegetation. In areas of shallow clay or loamy soil, biological crust formation is likely due to their ability to retain moisture for a longer period following a rainfall event. Biological crusts in these areas are susceptible to erosion due to physical disturbance (tire tracks, foot traffic), because a breakdown of the crust allows the underlying soil to be carried away by wind or water. Shallow, shifting Torriorthents soils are subject to frequent wind and water erosion, which would be accelerated by physical disturbances to these areas.

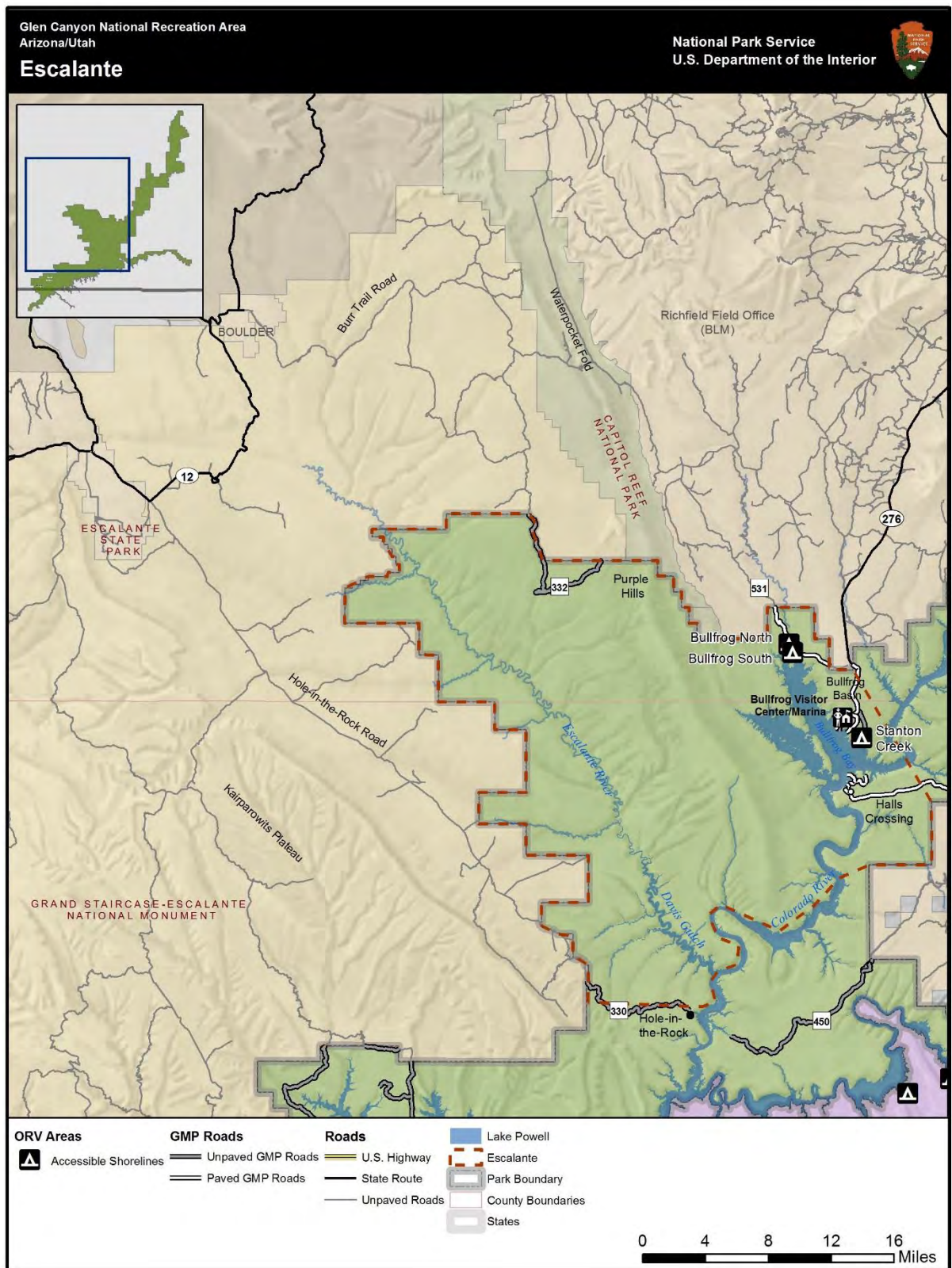
### Escalante Region

Extending north from the Kaiparowits Plateau to the Purple Hills and the southern end of the Waterpocket Fold is the Escalante region (Figure 27). The Escalante River and its tributaries have incised, deep, narrow canyons in the apricot-hued sandstones. The region offers unparalleled hiking opportunities, and the canyons offer some of the most beautiful scenery in the southwest. High above the river, the windswept slickrock and sand benches offer grand vistas and unbroken solitude. Grazing occurs on allotments that cover a portion of this region.

Halls Crossing, located in the southeastern part of the Escalante region, includes a marina, campground, and boat launch. The John Atlantic Burr Ferry serves as a continuation of State Route 276 from Halls Crossing to Bullfrog Bay. The Bullfrog visitor center, which includes a medical clinic, is located on Utah State Route 276 just past the entrance station. Bullfrog also includes a restaurant/lodge, campsites, and marina.



Figure 27. Escalante Region in Glen Canyon National Recreation Area.



The unpaved Hole-in-the-Rock Road (NPS 330) is the primary artery into the Escalante region. The Hole-in-the-Rock Road is a popular scenic and historical driving route for local residents, tourists, and those hiking the Escalante River area. Listed on the National Register of Historic Places (National Register), Hole-in-the-Rock is the location where, in 1880, Latter-day Saints settlers used pickaxes, shovels, and blasting powder to work their way down to the Colorado River through the only known natural breach in the 2,000-foot vertical cliff. The road generally is increasingly difficult to drive as it approaches Glen Canyon. The road deteriorates for the last 5 miles past the Davis Gulch crossing and generally is passable to four-wheel-drive, high-clearance vehicles only from this point to the road terminus.

The Burr Trail is a 68-mile route winding through federally owned lands from the town of Boulder, Utah, down through Grand Staircase–Escalante into Capital Reef National Park and then across BLM administered land to the Bullfrog visitor use area in Glen Canyon. The road begins as a paved road in Boulder and transitions to a chip-sealed surface and graded dirt surface along its length. The road is paved on its upper end and graded dirt on the lower end. The condition of the graded section is subject to deterioration, and a high-clearance vehicle may be required. During inclement weather the Burr Trail may be impassable even to four-wheel-drive vehicles at the Bullfrog Creek crossing and other low spots. The 7.7-mile segment of the Burr Trail in Glen Canyon is designated as the Notom–Bullfrog Road (NPS 531) and is considered a paved GMP road except for the crossing at Bullfrog Creek, which is an unimproved dirt surface.

In the far northern section of the Escalante region is Moody Canyon Road (NPS 332), a 12-mile road located in the Purple Hills. The road enters Glen Canyon from the Burr Trail to the north and crosses 12 miles of natural soils before terminating at the Glen Canyon boundary. The road is isolated and seldom used but offers access to hunters and hikers and is categorized as an unpaved GMP road.

State Route 276 enters Glen Canyon in the Bullfrog area, continuing into Glen Canyon as a paved GMP road to the Bullfrog Visitor Center/Marina. Four small (approximately a quarter of a mile) unpaved GMP roads continue from the Visitor Center/Marina, continuing to the Stanton Creek accessible shoreline locations. State Route 276 enters Glen Canyon again west from Carl Black Memorial Airport where it becomes a 7-mile paved GMP road to the Hails Crossing section of Glen Canyon. Small unpaved roads stem from this unpaved GMP road, providing access to the water.

Three accessible shoreline areas in the Bullfrog developed area have been popular vehicle-accessible campsites in the past. Two of these are located at Bullfrog Creek and total approximately 2,250 acres, depending on lake levels. In 2002, 9,680 vehicles entered the Bullfrog North and South campsites (Figure 28). These areas have been closed since 2003 due to low lake levels. The gentle topography in this area has magnified the impact of low lake levels as vast areas of soft and deep sand are exposed, and the distance required to reach the lakeshore has been increased. This situation is noticeable particularly at the Bullfrog South site. Because of these conditions, public access, public use, and NPS operational duties (such as servicing toilets and conducting routine patrols) has become difficult, resulting in the closure of these areas.



**Figure 28. Bullfrog South ORV Area**



Stanton Creek is accessed from Utah State Route 276 close to Bullfrog Marina. Due to the closure of the Bullfrog North and South sites and the relatively easy access to Stanton Creek, Stanton Creek has become a popular accessible shoreline area. At Stanton Creek, vehicle counts ranged from 5,716 in 2002 to 3,953 in 2007. The area is managed for both day and overnight use for recreation opportunities of semi-isolation where shoreline campsites have been used as boat anchorage. Camping use zones exist in the western portion of the site. Toilets and trash containers are maintained in the area. Stanton Creek is approximately 675 acres, depending on lake levels.

Vegetation at these accessible shorelines is minimal and sparse and primarily consists of blackbrush and shadscale. The accessible shorelines at Bullfrog North and South contain a mixture of deeper, better-established, and loamy Pagina soils, and shallow, shifting, sandy Torriorthents–rock outcrop. As with many shoreline areas around Glen Canyon, rock outcroppings make up about a third of the surface area, with shallow soils prevalent and deeper soils occurring on flatter plateaus and structural benches. The deeper soils present in these areas are somewhat rare and may contain better established vegetation. In areas of shallow clay or loamy soil, biological crust formation is likely due to their ability to retain moisture for a longer period following a rainfall event. Torriorthents soils are sandy and gravelly talus derived from sandstone and shale, and are of variable depth. These soils are transported by wind or water and form a thin mantle over the rock. In areas of shallow slopes and sparse vegetation cover, these soils may form biological crusts. Shallow, shifting Torriorthents soils are subject to frequent wind and water erosion, which would be accelerated by physical disturbances to these areas.

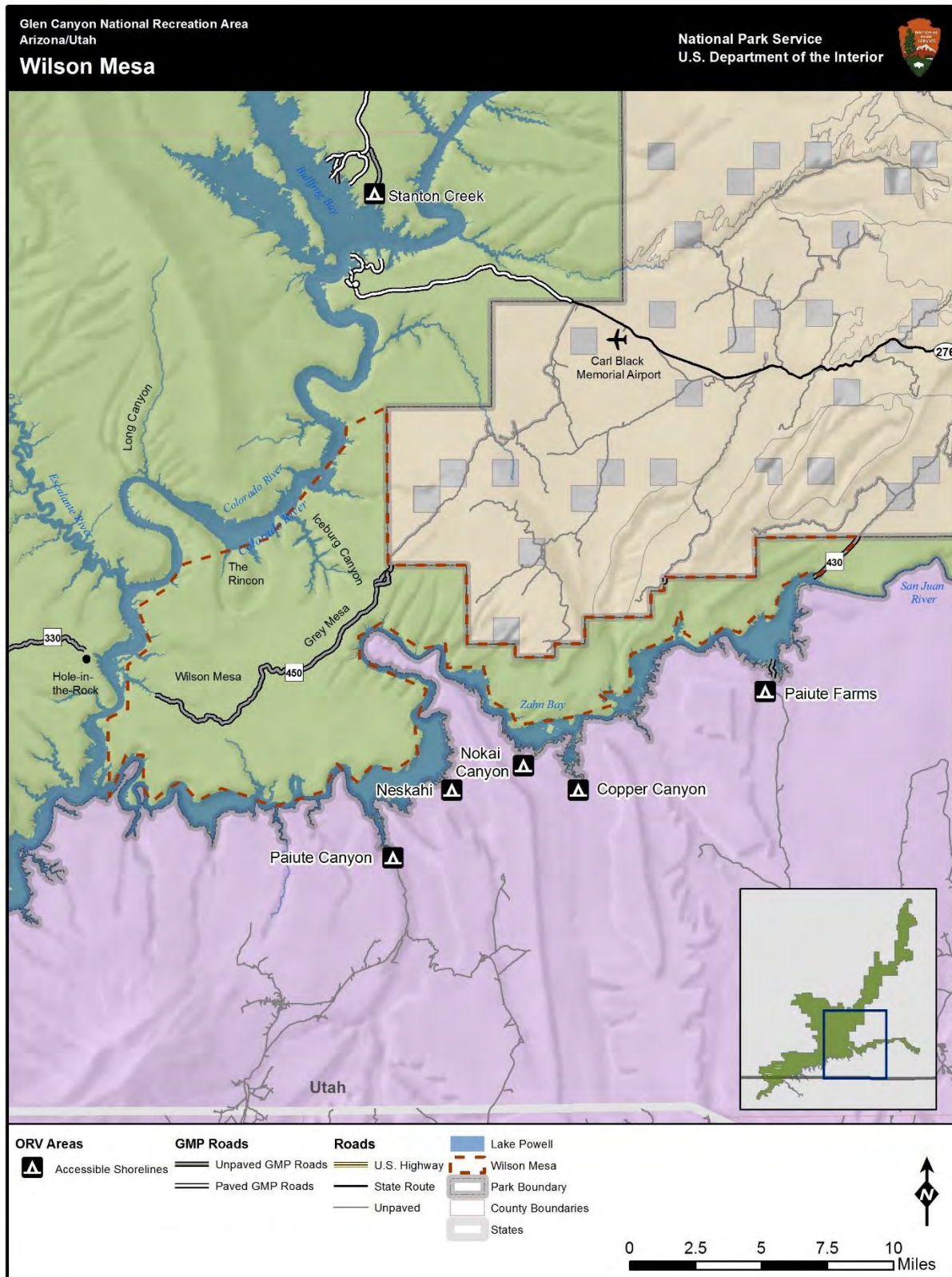
Soils in the Stanton Creek area are rock outcrop–Needle association. Soils are derived from windblown sandstone, and rock outcrops cover the majority of the area. Soils are shallow, with rare areas of deeper soils where they were deposited by water or are protected from scouring winds. The topography of the areas limits the formation of biological crusts to gently sloping or flat areas. In areas of rock outcrop, the potential for erosion is minimal. In areas with soil cover where there is no vegetation or biological crust to fix the soil in place, there is frequent erosion due to wind, and water, and soils shift frequently. In areas where biological crusts have formed, or sand sagebrush grows, fixing the soil in place, there is less potential for wind or water erosion.

### Wilson Mesa Region

Wilson Mesa is a large, prominent topographic feature located on the south shore of Lake Powell opposite Hole-in-the-Rock and the Escalante River (Figure 29). The region is one of the most remote and least visited portions of Glen Canyon. Across its southern boundary with Lake Powell lies an equally remote section of the Navajo Nation. One large grazing allotment overlies this region.

The primary route on Wilson Mesa is the Hole-in-the-Rock Trail Road (NPS 450), also referred to as Cottonwood Canyon Road. Cottonwood Canyon Road (unpaved GMP road NPS 450) is the continuation of the Hole-in-the-Rock Road from the Escalante region. The road is accessed from State Route 276 at the Cal Black Memorial Airport, approximately 10 miles east of Halls Crossing and 75 miles west of Blanding, Utah. It can also be accessed farther west from State Route 276. The road travels southwest for a distance of approximately 30 miles from the Cal Black Memorial Airport to its terminus at Cottonwood Canyon. Only the last 11.8 road miles are in Glen Canyon; the remaining road miles cross BLM-administered lands. Cottonwood Canyon Road is the only road that traverses Wilson Mesa and it is isolated, is extremely difficult to negotiate the terrain, and requires a high-clearance, four-wheel-drive vehicle. There are numerous obstacles and steep ascents and descents in sections of the road, including the sections up Grey Mesa and Iceberg Canyon. Driving the road is popular with a small subset of four-wheel-drive enthusiasts, but the area remains infrequently visited due to its isolation and difficult driving conditions.

Figure 29. Wilson Mesa Region in Glen Canyon National Recreation Area.



Unpaved GMP road NPS 430 traverses Glen Canyon in this region for approximately 2.5 miles, continuing from BLM-administered land to the confluence of the San Juan River with Lake Powell. A prominent feature on Wilson Mesa is the Rincon. Located between Long and Iceberg Canyons, the Rincon is the remnant of a former channel of the Colorado River. Aleson Arch, a 100-foot-long span, is on the landform between Iceberg Canyon and the Rincon.

There are five accessible shoreline sites in this region, the largest of which is Paiute Farms, the site of an abandoned marina development on the Navajo Nation. The marina was developed by Utah Navajo Industries in the 1980s but all structures were removed after a severe flash flood damaged many of the facilities in 1989. Access to the area is provided by Paiute Farms Road which runs along the Paiute Farms Wash on the Navajo Nation. The marina site, approximately 1,000 acres, is still by residents of nearby communities and it is the access point to a prominent waterfall on the San Juan River just downstream from the Clay Hills Crossing raft take-out area. Many of the unpaved service roads on the marina site can be driven on.

The area is located primarily in Moenkopi and Chinle Formations and is extensively overgrown with tamarisk. Both formations are composed of thin-bed mudstone and siltstone, varying in color from purple to grey for the Chinle, and red to pale brown for the Moenkopi. Rapid erosion at Paiute Farms has created a relatively level surface shallowly dissected by gullies and washes that drain northward into the former San Juan River channel (Fairley 1985; NPS 1986).

Vegetation in Paiute Farms is typical of a desert shrub community, with the primary vegetation types being four-wing saltbush, Mormon tea (*Ephedra torreyana*), prickly-pear cacti (*Opuntia* spp.), rabbitbrush, and Russian thistle (NPS 1986). ORVs are also used in locations dominated by rock outcrops (Spence n.d.). Some slopes and heavily used accessible shorelines are completely denuded of vegetation, except for partial areas inhabited by sagebrush. Some species, such as snakeweed (*Gutierrezia microcephala*), dicoria (*Dicoria brandegeei*), and ragweed (*Ambrosia acanthicarpa*), that have taken advantage of ORV activity because they have adapted to various soil disturbances.

Nokai is an accessible shoreline located where the Nokai Wash intersects with Zahn Bay on the San Juan arm of Lake Powell. Copper Canyon is located just upstream on the San Juan Arm. Access to these areas is poor along primitive four-wheel-drive roads leading from State Route 163, making visitation low. No facilities are present at Copper Canyon or Nokai, which are approximately 30 acres and 275 acres, respectively, depending on lake level. Only a limited area is available for camping at each site and these areas are utilized primarily by local residents from nearby communities of the Ojeto Chapter on the Navajo Nation. Vegetation is minimal and sparse and primarily consists of blackbrush and shadscale. The areas are located primarily in the Moenkopi and Chinle Formations and can be described as canyon country with steep Wingate escarpments forming physical barriers around the areas. These steep sandstone cliffs limit vehicle access to four-wheel-drive vehicles. These accessible shorelines contain rock outcrop soil associations similar to those of other shorelines in the immediate vicinity.

Paiute Canyon and Neskahi are located downriver from Nokai on the San Juan Arm. The areas are similarly characterized by sparse vegetation and primarily by Moenkopi and Chinle Formations, and the Shinarump Formation at the Neskahi site, making the area relatively unstable. Sloughing occurs and is observable in the form of mounded peninsulas and islands that jut into the river. The area can be described as canyon country with steep Wingate escarpments forming physical barriers around the areas. These steep sandstone cliffs limit vehicle access to four-wheel-drive vehicles which travel on rugged roads across the Navajo Mountain Chapter of the Navajo Nation. Paiute Canyon (Figure 30), approximately 100 acres, is accessible via a five-mile, primitive, four-wheel-drive road off the Wetherill Trail, itself located approximately 50 road miles from State Route 98. Only a very small area is available for vehicle camping and the areas are used primarily by nearby residents. Although there is evidence of

recent use, it appears that the use is extremely limited. The Neskahi site, approximately 15 acres, is not directly accessible by road and provides no opportunities for vehicle access. It appears the area is accessed by cross-country travel along the shoreline at low water levels.

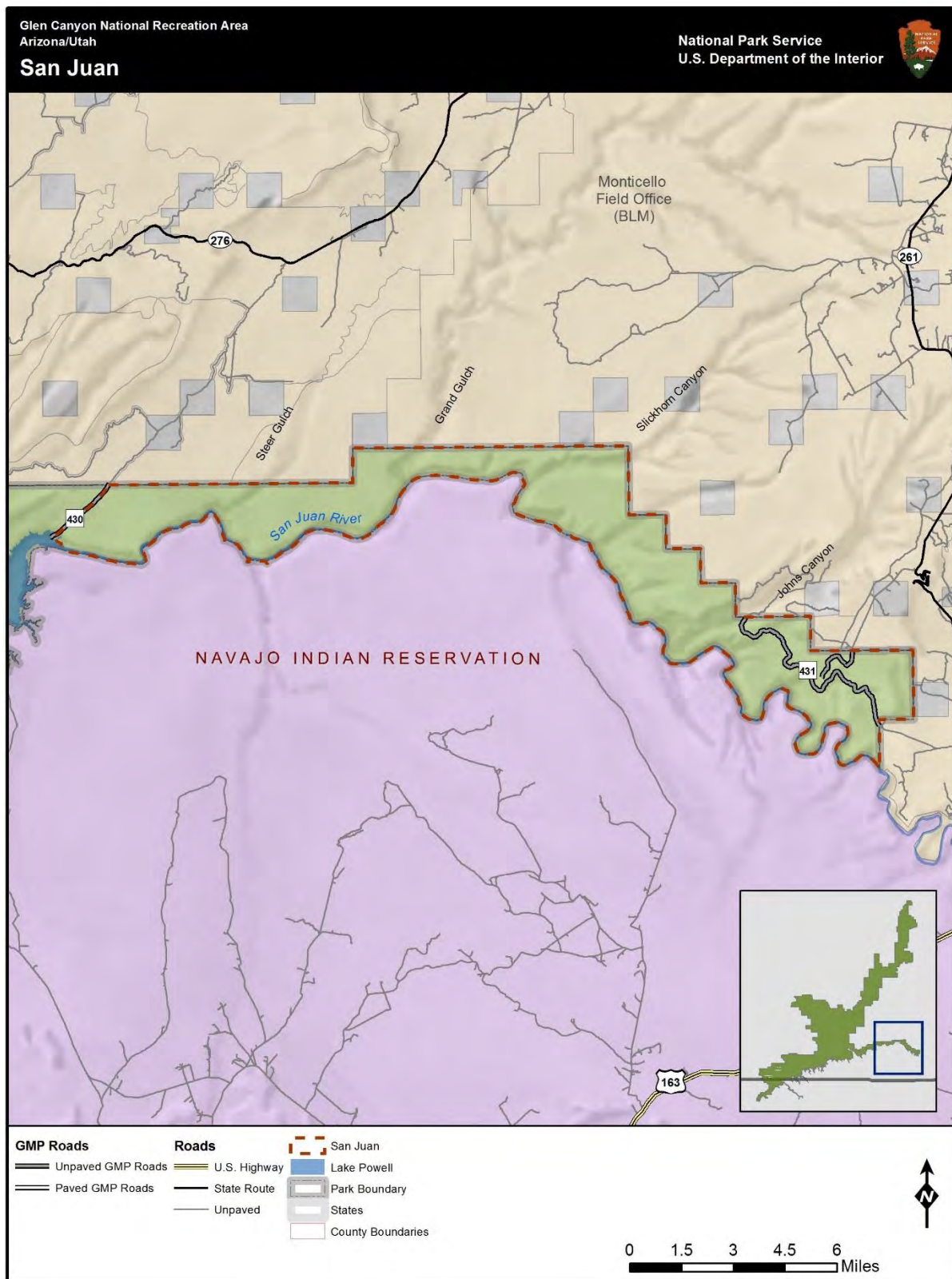
These accessible shoreline areas all contain Torriorthents–rock outcrop association soils. This association consists of nearly half rock outcrops, with most of the remainder made up of Torriorthents or similar soils. Better-established, deeper Myton soils are found in drainages. Torriorthents soils are sandy and gravelly talus derived from sandstone and shale, and are of variable depth. These soils are transported by wind or water and form a thin mantle over the rock. In areas of shallow slopes and sparse vegetation cover, these soils may form biological crusts.



**Figure 30. Paiute Canyon Access Road.**



**Figure 31. San Juan Region in Glen Canyon National Recreation Area.**



## San Juan Region

The San Juan Region (Figure 31) features the last segment of the San Juan River that is utilized by river rafters before the river joins with the fluctuating levels of Lake Powell in the vicinity of Clay Hills Crossing at the western edge of this region. The region is bordered by the Navajo Nation to the south and by BLM-managed lands to the north. Within the BLM-managed Cedar Mesa Special Recreation Management Area, the Grand Gulch Archeological District is famous for its Ancestral Puebloan architecture and rock art. The Grand Gulch Natural Area and the Grand Gulch ISA Complex Wilderness Study Area also abut Glen Canyon in this area. The large difference in elevation from the center of the Cedar Mesa plateau at 6,500 ft. and the surrounding area, typically near 4,200 feet in elevation, created the conditions for the formation of numerous cliffs, canyons, and other scenic features of differential erosion. Large canyons such as Slickhorn, John's and the combination of Grand Gulch and Bullet Canyons drain into the San Juan River in Glen Canyon. Excellent opportunities for hiking and backcountry camping exist on the plateaus and in the canyons of this mostly road-less and primitive area.



**Figure 32. Muley Point Overlook of John's Canyon Road and San Juan River.**

The prominent Red House Cliffs featuring the reddish-brown cliffs of the Moenkopi Formation form the western boundary of the region. Goosenecks State Park, offering spectacular views of the entrenched meanders of the San Juan River, is perched on the canyon rim to the east of the region, overlooking a 1,200 foot drop to the river below. Muley Point inside Glen Canyon (Figure 32) is a popular location for sightseeing and, more frequently, social events such as weddings, despite the rugged terrain and difficult driving conditions.

Private and commercial raft trips using the lower segment of the San Juan River normally end their trip at Clay Hills Crossing. The BLM Monticello Field Office administers the river permit system, which includes the requirement for the use of designated campsites along the river below Government Rapid within Glen Canyon. The BLM has nominated the segment of the San Juan River to the east of the park boundary as a Wild and Scenic River.



Vehicle access is limited to the raft take-out location at Clay Hills Crossing and two roads that enter from the east, one above and one below the steep walls of the San Juan River canyon. At the western end of the region, the unpaved GMP road NPS 430 (known as Whirlwind Crossing or Clay Hills Road) traverses Glen Canyon in this region for approximately 2.5 miles, continuing from BLM-administered land to the Clay Hills Crossing river take-out at the confluence of the San Juan River with Lake Powell. The unpaved GMP road NPS 431 (Muley Point Road) begins at State Route 261 near Mexican Hat, UT and travels through BLM-administered land to terminate at a scenic overlook that juts into the main river canyon. Approximately 1.75 miles of this road can be found in Glen Canyon. John's Canyon Road, another unpaved GMP road that exits from State Route 261, enters Glen Canyon and follows a bench along the base of the towering Cedar Mesa Sandstone-Halgaito Formation cliffs for approximately 7.5 miles where it exits onto BLM-administered lands in John's Canyon.

### Hite Region

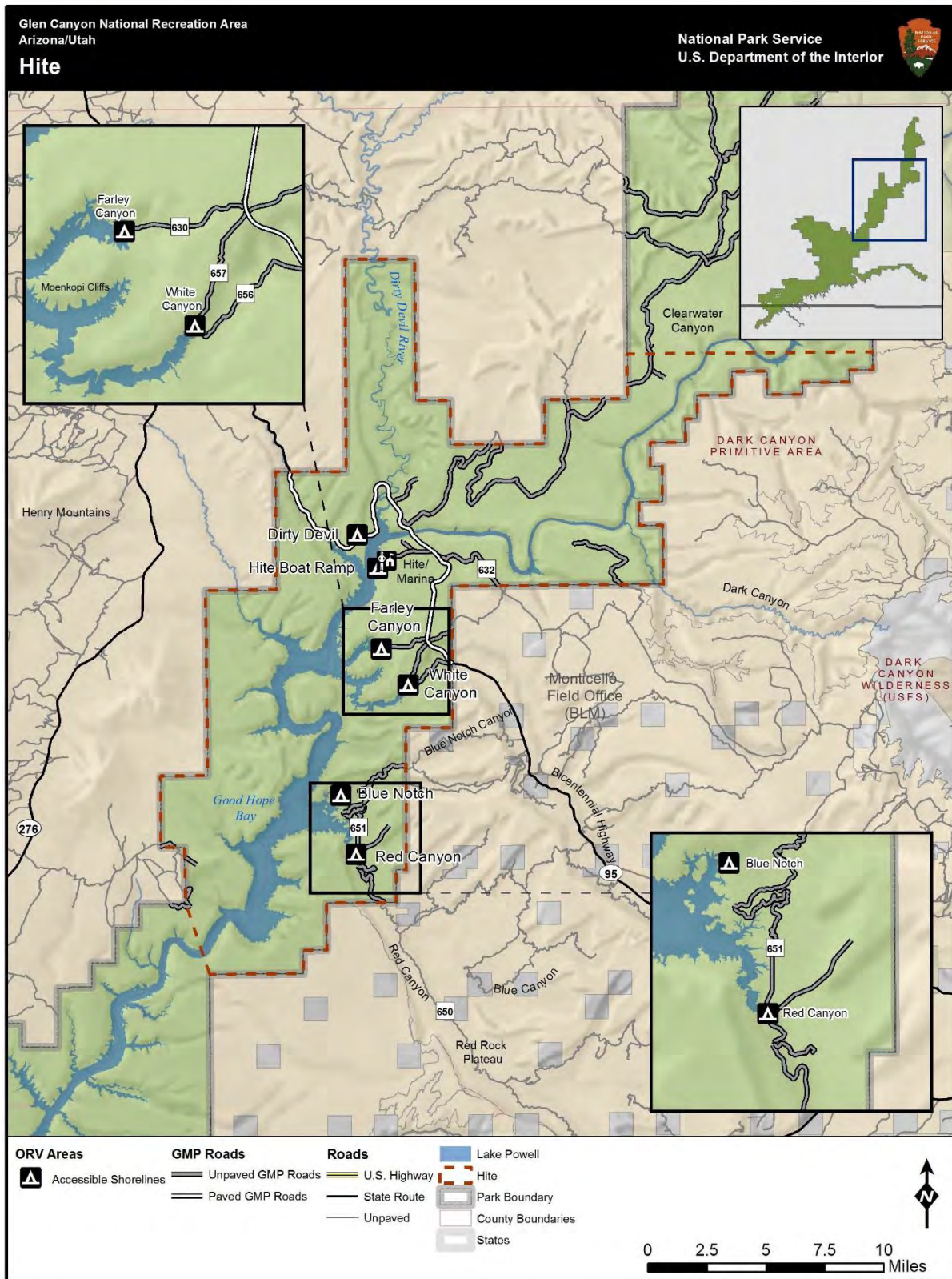
The uplake area around Hite, Utah, begins on the east side of Lake Powell, extending roughly from Good Hope Bay north to the Orange Cliffs boundary at Clearwater Canyon. The Hite region is located at the northernmost part of Lake Powell. The region is best accessed by State Route 95, from both the north and south. The State Route 95 steel arch bridge (Figure 33) provides the only road crossing of the Colorado River for 300 miles between the Glen Canyon Dam west of Page, Arizona (139 miles away by boat), and U.S. Highway 191 at Moab, Utah. State Route 95 also crosses the Dirty Devil River at the northern tip of Lake Powell.



**Figure 33. State Route 95 Bridge over Colorado River.**

The Hite Region (Figure 34) offers a stunning example of the geologic record that is a signature feature of southern Utah's canyon country. The views from the Hite overlook off State Route 95 are particularly dramatic, with distant views of the towers and buttes of the Orange Cliffs Special Management Unit (Orange Cliffs Unit) and sweeping views of the white, undulating Cedar Mesa Sandstone and its contact with the deep red, multilayered Organ Rock Formation. Looking north, Hite is characterized by an impressive, white Cedar Mesa Sandstone bench that outcrops at lake level and extends upriver past the mouth of the Dirty Devil River, the steel arch bridge across State Route 95, and up the inner gorge of the Colorado River. Looking southeast across the river from the overlook offers a fine example of the Organ Rock cliffs and talus slopes with views of the Hite developed area, which includes launch facilities, primitive camping, a small store, and a ranger station. Looking southwest from the State Route 95 entrance to the Hite developed area, the deep red rock layer of the Organ Rock Formation frames a dramatic view of the Henry Mountains and a row of massive Navajo Sandstone fins perched atop the Kayenta Formation and sheer, deep-orange-colored Wingate cliffs. Heading east toward Natural Bridges National Monument, the Cedar Mesa Sandstone and the White Canyon complex is the dominant feature at road grade, whereas towering on the southwest side of State Route 95 is the Red Rock Plateau.

Figure 34. Hite Region in Glen Canyon National Recreation Area.







**Figure 35. Entrance to Red Canyon Road.**

Red Canyon (Figure 35) and Blue Notch Roads lead to small, accessible shoreline areas on Good Hope Bay. Red Canyon Road (NPS 650) begins at State Route 276 and heads northwest across BLM-administered lands into Glen Canyon. The road travels approximately 22 miles across BLM lands before entering Glen Canyon. The segment of the road in Glen Canyon is known to be subject to flash flooding and the road is in extremely poor condition.

Blue Notch Road (NPS 651) travels from Utah State Route 95 west to Good Hope Bay. The road crosses BLM lands for approximately ten miles before entering Glen Canyon. Blue Notch is an intermittently maintained, four-wheel-drive road that can range from poor to fair condition. The road traverses slopes composed of clay

soils and can be extremely hazardous when wet. Travel becomes increasingly difficult once the road enters Glen Canyon due to the numerous wash crossings. Good Hope Bay is one of the largest bays in Lake Powell, featuring fishing and plenty of room for water sports.

Three short roads lead to White and Farley Canyons, two accessible shoreline areas; all three are unpaved GMP roads. The Farley Canyon Road (NPS 630) is a maintained gravel road in fair condition. Farley Canyon is one of the few accessible shoreline areas that is used for boat launching, and is a three mile drive from Utah State Route 95. Two roads lead into White Canyon, NPS 656 and 657. Both roads travel approximately 3.25 miles over natural surfaces and are in fair condition. Travel can become difficult below the high water mark at 3,700 feet elevation due to dense stands of tamarisk and deep silt. Currently there is no access to Lake Powell from the White Canyon roads. The White Canyon accessible shoreline area lies at the base of the steep Moenkopi Cliffs along the Lake Powell shoreline and is a colorful, two-level canyon that lends itself to exceptional hiking adventures.

Brown's Rim Road (NPS 632) off Utah State Route 95 runs east from Hite toward the Dark Canyon area. The road can be traveled east across BLM and U.S. Forest Service lands, or back in a loop to a junction with State Route 95. This unpaved road travel is approximately 5 miles long, is in fair condition, and is occasionally maintained by the county. NPS 633 connects State Route 95 to Clearwater Canyon. One additional unpaved GMP road enters Glen Canyon from the southern boundary, in the Dark Canyon area.

One paved GMP road, State Route 95, enters Glen Canyon just north of White Canyon. The road leads across NPS 632 near the Hite Marina and continues up and across the Dirty Devil River, passes the Dirty Devil accessible shoreline area, and north out of the Glen Canyon boundary into BLM administered lands. The road is approximately 15 to 20 miles long.

The Hite Marina is located at the uppermost part of the lake, 139 miles upstream from the Glen Canyon Dam. The paved launch ramp can be used at higher lake levels and there are no on-water services; all marina facilities were moved down lake during the extended drought period in the early 2000s. When the lake is at or above 3,606 feet, smaller boats can launch from an old road bed just down lake from the paved launch ramp. Hite also has a campground, overnight lodging, and a gas station / convenience store.

There are six accessible shorelines in this region. As with all of the other shoreline areas, vegetation is minimal and sparse and primarily consists of blackbrush and shadscale. The Dirty Devil accessible

shoreline area is a small area (approximately 75 acres) between Utah State Route 95 and the lakeshore on the Dirty Devil arm near the Hite developed area. The area provides a dispersed primitive camping experience with visitor facilities, including toilets and trash containers, to protect resources and provide for appropriate visitor experience. The site includes three isolated areas divided by canyons formerly filled with the waters of Lake Powell. The Dirty Devil shoreline was a popular camping location when Lake Powell was at full pool and included a swimming beach and boat ramp. Due to low water levels, the Dirty Devil area no longer provides access to Lake Powell but remains open to camping.

The Dirty Devil area is located at the base of steep cliffs, capped by the Wingate formation and underlain by exposed strata of the Chinle, Moenkopi, and White Rim Formations. The shoreline area consists of broad exposures, ridges, and low hills of exposed Cedar Mesa slickrock overlain in the northern portion by limited aeolian gravel-bearing caps. The southern portion is characterized by the weathered colluvial covering from the steep cliffs above, where these deposits have filled the Cedar Mesa canyons.

The Hite Boat Ramp accessible shoreline is a remote area adjacent to the confluence of the Colorado and the Dirty Devil Rivers, 8 miles from State Highway 632. The Hite developed area includes a small ranger station, gas station, boat storage, sanitary dump/potable water station, fish clearing station, and primitive RV and shoreline camping. Boat launching is available at north and south boat ramps, which are currently open, however four-wheel drive vehicles are recommended. The north ramp is concrete and the south ramp is gravel (NPS n.d.c). In 2005, there were 59,405 visitors to the Hite region (NPS 2008). The accessible shoreline area between these ramps is approximately 50 acres, depending on lake levels. Similar to Dirty Devil, Hite Boat Ramp was a popular visitation location when Lake Powell was at full pool, however Hite Boat Ramp continues to provide access to the lake.

Although the Hite Boat Ramp area itself is located upon rock outcropping, soils in the Hite area include those from the Moenkopi series. The Moenkopi series consists of very shallow and shallow, well-drained, moderately to rapidly permeable soils that formed in alluvium and residuum from sandstone and shale. Moenkopi soils occur on mesas, hill slopes on structural benches, and plateaus. Soils are loamy sand. Slopes are 1% to 30%. Soil depths are typically 9 to 12 inches, but can range from 4 to 20 inches. Soils in this series are typically used for livestock grazing and wildlife habitat.

Blue Notch and Red Canyon are located in San Juan County along Good Hope Bay, off Lake Powell. Blue Notch (Figure 36) is located approximately 10 miles west of State Highway 95 on NPS 651, and is accessible by an intermittently maintained, primitive, four-wheel-drive road. Red Canyon is approximately 20 miles from State Highway 276 on NPS 650, a seldom-maintained, primitive road located along a canyon bottom that is subject to flash flooding.



**Figure 36. Blue Notch Canyon.**

Blue Notch and Red Canyon are approximately 325 acres and 50 acres, respectively, depending on lake levels. Because of their isolation and difficult access routes, visitation to both areas has remained low. A limited number of Glen Canyon visitors use the Blue Notch area because access to this site is more practical than to Red Canyon. Blue Notch can be used during low water. No facilities are available at either shoreline area.

These areas contain mostly Torriorthents–rock outcrop association soils, which are shallow, sandy soils generally located on slopes, with almost half consisting of rock outcrops. Because of the steeper topography generally found in these areas, biological crust formation would be less likely, except in areas of gentle slopes. The slopes on which these soils are found may be too steep for any ORV. Increased vehicle use is possible in those limited areas that do contain deeper, better established soils, because most access roads run through canyons, where protection from the wind and shallow slopes may allow for soil collection and subsequent vegetation stabilization. Physical disturbance to these better established soils, especially disruption to stabilizing biological crusts or to the root system of vegetation (blackbrush and shadscale) may increase erosion. Canyon areas are prone to flash floods or periods of fast moving water, and loose soil in the path of this water would be carried away.

Farley Canyon is accessed off State Highway 95 by NPS 630, a maintained gravel road. A large, gravel-surface parking lot with two vault toilets and a wayside panel are located along the road just above the 3,700-foot lake elevation. Farley Canyon remains a popular camping and fishing location. There is evidence of moderate levels of ongoing use of the area, including unauthorized off-road use. Visitation records from the late 1980s report up to 250 vehicles present on a Memorial Day weekend. At lower lake elevations, the topography confines the size of the use area and a smaller number of users can be present at one time. The accessible shoreline area is approximately 275 acres, depending on lake levels.

Farley Canyon contains Torriorthents–rock outcrop association soils. This association consists of nearly half rock outcrops, with most of the remainder made up of Torriorthents or similar soils. Better-established, deeper Myton soils are found in drainages. Torriorthents soils are sandy and gravelly talus derived from sandstone and shale, and are of variable depth. These soils are transported by wind or water and form a thin mantle over the rock. In areas of shallow slopes and sparse vegetation cover, these soils may form biological crusts.

Access to White Canyon is by NPS 656 and 657 off Utah State Route 95. Due to the level, open terrain in the eastern portion of the White Canyon area, the 1988 Accessible Shoreline EA/DCP (NPS 1988) closed roads to vehicular travel to protect resources. The White Canyon drainage cuts through the deep-red Moenkopi and banded Cutter Formations. The accessible shoreline area lies at the base of the steep Moenkopi Cliffs along the Lake Powell shoreline. White Canyon proper is a narrow drainage that is cut into the Cedar Mesa portion of the Cutter Formation. The canyon walls are steep (up to 300 feet) within a few miles of the Lake Powell shoreline. At lake elevations below 3,650 feet, there is no access to Lake Powell. The high water area from 3,650 feet to 3,700 feet in elevation is dominated by a dense stand of tamarisk and deep silt, requiring a four-wheel-drive vehicle for passage. The accessible shoreline area is approximately 325 acres, depending on lake levels. There are no facilities at the site.

The soils in White Canyon are shallow, sandy, and shifting soils found in rock-outcrop-Needle association and Torriorthents–rock outcrop association. Nearly half of the area consists of exposed rock outcroppings. Soils are shallow with rare areas of deeper soils where they were deposited by water or are protected from scouring winds. The topography of the areas limits the formation of biological crusts to gently sloping or flat areas. In areas of rock outcrop, the potential for erosion is minimal. In areas with soil cover where there is no vegetation or biological crust to fix the soil in place, there is frequent erosion due to wind and water, and soils shift frequently. In areas where biological crusts have formed or with vegetation cover fixing the soil in place, there is less potential for wind or water erosion.



### Orange Cliffs Region

The Orange Cliffs Unit extends from Clearwater Canyon to the northernmost boundary of Glen Canyon. The Colorado River is located in the southern part of the region and includes the famous Cataract Canyon rapids. The Green River is located east of the region, just outside Glen Canyon. These rivers offer a variety of water sport opportunities: rafting, motorized boating, etc. East of Cataract Canyon, bordering Glen Canyon, is the BLM Dark Canyon Primitive Area.

The Orange Cliffs contains a scenic row of Wingate Sandstone cliffs (Figure 37), from the top of which one can view the vast and spectacular panoramas of Canyonlands National Park. The canyon of the Green and Colorado Rivers, the Maze, Horse Canyon, the Land of Standing Rocks, the Needles, Island in the Sky, and the cliffs far to the east of the Colorado River are visible. The foreground view of Millard Canyon is stunning, with the sandstone cliff face plunging abruptly downward over 1,000 feet and the canyon receding from sight to the north for 7 miles in a nearly straight line. This region also affords scenic views of various landforms, including Cleopatra's Chair, Bagpipe Butte, and the Chocolate Drops.

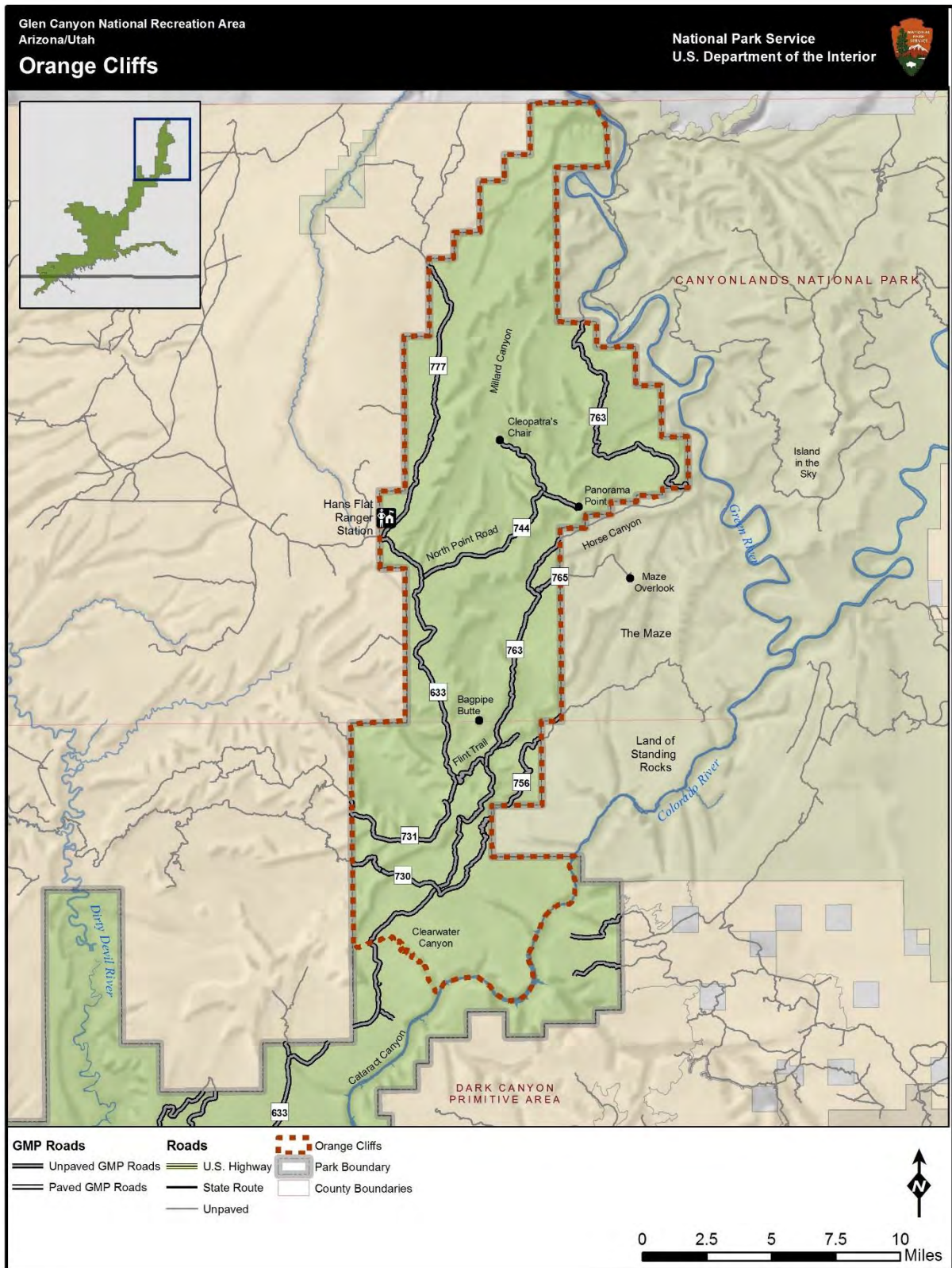


**Figure 37. Wingate Sandstone forms the Orange Cliffs.**

For the visitor, the beauty of the landscape is complemented by the area's isolation and solitude. The Orange Cliffs Region (Figure 38) is one of the least-visited areas in Glen Canyon; approximately 2,500 visitors pass through the Hans Flat Ranger Station in a year. Access to the area is provided by two main roads, the Flint Trail and the North Point Road. The Flint Trail (NPS 633) extends from Utah State Route 95 at Hite to the Hans Flat Ranger Station, located on the west side of the Orange Cliffs region. Hans Flat and the Orange Cliffs also can be accessed from the west by a 46-mile drive down a graded dirt road from State Route 24. Just east of Hans Flat is the North Point Road (NPS 744), which leads to two scenic views: Cleopatra's Chair and Panorama Point.



Figure 38. Orange Cliffs Region in Glen Canyon National Recreation Area.



Numerous unpaved GMP roads in the Orange Cliffs lead to scenic viewpoints and designated camping locations. The majority of the roads are in poor condition, and only the Flint Trail may be maintained more than once a year. Many of the roads are unimproved and subject to washouts, cross natural soils and bare slickrock, and require high-clearance, four-wheel-drive vehicles for safe passage. Speed of travel is limited by natural conditions at the time of the visit, and may be no more than 5 to 10 miles per hour (mph) for extensive periods of travel time. The roads are often difficult to negotiate and can be even more difficult to follow as the movement of desert sands and rockslides obscure or even block routes.

The Flint Trail is the most commonly used road in the Orange Cliffs, and is sometimes signed as the “Orange Cliffs Road” (Figure 38). This 55-mile-long road is the easiest road to negotiate. The road receives occasional grading and has some good sections. The road traverses slopes of clay soils that can be extremely hazardous when wet. The most well-known section of the Flint Trail is the drop off, the section of steep road and hairpin turns that leads from Gordon Flats down to the Maze area. The Flint Trail can be closed in winter months due to adverse driving conditions.

## **5.0 Pre-field Review**

A list of federally listed and proposed species and designated/proposed critical habitat in the action area was obtained from the USFWS on October 19, 2015 (Appendix B). Using this list, we determined which of those species/critical habitat had a potential to occur within the action area (shown in Table 3 below). Species not known or with no potential of occurring in the action area are documented with rationale in Table 3 and will not be discussed further in this document. Excluded species have been dropped from further analysis by meeting one or more of the following conditions:

1. Occurs in habitats that are not present; and/or is
2. Outside of the geographical or elevational range of the species, and/or
3. Surveys have failed to document the species in its habitat in park.

In addition, Table 3 below also gives a very brief summary of federally listed/proposed species, designated/proposed critical habitat, species’ habitat requirements, and known occurrence information of species that are known or may occur in the action area.

There is proposed or designated critical habitat for some of the federally listed species addressed in this assessment within the analysis area. Critical habitat is be addressed in Section 9.0 of this assessment.

## **6.0 Species Considered and Evaluated**

The following table indicates whether the species from the USFWS official species list are known or expected to occur within the action area, suitable habitat is present, or if not why they are excluded from further analysis (with rationale).

**Table 3. Threatened, endangered, candidate/proposed species with the potential to occur within the action area and critical habitat. The U.S. Fish and Wildlife Service species list (USFWS 2015) was obtained (October 19, 2015) and reviewed and species/critical habitat not having the potential to occur were excluded from further review with a no effect determination.**

<sup>1</sup> **Status Codes:** E=federally listed endangered; T=federally listed threatened; P= federally proposed for listing; C= federal candidate for listing

<sup>2</sup> **Exclusion Rationale Codes:** ODR=outside known distributional range of the species; HAB= no habitat present in action area; ELE= outside of elevational range of species; and SEA=species not expected to occur during the season of use/impact

| Species Common and Scientific Name                                   | Status <sup>1</sup>                    | Potential to Occur | Critical Habitat | Rationale for Exclusion <sup>2</sup> | Habitat Description and Range in action Area  |
|--|--|--------------------|------------------|--------------------------------------|---|
| <b>INVERTEBRATES</b>   |  |                    |                  |                                      |   |
| Kanab Ambersnail ( <i>Oxyloma haydeni kanabensis</i> )               | E                                      | No                 | No               | ODR                                  | Surveys have failed to find the species; one population of the Niobrara Ambersnail is known from the Colorado River corridor below Glen Canyon Dam, at River Mile -8.8L.  |
| <b>BIRDS</b>   |  |                    |                  |                                      |   |
| California condor ( <i>Gymnogyps californianus</i> )                 | Experimental population, Non-Essential | YES                | No               |                                      | California condors have been re-introduced in nearby Vermilion Cliffs National Monument. Condors prefer mountains, gorges, and hillsides, which create updrafts. The species prefers to nest in protected caves on cliffs. The Glen Canyon reach is not particularly good breeding habitat.   |
| Gunnison sage-grouse ( <i>Centrocercus minimus</i> )                 | T                                      | No                 | No               | ELE                                  | Only occurs in southeastern Utah near Monticello and in western Colorado.   |
| Mexican spotted owl ( <i>Strix occidentalis lucida</i> )             | T                                      | YES                | Final designated |                                      | Breeding and roosting owls have been detected in association with two types of habitats, stands of Douglas fir ( <i>Pseudotsuga menziesii</i> ) in shaded alcoves, and less commonly in narrow deep canyons without large conifers.   |
| Southwestern Willow flycatcher ( <i>Empidonax traillii eximius</i> ) | E                                      | YES                | Final Designated |                                      | Breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands including lakes and reservoirs. Has not been documented as breeding in the Glen Canyon reach in the last 50 years. Small numbers migrate through the area in late spring, especially along the San Juan River (Spence et al. 2011). |
| Yellow-Billed Cuckoo ( <i>Coccyzus americanus</i> )                  | T                                      | YES                | Proposed         |                                      | Prefers large blocks of multi-layered riparian woodlands (cottonwood, willow, or tamarisk galleries). Cuckoos are found nesting statewide below 8,500 ft. in central, western, and southeastern Arizona, as well as eastern portions of Utah.   |
| <b>FISHES</b>  |  |                    |                  |                                      |   |
| Bonytail chub ( <i>Gila elegans</i> )                                | E                                      | No                 | Final Designated | HAB                                  | Currently extirpated from park  |
| Colorado pikeminnow ( <i>Ptychocheilus lucius</i> )                  | E                                      | No                 | Final Designated | HAB                                  | Small populations within Lake Powell, San Juan River, Green River and Colorado River outside project boundaries   |
| Greenback Cutthroat trout ( <i>Oncorhynchus clarki stomias</i> )     | T                                      | No                 | No               | ODR                                  | High elevation cold streams well outside park boundaries  |
| Humpback chub ( <i>Gila cypha</i> )                                  | E                                      | No                 | Final Designated | HAB                                  | Extirpated from park; known only from Colorado River and tributaries in Grand Canyon NP   |
| Razorback sucker ( <i>Xyrauchen texanus</i> )                        | E                                      | No                 | Final Designated | HAB                                  | Small populations within Lake Powell, San Juan River, Green River and Colorado River outside project boundaries   |

|   |          |            |                         |                 |   |
|---|----------|------------|-------------------------|-----------------|---|
| Virgin River Chub ( <i>Gila seminuda</i> [=robusta])                                  | <i>E</i> | <i>No</i>  | <b>Final Designated</b> | <i>ODR</i>      | Virgin River species  |
| Woundfin ( <i>Plagopterus argentisimus</i> )  | <i>E</i> | <i>No</i>  | <b>Final Designated</b> | <i>ODR</i>      | Virgin River species  |
| <b>FLOWERING PLANTS</b>   |          |            |                         |                 |   |
| Autumn Buttercup ( <i>Ranunculus aestivalis</i> [acriformis])                         | <i>E</i> | <i>No</i>  | <i>No</i>               | <i>ODR</i>      | Occurs on wet meadow habitats along the Sevier River north of Panguitch, >75 miles to the NW of the park  |
| Barneby reed-mustard ( <i>Schoenocrambe barnebyi</i> )                                | <i>E</i> | <i>No</i>  | <i>No</i>               | <i>ODR</i>      | Found on Chinle deposits in the central and northern Waterpocket Fold in Capitol Reef NP; repeated floristic surveys have not found in the park.  |
| Brady's footcactus ( <i>Pediocactus bradyi</i> )                                      | <i>E</i> | <b>YES</b> | <i>No</i>               |                 | Occurs in the project area  |
| Jones Cycladenia ( <i>Cycladenia humilis</i> var. <i>jonesii</i> )                    | <i>T</i> | <b>YES</b> | <i>No</i>               |                 | Occurs between 4,390 to 6,000 feet elevation in plant communities of mixed desert scrub, juniper, or wild buckwheat Mormon tea. It is found on gypsiferous, saline soils of Cutler, Summerville, and Chinle Formations.   |
| Kodachrome bladderpos ( <i>Lesquerella tumulosa</i> )                                 | <i>E</i> | <i>No</i>  | <i>No</i>               | <i>HAB</i>      | Found on Windsor Member white shale barrens of the Carmel Formation in and around Kodachrome Basin State Park; particular member does not outcrop in the park.  |
| Last Chance townsendia ( <i>Townsendia aprica</i> )                                   | <i>T</i> | <i>No</i>  | <i>No</i>               | <i>ODR</i>      | Occurs on the Arapein and Mancos Shale Formations of central Utah; formations and habitat do not occur in park; closest known populations >40 miles to north of park.   |
| Navajo sedge ( <i>Carex specuicola</i> )  | <i>T</i> | <i>No</i>  | <b>Final Designated</b> | <i>HAB</i>      | Occurs in hanging gardens within riparian zones on the Navajo Nation. The seep-spring pockets along the Cedar Mesa and Navajo Sandstone Formations bedrock provide this habitat. One occurrence in Glen Canyon in Slickhorn Canyon. This population is in a narrow inaccessible canyon off the San Juan River, with no roads within two miles; not in project area..  |
| San Rafael cactus ( <i>Pediocactus despainii</i> )                                    | <i>E</i> | <i>No</i>  | <i>No</i>               | <i>ODRHAB</i>   | Found on Mancos Shale in northern Capitol Reef NP and adjacent BLM lands >50 miles to north of park.  |
| Siler Pincushion cactus ( <i>Pediocactus</i> [=echinocactus, =utahia] <i>sileri</i> ) | <i>T</i> | <b>YES</b> | <i>No</i>               |                 | Found on primarily on the Red Member of the Moenkopi on gypsiferous soils in House Rock Valley and SW Utah >30 miles to west of park boundary. Surveys in park have not found the species. Specific Moenkopi layers where species occurs are not present in project area, but species is rarely found on Kaibab and Chinle Formations.  |
| Ute ladies'-tresses ( <i>Spiranthes diluvialis</i> )                                  | <i>T</i> | <i>No</i>  | <i>No</i>               | <i>HAB</i>      | Occurs in Grand Staircase-Escalante NM and Capitol Reef NP in wet meadows along Deer Creek and the Fremont River; repeated surveys have not found the species in GLCA. Suitable habitat does not occur in the project area.   |
| Welsh's milkweed ( <i>Asclepias weshii</i> )  | <i>T</i> | <i>No</i>  | <b>Final Designated</b> | <i>HAB/ ELE</i> | Prefers shifting sands and active dunes adjacent to sagebrush, juniper, and ponderosa pine communities between 5,600 to 6,200 feet in elevation in southern Utah and northern Arizona. Surveys in the Wahweap area in 1992-1993 and again in 2005 by trained botanists in its preferred substrates (sand dunes or other mobilized sand deposits) did not found the species, and the elevation is well below its typical elevation range. Suitable habitat does not occur in the project area. |
| Winkler cactus ( <i>Pediocactus winkleri</i> )  | <i>T</i> | <i>No</i>  | <i>No</i>               | <i>ODR</i>      | Found on various substrates, primarily Mancos Shale, north of the Fremont River in Capitol Reef NP and adjacent BLM lands >50 miles to the north of the park. No Mancos Shale outcrops in project area.   |

|   |          |           |           |                          |   |
|---|----------|-----------|-----------|--------------------------|---|
| Wright Fishhook cactus<br>( <i>Sclerocactus wrightiae</i> ) | <i>E</i> | <i>No</i> | <i>No</i> | <i>ODR</i>               | Found on Mancos Shale, north of the Fremont River in Capitol Reef NP and adjacent BLM lands >50 miles to the north of the park. No Mancos Shale outcrops in project area. |
| <b>MAMMALS</b>  |          |           |           |                          |   |
| Utah prairie dog<br>( <i>Cynomys parvidens</i> )            | <i>T</i> | <i>No</i> | <i>No</i> | <i>ODR/ HAB/<br/>ELE</i> | Found in SW Utah at high elevations in and near Bryce Canyon NP; suitable habitat does not exist in park.   |

As indicated in the above table, there are seven federally listed threatened or endangered, candidate/proposed species - California condor (*Gymnogyps californianus*), Mexican spotted owl (*Strix occidentalis lucida*), Southwestern Willow flycatcher (*Empidonax traillii extimus*), Yellow-Billed Cuckoo (*Coccyzus americanus*), Jones Cycladenia (*Cycladenia humilis* var. *jonesii*), Brady's pincushion cactus (footcactus); *Pediocactus bradyi*), and Siler's pincushion cactus (*Pediocactus sileri*) with the potential to occur (i.e., habitat is present) within the park and within the plan area. Therefore, only those species will be addressed hereafter in this assessment (evaluated species). The remaining species shown above without a potential to occur will not be analyzed further based on the rationale provided. The proposed action will have no effect on any of these other species or critical habitat.

## 7.0 Evaluated Species Information

### 7.1 Field reconnaissance

Below the specific survey and monitoring efforts and protocols are documented for each species retained in the effects analysis, excluding California condor, for which standardized survey efforts have not been developed, and also because each individual of the species is currently monitored by other agencies including Utah and Arizona states and the Peregrine Fund.

#### *Mexican Spotted Owl*

Formal surveys were initiated in 1996 in GLCA (Willey 2000; Spence et al. 2011). Breeding pairs or suspected pairs were located in Miller Canyon of the Waterpocket Fold, Stevens Canyon and Scorpion Gulch on the Escalante River, and in Millard Canyon and French Spring Fork of Happy Canyon near Hans Flat. Other sightings have been documented as well, including recent sightings along Cataract Canyon and near Alstrom Point. Anecdotal records along the Escalante River have also been reported. No formal monitoring has occurred since 1998. Prior to Glen Canyon Dam, birds were heard at various locations along the Colorado River that are now under Lake Powell. Surveys will be initiated again in 2017 using USFWS formal survey protocols.

#### *Southwestern Willow Flycatcher:*

USFWS and USGS personnel conducted formal SWIFL surveys as part of the critical habitat designation in the early 2000's (USFWS 2005), including surveys associated with accessible shorelines and the San Juan River corridor. Surveys were concentrated along the San Juan River upstream of Clay Hills Crossing, as these were the only areas likely to have SWIFL preferred habitat. No breeding was detected, although migrating individuals were documented. A pair was recorded in 1997 along the Escalante River in an area where breeding may have occurred that year (Spence et al. 2011). Follow-up avian surveys along the Escalante River in 1999-2000, conducted in June, did not document any individuals. More recently, surveys were conducted in Hansen Creek near Bullfrog in 2013 after an individual was reported by visitors, but no birds were found and the habitat did not appear suitable for the species, consisting of



scattered low growing tamarisk. No other surveys have been conducted in the park in the previous 5 years.

### ***Yellow-Billed Cuckoo***

No formal USFWS protocol surveys have been conducted in the park for the species. Individuals have been detected during other avian surveys at Clay Hills Crossing and on the Colorado River below Glen Canyon Dam (Spence et al. 2011). Proposed critical habitat at the upper San Juan Arm and river delta has not yet been surveyed. This is the only area in the park where critical habitat has been proposed.

### ***Jones Cycladenia***

Surveys have been conducted for this species since 1986 by various botanists, focusing on the only substrate it occurs on in the region, the Church Rock and Owl Creek members of the Chinle Formation. Surveys were done in May and June when the species is in flower. To date, the species has been located in the park only within the Escalante River District, with ca. 20 known populations associated with the Silver Falls, Escalante River, Moody Canyon and Middle Moody Canyons drainages on steep slopes. In 2008, the park botanist did limited surveys at Blue Notch accessible shoreline, but failed to find the species. Other accessible shorelines where Chinle deposits occur include those along the San Juan Arm and River. These areas have been surveyed by Navajo Nation botanists without finding the species. However, additional surveys at those accessible shorelines with Chinle deposits are warranted and will be conducted in 2017, using guidelines developed by the USFWS (2011c).

### ***Brady pincushion cactus***

Surveys for this species were initiated by NPS botanists in the 1970's and have continued through 2015. The species has extremely specific habitat requirements, white Kaibab Limestone cobble over Moenkopi clays. Surveys for the species in Glen Canyon were completed in 2015, with all available habitat surveyed. The species occurs along the Colorado River rims in Kaibab Limestone south of Lees Ferry on both sides of the river, and does not occur outside this specialized habitat. Nor does it occur on the west side of the Lees Ferry paved road on Moenkopi substrates.

### ***Siler's pincushion cactus***

Floristic surveys in GLCA between the 1970's and 2005 failed to locate this species, including by multiple teams of botanical experts. The cactus occurs on primarily the Red Member of the Moenkopi Formation to the west of the park, on rolling "badlands" of gypsiferous clays. These habitats do not occur in GLCA. However, the species has also been rarely found on Kaibab Limestone and Chinle Formation clays, which do outcrop in the park. Additional surveys at those accessible shorelines with Chinle deposits are warranted and will be conducted in 2017, using guidelines developed by the USFWS (2011c).

## **7.2 Species Status and Biology**

### ***California Condor (Experimental population, non-essential (10j)).***

The current status, general biology and recovery efforts for the California condor (*Gymnogyps californianus*) can be found in Snyder and Snyder (2000) and Snyder and Schmitt (2002). The condor was introduced into northern Arizona in 1996 as a *non-essential experimental population (10j) as defined under ESA*, but is classified as threatened on NPS lands. Individual birds have been known to wander

several hundred miles from the release area in House Rock Valley, and there have been numerous sightings of birds from Navajo Bridge (Highway 89A) up through Glen Canyon to the Dam and near the city of Page. In the late 1990s, several birds roosted on cliffs just south of Horseshoe Bend (Colorado River Mile -9.0L to - 10.0L) on the east side of the canyon. Condors are occasionally seen along the Glen Canyon reach, with most sightings from the vicinity of Navajo Bridge at Marble Canyon. However, condors are wide ranging and curious birds, and are often attracted to human activities. Thus there remains a possibility for individuals to wander over and land in or near the proposed action area, or to visit and roost on surrounding cliffs and rims.

Recent breeding attempts have been documented from caves and ledges in Grand Canyon, primarily in the Redwall Limestone. Recently, the species has also expanded into the Zion National Park area of southwestern Utah ca. 100 miles to the west of the project area. The species prefers to nest in protected caves on cliffs. The Navajo Sandstone cliffs of Glen Canyon do not typically produce caves; instead, weathering generally produces sheer cliffs interrupted by narrow and often sloping ledges. In 2012, condors 273M and 302F established the first nest in Glen Canyon near Colorado River Mile -5.0R on the west side of the canyon, but the nest failed. There have been no subsequent nest attempts in the area.

### ***Mexican Spotted Owl (Threatened)***

The Mexican spotted owl (*Strix occidentalis lucida*) was listed as threatened in 1993 (USFWS 2012c). It is found in canyon country on the Colorado Plateau, usually in association with large forest trees and relatively dense canopy near cliffs generally in narrow rocky canyons. Elsewhere, it has been found in adjacent areas of New Mexico and Colorado, the mountains of southeastern Arizona, and well south into south-central Mexico. It is at best a local to sparse breeder throughout this large range (see Gutiérrez et al. 1995 for general biology; see Willey 2000 and Spence et al. 2011 for Glen Canyon records). Work in northern Arizona revealed that the species preferentially selects sites for breeding with forest trees, large logs, and in often associated with adjacent cliffs (Ganey and Balda 1994). Mexican spotted owls tend to be relatively unwary around hikers when roosting, with flush distances typically less than 25 meters (Swarthout and Steidl 2001), who suggest that 55-meter buffers are generally considered adequate to prevent disturbance of roosting birds.

Owl foraging habitat includes a wide variety of forests, canyon bottoms, cliff faces, tops of canyon rims, and riparian areas, where they feed on small mammals, particularly mice, voles, and woodrats. Mexican spotted owls will also eat birds, bats, reptiles and arthropods. The Mexican spotted owl uses a "perch and pounce" strategy to capture prey, using elevated perches to find prey items using sight and sound. They can take prey on the wing, particularly birds. Most hunting is at night (USFWS 2014a).

Juvenile owls disperse into a variety of habitats ranging from high-elevation forests to pinyon-juniper woodlands and riparian areas surrounded by desert grasslands. Dispersal from the nest area usually occurs from mid-September to early October and while they are capable of moving long distances, many successfully establish themselves nearby. Observations of long-distance dispersal by juveniles provide evidence that they use widely spaced islands of suitable habitat which are connected at lower elevations by pinyon-juniper and riparian forests. Some juveniles will travel through a variety of vegetation communities until they settle down (USFWS2014a).

Mated pairs are territorial and defend a breeding territory at least during the nesting season (March through August). The breeding season activity centers tend to be smaller than the non-breeding season activity centers, with considerable overlap between the two. Mexican spotted owls breed sporadically, and not all birds nest every year. Local conditions, particularly for the prey base, may govern nesting success. Adults may or may not leave the territory during the winter. Most adults remain on the same territory year after year (USFWS 2014a).

There are 18 Mexican spotted owl observations and records in Glen Canyon from Utah, and none from Arizona (Table 4, Figures 39-51). Only four are likely to be breeding territories (but none have been assigned as protected activity centers, or PACs) based on survey work in the late 1990's. One other record in the French Spring Fork of Happy Canyon is a possible breeding pair. Most other records are unconfirmed, and many are pre-1980. In particular, old records from Bullfrog-Hall's Creek Bays Divide, Farley Canyon and elsewhere may be misidentifications, or perhaps records of dispersing individuals. Most of these older sightings are not associated with appropriate habitat, and in some cases are in exposed settings in desert shrub communities.

In Glen Canyon, breeding and most roosting Mexican spotted owls have been detected in association with two types of habitats: stands of Douglas fir (*Pseudotsuga menziesii*) in shaded alcoves and, less commonly, in narrow deep canyons without large conifers (Spence et al. 2011; Willey 2000). Breeding and most individual observation records are primarily associated with the Waterpocket Fold near Bullfrog, Cataract Canyon, and the Orange Cliffs near Canyonlands National Park, all in Utah. Three of an estimated four to five breeding pairs were associated with Douglas fir in north-facing alcoves with springs (see Table 4). There are substantiated as well as unconfirmed reports of Mexican spotted owls from the rims of Cataract Canyon near Hite, Utah. Other sightings that may indicate the presence of breeding include the Escalante River corridor, Scorpion Gulch and Stevens Canyon. Currently, all but two of these observations are located more than two miles from park roads.

There are two records in the project area from the Alstrom Point-Grand Bench area: an unsubstantiated record from Grand Bench of an owl in Cave Spring in 2008, and an individual flying along the east rim of Alstrom Point on September 23, 2014, both in Utah. These are the closest known records to park roads in the project area, as Cave Spring is located adjacent to an unpaved road on Grand Bench, and there is an unpaved road on Alstrom Point. Repeat visits to the Cave Spring site have not revealed any additional owls between 2005 and 2008, thus this may have been a dispersing individual.

The closest known occurrences of the species to the Ferry Swale area are >25 miles to the northwest (Grand Bench) and northeast (Grand Staircase-Escalante National Monument), and >50 miles to the south in Marble Canyon (Grand Canyon NP).

**Table 4. Records of Mexican spotted owl survey locations and incidental sightings in Glen Canyon National Recreation Area.**

| NUMBER | LOCATION                                      | COMMENTS   |
|--------|---|--|
| 1      | East Moody Canyon                             | Pair in single year, likely nest site, not revisited   |
| 2      | Stevens Canyon                                | Pair in single year, likely nest site, not revisited   |
| 3      | “Scorpion Tongue”                             | Single; location very approximate-canyon name unknown but may be part of Scorpion Gulch on Escalante River |
| 4      | Easter Pasture Canyon                         | Single   |
| 5      | French Spring Fork of Happy Canyon            | Single in more than one year in Douglas fir stand;   |
| 6      | Millard Canyon                                | Pair in Douglas fir stand  |
| 7      | “French Spring Canyon”                        | Single; location approximate, no French Spring Canyon; may be the east fork of Millard Canyon?             |
| 8      | Miller’s Canyon                               | Pair in Douglas fir stand  |
| 9      | North of Neon Canyon – Escalante River        | Single – very approximate location; three miles above Neon Canyon in granary                               |
| 10     | Grand Bench Cave Spring                       | Single – in cave   |
| 11     | Bullfrog-Hall’s Creek Bays Divide             | Not in GLCA database - odd location on island in bay; seems unlikely                                       |
| 12     | Forgotten Canyon                              | Single; Not in GLCA database   |
| 13     | NE edge of Mancos Mesa                        | Single; Not in GLCA database   |
| 14     | Flats near Farley Canyon                      | Single; Not in GLCA database   |
| 15     | Side canyon (lake arm) off Long Canyon        | Single; Not in GLCA database   |
| 16     | Upper Horse Pasture Canyon near Dangling Rope | Single; Not in GLCA database   |
| 7      | Clearwater Canyon                             | Location not specified; anecdotal observations of heard birds in two or more years in upper canyon         |
| 18     | Alstrom Point                                 | Single; flying near canyon rim   |

**Notes:** Mexican Spotted Owl survey locations in Glen Canyon. Data is primarily from 1993-1998, except for the Neon and Grand Bench sightings (both undocumented), and some older (<1990) sightings that may be unreliable (#11-16). The Millard Canyon, Miller’s Canyon and French Spring Fork birds were all associated with relict Douglas fir stands in north-facing alcoves, where pairs were observed over 2 or more years. The 1998 data and 2000 report did not provide exact locations for most observations, plus it used names not available on 7.5 minute topo maps, such as “Scorpion Tongue.”

The Glen Canyon reach below Glen Canyon Dam in Arizona provides limited canyon roosting habitat. All known breeding attempts in northern Arizona and adjacent Utah have been at elevations substantially higher than the Glen Canyon reach, typically above 5,000 feet (Willey 2000; Wise-Gervais 2005). There are no records of spotted owls in the Glen Canyon reach (Spence et al. 2011). However, only limited night surveys were done in the 1990s, when great horned owls were detected (Spence et al. 2011). No work has been done in the canyon since these early surveys, nor was any done by contractors (Willey 2000). Thus it is possible that individual spotted owls, most likely dispersing individuals, may have remained undetected and occasionally roost in the canyon during fall and winter months. However, the presence of at least two great horned owl territories suggests that Mexican spotted owls are unlikely to use the Glen Canyon reach on a regular basis. NPS biologists have determined the potential habitat for this species only occurs in several side or tributary canyons; Waterholes Canyon (200 feet across top, 20 feet across bottom) (Colorado River Mile -4.0L) which is located on the Navajo Indian Reservation, and Nine Mile Draw, which is located about one mile east of the Petroglyph Trail site (Colorado River Mile - 10.5L) and is 600 feet at the top of the canyon and 60 feet at the bottom of the canyon. While neither of these sites has been surveyed for the presence of owls, they could potentially be narrow enough to provide the cool canyon habitat required by this species on the Colorado Plateau. The closest project areas where ORV activity may occur is Ferry Swale, ca. five miles to the north and ca. 1000 feet higher in elevation.

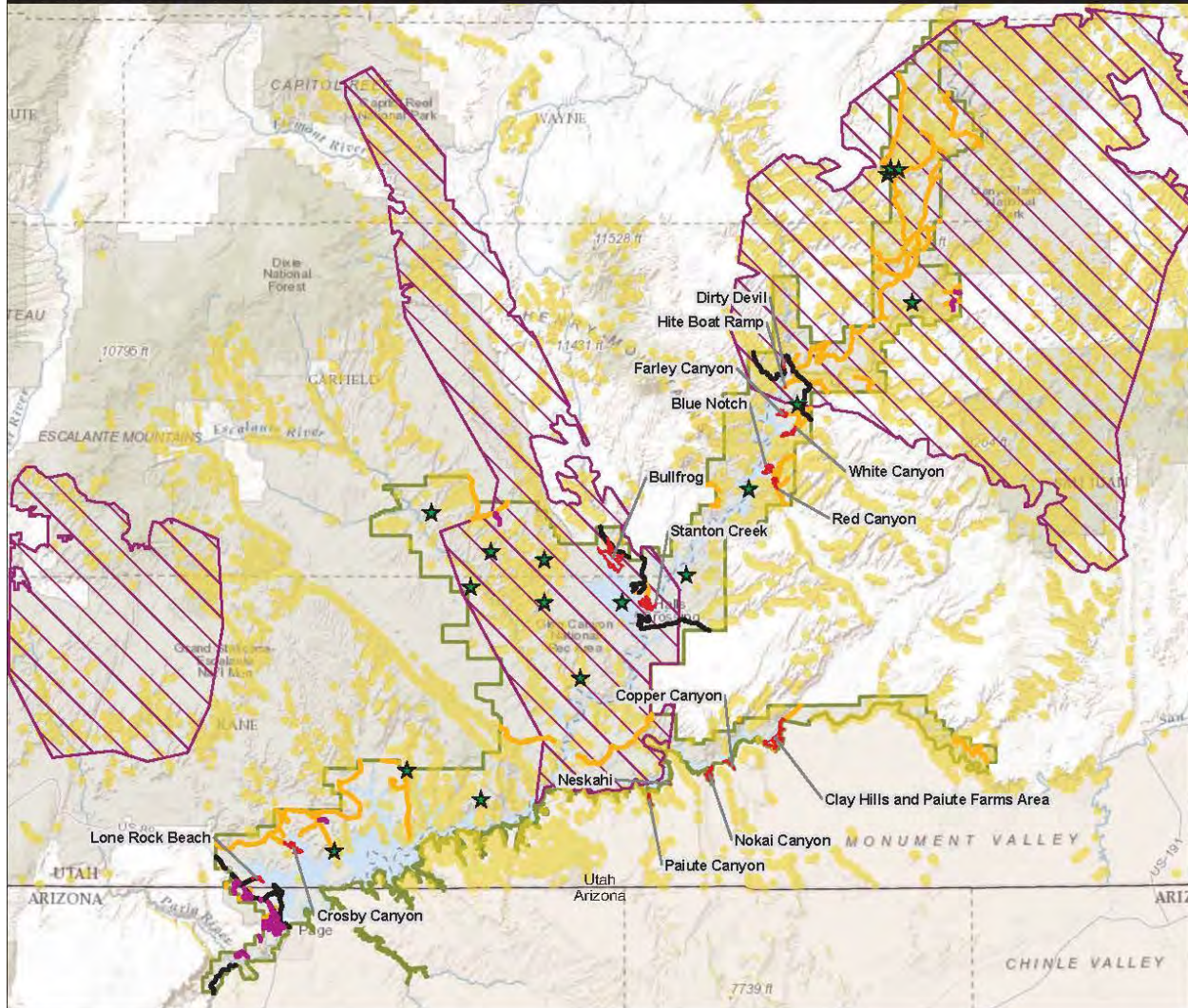
**Figure 39. Overview map of Mexican Spotted Owl suitable and critical habitats and occurrences in Glen Canyon National Recreation Area.**

Glen Canyon National Recreation Area  
Arizona/Utah

National Park Service  
U.S. Department of the Interior



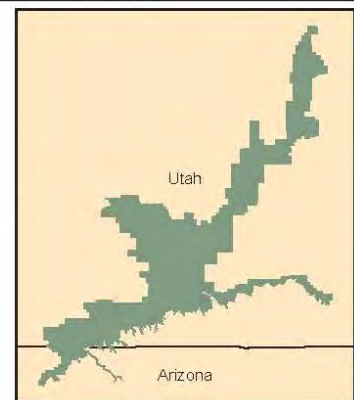
**Mexican Spotted Owl Suitable Breeding and/or  
Designated Critical Habitat - Overview**



- Glen Canyon NRA Boundary
- Paved Road
- Unpaved Road
- Proposed ORV Routes
- Proposed ORV Area
- Mexican Spotted Owl Occurrence
- Suitable Breeding Habitat Model (Wiley, 2000)
- Mexican Spotted Owl USFWS Designated Critical Habitat (2004)
- State Boundary

1:1,055,000

0 10 20 40 Miles





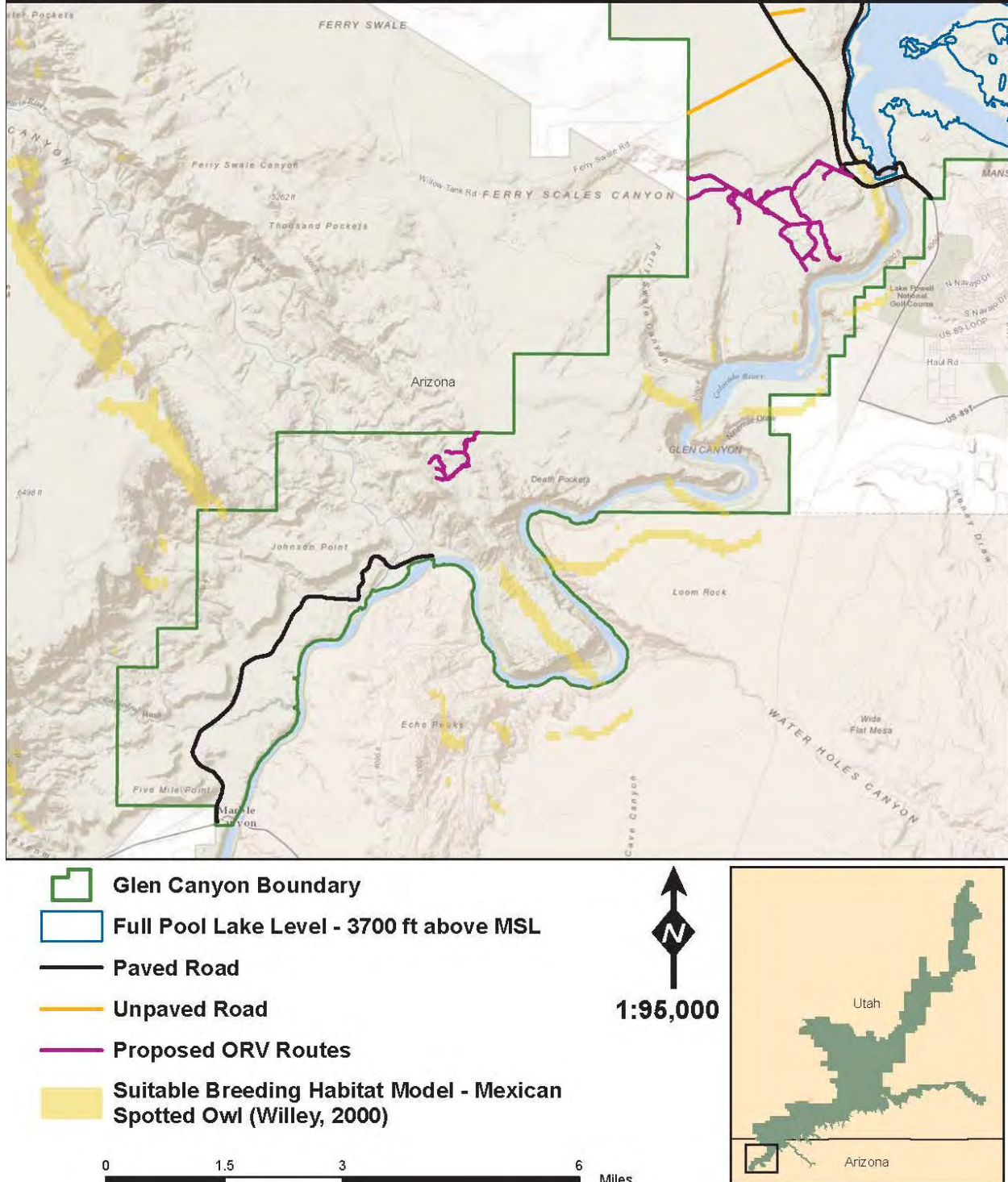
**Figure 40. Mexican Spotted Owl suitable breeding habitat in Arizona. There is no area overlap between the plan area roads and routes and suitable breeding habitat.**

Glen Canyon National Recreation Area  
Arizona/Utah

National Park Service  
U.S. Department of the Interior

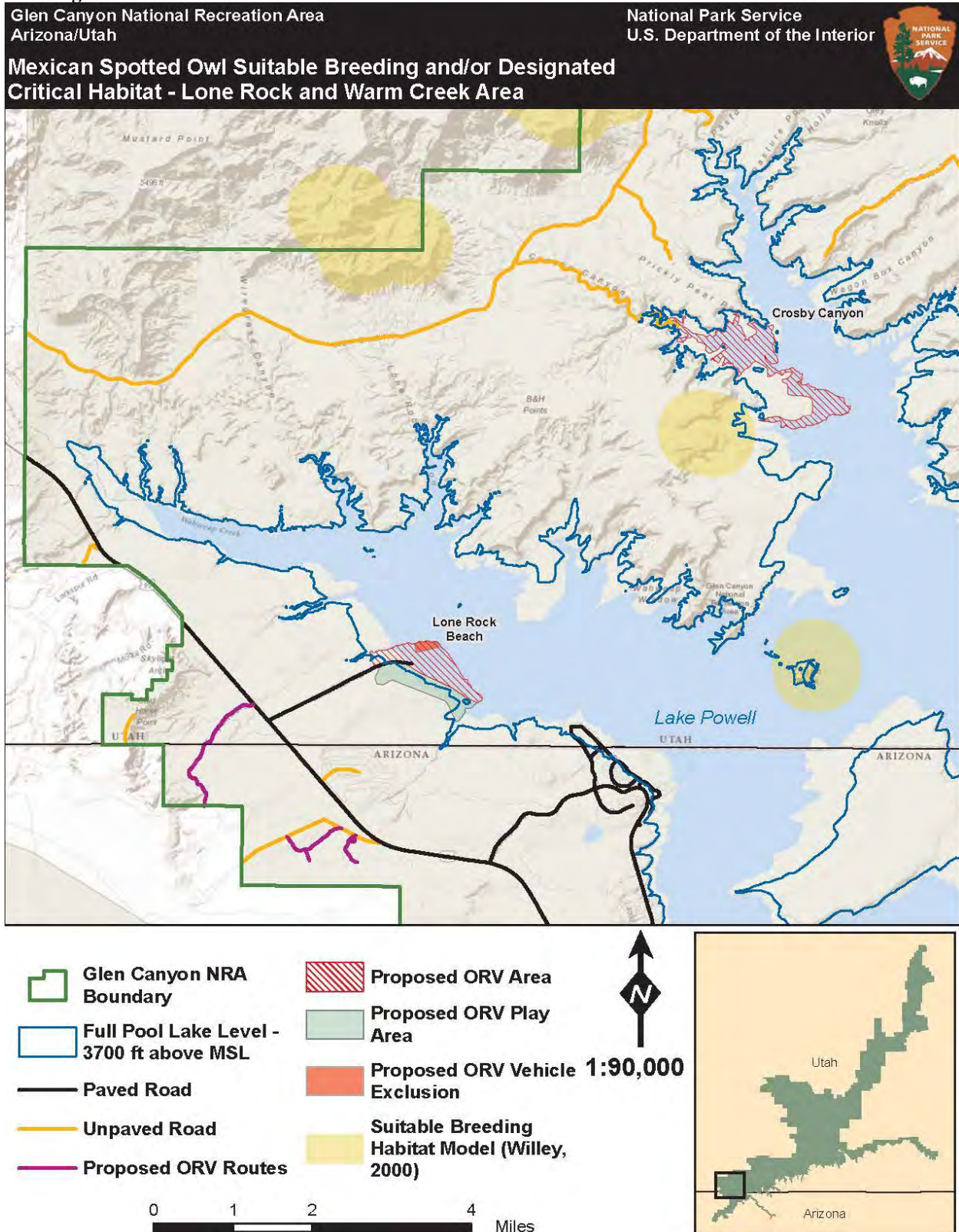


**Mexican Spotted Owl Suitable Breeding  
and/or Designated Critical Habitat- Arizona**



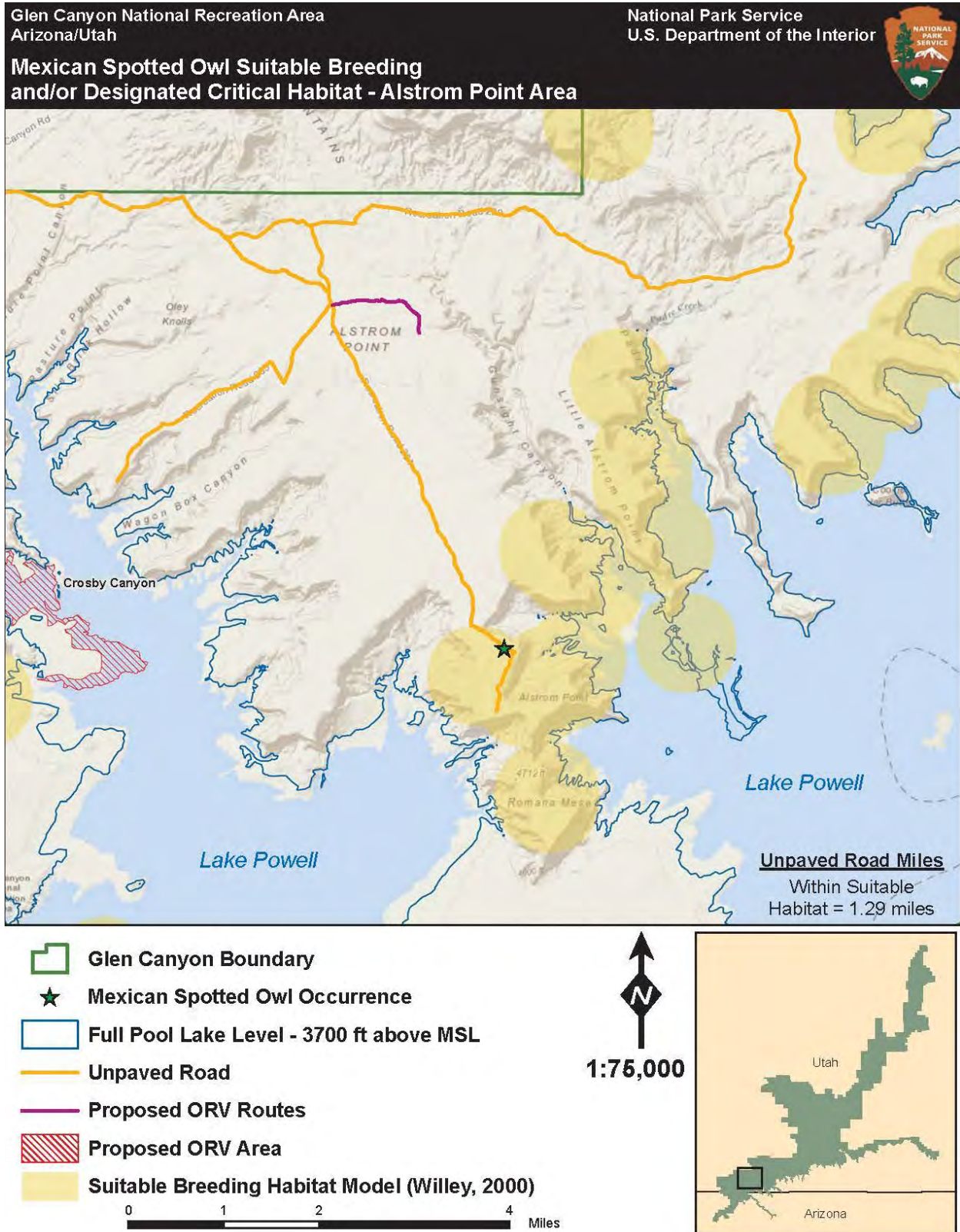


**Figure 41. Mexican Spotted Owl suitable breeding habitat in the Lone Rock and Warm Creek areas. There is no area overlap between the plan area roads, ORV routes or ORV Areas and suitable breeding habitat.**



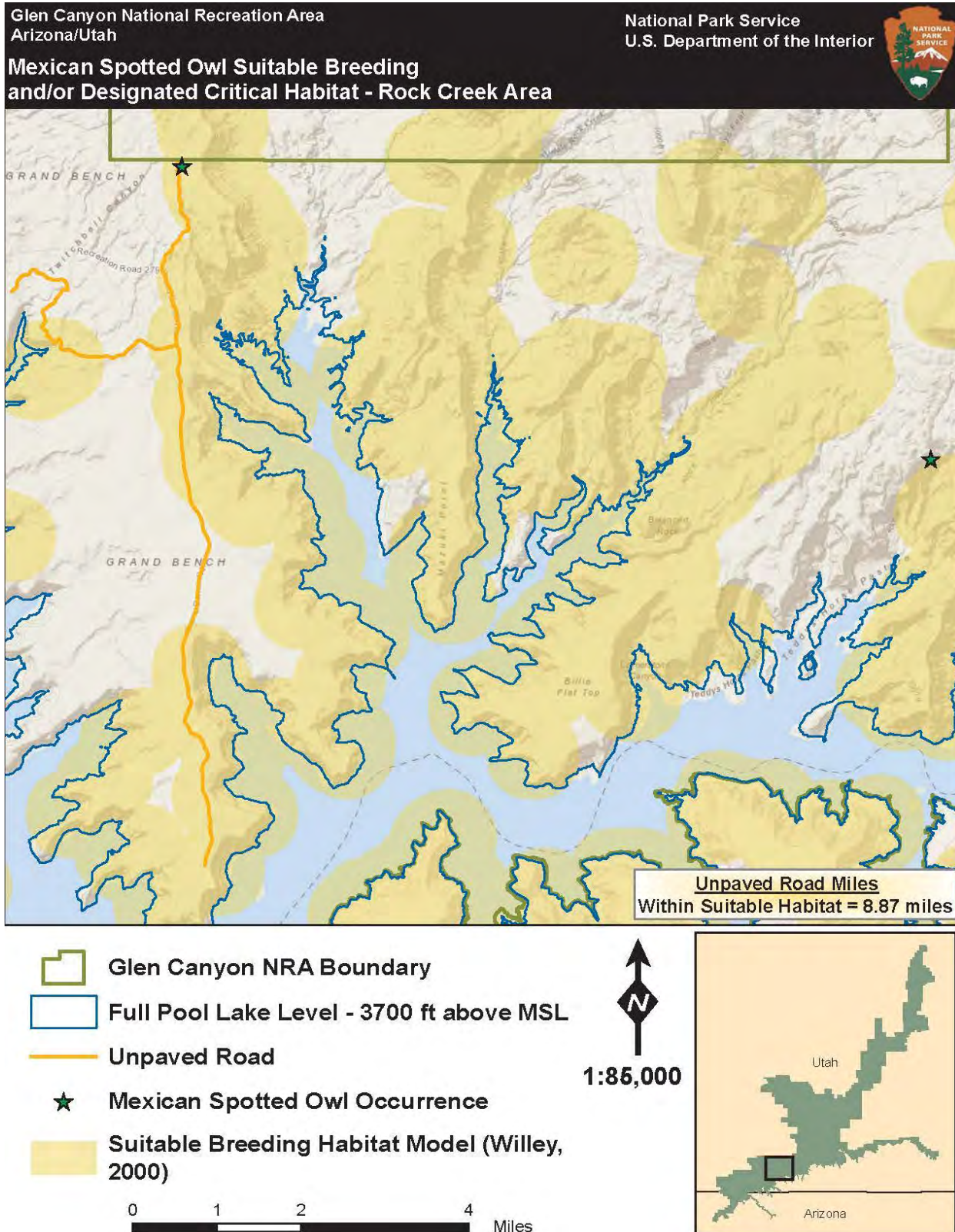


**Figure 42. Mexican Spotted Owl suitable breeding habitat overlap with plan area roads and ORV routes in the Alstrom Point area.**



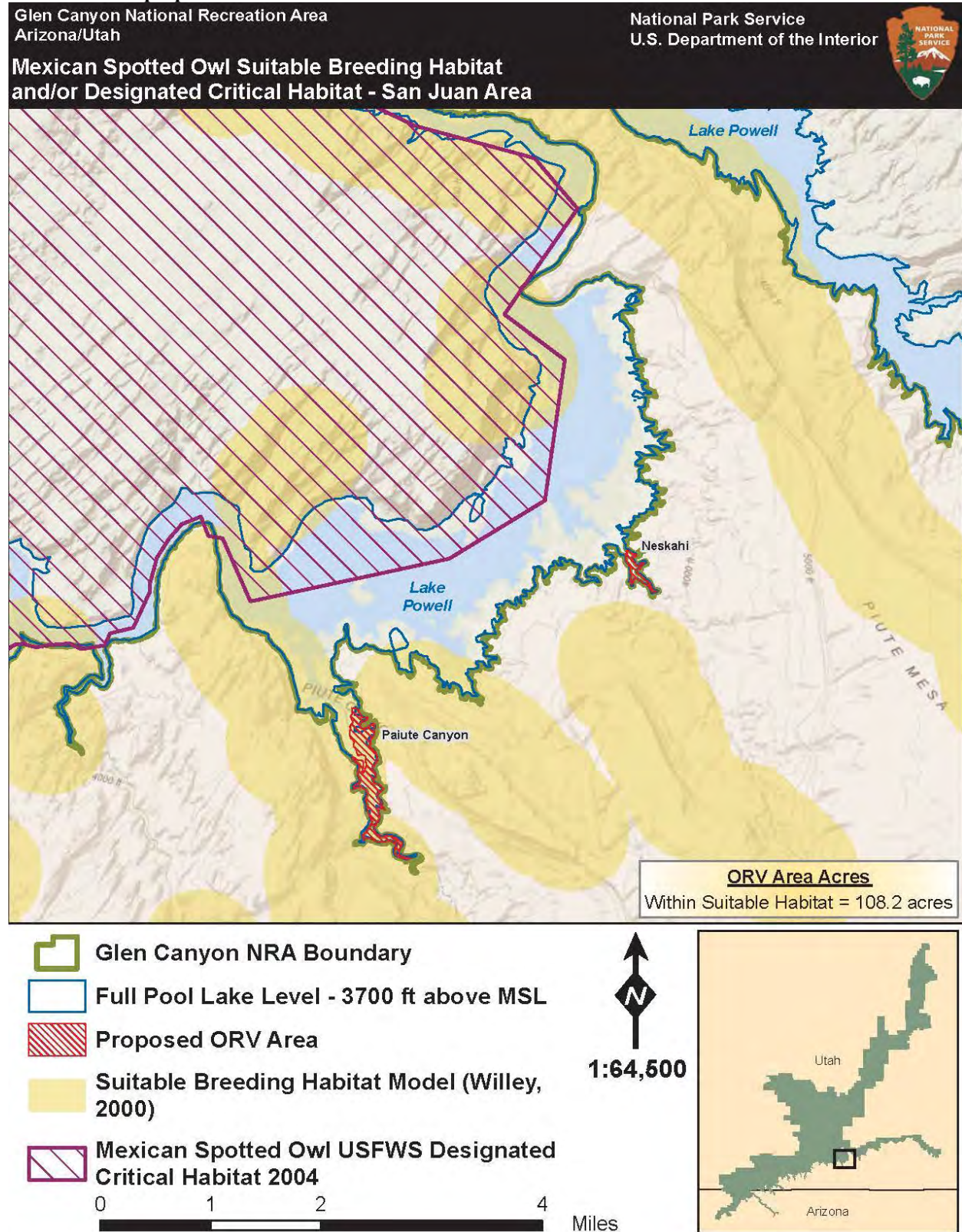


**Figure 43. Mexican Spotted Owl occurrences and suitable breeding habitat overlap with plan area roads in the Rock Creek area.**





**Figure 44. Mexican Spotted Owl designated critical and suitable breeding habitat overlap with plan area roads and proposed ORV Areas in the San Juan area.**





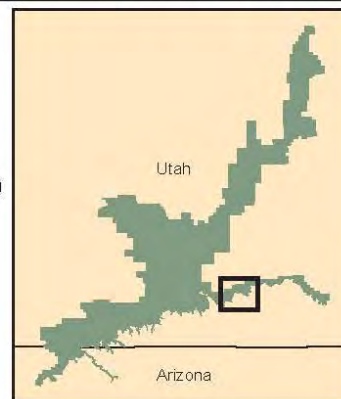
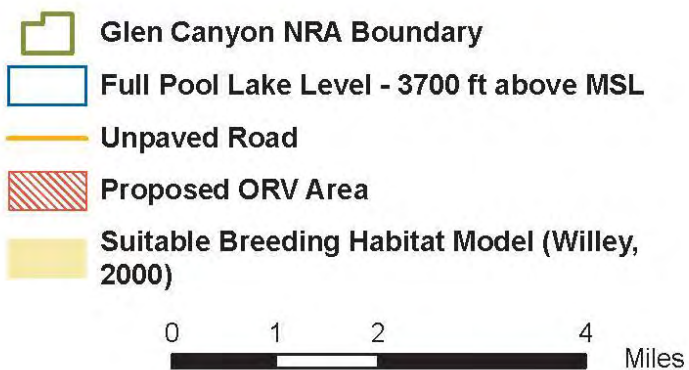
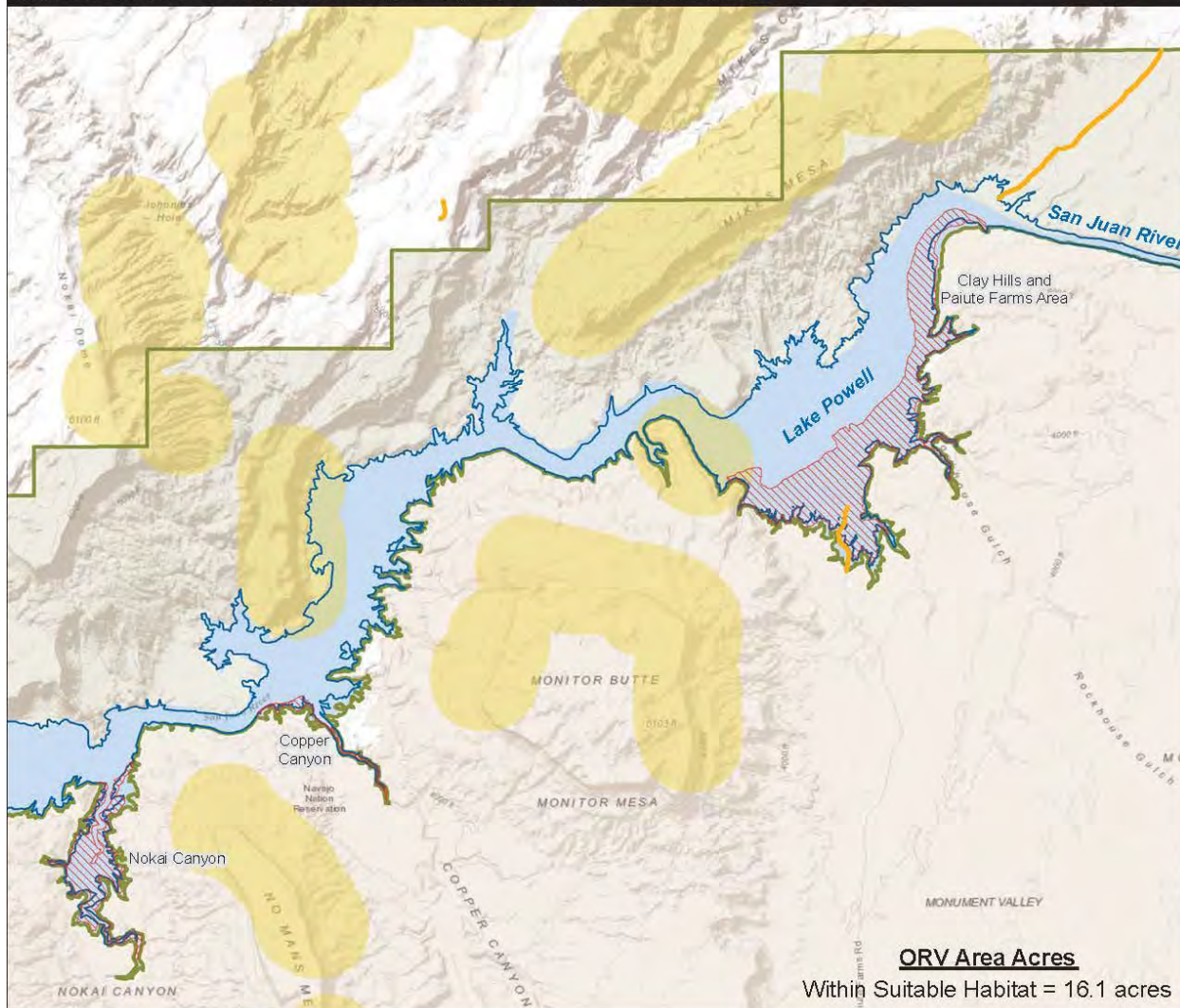
**Figure 45. Mexican Spotted Owl suitable breeding habitat overlap with plan area roads and proposed ORV Areas in the San Juan/ Clay Hills Crossing area.**

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Arizona/Utah

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**Mexican Spotted Owl Suitable Breeding and/or Designated Critical Habitat - Clay Hills Crossing and Paiute Farms Area**





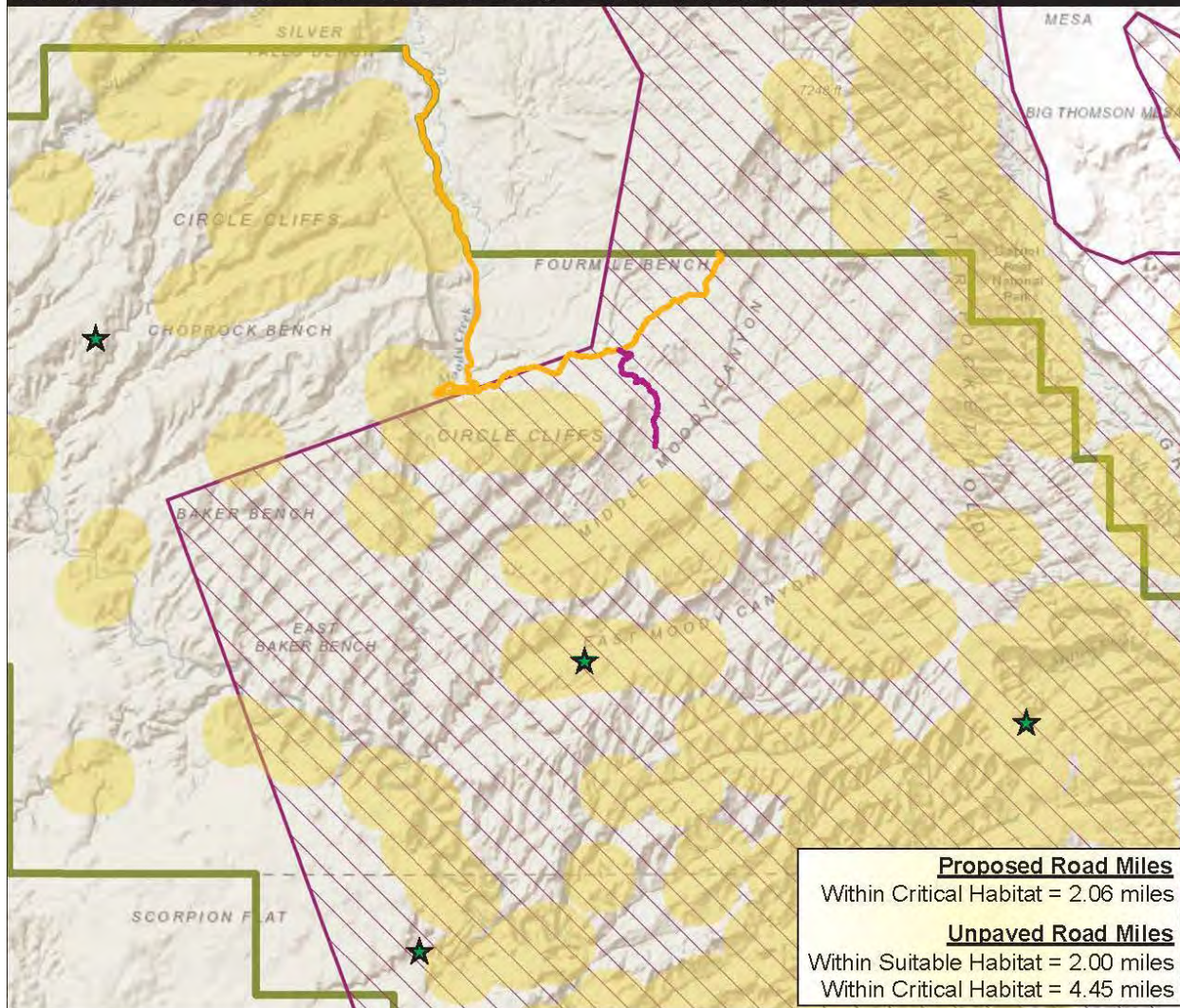
**Figure 46. Mexican Spotted Owl occurrences, designated critical, and suitable breeding habitat overlap with plan area roads and proposed ORV routes in the Escalante/ Big Bowns Bench area.**

Glen Canyon National Recreation Area  
Arizona/Utah

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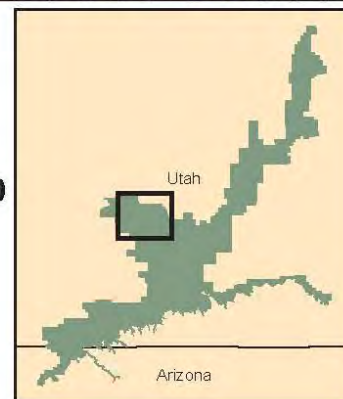
**Mexican Spotted Owl Suitable Breeding and/or  
Designated Critical Habitat - Escalante/Big Bowns Bench Area**



- Glen Canyon NRA Boundary
- Unpaved Road
- Proposed ORV Routes
- Mexican Spotted Owl Occurrence
- Suitable Breeding Habitat Model (Wiley, 2000)
- Mexican Spotted Owl USFWS Designated Critical Habitat (2004)

1:128,000

0 1.5 3 6 Miles





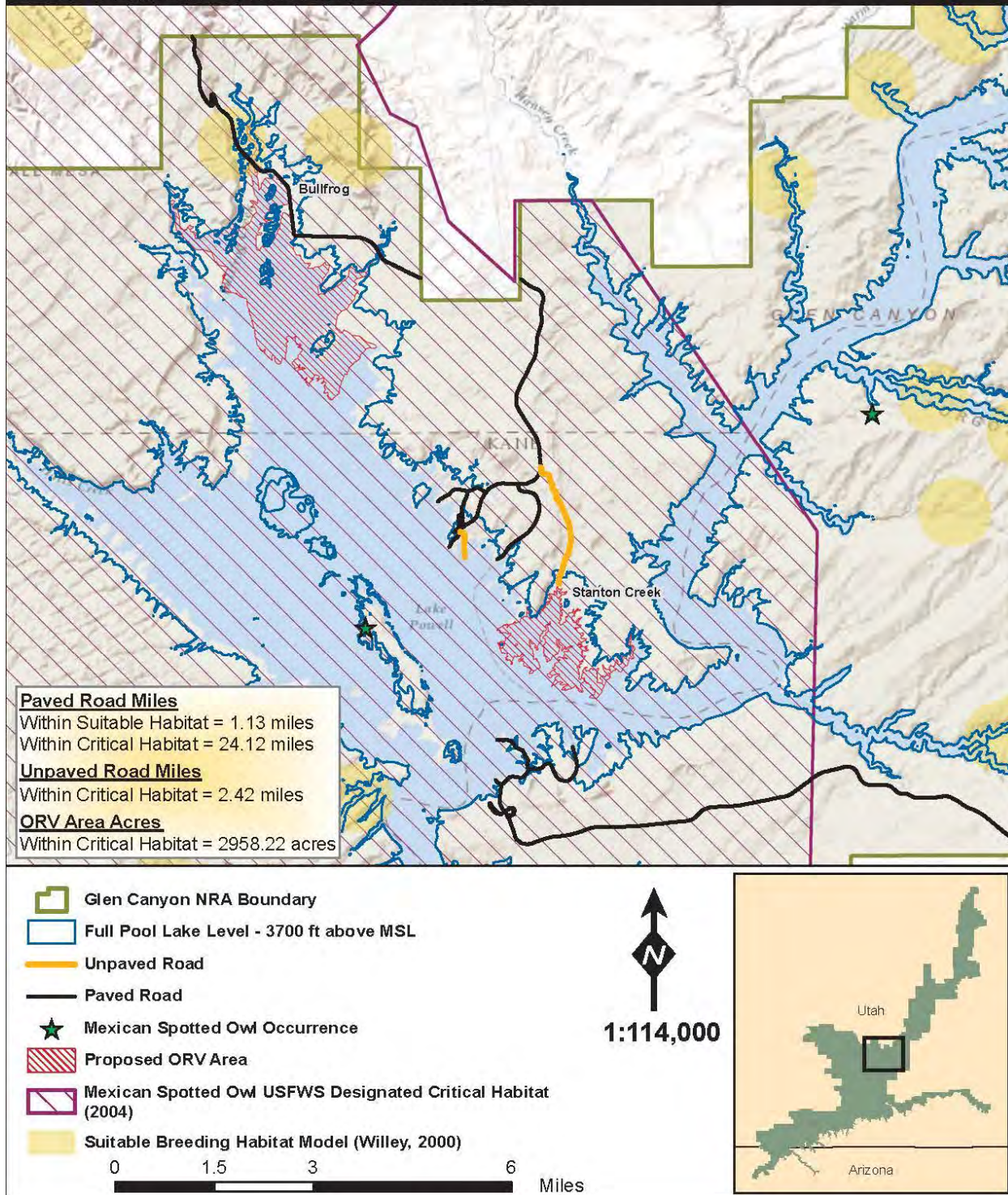
**Figure 47. Mexican Spotted Owl occurrences, designated critical, and suitable breeding habitat overlap with plan area roads and proposed ORV Routes and Areas in the Bullfrog area.**

Glen Canyon National Recreation Area  
Arizona/Utah

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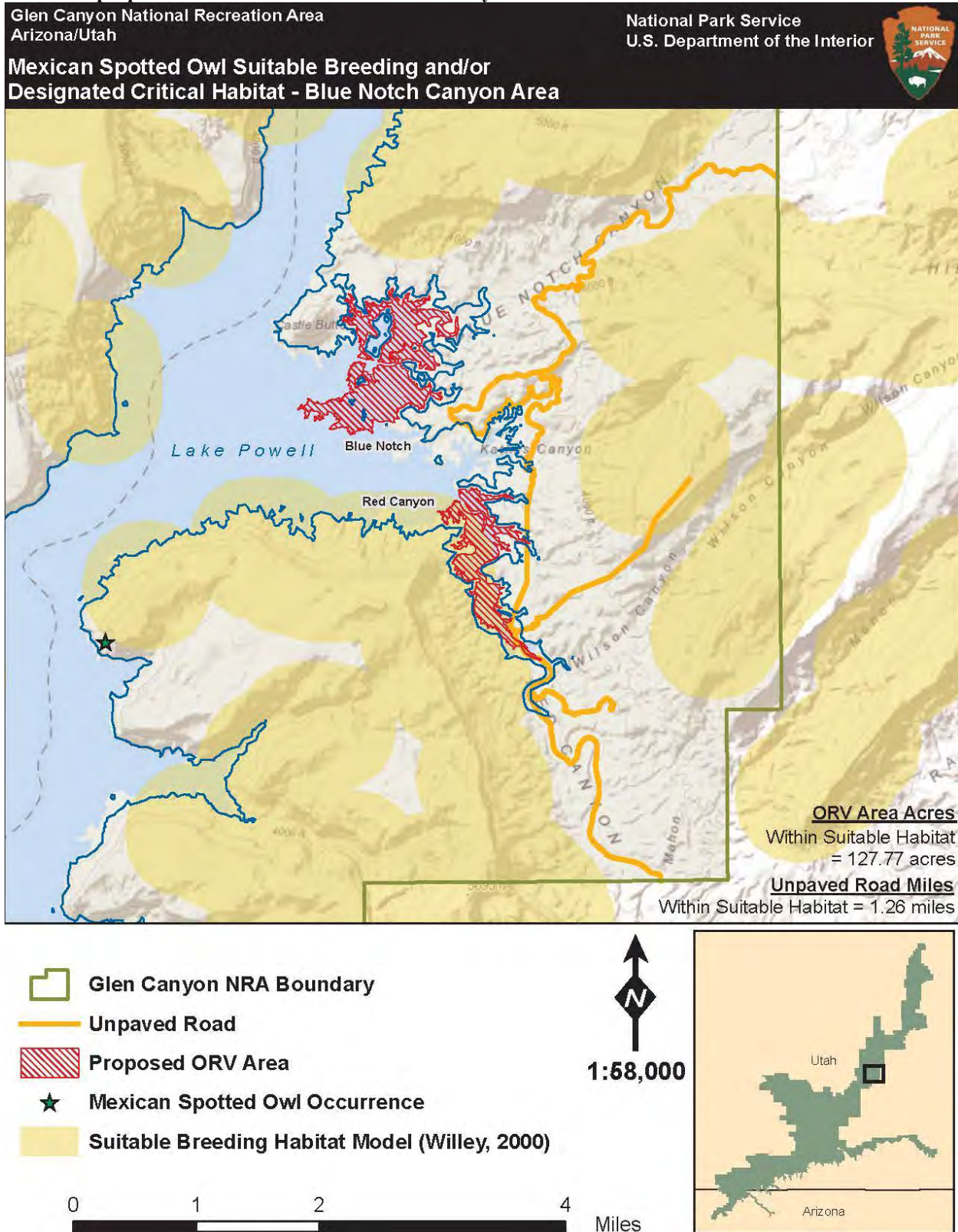


**Mexican Spotted Owl Suitable Breeding  
and/or Designated Critical Habitat - Bullfrog Area**





**Figure 48. Mexican Spotted Owl occurrences and suitable breeding habitat overlap with plan area roads and proposed ORV Areas in the Blue Notch Canyon area.**





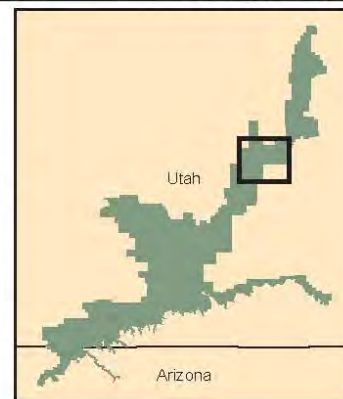
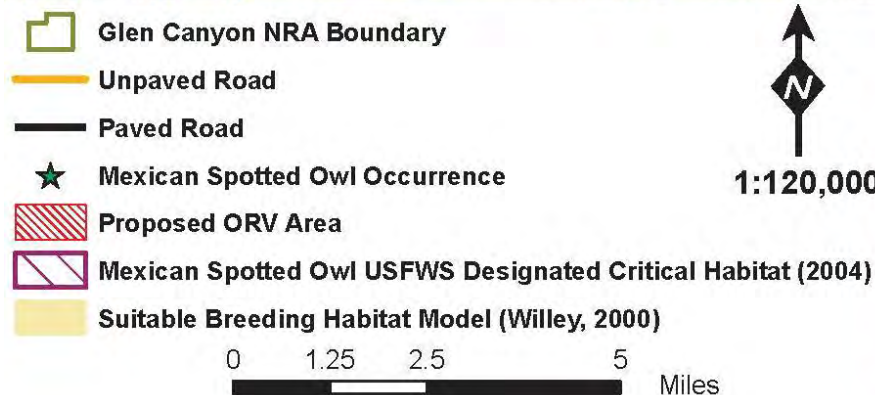
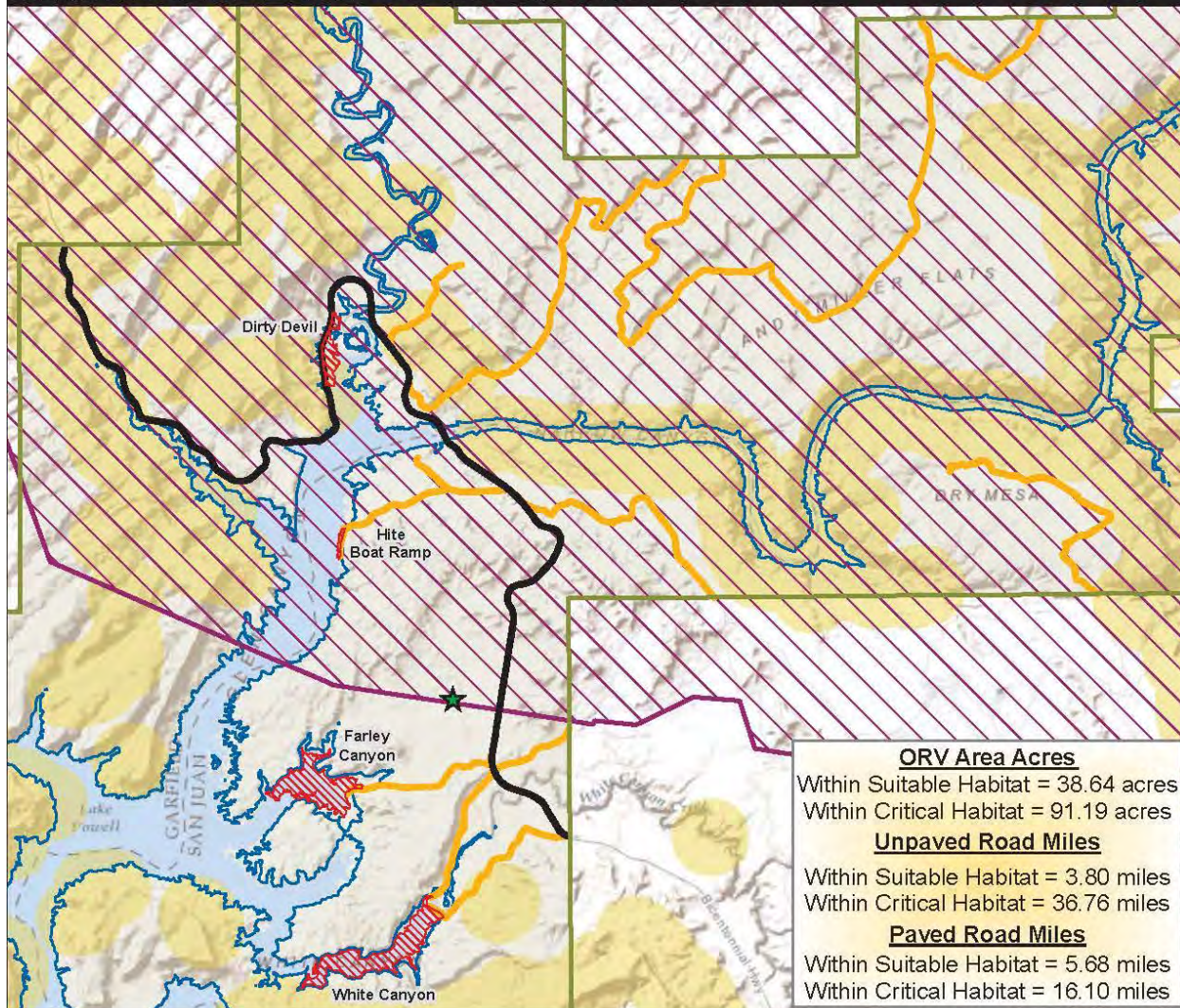
**Figure 49. Mexican Spotted Owl occurrences, designated critical, and suitable breeding habitat overlap with plan area roads and proposed ORV Areas in the Hite and Dirty Devil area.**

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Arizona/Utah

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**Mexican Spotted Owl Suitable Breeding and/or  
Designated Critical Habitat - Hite and Dirty Devil Area**





**Glen Canyon National Recreation Area  
Arizona/Utah**

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**Mexican Spotted Owl Suitable Breeding and/or  
Designated Critical Habitat - Southern Orange Cliffs Area**





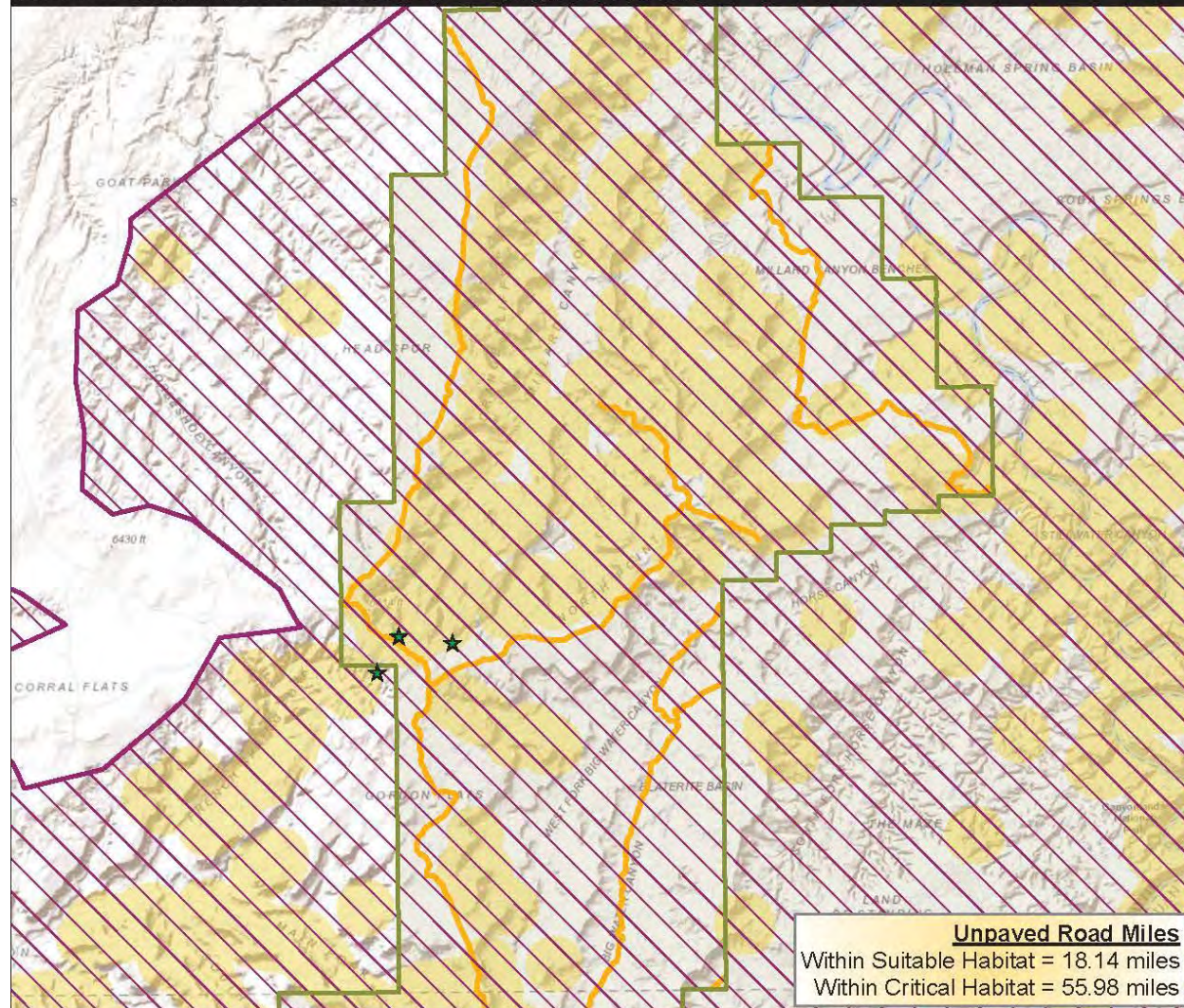
**Figure 51. Mexican Spotted Owl occurrences, designated critical, and suitable breeding habitat overlap with plan area roads in the Northern Orange Cliffs area.**

Glen Canyon National Recreation Area  
Arizona/Utah

National Park Service  
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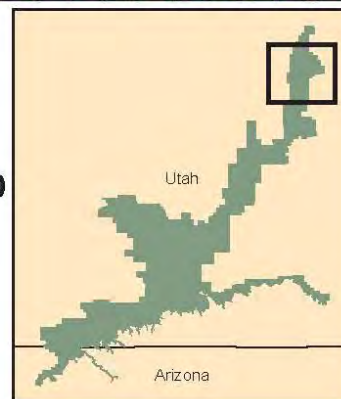


**Mexican Spotted Owl Suitable Breeding  
and/or Designated Critical Habitat - Orange Cliffs Area**



- Glen Canyon NRA Boundary
- Unpaved Road
- Mexican Spotted Owl Occurrence
- Mexican Spotted Owl USFWS Designated Critical Habitat 2004
- Suitable Breeding Habitat Model (Wiley, 2000)

0 2.5 5 10 Miles



### ***Southwestern Willow Flycatcher (Endangered)***

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 (*Salix* spp.), box elder (*Acer negundo*), tamarisk (*Tamarix* spp.), buttonbush (*Cephalanthus* spp.), cottonwood (*Populus* spp.), and mesquite (*Prosopis* spp.). 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 2011a). Threats to this species include loss and modification of breeding habitat, water diversions, grazing, and cowbird parasitism.

Destruction and modification of riparian habitats have been caused mainly by the reduction or removal of surface and subsurface water due to diversion and groundwater pumping, changes in flood and fire regimes due to dams and stream channelization, vegetation clearing, and changes in soil and water chemistry due to the disruption of natural hydrologic cycles (USFWS 2002). 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 invasive non-native plant populations and degraded watersheds.

The recent introduction, spread, and effect of the tamarisk 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 2011a). All of the impacts described contribute to the baseline conditions for the southwestern willow flycatcher. NPS biologists forecast improvements to potential flycatcher habitat over the next 10 years as a result of a Lees Ferry restoration project located near the project area. Also, the recent revision of critical habitat designations, combined with actions consistent with the species' recovery plan, 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.

Southwestern willow flycatchers have not been documented as breeding in Glen Canyon, although a possible pair was found during vegetation surveys on the Escalante River in 1997 at George's Camp, an area on the river ca. 8 miles from the nearest park road (Spence et al. 2011). Small numbers migrate through Glen Canyon in late spring, especially along the San Juan River (Spence et al. 2011). In riparian vegetation below Glen Canyon Dam, 25 point count surveys for riparian and aquatic birds were completed between 1992 and 1999 (Spence and Holmes 2004). During these surveys there were only two reported sightings of willow flycatchers, both in 1997. Due to the timing of the sightings and lack of response to taped calls, it has been postulated by the surveyors that these individuals were likely a subspecies other than southwestern willow flycatcher that were migrating through the area. In 2006, protocol level surveys for southwestern willow flycatcher at Hidden Slough were negative. There is a single breeding record that exists at Lees Ferry from before Glen Canyon Dam was built; however, no breeding of this species has been detected for more than 50 years in or near the project area. The existing tamarisk stands at Hidden Slough (River Mile -6.5R above Lees Ferry) and Leopard Frog Marsh (River Mile -8.8L above Lees Ferry at Horseshoe bend) were evaluated, and it was determined these stands do not currently have suitable southwestern willow flycatcher breeding habitat (Beatty 2013).

Based on vegetation data and surveys conducted in the park since 1991 (Spence 2016), the following areas within the project area overlap with suitable habitat as outlined in Sogge et al. (2010); Clay Hills Crossing on the San Juan River, Paiute Farms accessible shoreline, Last Chance Creek, the Colorado River at and adjacent to the Lees Ferry District (Figures 52-54).

Suitable habitat during migration is available in the vicinity of the Clay Hills Crossing takeout for river runners (see Figure 52). Both downstream and upstream along the San Juan River, extensive dense riparian habitat exists that may also support breeding, although none has been documented. Small dense patches of large tamarisk also occur, mostly lacking native riparian shrubs or trees, near the road end at the Paiute Farms accessible shoreline.

There are no recorded sightings during migration at Lees Ferry where the paved road ends at the boat ramp, although suitable riparian thickets occur both downstream and upstream of the ramp for ca. 0.5 miles. Although generally consisting of a relatively thin margin along the Colorado River, there are some dense patches and areas with overstory cottonwoods south of the ramp in the vicinity of the river runner camp, although no flycatchers have been reported from this area (Figure 53).

The unpaved Park Road 230 crosses Last Chance Creek (Figure 54). Riparian vegetation is limited in this area, but patches of tamarisk, willow and cottonwoods occur both upstream and downstream of the crossing that could potentially be utilized by birds for resting or foraging during migration.

Extensive suitable habitat also occurs in Glen Canyon along the San Juan, Colorado, Green, Dirty Devil and Escalante Rivers, but with the exception of Lees Ferry, Last Chance Creek, Paiute Farms and Clay Hills Crossing, these are all in more remote areas well removed from the project area accessible shorelines and roads, and are all >0.5 miles from any portions of the project area. However, breeding has never been documented in any of these areas and they are not included in the species critical habitat designation. Critical habitat does not occur in or near Glen Canyon NRA.

Exotic plant control and management along the San Juan River has been conducted on a regular basis by the BLM, NPS and Navajo Nation. These activities include control of Russian olive and several herbaceous exotics, and occur in areas above Grand Gulch, and thus would have only minor indirect effects to migrating individuals. These activities could have potential long-term beneficial effects to the species.



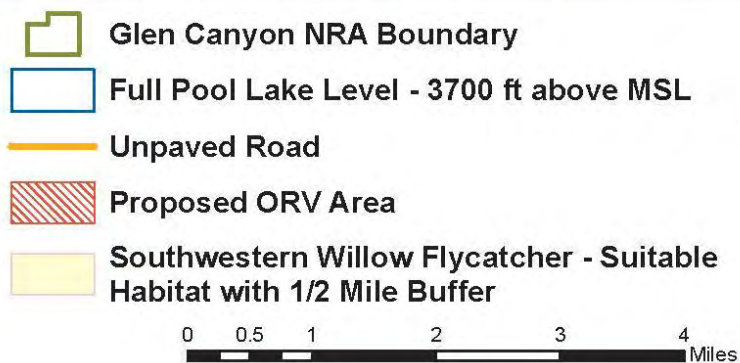
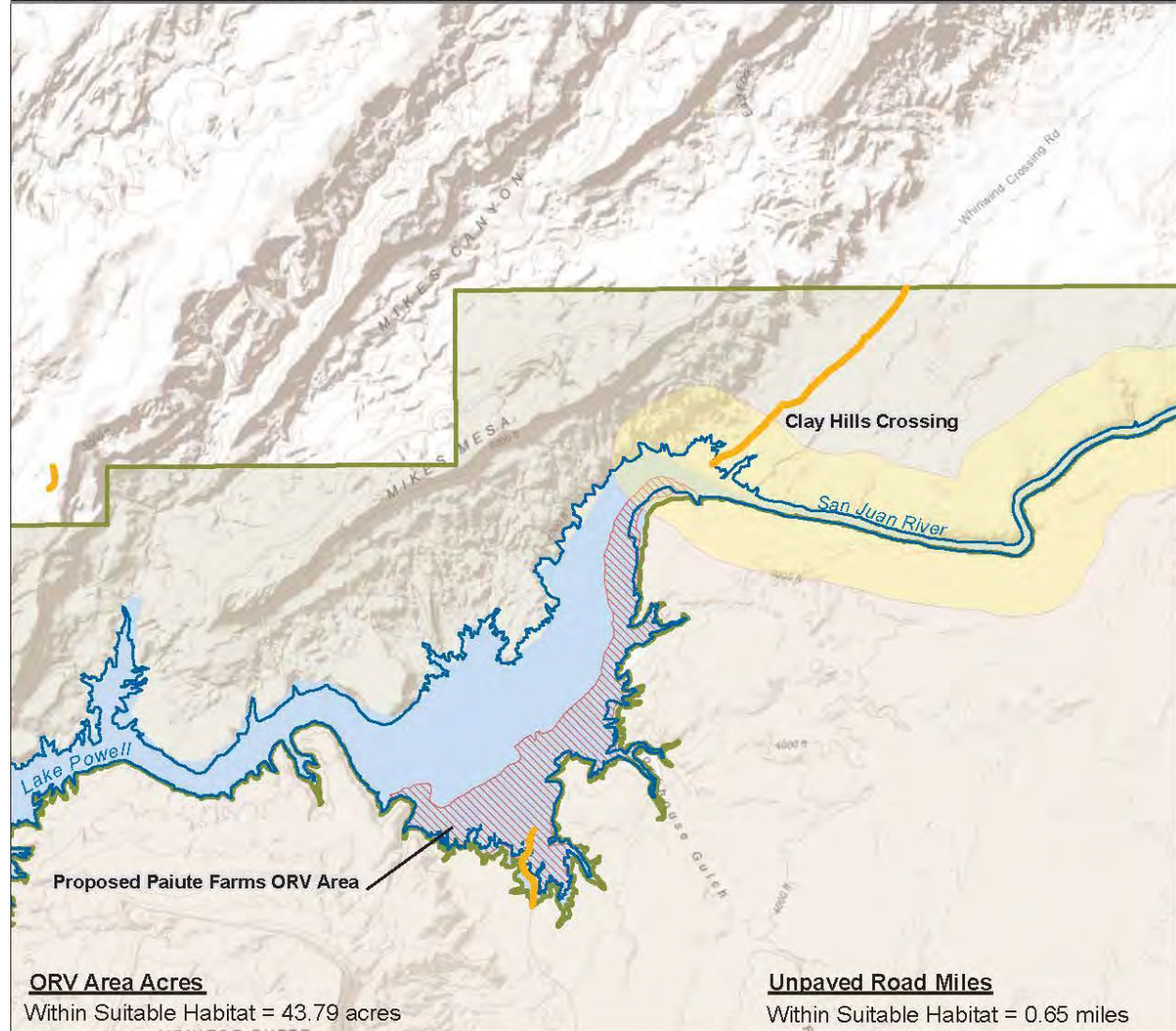
**Figure 52. Southwestern Willow Flycatcher suitable habitat overlap with plan area roads and proposed ORV Areas in the Clay Hills Crossing area.**

Glen Canyon National Recreation Area, Arizona/Utah

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### Southwestern Willow Flycatcher Suitable Habitat - Clay Hills Crossing and Paiute Farms



1:75,000





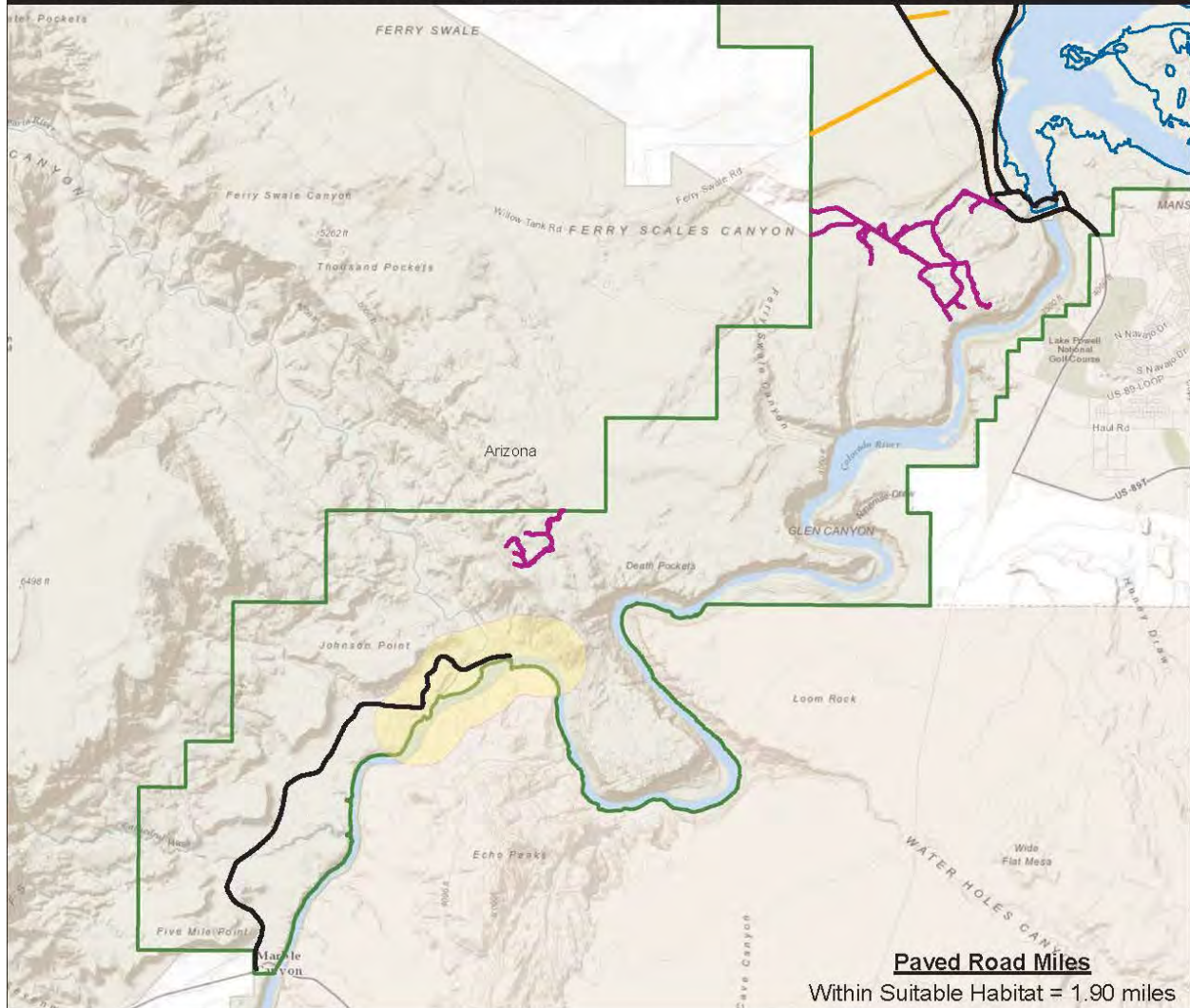
**Figure 53. Southwestern Willow Flycatcher and Yellow-billed Cuckoo suitable habitat overlap with plan area roads and proposed ORV Routes in the Lees Ferry area.**

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Arizona/Utah

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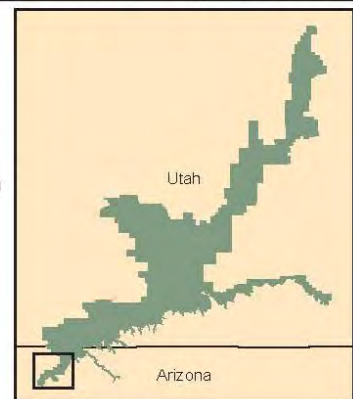
### Yellow-billed Cuckoo and Southwest Fly Catcher Suitable Habitat - Arizona



- Glen Canyon Boundary
- Full Pool Lake Level - 3700 ft above MSL
- Paved Road
- Unpaved Road
- Proposed ORV Routes
- Yellow Billed Cuckoo/Southwest Fly Catcher Suitable Habitat

0 1.5 3 6 Miles

1:95,000



**Figure 54. Southwestern Willow Flycatcher and Yellow-billed Cuckoo suitable habitat overlap with**



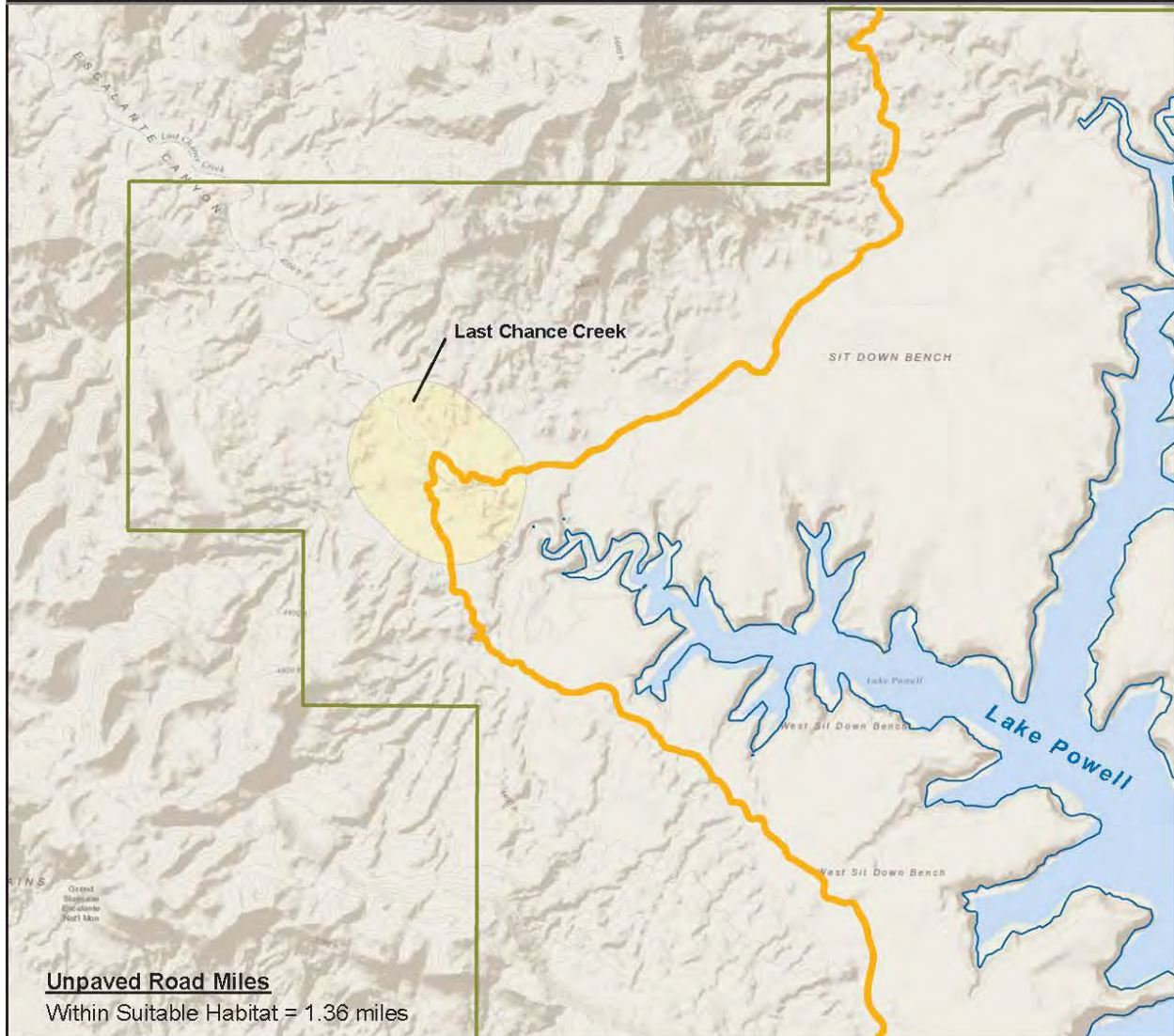
plan area roads in the Last Chance Creek area.

Glen Canyon National Recreation Area  
Arizona/Utah

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U.S. Department of the Interior



**Southwestern Willow Flycatcher and Yellow-billed Cuckoo  
Suitable Habitat - Last Chance Creek**



- Glen Canyon NRA Boundary
- Full Pool Lake Level - 3700 ft above MSL
- Unpaved Road
- Southwestern Willow Flycatcher and Yellow-billed Cuckoo - Suitable Habitat Including 1/2 Mile Buffer

1:50,000



***Yellow-Billed Cuckoo (Threatened)***

The yellow-billed cuckoo, federally listed by USFWS on 3 October 2014, nests in large blocks of relatively dense, multi-layered wooded, streamside riparian habitat, with varying combinations of Fremont cottonwood, willow, velvet ash (*Fraxinus velutina*), Arizona walnut (*Juglans major*), mesquite, and tamarisk. Some birds have been observed nesting in orchards adjacent to riparian habitat. Because yellow-billed cuckoo prefer nest sites with low total ground cover, moderately high canopy closure, and presence of water, there are some locations near the project area where they have the potential to occur. In Arizona, cuckoos are found nesting statewide, mostly below 6,000 feet in the central, western, and southeast part of the state (USFWS 2012b). In Utah, the species is known to breed along the Green and Colorado Rivers in northeastern and eastern portions of the state where dense riparian vegetation occurs, and nesting has occurred up to 8,500 feet. Smaller populations are found along the San Juan River in extreme western Colorado and adjacent Utah, as well as along the lower Dolores River in eastern Utah.

The yellow-billed cuckoo is presently common east of the Continental Divide, and historically, the species was widespread and locally common in Arizona and eastern Utah. Unfortunately, cuckoo populations have declined region wide due to degradation or loss of more than 90 to 95 percent of its preferred riparian habitat as a result of conversion to agriculture, dams and river flow management, bank protection, overgrazing, and competition from invasive non-native plants (USFWS 2011b).

Large declines in the distribution and abundance of the yellow-billed cuckoo have occurred as a result of pesticide use and the destruction of preferred riparian habitat (Hughes 1999). Threats to the yellow-billed cuckoo include habitat loss, overgrazing, and pesticide application. The principal causes of riparian habitat losses are conversion to agricultural and other uses, dams and river flow management, stream channelization and stabilization, and livestock grazing (74 FR 57823).

Suitable habitat includes multi-layered riparian woodland and forest, with emergent trees such as cottonwood (*Populus deltoides*) and Goodding Willow (*Salix gooddingii*). Size and width of suitable riparian patches are also critical (FR Vol. 79, No. 158, Part IV, 2014). However, cuckoos have been known to breed in smaller patches as well. Areas along the San Juan River from ca. Grand Gulch to ca. 1 mile below Clay Hills Crossing include vegetation with appropriate structure including tall emergent trees and dense shrubby understories, but widths are seldom greater than 30-50 meters. Some patches below Clay Hills Crossing on the north side of the river are large enough to be suitable, but largely consist of tamarisk with little native vegetation. However, these patches have potential as native species colonize.

In Glen Canyon, the yellow-billed cuckoo is considered a rare transient in dense riverside thickets. Yellow-billed cuckoos have not been documented as breeding in Glen Canyon, although breeding may occur upstream of Clay Hills Crossing along the San Juan River (Spence et al. 2011). Observations of cuckoos are associated with migration (early June and September) at Clay Hills Crossing. Birds have been documented upstream and rarely during the breeding season of late June to late August with three records, all in 2006. Historically, the cuckoo has only been observed a few times in the Glen Canyon stretch below Glen Canyon Dam and near Clay Hills Crossing in dense riparian thickets. However, during migration the species can occur in a wide variety of habitats, often away from riparian zones.

Based on vegetation data and surveys conducted in the park since 1991 (Spence 2016), the following areas within the project area overlap with suitable or proposed critical habitat or are within 0.5 miles as outlined in the Utah Ecological Office's Guidelines for the Identification of Suitable Habitat for WYBCU in Utah; Clay Hills Crossing, Paiute Farms accessible shoreline (Figure 55), Last Chance Creek (Figure 55), and the Lees Ferry District (Figure 53). The proposed critical habitat designation that includes portions of Paiute Farms will be discussed under Section 9.2 below.

Suitable habitat during migration is available in the vicinity of the Clay Hills Crossing takeout for river

runners (Figure 55). Upstream along the San Juan River, starting about 2 miles upstream, patches of suitable habitat exist that may also support breeding, although they are relatively small and isolated. Small dense patches of large tamarisk also occur, although without emergent trees, near the road end at the Paiute Farms accessible shoreline (Haltermann et al. 2015).

There is one record from June 1995 at Lees Ferry where the paved road ends at the boat ramp. Dense riparian thickets occur both downstream and upstream of the ramp for ca. 0.5 miles. Although generally not multilayered, there are some areas with overstory cottonwoods south of the ramp in the vicinity of the river runner camp, although no cuckoos have been reported from this area (Figure 53).

Last Chance Creek, where park road 230 crosses, includes some native riparian species, but is largely dominated by tamarisk, much of which is dying due to the tamarisk leaf beetle. The area above and below the road crossing is very marginal suitable habitat, but the use of the area during migration by cuckoos cannot be ruled out (Figure 54).

Extensive suitable habitat also occurs in Glen Canyon along the San Juan, Colorado, Green, Dirty Devil and Escalante Rivers, but with the exception of Lees Ferry, Paiute Farms and Clay Hills Crossing, these are all in more remote areas well removed from the project area accessible shorelines and roads, and are also all >0.5 miles from any portions of the project area.

Exotic plant control and management along the San Juan River has been conducted by the Navajo Nation. These activities include control of Russian olive and several herbaceous exotics, and occur in areas above Grand Gulch, and thus would have only insignificant indirect effects to migrating individuals, and may produce minor to major beneficial effects on migratory habitat in the future.

The recent introduction, spread, and effect of the tamarisk leaf beetle threatens the yellow-billed cuckoo by defoliating and killing tamarisk-associated nesting habitat (Paxton et al. 2011). The leaf beetle has expanded into the southwestern United States 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). Loss of tamarisk vegetation without replacement by native trees will likely impact the yellow-billed cuckoo and other riparian bird populations (Paxton et al. 2011).

Numerous climate change studies have revealed that the Southwest is warming rapidly, and this may be affecting many Neotropical migrant bird species such as the yellow-billed cuckoo. A study conducted by Anders and Post (2006) revealed the tendency of cuckoo populations to decline after warm years, suggesting that this species may be sensitive to climate change. Therefore, climate change may indirectly affect cuckoo food availability and habitat quality, resulting in population declines (Anders and Post 2006).



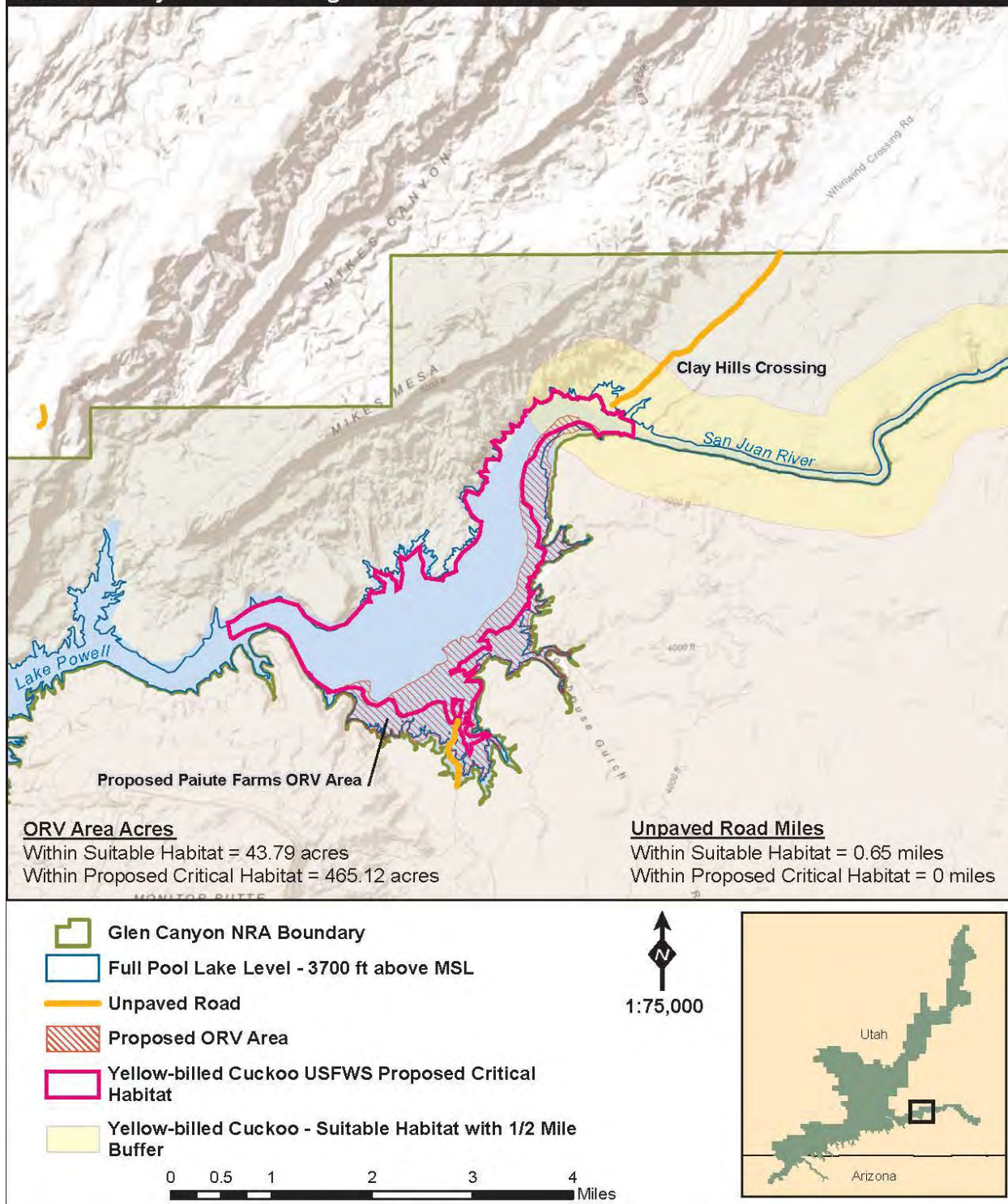
**Figure 55. Yellow-billed Cuckoo proposed critical habitat overlap with plan area roads and proposed ORV Areas in the Clay Hills Crossing area.**

Glen Canyon National Recreation Area, Arizona/Utah

National Park Service  
U.S. Department of the Interior



**Yellow-billed Cuckoo Proposed Critical and Suitable Habitat - Clay Hills Crossing and Paiute Farms**



### ***Jones cycladenia (Threatened)***

*Cycladenia humilis* var. *jonesii* was first collected from the Pipe Spring area in Arizona and Utah in 1882 by Andrew Siler (USFWS 1986), but was not described until 1942 by Alice Eastwood (USFWS 1986). Recent genetics work suggests that the varietal status of the species may need to be re-evaluated, as a preliminary study found that there were significant differences found in California populations but few between known populations in Nevada and the Colorado Plateau (Last 2009). The species is found in Utah and Arizona on Chinle, Cutler, and Summerville Formations (Spence 1994), with related varieties in Nevada and California. There is no designated critical habitat for the species. Overlap of Chinle deposits with Ferry Swale area roads and accessible shorelines can be found in Figures 56 – 58.

*Cycladenia humilis* var. *jonesii* is a showy, pink flowered perennial that ranges from 11 to 36 cm tall, with round somewhat thickened leaves in opposite pairs, growing on steep Chinle Formation substrates in Glen Canyon NRA (Spence 1994). It is highly rhizomatous, which seems to account for most of its persistence and spread, since sexual reproduction is quite rare (Sipes and Tepedino 1995, Spence 1994). Flowering typically occurs between April and June, followed by senescence of ramets in summer. Fruit set is very low, aborted seed numbers are high, pollinators are rarely seen, and seedlings are rare to non-existent (Sipes and Tepedino 1995, Spence 1994, Hughes 2000). Surveys at one location, the Purple Hills, near Moody Canyon between 1992 and 2013 indicate a highly significant increase in the number of ramets, particular since 2007 ( $r^2=0.78$ ; Spence and Palmquist 2014).

All known populations in the park except one are on extremely steep Chinle slopes, typically at angles >35 degrees, in remote areas well removed from park roads, typically >1/2 mile and at 500-1000 feet higher in elevation. The one exception is a population in Middle Moody Canyon, ca. 2 miles down canyon from the end of NPS Route 332. This population occurs on less steep slopes and flat areas near the bottom of the wash near a hiking trail. This population represents <1% of the total estimated ramets among all GLCA populations. It is possible for illegal off-road activity in this canyon to affect portions of this population.

Accessible shorelines with Chinle outcrops include Copper Canyon, Paiute Farms and Blue Notch. Informal surveys have been conducted at Blue Notch, but not the other two shorelines. As part of the proposed project additional surveys will be conducted at all suitable shorelines in the spring of 2016 using recommended protocols for rare plants developed by the USFWS. If populations are found they will be excluded from the project area by the use of barriers (see proposed conservation measures).

### ***Brady's pincushion cactus (Endangered)***

*Pediocactus bradyi* was listed as endangered under the ESA in 1979 (44 FR 61784; USFWS 1985), due to illegal collecting and its extremely small geographic distribution in northern Arizona. The species is an extreme habitat specialist, requiring white gravel/cobble surfaces overlying swelling clays. Currently, all known occurrences are associated with the Kaibab Limestone Formation and the underlying Moenkopi Formation (Haskins 2015). Critical habitat has not been designated for the species.

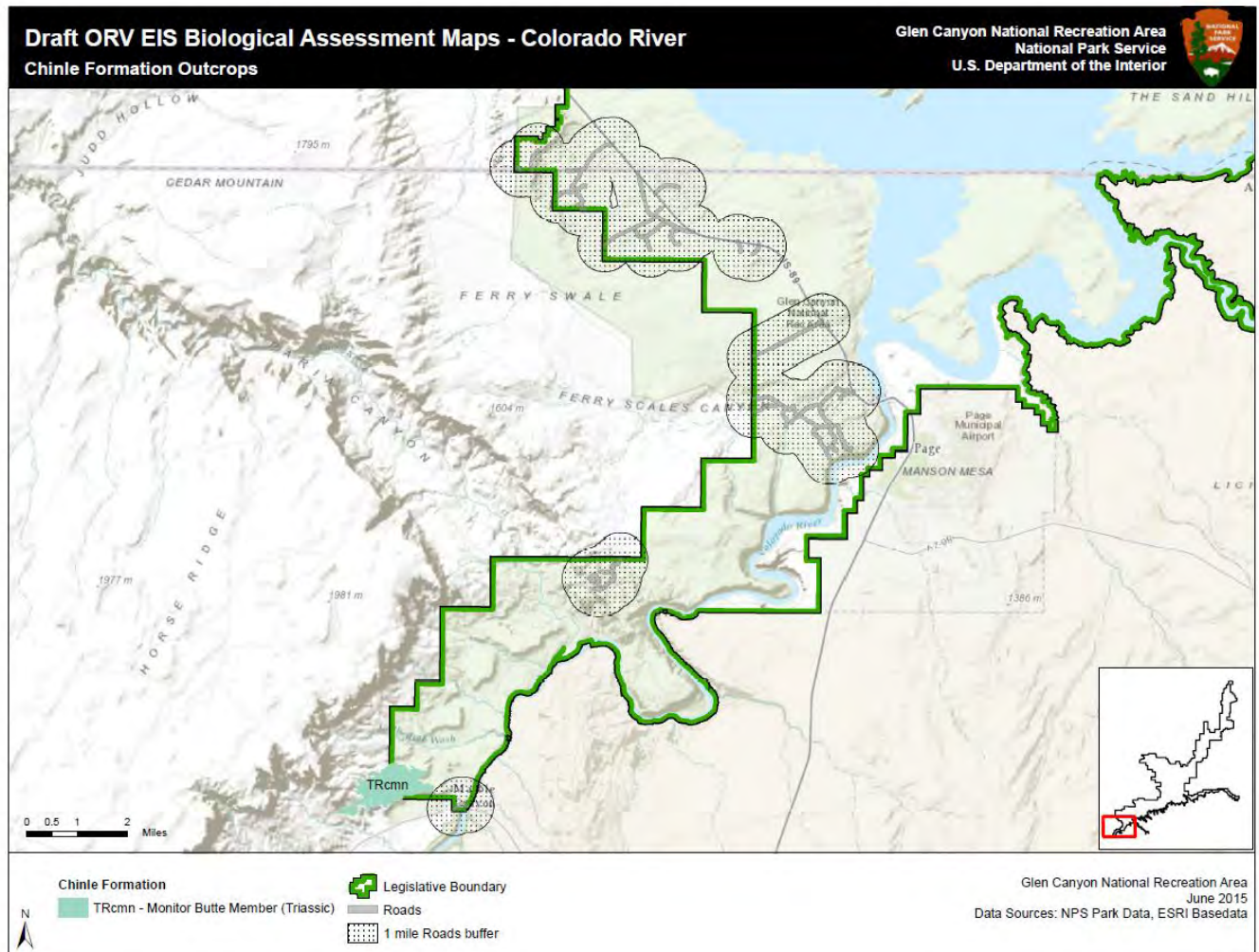
The species is a small single-stemmed cactus with diameters reaching ca. 60 mm in large individuals, and has large pale cream flowers that open in early to late March. The species, like other members of the genus, has contractile roots that partially or completely pull the plant underground as the soils dry out. The underlying clays, when wet, start to swell and push the plants back aboveground in winter (Spence 1993).

In Glen Canyon, *P. bradyi* has been found only in the Lees Ferry area, in a polygon ca. 2 x 3 km south of the Paria River, and between the canyon rims and the paved Lees Ferry access road. This area includes

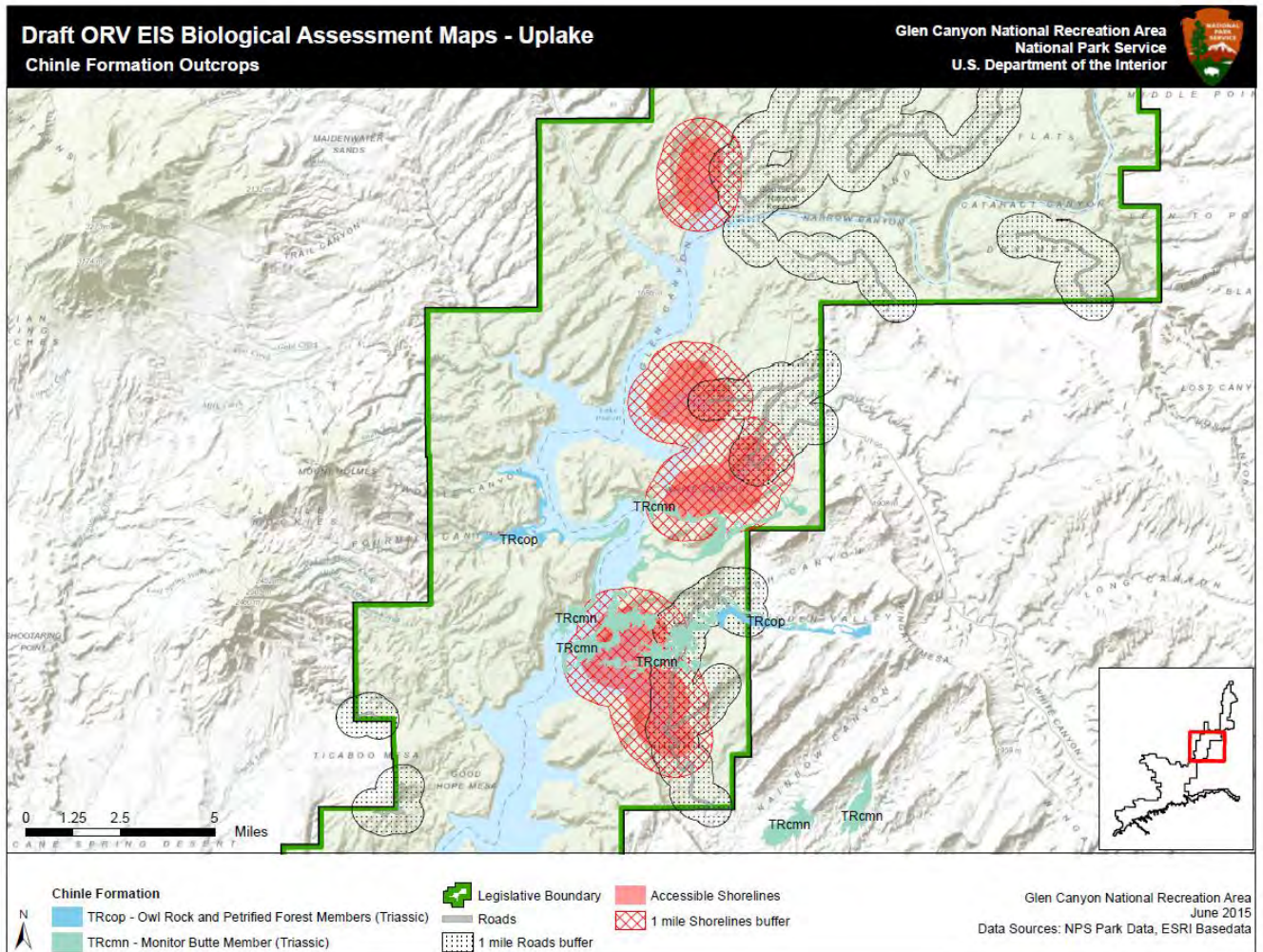


ca. 600-700 hectares of suitable habitat. All of this habitat was surveyed by trained botanists, primarily in 2013-2015, away from known occurrences and long-term monitoring plots. In all ca. 600 plants were located, but there are likely more as the species is extremely difficult to detect, especially when not in flower. A few plants occur within ca. 100 meters of the paved road on the east side.

**Figure 56. Chinle Formation Outcrops Associated with the Ferry Swale Area Roads.**

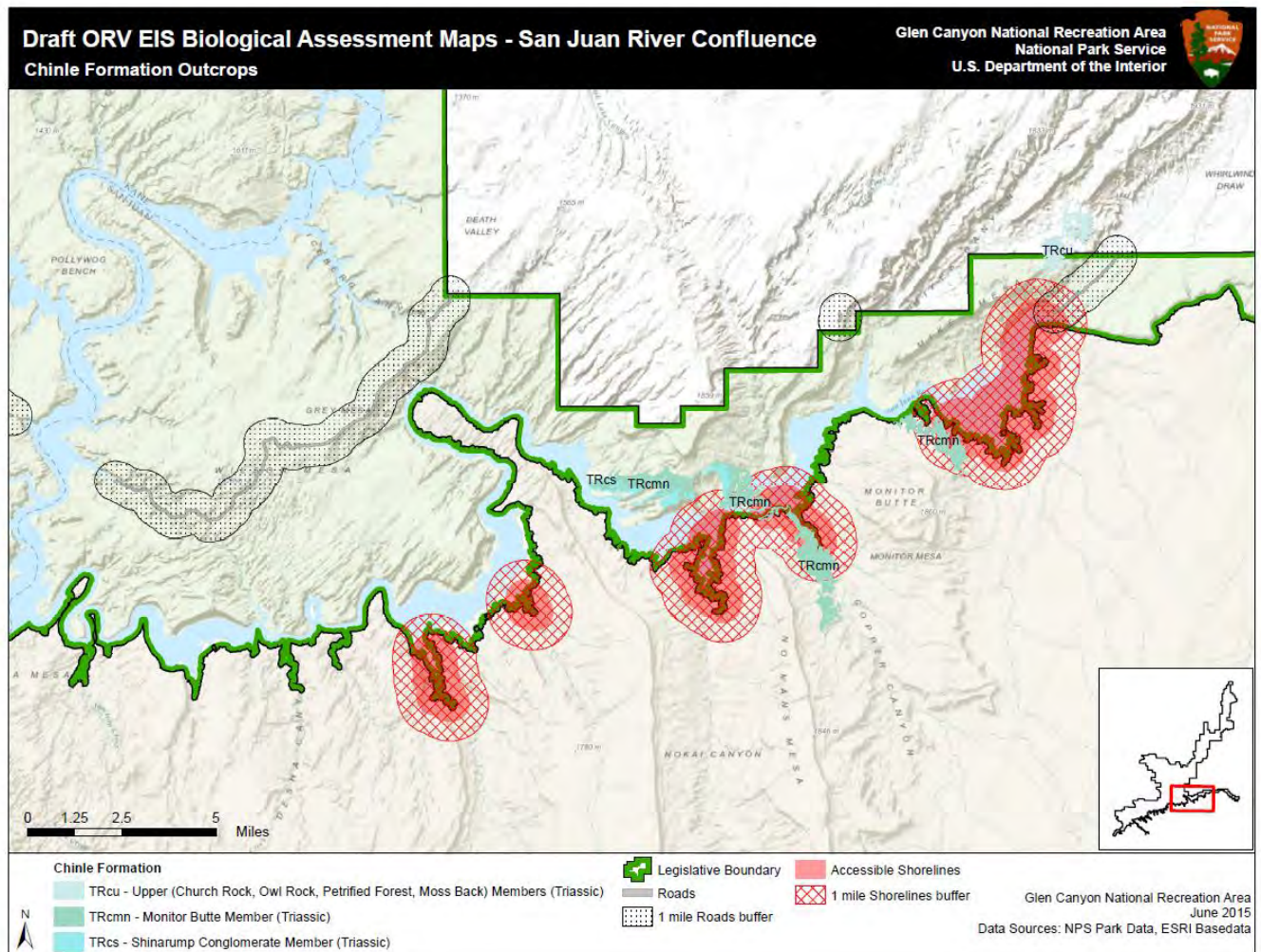


**Figure 57. Chinle Formation Outcrops Associated with Accessible Shorelines in Upper Lake Powell. Shorelines include Dirty Devil, White Canyon, Farley, Blue Notch, and Red Canyon.**





**Figure 58. Chinle Formation Outcrops Associated with Accessible Shorelines in Upper San Juan Arm of Lake Powell. Shorelines include Neskahi, Nokai Dome, Paiute Canyon, Copper Canyon and Paiute Farms.**



A working group composed of NPS, USGS, BLM, Navajo Nation and Flagstaff Arboretum botanists has been formed, initiated with ESA Section 6 funding, to complete surveys and to study the genetics and ecology of the species. Using a random stratified sampling approach with points throughout the potential suitable habitat and geographic range of the species, the species' overall status and distribution will be determined. This work will be completed in 2016.

### ***Siler's pincushion cactus (Threatened)***

*Pediocactus sileri* was originally listed as endangered under the ESA in 1979, but subsequent surveys revealed many additional populations and its status was downgraded to threatened in 1993 (USFWS 1993). It is a medium-sized species reaching 10 cm in height and 7-8 cm wide, with flowers that are yellowish with purple veins. The principal flowering time is March through April. The species occurs on gypsiferous badlands derived from the Red Member of the Moenkopi, primarily in northwestern Coconino County and adjacent Washington and western Kane Counties in Utah. Elevations range from ca. 900-1700 meters. The species has not been found in GLCA, but since there are a few records on both Chinle and Kaibab Formations which do outcrop in the park, there is a slight possibility that it might be found with additional surveys, likely at some of the accessible shorelines where Chinle deposits occur. Recent work within the range has shown major mortality in the past few years for this species (FERC Lake Powell Pipeline Project Draft Preliminary Licensing Proposal, 2015). There is no designated critical habitat for the species.

## **8.0 Environmental Baseline**

As defined under the ESA, the environmental baseline includes past and present impacts of all federal, state, and private actions in the action area; the anticipated impacts of all proposed federal actions in the action area that have undergone formal or early section 7 consultation; and the impact of state and private actions which are contemporaneous with the section 7 consultation process. Future actions and their potential effects are not included in the environmental baseline. This section in combination with the previous section defines the current status of the species and its habitat in the action area and provides a platform to assess the effects of the proposed action under consultation with the USFWS.

Profound changes to the ecosystems conditions have occurred within the action area over the past 150 years that can be attributed to both direct and indirect human impacts. Much of these occurred prior to the establishment of the Glen Canyon in 1972 or the withdrawal of much of the action area for reclamation purposes in 1953. Prior to establishment of Glen Canyon, timber harvest and road construction from mining and other settlement activities as well as intensive livestock grazing affected most of this area. Native Americans had much less intensive and extensive impacts on the landscape. Although their influences on fire and game populations may have been ecologically significant, the magnitudes of these impacts were less than the changes wrought during the Euro-American settlement period.

Much of the area was only sparsely settled by Euro-Americans until the latter decades of the 19<sup>th</sup> century, when the Church of Jesus Christ of Latter Day Saints began a focused settlement of much of Southern Utah and Northern Arizona. Typical of these settlement efforts was the construction of the Hole-in-the-Rock Road from the community of Escalante, UT in order to cross the Colorado River and found the community of Bluff, UT (DOI-BLM-UT-0300-0008-EA 2011). The Lonely Dell Ranch and nearby Lees Ferry Crossing are typical of early pioneer settlement activities that took place within the Glen Canyon area.

Lands within Glen Canyon were first used for livestock grazing 100 years prior to the establishment of the recreation area (NPS 2015). Since then, grazing has had an adverse effect on vegetation by changing



plant community composition and structure in upland areas and increasing the presence of nonnative and exotic vegetation. Grazing has had an adverse effect on vegetation by changing plant community composition and structure in upland areas (Bich, et. al. 1995) and increasing the presence of nonnative and exotic vegetation. Research has shown that livestock grazing can promote the spread and dominance of certain invasive exotic species, such as cheatgrass (*Bromus tectorum*), red brome (*Bromus rubens*), halogeton (*Halogeton glomeratus*), and Russian thistle (*Salsola pestifer*). In addition, past and current grazing activities have likely impacted riparian areas within the districts by increasing erosion, reducing native vegetation, and reducing water quality. Previous studies have indicated that grazing significantly reduces the shrub, cryptogammic, and herbaceous cover on sites; and in arid regions, recovery after grazing can take many years (Jefferies and Klopatek 1987).

Mineral resources within Glen Canyon include oil-impregnated rock, oil and gas, coal, uranium, vanadium, copper, manganese, gold, construction materials, halite and gypsum. Mining activities over the past two centuries have had location-specific impacts at prospect locations and several larger uranium mine ventures such as the Jomac, El Pequito and Whirlwind mines, but the largest impact associated with mining has been the bulldozing of over 100 miles of roads during exploration activities in the period of 1940-60. Many of these roads have been reutilized for recreational and grazing access in more modern times, and a substantial quantity have revegetated as part of natural succession patterns.

By far the largest impact on the area was the damming of the Colorado River and the creation of Lake Powell, which began to fill in 1963 and reached full pool in 1980, impounding 25,000,000 acre-feet of water, flooding 163,000 acres of canyons and backcountry, and altering the historic flooding pattern along the main stem of the Colorado River. All four federally listed fish species were eliminated from resulting Lake Powell either by direct impacts or from predation by introduced non-native fish such as striped bass. Riparian woodlands along the original river channel and the associated glens and pools in side canyons were eliminated, removing breeding, feeding, roosting and other habitats important for federally listed birds, especially the southwestern willow flycatcher, which was abundant in Glen Canyon prior to the reservoir. The rising and falling water levels as a result of natural fluctuations and dam operations have exposed more or less of the accessible shoreline areas, negatively impacting vegetation. Due to fluctuating lake levels, native vegetative communities are not able to establish along the shoreline, limiting shoreline vegetation. The fluctuating water levels along the shoreline create suitable conditions for exotic species to thrive, increasing the nonnative vegetation cover along the shoreline and displacing native vegetation (NPS 2015).

Hydroelectric power facilities were constructed concurrently with the Glen Canyon Dam as well a number of transmission stations and power lines that transmit electricity to and from the area. The enabling legislation for Glen Canyon provides for a utility corridor in which rights-of-way were established. Disturbance of soils, vegetation and wildlife has primarily been limited to the construction sites, but roads associated with the operation and maintenance of these utility lines provided additional access to the surrounding areas, with the corresponding direct and indirect impacts to a larger footprint than the original construction.

Recreational development in Glen Canyon began in force soon after the creation of Lake Powell in 1963 and has included the construction of multiple marinas, lodging, boat ramps, parking areas, campgrounds, access roads, housing and visitor facilities (NPS 1979). Other activities that have resulted in impacts on the natural environment include motor vehicle use, hiking, boating, commercial filming and photography, and routine park operations. These activities and their effects to species and their habitats are particularly relevant and important in Glen Canyon where increased human developments such as the Wahweap and Bullfrog Marinas, Burr Trail and Warm Creek Roads and Lees Ferry Boat Ramp have all impacted each of these species directly and indirectly, both in the short and long-term.

The spread of tamarisk leaf beetles (*Diorhabda* spp.; to control tamarisk *Tamarix* spp.) in Glen Canyon has resulted in beneficial impacts on native vegetation. The tamarisk leaf beetle was released as a biological control agent in certain areas of the West in 2001 to help manage tamarisk, which is a highly invasive plant that grows along the Colorado River and in riparian habitats throughout the Southwest (NPS n.d.d). Although the beetle was not released in Glen Canyon, it has arrived and thrives at various locations throughout Glen Canyon since ca. 2010. Tamarisk is known to displace native trees such as cottonwoods and willows, can reduce habitat quality for native animals, increase soil salinity, and increase the risk of fire; therefore, continued defoliation of tamarisk would result in long-term beneficial impacts on vegetation (NPS n.d.d). However, there are concerns in managing tamarisk: defoliation may lead to site conditions that favor the establishment of other invasive nonnative plants and an increased short-term fire hazard may result if the majority of tamarisk is killed in an area and dense stands of dead stems remain (Harms and Hiebert 2009). Therefore, although beneficial impacts would result over the long term, localized short-term adverse impacts on vegetation are likely to result from the removal of tamarisk.

Off-road use can have an adverse impact on ambient air quality through its destabilizing effects on soils and through mobile source emissions. Additionally, impacts of fugitive dust due to off-road activity can be problematic. In considering whether to analyze the impacts of the proposed action on air quality in detail, NPS relied on current and predicted use numbers for Glen Canyon, creating models using the American Meteorological Society / U.S. Environmental Protection Agency Regulatory Model (AERMOD) which contains results based on five years of meteorological data collected at Page, AZ for 2005–2009. The analysis demonstrated that current off-road driving by conventional vehicles and OHVs had minimal impact on air quality and would not result in emission levels that would be harmful to the environment. Dust can also be a concern related to off-road driving of conventional and non-conventional motor vehicles. One cactus species (*Pediocactus bradyi*) found in Glen Canyon is especially susceptible to dust. However, according to a recent survey, this species does not exist within any of the areas in which OHV use currently occurs or is being contemplated. Based on AERMOD dispersion modeling, the air quality analysis concluded that additional OHV use would not cause or contribute to any exceedances of the particulate matter National Ambient Air Quality Standards. Further, since off-road use under this plan/EIS would be primarily for reaching shoreline destinations and then parking, dust is anticipated to be minimal.

The two potential impacts on water resources from current off-road use are disturbance and pollution. Disturbance occurs as off-road use breaks down stream banks, compacts soils, and damages riparian vegetation, all of which can lead to erosion and siltation; however, no off-road use is occurring in riparian areas of Glen Canyon. Pollution may occur if motorized vehicles leak or otherwise discharge oil or gasoline, or if increased public use due to off-road access leads to problems with human waste management.

Due to the ephemeral nature of the streams in off-road use areas and the overall arid climate, disturbance and the resulting erosion has not been an identified problem at Glen Canyon. Localized events may lead to increased turbidity of lake waters, which can cause decreased sunlight penetration, temperature variations, and the introduction of sediment; however, these impacts would be short term and localized, and would not cause a threat to water quality.

Each of these activities have directly affected the species addressed in this assessment directly and indirectly by habitat alteration such as removal and degradation of nesting/denning, foraging, and sheltering habitats, negatively affecting movement corridors, increased fragmentation, increased noise and other human disturbances which has displaced animals causing increased stress, mortality, and negatively affected reproduction. Thus, the distribution and abundance of populations has been negatively affected within the action area both in and outside Glen Canyon.

## 8.1 Previous Consultations with the USFWS Within the Action Area

**Table 5. Relevant past consultations with the USFWS and determinations for actions within the action area for all federally listed and proposed species.**

<sup>1</sup> ESA determinations: NE = No effect, NLAA = May affect, not likely to adversely affect, and LAA = May affect, likely to adversely affect.

| Project                                | Park Unit          | Type of Project          | Species Addressed   | Determination <sup>1</sup> | Date        |
|--|--------------------|--------------------------|---|----------------------------|-------------|
| <i>Personal Watercraft Rulemaking</i>  | <i>Glen Canyon</i> | <i>Recreation</i>        | <i>Humpback Chub, Bonytail Chub, Colorado Pikeminnow, Razorback Sucker, Bald Eagle, American Peregrine Falcon, Southwestern Willow Flycatcher, Western Yellow-Billed Cuckoo</i> | <i>NLAA</i>                | <i>2002</i> |
| <i>Uplake Development Concept Plan</i> | <i>Glen Canyon</i> | <i>Facility Planning</i> | <i>Humpback Chub, Bonytail Chub, Colorado Pikeminnow, Razorback Sucker, Bald Eagle, California Condor, Mexican Spotted Owl, Southwestern Willow Flycatcher</i>                  | <i>NLAA<br/>NE</i>         | <i>2006</i> |
| <i>Rim Trail Project</i>               | <i>Glen Canyon</i> | <i>Trail Plan</i>        | <i>California Condor, Mexican Spotted Owl; Brady Pincushion Cactus</i>  | <i>NLAA</i>                | <i>2009</i> |

## 8.2 Past and Current Activities within the Action Area

As described previously in Sections 4.0 and 8.0, human use of the action area has occurred in the past and continues to impact the area.

The Bureau of Reclamation manages the operations of Glen Canyon Dam and the resulting storage of water in Lake Powell. Water levels in Lake Powell will continue to fluctuate on average of 25 vertical feet but as much as 60 feet annually within a lake level range of 3,490 and 3,720 feet above mean sea level. Within this vertical range shorelines along Lake Powell can migrate up to a half-mile between a high lake level after spring run-off and lower levels during late winter. Resulting impacts on shoreline vegetation and soils will continue to effect species utilizing these habitats.

The operation of hydroelectric power facilities at the Glen Canyon Dam continues through the present and has impacts that are similar to the operation of Lake Powell as a flood storage reservoir. Roads associated with the operation and maintenance of these utility lines continue to provide access to the surrounding areas within the utility corridor that crosses the Ferry Swale area with the corresponding direct and indirect impacts to a larger footprint than the original construction of the transmission lines.

Grazing within Glen Canyon is administered by the Bureau of Land Management (BLM). Grazing has continued and is permissible under Glen Canyon's enabling legislation. The BLM and NPS work together to administer grazing leases and protect the values and purposes of the recreation area. Currently, four BLM districts administer the 34 grazing allotments including Grand Staircase Escalante National Monument, Hanksville Field Station, Monticello Field Office, and Arizona Strip Field Office. Glen Canyon includes all or part of 34 grazing allotments encompassing approximately 882,678 acres. However, no livestock grazing is authorized in five of these allotments (approximately 120,317 acres). Four areas (Antelope Island, Horseshoe South, Robber's Roost and the Escalante River) covering approximately 71,705 acres are no longer grazed by livestock due to retirement of the grazing privileges

through a willing seller/buyer arrangement. In addition, approximately 139,522 acres park-wide within Glen Canyon are not within designated grazing allotments (NPS 2015).

Current grazing operations would contribute ongoing, incremental adverse impacts to vegetation associated with livestock grazing. NPS management of grazing would also result in beneficial effects to vegetation by providing additional management tools such as modifications to season of use, stipulating maximum forage utilization for different seasons and plant communities, by identifying desired conditions for plant communities, and protecting special status species and important or sensitive communities (NPS 2015).

Human-caused sounds, including watercraft, off-road vehicles, and aircraft overflights (air tours, general aircraft, military operations, and high altitude commercial jet aircraft) are present at Glen Canyon. Past acoustic monitoring has shown that sound characteristics and noise levels vary greatly at Glen Canyon depending on location and time of year (Ambrose and Florian, 2013). Although higher noise levels occur consistently in developed areas (e.g. marinas) and near the lake during the summertime, the large and remote backcountry of the park reflects very low ambient sound levels, in some cases levels below the ability for monitoring tools to detect. The majority of air tours at Glen Canyon occur above or adjacent to Lake Powell, Rainbow Bridge, and Horseshoe Bend on the Colorado River below the Glen Canyon Dam, with only a small portion occurring in or near the action area.

Mining activities described earlier in this section have largely ceased. There are 99 listed mine features in the abandoned mine lands database within Glen Canyon and no mines are currently active. The enabling legislation designated the BLM for the administration of any future mining leases, and the only potential leasing opportunities are for 85,000 acres of tar sands within Glen Canyon that form part of the Tar Sands Triangle of southern Utah that was mapped in the early 1960s.

Recreational activities including boating, auto touring, backpacking, horseback riding, rafting, ORV use, fishing, hunting and hiking have grown since the opening of the area to recreation in the early part of the century. Over two million visitors visit Glen Canyon annually. Most large developments of visitor facilities have already occurred and the majority of current park operations consist of the replacement of older facilities and the maintenance of current facilities.

Similar to tamarisk, at the GSENM District, Russian olive (*Elaeagnus angustifolia*) was brought into the area as erosion control after the Dust Bowl in the 1930s. Since then, the species has spread, replacing native vegetation in the towns of Escalante and Boulder, and along the Escalante River. In general, Russian olive causes river channelization and is shading the river corridor, cooling the water temperature. Since 2000, volunteers have been working on Russian olive removal and restoration of the Escalante River watershed (Escalante River Watershed Partnership 2011; Spence and Whitham 2015). Although short-term adverse impacts are likely to result from removal efforts (i.e., reduction in vegetative cover), beneficial impacts have resulted and would continue for vegetation from the removal of Russian olive along the Escalante River as native vegetation may return.

In addition to controlling tamarisk and Russian olive, the NPS has been controlling Ravenna grass (*Saccarum ravennae*) along the Colorado River corridor and around Lake Powell. Ravenna grass was initially planted as an ornamental at Lees Ferry in the late 1970's. The grass germinates in a wide variety of soil and canopy cover conditions and is a threat to riparian habitats (Stevens n.d.). The past, ongoing, and future control of this species will have a beneficial impact on riparian and spring vegetation in the district as it is an aggressive invasive species that out-competes all other plants.

Each of these activities have directly affected and will continue to affect the species addressed in this assessment directly and indirectly by habitat alteration such as removal and degradation of



nesting/denning, foraging, and sheltering habitats, negatively affecting movement corridors, increased fragmentation, increased noise and other human disturbances which has displaced animals causing increased stress, mortality, and negatively affected reproduction. The scope of these effects varies widely within the action area as described in the following sections.

## 9.0 Effects to Evaluated Species / Critical Habit And Determinations

Throughout the following sections on evaluated species the terms insignificant and discountable are used, and are defined as:

- Insignificant effects: “relate to the size of the impact and should never reach the scale where *take* occurs. Based on best judgement, a person would not (1) be able to meaningfully measure, detect or evaluate insignificant effects”;
- Discountable effects: “are those *extremely unlikely* to occur. Based on best judgement a person would not (2) expect discountable effects to occur”.

Within the action area, the acres of disturbance are considered to be those along the GMP road and ORV route corridors and within the allowed or proposed ORV areas. The total acres of existing disturbance is calculated as 7,640 acres, distributed across the 1,254,306 acres of Glen Canyon as follows:

- 75 miles of paved roads with an estimated corridor of 66’ (0.0125 miles) or 600 acres
- 313 miles of unpaved roads with an estimated corridor of 24’ (0.0045 miles) or 910 acres
- 15 accessible shoreline ORV areas of varying size with a total of 5,950 acres, and
- Lone Rock Play Area ORV area of 180 acres.

No new previously undisturbed lands will be impacted by this plan, and one accessible shoreline, Warm Creek, will be closed (50 acres).

### 9.1 Federally Listed Species

#### *California Condor*

##### Direct and Indirect Effects

The back country unpaved road network in the park existed prior to its creation in 1972. At this time California condor had not been documented from Arizona or Utah for >40 years, and had not been re-introduced. Thus effects of unpaved road use were not analyzed. Individual condors or small groups of juveniles can occasionally be seen soaring over Glen Canyon. Since condors are curious birds they are often attracted to human activities. There is potential for individuals to fly over and land in or near the project area, or to visit and roost on surrounding cliffs and rims, although roosting and other ground-based activities are highly unlikely around humans and their vehicles due to training protocols to reduce approaching humans by the released animals. In rare cases, condors may be directly affected (flushing, increased stress levels) by interaction with vehicles and recreationists on project area roads or shorelines.

Collisions between birds and conventional motor vehicles, OHVs, and street-legal ATVs cannot be entirely ruled out, but would be considered discountable. There are no documented records of vehicle-condor collisions in the park since re-introduction efforts started in 1996. Noise-induced stress and flushing from carcasses and roosts may occur, but would be considered insignificant due to condors rarely

using the project area. Implementing reduced speed limits of 15 mph at Lone Rock and accessible shorelines, and 25 mph on most park roads and at Ferry Swale would help further reduce and minimize negative impacts of off-road use by reducing the level of noise and impacts related to vehicle travel at higher speeds. The closure of 38 miles of ORV routes in the Ferry Swale area will have additional beneficial effects as this will decrease the potential for collision of vehicles with condors and reduce the level of noises and associated impacts. Interaction with and disturbance from the public would continue to occur regardless of implementing the proposed action. Generally, park rangers and resource staff will communicate with staff from the Peregrine Fund and Arizona Game & Fish Department to prevent or stop these interactions.

Modeling results (see EIS Ch. 4 Sound Analysis) using anticipated increases in vehicle numbers in the project area indicate in general relatively minor increases in sound levels beyond ambient background (20 dBA) for the project area. For GMP roads and accessible shorelines typical modeled levels range from 20-35 dBA at ca. 800' feet from roads and shorelines. These levels are unlikely to have more than very minor and localized effects on condors, including potential increases in physiological stress, and flushing birds from carcasses or roost sites. However, condors are extremely rare in the project area, thus these impacts are considered discountable. At 0.5 miles no road or shoreline modeled values rise above the level of background natural ambient conditions. Thus these slight increases in ambient noise levels are considered insignificant.

#### Cumulative Effects

Cumulative effects are defined somewhat differently under ESA and NEPA. Under ESA, cumulative effects are reasonably foreseeable future state, private and tribal activities only. For ESA cumulative effects, we do not consider the effects of future federal actions. ESA cumulative effects are additive to the environmental baseline (past and ongoing actions and their effects) we described above in that section of the BA. Conversely, under NEPA, cumulative effects include all past and ongoing actions and their effects that are additive to the effects from all reasonably foreseeable future actions (federal and non-federal) as well. For ESA consultation purposes in this BA, we use the ESA definition of cumulative effects.

A summary of non-federal (private, state, or tribal only) activities that are reasonably likely to occur within the action area and that directly and indirectly affect species/critical habitat are addressed in this section by species. These are added to the environmental baseline (discussed above).

Future activities that may affect California condors include river recreation, aircraft overflights, and actions on adjacent Navajo Indian Reservation lands. These future non-federal activities occur on a regular basis, and will continue to occur regardless of whether the proposed plan is implemented. The most likely impacts are from people-condor interactions, recreational activities that may disturb roosting birds, or aircraft flights that may force condors to take evasive maneuvers. Recreation is increasing in the area, and will likely continue to increase, leading to greater numbers of visitors and increased aircraft and boat activities.

The canyon rims along the project area are less than ten miles from Page Municipal Airport, which has daily flights by commuter companies, as well as commercial air tours during the spring through fall seasons, and year-round private plane use. Planes fly over the rims in the area on a daily basis. The Federal Aviation Administration (FAA) policy directs pilots operating noise producing aircraft (fixed-wing, rotary-wing and hot air balloons) over noise-sensitive areas to make every effort to fly not less than 2,000 feet above ground level, weather permitting, to reduce potential interference with wildlife and complaints of noise disturbances caused by low flying aircraft over noise-sensitive areas (FAA 2004). The noise level of most of these aircraft is higher than any noise that will be generated by project

implementation activities (e.g., motor vehicle use). In addition, air tours occasionally occur along the rims of Glen Canyon below the dam, including in areas near attempted nesting by California condors. The NPS is currently working with FAA and the air tour operators to alter tour routes in the canyon corridor to reduce or eliminate impacts to raptors and condors. Other projects and planning actions by for utility access by the Arizona Department of Transportation (DOT, Coconino County) may occur.

To the south of Ferry Swale and along the accessible shoreline areas south of the San Juan River and Arm is the boundary of the Navajo Indian Reservation. The local landowners live fairly close to this boundary, and in the future may attempt to develop their lands along the river or canyon rims. However, to date no development has occurred or been proposed.

#### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

#### Incidental Take

There will be no incidental take of this federally listed species under this proposed action.

#### Effect Determination

For California condor, the NPS determination is *may affect, not likely to adversely affect*. This determination is due to the rarity of the species in the project area, and the extremely unlikely and discountable possibility of a condor-vehicle collision and minimal increases in noise levels. Also, stress-related effects from noise and vehicle activity would be considered discountable and insignificant due to general avoidance by birds of areas where humans occur. Project implementation activities will be relatively short term, involve relatively few workers, and will produce relatively little noise and dust. The Applicant Committed Conservation Measures (Section 3.3) for California condor are part of the proposed action and will be implemented to mitigate any potential effects and to support the determination. These include among others appropriate contacts in case condors are detected in the project area, reduced speed limits, monitoring of condor activities, additional protection measures including temporary closures, and providing information to recreationists on the species status and behavior. These conservation measures, along with potential impacts and determination effects are summarized in Table 6.

#### ***Mexican Spotted Owl***

##### Direct and Indirect Effects

Mexican spotted owl was not listed when Glen Canyon was established, thus the effects of keeping these unpaved roads open were not analyzed. Analysis of current Mexican spotted owl data shows that existing park roads and several proposed ORV areas and routes within the project area overlap with both suitable and designated critical owl habitat (Figures 40 - 51). Table 7 lists the geographic correlation of the applicable project components with designated critical habitat and records of owl occurrence. NPS has assessed the presence and intensity of current and proposed vehicle use on and off park roads in the Glen Canyon Off-road Vehicle Management Plan / Draft Environmental Impact Statement (NPS 2016). The assessment factored in the distance, frequency, duration, and source of the disturbance from these recreational activities, and the preferred alternative limits human activities during the breeding season in areas occupied by owls.

**Table 6. Summary of potential effects to California condor, proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects                                   | Conservation Measures  | Effect Determination           |
|---|--|--------------------------------|
| Attracted to workers and project activities         | Human-avoidance training prior to release; educational materials for visitors; project work done in non-breeding season                          | Insignificant and Discountable |
| Vehicle collisions                                  | Reduced speed limits on unpaved roads and accessible shorelines  | Insignificant and Discountable |
| Flushing and other adverse behavioral effects noise | Reduced speed limits; insignificant increases in noise levels based on modeling results; project work done in non-breeding season                | Insignificant and Discountable |
| Interference with nesting and breeding              | Temporary closures within 1 mile of nests; further coordination with USFWS; any project work done in non-breeding season                         | Insignificant and Discountable |
| Closures  | Closures of Warm Creek shoreline, closure and restoration of some sections of unpaved roads in Ferry Swale will reduce noise and vehicle impacts | Beneficial                     |

Potential effects include vehicle-bird collisions, flushing or altered foraging and roosting behaviors from noise and human activities, and potential effects to breeding near nest sites. Since owls are active at night, some effects are likely to be reduced compared with diurnal species. Migration and dispersal patterns are unlikely to be effected by the proposed plan actions, as these behaviors occur at night, and strict noise limits are enforced between 10 PM and 6 AM year-round throughout the park. Vehicle and noise effects may affect individuals at roost sites or around nests during daylight hours. Visitation within the project area is most common during the period May-September, thus some overlap occurs with owl breeding activities. In most instances, likely disturbances have been avoided or reduced by siting ORV areas, routing ORV routes and designating park roads for street-legal ATV and/or OHV use outside designated critical and suitable habitat to the extent possible. In addition, low posted speed limits on most unpaved roads and at accessible shorelines will greatly reduce any potential collisions with vehicles. There are no reported instances of owl-vehicle collisions in the park.

Two proposed ORV areas, Blue Notch and Red Canyon, are located along the shoreline at the terminus of these canyons with the Lake Powell shoreline in Good Hope Bay (Figure 48). These areas include some suitable habitat within the area and nearby. An historic occurrence of an owl has been noted on the northeastern edge of Mancos Mesa, which is ca. 1,000 ft. higher and greater than one mile from these proposed ORV areas. Because of the rough conditions of the adjacent access roads, the ruggedness of the surrounding terrain, and the long distances from paved roads, these proposed ORV areas are currently rarely used by visitors with conventional motor vehicles based on patrol data. Allowing the use of these areas by street-legal ATVs under the preferred alternative is not anticipated to substantially increase the use of these areas. Impacts on individual owls might be detectable, but would be considered minor and would be limited to potential noise-related impacts such as flushing of roosting birds within the designated shoreline.

Two proposed ORV areas, Farley Canyon and White Canyon, are located along the shoreline at the terminus of these canyons with the Lake Powell shoreline. Suitable owl habitat exists directly to the south of White Canyon (Figure 49). An historic occurrence of an owl has been noted on the flats near Farley Canyon to the northwest of the intersection of State Highway 95 and unpaved NPS Route 630, an unlikely location for other than a dispersing owl. NPS Route 630 and the Farley Canyon ORV area are currently utilized intermittently by visitors with conventional motor vehicles. The historic owl occurrence is located approximately one mile from the unpaved road. Allowing the use of these areas by street-legal



ATVs under the preferred alternative is not anticipated to substantially increase the use of these areas. Minor effects on this species might be detectable, but would be localized and would be limited to potential noise-related impacts to dispersing individuals including flushing of roosting birds within the designated accessible shoreline area, particularly between May and September when visitation peaks. The White Canyon area is no longer accessible to vehicles due to low lake level and is likely to remain so.

There are five accessible shoreline areas along the upper San Juan Arm (Figures 44 and 45). None of these are in designated critical habitat, but suitable habitat overlaps with some of them. In addition, high quality breeding habitat occurs on Navajo Nation lands adjacent to the Paiute and Neskahi areas (Figure 44). Because of the rough conditions of the adjacent access roads, the ruggedness of the surrounding terrain, access through the Navajo Nation, and the long distances from paved roads, these proposed ORV areas are currently only sporadically used by visitors with conventional motor vehicles, primarily local Navajo families who use the areas year-round. Allowing the use of these areas by street-legal ATVs under the preferred alternative is not anticipated to substantially increase the use of these areas. Owl-vehicle collisions would be extremely unlikely and would be discountable. Impacts on individual owls might be detectable, but would be considered minor and would be limited to potential noise-related impacts such as flushing of roosting birds within the designated shoreline.

The Dirty Devil accessible shoreline is along Highway 95 near the mouth of the Dirty Devil River, with most areas within 30 meters of the road (Figure 49). Suitable habitat occurs west of the shoreline and road on the adjacent cliffs. Allowing the use of these areas by street-legal ATVs under the preferred alternative is not anticipated to substantially increase the use of these areas. Owl-vehicle collisions would be extremely unlikely and would be discountable. Impacts on individual owls might be detectable, but would be considered minor and would be limited to potential noise-related impacts such as flushing of roosting birds within the designated shoreline. Use of this shoreline area has dropped off substantially in recent years due to low lake levels.

The Cave Spring owl sighting is adjacent (ca. 40 meters) to an unpaved park road (NPS Route 262) on Grand Bench (Figure 43), and at a lower elevation in a canyon than the road, within suitable habitat. Thus at this site, noise levels may equal or exceed the threshold of 69 dBA on occasion. However, there has been only a single incidental sighting at the cave by BLM staff in 2008 without accompanying documentation. This may have been a dispersing juvenile if correctly identified. The cliffs around Grand Bench include suitable habitat.

The Alstrom Point record (Figure 42) from September 23, 2014 was of an individual flying along the east rim, in several cases flying over the unpaved road to the point. Later, the bird was observed flying eastward towards Gunsight Butte. The age and origin of this bird is unknown, but may have been a dispersing individual. This road is fairly heavily utilized during daylight hours by visitors, primarily between April and September. This area includes some suitable habitat, generally along the cliffs around the Point. Thus there are potential impacts to roosting or dispersing birds.

The Crosby Canyon area (Figure 41) is not within designated critical habitat, but suitable habitat occurs within the area, and a small patch of high quality breeding habitat occurs to the southwest, ca. 1 mile from current shoreline areas. This area sees fairly high levels of visitation, and in the past has also been used as a movie set location. Impacts on individual owls might be detectable, but would be considered minor and would be limited to potential noise-related impacts such as flushing of roosting birds within the designated shoreline.

Beneficial impacts on Mexican spotted owls and suitable habitat, however, are possible at Warm Creek (50 acres and ca. 2.3 miles of unpaved roads) as a result of discontinuation of off-road use, although this area is not in designated critical habitat. Potential habitat within and to the west and east of this closed

**Table 7. Geographic correlation of project area components with Mexican spotted owl designated critical habitat and occurrences.**

| Project Area Component                                     | Component Type     | Critical Habitat Unit | Mexican Spotted Owl Occurrence  |
|--|--------------------|-----------------------|---|
| NPS Route 450  | Unpaved park road  | CP-13                 | No records in Wilson Mesa region  |
| NPS Route 332  | Unpaved park road  | CP-13                 | Closest record is >3 miles south in East Moody Canyon   |
| Middle Moody Trailhead                                     | ORV route          | CP-13                 | Closest record is >3 miles south in East Moody Canyon   |
| NPS Route 330  | Unpaved park road  | CP-13                 | Closest record is 20 miles north in Miller's Canyon   |
| State Hwy 276 and Bullfrog Marina roads                    | Paved roads        | CP-13                 | One record in unlikely location >1.5 miles south on island in Bullfrog Bay  |
| State Hwy 276 and Halls Crossing Marina roads              | Paved roads        | CP-13                 | One record in unlikely location >3 miles west on island in Bullfrog Bay   |
| Burr Trail   | Paved road         | CP-13                 | Miller's Canyon records are 8 miles to west   |
| Bullfrog North and South                                   | ORV area           | CP-13                 | One record in unlikely location >8 miles south on island in Bullfrog Bay  |
| Stanton Creek  | ORV area           | CP-13                 | One record in unlikely location >2 miles west on island in Bullfrog Bay   |
| Orange Cliffs Unit roads, including NPS Routes 633 and 744 | Unpaved park roads | CP-14                 | 3 records in inaccessible slot canyons near Hans Flat Ranger Station; distances range from 1.1-1.6 miles from roads |
| East Gypsum Canyon Overlook                                | ORV route          | CP-14                 | Clearwater Canyon record is >3 miles west   |
| Imperial Valley  | ORV route          | CP-14                 | Clearwater Canyon record is >3 miles west   |
| Hite Marina roads  | Paved park roads   | CP-14                 | None  |
| Hite Boat Ramp   | ORV area           | CP-14                 | None  |
| Dirty Devil  | ORV area           | CP-14                 | None  |
| Farley Canyon  | ORV area           | N/A                   | One record in unlikely location on flats near Farley Canyon >3 miles east   |
| White Canyon   | ORV area           | N/A                   | One record in unlikely location on flats near Farley Canyon >4 miles north  |
| State Highway 95 and NPS Route 630                         | Unpaved road       | N/A                   | One record in unlikely location on flats near Farley Canyon ca. 1 mile north  |
| Blue Notch   | ORV area           | N/A                   | One historic record >2.5 miles south  |
| Red Canyon   | ORV area           | N/A                   | One historic record >1.5 miles west   |
| NPS Route 262  | Unpaved park road  | N/A                   | One record adjacent (ca. 40 meters) to road is likely a dispersing individual                                       |
| NPS Route 264  | Unpaved park road  | N/A                   | One record adjacent to road is likely a dispersing individual   |
| Gunsight Springs Trailhead                                 | ORV route          | N/A                   | Record near Alstrom Pt is >4 miles south  |

shoreline would be restored to natural conditions over the long term, resulting in localized, long-term benefits to sensitive birds occurring in that area. Similarly, implementing a speed limit of 15 mph at shoreline areas and enforcement of quiet hours after 10:00 p.m. would help lessen some of the potential impacts of off-road use on owls by reducing the level of noise and impacts related to vehicle travel at higher speeds (e.g., vehicle -wildlife collision, dust particles, noise). Slower speeds allow for longer reaction times to break or otherwise avoid collision with the animals.

The Ferry Swale route area is adjacent the west rim of Glen Canyon below Glen Canyon Dam (Figure 40). Although no mapped data sets exist for this area, the canyon walls offer likely suitable roosting habitat. The unpaved road reaches the rim in one area, thus it is possible for effects to any roosting individuals in the immediate vicinity. The Lone Rock camping and ORV area is not associated with any suitable habitat, with the closest suitable (but not designated) habitat ca. 4 miles to the west on BLM lands.

There are substantiated as well as unconfirmed reports of Mexican spotted owls from the rims of Cataract Canyon in designated critical habitat (Figure 49), although no breeding has been confirmed. An analysis of the distance from the canyon rim to the closest road (unpaved NPS Route 633) indicates that the closest approach is 0.8 miles near Freddie's Cistern. Based on the inverse square law and a decline of 6 dBA for every doubling of distance, and assuming a  $L_{\max}$  noise level of 85 dBA at the road at a distance of 10 feet, the attenuation of the sound wave out to 0.5 miles on a flat surface would mean that on the rim the sound level would be ca. 34 dBA, slightly above background ambient (see also sound effects analysis in EIS Chapter 4). Using an  $L_{\max}$  of 96 dBA at the tailpipe the attenuation would be to ca. 42 dBA at 0.5 miles. This would be a worst case scenario, as the terrain in the area is rugged and vegetated, which would tend to reduce noise propagation more than on a hypothetical flat surface. Noise guidelines in the 2012 revised Mexican spotted owl Recovery Plan includes an upper threshold of 69 dBA within 50 meters of a nesting site (USFWS 2012c). Additional work indicates that birds can tolerate noise levels up to ca. 92 dBA from helicopters and 46 dBA from chainsaws at distances greater than ca. 100 meters (Delaney et al. 1999). Based on this assessment, there is likely to be only minor (but potentially significant) effects to individual birds or breeding pairs based on the ORV EIS preferred alternative in this area.

Detailed modeling results (see EIS Ch. 4 Sound Analysis) using anticipated increases in vehicle numbers in the project area indicate in general relatively minor increases in sound levels beyond ambient background (20 dBA) for the project area. For GMP roads and accessible shorelines typical modeled levels range from 20-35 dBA at ca. 800' feet from roads and shorelines. These levels are unlikely to have more than minor effects on wildlife. At 0.5 miles no road or shoreline modeled values rise above the level of background natural ambient conditions. However, individuals within a few hundred feet of roads and accessible shorelines might experience minor (but potentially significant) effects within suitable and critical habitat for the species.

### Cumulative Effects

Current activities that may affect the Mexican spotted owl include river recreation, aircraft overflights, development in the Ticaboo area north of Bullfrog, and actions on adjacent Navajo Indian Reservation lands. These activities occur on a regular basis, and will continue to occur regardless of whether the proposed plan is implemented, and are similar to those described under the California condor discussion above.

The Ferry Swale area west of Page in the project area is less than five miles from Page Municipal Airport, which has daily flights by commuter companies, as well as commercial air tours during the spring through fall seasons, and year-round private plane use. Planes fly over the area on a daily basis. The Federal Aviation Administration (FAA) policy directs pilots operating noise producing aircraft (fixed-wing, rotary-wing and hot air balloons) over noise-sensitive areas to make every effort to fly not less than 2,000 feet above ground level, weather permitting, to reduce potential interference with wildlife and complaints of noise disturbances caused by low flying aircraft over noise-sensitive areas (FAA 2004). The noise level of most of these aircraft is higher than any noise that will be generated by project implementation activities (e.g., motor vehicle use). In addition, air tours occasionally occur along the rims of Glen Canyon below the dam, including in areas near where dispersing owls may roost. The NPS is currently working with FAA and the air tour operators to alter tour routes in the canyon corridor to reduce or eliminate impacts to raptors and condors.

To the south of Ferry Swale and along the accessible shoreline areas along the San Juan River is the boundary of the Navajo Indian Reservation. The local landowners live fairly close to this boundary, and in the future may attempt to develop their lands along the river or canyon rims. However, to date no development has occurred or been proposed.

### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

### Incidental Take

There is a potential for limited incidental take through adverse impacts to individuals (flushing, noise affects) from increased recreational activity to this federally listed species under this proposed action.

### Effect Determination

For the Mexican spotted owl, the NPS determination is *may affect, likely to adversely affect*. Although the likelihood that a Mexican spotted owl would be present in the area affected by the proposed action is low, it is not discountable due to extensive overlap with suitable and designated critical habitat. Thus there would be potentially adverse impacts to individuals. Potential effects from vehicle activity (collisions) along back country unpaved roads would be extremely unlikely and are considered discountable. Any project implementation activities (e.g. installation of signs, restoration of illegal ORV routes) will occur outside of the Mexican spotted owl breeding season. Reduced speed limits and the general lack of overlap between the road networks, known locations of owls indicates that direct effects (e.g., collisions) are discountable. However, noise-related impacts to dispersing, roosting or foraging individuals cannot be ruled out. Adherence to the Applicant Committed Conservation Measures (Section 3.3) will help mitigate these impacts, and include among others additional surveys for owls starting in 2017, altering routes and area boundaries to protect owls, avoidance of all known owl nests, reduced speeds for vehicles, additional signage and information on owls for recreationists, and applying specific guidelines and protection measures including area closures within 0.5 miles for protection of owls that may be detected. The conservation measures, potential impacts and effects determinations are summarized in Table 8.

### ***Southwestern Willow Flycatcher***

#### Direct and Indirect Effects

The back country unpaved road network in the park existed prior to its creation in 1972. At that time the southwestern willow flycatcher was not listed, thus effects of keeping these unpaved roads open were not analyzed. Although the southwestern willow flycatcher formerly bred in Glen Canyon along the Colorado River prior to the construction of Glen Canyon Dam, there have been no confirmed nesting or presence of breeding pairs in the project area since the early 1960's (Spence et al. 2011). Individuals of migrating willow flycatchers have been observed in the vicinity of the project area (at Clay Hills Crossing), but the species presence can be considered rare and transient (Spence et al. 2011). Also, some of these records may be of other subspecies rather than the southwestern subspecies. Suitable habitat occurs along the Green, Dirty Devil, Colorado, Paria, San Juan and Escalante Rivers in the park although not considered acceptable for designation as critical habitat, and to date no breeding has been confirmed (Spence 2016).



**Table 8. Summary of potential effects to Mexican spotted owl, proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects  | Conservation Measures  | Effect Determination           |
|--|--|--------------------------------|
| Vehicle collisions   | Reduced speed limits on unpaved roads and accessible shorelines; educational materials for visitors  | Insignificant and Discountable |
| Flushing and other adverse behavioral effects due to noise | Reduced speed limits; insignificant increases in noise levels based on modeling results; any project work done in non-breeding season; however, there is significant overlap between suitable/critical habitat and some accessible shorelines and park roads during critical life-history periods including migration. | Adverse                        |
| Interference with nesting and breeding                     | Closures within 0.5 mile buffer of nest; further coordination with USFWS; project work done in non-breeding season   | Insignificant and Discountable |
| Closures   | Closures of Warm Creek shoreline, closure of restoration of some sections of unpaved roads in Ferry Swale will reduce noise and vehicle impacts  | Beneficial                     |
| Effects on undocumented individuals                        | Additional focused surveys 2017-2019 in suitable and critical habitat and in project area using USFWS protocols  | Beneficial                     |
| Population status and trends                               | Long-term monitoring   | Beneficial                     |
| Low lake levels  | Several accessible shorelines (Bullfrog North and South, White Canyon) are currently closed due to low lake levels. These will remain closed barring significant increases in lake levels.   | Beneficial                     |

Most suitable habitat is in inaccessible reaches of river corridors well removed from the project area. Because there is an extremely low likelihood that individuals of the species would occur in the project area that could be affected by the proposed action, effects on the species would be limited. Potential effects include vehicle-bird collisions and flushing or altered foraging and roosting behaviors from noise and human activities. As flycatchers are active during daytime hours, some effects are likely to be greater compared with nocturnal species. Vehicle and noise effects may affect individuals at roost sites, during foraging or as birds are migrating in spring and fall through riparian areas. Effects on southwestern willow flycatcher are thus considered minor (but potentially adverse) as a result of implementing the preferred alternative, primarily as a result of noise or recreational disturbance to migrating and foraging individuals in a few areas along the Colorado River at Lees Ferry, the San Juan River at Clay Hills Crossing, river sections along the Paiute Farms accessible shoreline and Last Chance Creek, totaling ca. 100 acres. Recreational visitation within these project areas is most common during the period May-September. However, visitation is year-round at Lees Ferry, and there is an extended visitation season from March to September at Clay Hills Crossing. Thus there is significant overlap during flycatcher migration times and any potential breeding activities. In most instances, likely disturbances have been avoided or reduced by siting ORV areas, routing ORV routes and designating park roads for street-legal ATV and/or OHV use outside suitable habitat to the extent possible. In addition, low posted speed limits on most unpaved roads and at accessible shorelines will greatly reduce any potential collisions with vehicles. There will no additional impacts or disturbances to riparian vegetation within suitable habitat in this plan.

Modeling results (see EIS Ch. 4 Sound Analysis) using anticipated increases in vehicle numbers in the project area indicate in general relatively minor increases in sound levels beyond ambient background (20

dBA) for the project area. For GMP roads and accessible shorelines typical modeled levels range from 20-35 dBA at ca. 800' feet from roads and shorelines. These levels are unlikely to have more than minor effects on wildlife. At 0.5 miles no road or shoreline modeled values rise above the level of background natural ambient conditions.

### Cumulative Effects

Current activities that may affect the southwestern willow flycatcher include aircraft overflights, actions on adjacent Navajo Indian Reservation lands, and invasive species management by other agencies, primarily along the San Juan River. These activities occur on a regular basis, and will continue to occur regardless of whether the proposed plan is implemented. The local landowners live fairly close to this boundary, and in the future may attempt to develop their lands along the river. However, to date no development has occurred or been proposed.

### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

### Incidental Take

There is a potential for limited incidental take through adverse impacts to individuals (flushing, noise affects) from increased recreational activity to this federally listed species under this proposed action.

### Effect Determination

For the southwestern willow flycatcher, the NPS determination is ***may affect, likely to adversely affect.*** Although the endangered southwestern willow flycatcher has been observed in the vicinity of the project area (Spence et al. 2011), its presence can be considered rare and transient, and some records may in fact represent migration of other subspecies through the region. However, effects that alter foraging, migrating and roosting behaviors to individuals cannot be ruled out, primarily from noise and recreational activities, at some project area sites. As described above, any potentially disturbing actions or project implementation activities (e.g. installation of signs, restoration of illegal ORV routes) will cause only minor effects on migrating flycatcher individuals, with no effects on breeding since the species does not currently breed within 50 miles of the boundaries of Glen Canyon. The Applicant Committed Conservation Measures (Section 3.3) include among others additional survey work as warranted based on observations and application of additional guidelines and protection measures including closures if birds are detected in the project area. The conservation measures, potential impacts and effects determinations are summarized in Table 9.

## ***Yellow-Billed Cuckoo***

### Direct and Indirect Effects

The back country unpaved road network in the park existed prior to its creation in 1972. At this time western yellow-billed cuckoo was not listed, thus effects of keeping these unpaved roads open were not analyzed. In Glen Canyon, the yellow-billed cuckoo is considered a rare transient in dense riverside

tamarisk-willow-cottonwood thickets. Historically, the cuckoo has been observed only twice in the vicinity of the project area. Specifically, the species has been recorded only at the Colorado River at Lees

**Table 9. Summary of potential effects to southwestern willow flycatcher, proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects  | Conservation Measures  | Effect Determination           |
|--|--|--------------------------------|
| Vehicle collisions   | Reduced speed limits on unpaved roads and accessible shorelines; educational materials for visitors  | Insignificant and Discountable |
| Flushing and other adverse behavioral effects due to noise | Reduced speed limits; insignificant increases in noise levels based on modeling results; project work done in non-breeding season; there is limited overlap of suitable habitat in project area at some accessible shorelines and park roads during critical life-history periods including migration. | Adverse                        |
| Interference with nesting and breeding                     | Closures within 0.5 mile buffer of nest; further coordination with USFWS; any project work done in non-breeding season   | Insignificant and Discountable |
| Effects on undocumented individuals                        | Additional focused surveys 2017-2019 in suitable habitat within project area using USFWS protocols   | Beneficial                     |
| Population status and trends                               | Long-term monitoring   | Beneficial                     |

Ferry (1995), and on the San Juan River at Clay Hills Crossing (many records), as anecdotal records and from surveys using USFWS cuckoo protocols avian surveys. However, there has been regular observations of birds during migration and the breeding season from Clay Hills Crossing upstream along the San Juan River. Breeding may occur outside the project action area upstream from Clay Hills Crossing on the San Juan River (Spence et al. 2011). Suitable roosting and migratory habitat occurs sporadically elsewhere along major rivers, primarily along the Colorado, Escalante and San Juan Rivers. However, relatively few areas support large dense multi-canopy stands of riparian vegetation that are required by cuckoos for breeding (see critical habitat section 9.2; Spence 2016). Overlap between the project area and suitable and proposed critical habitat occurs at Lees Ferry, Last Chance Creek, the Paiute Farms accessible shoreline, and Clay Hills Crossing at the boat ramp takeout, totaling ca. 500 acres (based on USFWS proposed critical habitat in Unit 66). Visitation within the project area is most common during the period May-September, although the Paiute Farms area is used year-round by local Navajo families. Visitation is also year-round at Lees Ferry, and there is an extended visitation season from March to September at Clay Hills Crossing. Thus there is significant overlap during cuckoo migration and with any potential breeding.

Because there is an extremely low likelihood of a yellow-billed cuckoo being present in the project area, direct effects on individuals would be extremely rare. Collisions on unpaved roads and at accessible shorelines with moving vehicles are considered discountable as they are also extremely unlikely. Posted speed limits in general are slow enough that birds should be able to avoid moving vehicles. All proposed actions involving motorized vehicles could result in some indirect effects since ORV recreational impacts such as noise would take place year-round. Thus impacts could include flushing of roosting birds or alterations of foraging behaviors during migration and the breeding season. Because of the rare, transient presence of the yellow-billed cuckoo in the project area, and the small extent of suitable riparian vegetation associated with the project area, it is likely there would be only minor (but potentially adverse) effects to the species as a result of the proposed action. There are no reported instances of cuckoo-vehicle collisions in the park.

Modeling results (EIS Ch. 4 Sound Analysis) using anticipated increases in vehicle numbers indicate in general relatively minor increases in sound levels beyond ambient background (20 dBA) for the project area. For GMP roads and accessible shorelines typical modeled levels range from 20-35 dBA at ca. 800' feet from roads and shorelines. These levels are unlikely to have more than minor effects on wildlife. At 0.5 miles no road or shoreline modeled values rise above the level of background natural ambient conditions.

### Cumulative Effects

To the south of the San Juan Arm is the boundary of the Navajo Indian Reservation. Current activities that may affect the yellow-billed cuckoo include actions on adjacent Navajo Indian Reservation lands where localized habitat degradation could occur, affecting individuals or breeding pairs, and collecting for tamarisk and willows by local people along the San River River and Arm of the lake. These activities occur on a regular basis, and will continue to occur regardless of whether the proposed plan is implemented. The local landowners live fairly close to the project boundary, and in the future may attempt to develop their lands along river rims and in the Paiute Farms area. However, to date no development has occurred or been proposed.

### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

### Incidental Take

There is a potential for limited incidental take through adverse impacts to individuals (flushing, noise affects) from increased recreational activity to this federally listed species under this proposed action.

### Effect Determination

For the yellow-billed cuckoo, the NPS determination is *may affect, likely to adversely affect*. Although the yellow-billed cuckoo has been observed in the project area at Clay Hills Crossing (Spence et al. 2011), its presence can be considered rare and transient. The species does not currently breed near the project area, nor is there any currently appropriate breeding habitat within 0.5 miles of the project area (see under Designated Habitat 9.3). However, all potential effects cannot be considered discountable due to overlap with suitable and some proposed critical habitat. Thus there would be potentially adverse impacts to individuals. Effects from vehicle activity (collisions) along back country unpaved roads would be extremely unlikely and are considered discountable. Any project implementation activities (e.g. installation of signs, restoration of illegal ORV routes) will occur outside of the cuckoo breeding season. Reduced speed limits and the general lack of overlap between the road networks, known locations of cuckoos suggests that direct effects (e.g., collisions) are discountable. However, noise-related impacts to roosting, migrating or foraging individuals cannot be ruled out. Adherence to the Applicant Committed Conservation Measures (Section 3.3) will help mitigate these impacts, and include among others additional surveys for cuckoos starting in 2017, altering routes and area boundaries to protect documented occurrences, avoidance of all known nests, reduced speeds for vehicles, additional signage and information on cuckoos for recreationists, and applying specific guidelines and protection measures including area closures within ½ mile for protection of individual birds that may be detected. Any project implementation activities (e.g. installation of signs, restoration of illegal ORV routes) will occur outside of the yellow-billed cuckoo breeding season. In order to support the determination, the

Applicant Committed Conservation Measures (Section 3.3) include among others survey work associated with accessible shoreline areas and application of additional guidelines and protection measures including closures if birds are detected in the project area. The conservation measures, potential impacts and effects determinations are summarized in Table 10.

**Table 10. Summary of potential effects to western yellow-billed cuckoo, proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects  | Conservation Measures  | Effect Determination           |
|--|--|--------------------------------|
| Vehicle collisions   | Reduced speed limits on unpaved roads and accessible shorelines; educational materials for visitors  | Insignificant and Discountable |
| Flushing and other adverse behavioral effects due to noise | Reduced speed limits; insignificant increases in noise levels based on modeling results; project work done in non-breeding season; there is limited overlap of suitable and proposed critical habitat in project area at some accessible shorelines and park roads during critical life-history periods including migration. | Adverse                        |
| Interference with nesting and breeding                     | Closures within 0.5 mile buffer of nest; further coordination with USFWS; any project work done in non-breeding season   | Insignificant and Discountable |
| Effects on undocumented individuals                        | Additional focused surveys 2017-2019 in suitable habitat within project area using USFWS protocols   | Beneficial                     |
| Population status and trends                               | Long-term monitoring   | Beneficial                     |

### ***Jones' Cycladenia***

#### Direct and Indirect Effects

There are no known populations in suitable habitat for the species within the project area. Some roads in existence prior to the establishment of Glen Canyon National Recreation Area come within 2-3 miles of known populations, with all but one in Middle Moody Canyon on extremely steep upper Chinle slopes. The Middle Moody Canyon population is widespread, and some plants occur near the wash, ca. 2 miles down canyon from the nearest road. Potential threats to this species include modification of habitat from construction activities, mining activities, livestock grazing and off-road vehicle activity. Climate change is also implicated although to date no declines in the species in the region have been detected. No mining leases occur in Glen Canyon in areas where the species exists. Authorized grazing and illegal ORV activity has minimal impacts as all but one known population in the park occurs on steep inaccessible slopes. Indirect effects are not currently known for this species, but may include future climate change and monitoring efforts by NPS staff. Since some accessible shorelines include un-surveyed habitat, surveys will be conducted prior to plan implementation, and appropriate measures will be taken to protect new populations. Suitable habitat includes upper members of the Chinle Formation, which occur widely in the park but which are largely inaccessible to vehicle traffic except for potential areas associated with a few shorelines. These areas will be surveyed in spring of 2017 using recommended USFWS rare plant protocols.

#### Cumulative Effects

Current activities that may affect Jones cycladenia include actions on adjacent Navajo Indian Reservation lands where localized habitat degradation could occur, affecting individuals or populations, and collecting for tamarisk and willows by local people along the San River River and Arm of the lake. These activities



occur on a regular basis, and will continue to occur regardless of whether the proposed plan is implemented. The local landowners live fairly close to the project boundary, and in the future may attempt to develop their lands along canyon rims and in the Paiute Farms area. However, to date no development has occurred or been proposed.

#### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

#### Incidental Take

There will be no incidental take of this federally listed species under this proposed action.

#### Effect Determination

No populations of *Cycladenia humilis* var. *jonesii* are near or associated with any park roads or any accessible shorelines. If additional surveys in 2017 discover new populations appropriate actions will be taken to prevent any effects. Thus the NPS determination for this species is ***may affect, not likely to adversely affect***. In order to support the determination, the Applicant Committed Conservation Measures (Section 3.3) include additional surveys in 2017, and protection measures including closures if new populations are detected in the project area. The conservation measures, potential impacts and effects determinations are summarized in Table 11.

#### ***Brady pincushion cactus***

#### Direct and Indirect Effects

Known occupied habitat occurs for the species within the project area in the Lees Ferry District. Potential threats to this species include modification of habitat from construction activities and off-road vehicle activity. No mining leases occur in Glen Canyon in areas where the species exists. Illegal ORV activity has been documented in the District, although monitoring has not indicated that any plants have been affected to date. Indirect effects are not currently known for this species, but likely includes future climate change and monitoring efforts by NPS staff. In dry years rodent predation is heavier on the species, and thus could become a critical factor with future climate change that may lead to more extreme droughts. Critical habitat for the species has not been designated.

#### Cumulative Effects

Current activities that may affect *Pediocactus bradyi* include actions on adjacent Navajo Indian Reservation lands where localized habitat degradation could occur, affecting individuals or populations, and grazing activities on Bureau of Land management lands to the south of Marble Canyon. These activities occur on a regular basis, and will continue to occur regardless of whether the proposed plan is implemented.

#### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or

**Table 11. Summary of potential effects to Jones' cycladenia, Brady pincushion cactus, and Siler's pincushion cactus, proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects  | Conservation Measures   | Effect Determination |
|--|---|----------------------|
| <b>Jones' cycladenia</b>   |   |                      |
| Undocumented populations   | Additional surveys in project area using USFWS protocols                              | Beneficial           |
| Impacts to individuals including crushing, damage or reproductive losses | Barriers and closures including minimum 300 foot buffers from project area activities | None                 |
| Status and trends  | Long-term monitoring of populations   | Beneficial           |
| <b>Brady pincushion cactus</b>   |   |                      |
| Impacts to individuals including crushing, damage or reproductive losses | Project area closed to ATV's; regular patrols of occupied habitat                     | None                 |
| Status and trends  | Long-term monitoring of populations   | Beneficial           |
| <b>Siler's pincushion cactus</b>   |   |                      |
| Undocumented populations   | Additional surveys in project area using USFWS protocols                              | Beneficial           |
| Impacts to individuals including crushing, damage or reproductive losses | Barriers and closures including minimum 300 foot buffers from project area activities | None                 |
| Status and trends  | Develop long-term monitoring of any discovered populations                            | Beneficial           |

interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

#### Incidental Take

There will be no incidental take of this federally listed species under this proposed action.

#### Effect Determination

The actions to be initiated under the plan in the Lees Ferry District include closure of the Lees Ferry District and all paved roads to ATV's, and regular monitoring at known occupied sites. Thus the NPS determination for this species is ***no effect***. In order to support the determination, the Applicant Committed Conservation Measures (Section 3.3) include maintaining regular patrols and education of the public that the road is closed to all but conventional vehicles. These conservation measures, along with potential impacts and determinations of effect are summarized in Table 11.

#### ***Siler's pincushion cactus***

##### Direct and Indirect Effects

No known occupied habitat occurs for the species within the project area or in the park. Some roads in existence prior to the establishment of Glen Canyon National Recreation Area cross areas of Moenkopi Formation badlands, but not the specific member that the species prefers. Potential threats to this species include modification of habitat from construction activities, mining activities, livestock grazing and off-road vehicle activity. Climate change is also implicated as there have been recent declines in the species.

Indirect effects are not currently known for this species, but may include future climate change. Since some accessible shorelines include un-surveyed suitable habitat (Chinle Formation), surveys will be conducted prior to plan implementation, and appropriate measures will be taken to protect any populations that are found. These areas will be surveyed in spring of 2017.

### Cumulative Effects

Current activities that may affect *Pediocactus sileri* include actions on BLM and AZ and UT State lands along the Lake Powell Pipeline proposed corridor, which is in the planning stage.

### Interrelated and Interdependent Actions and Their Effects

Interrelated activities are part of the proposed action that depends on the action for their justification, and interdependent activities have no independent utility apart from the action. There are no interrelated or interdependent actions associated with this project; therefore, there are no anticipated adverse effects to this species.

### Incidental Take

There will be no incidental take of this federally listed species under this proposed action.

### Effect Determination

No populations of *Pediocactus sileri* are known from the project area or park. If new surveys in 2016 discover populations appropriate actions will be taken to prevent any effects. Also, there are no proposed changes to the GMP road network (widening, re-routing, etc.) that could potentially affect newly located plants. Thus the NPS determination for this species is ***may affect, not likely to adversely affect***. In order to support the determination, the Applicant Committed Conservation Measures (Section 3.3) include additional surveys in 2017, and protection measures including closures and barriers if the species is detected in the project area. These conservation measures, along with potential impacts and determinations of effect are summarized in Table 11.

## **9.2 Critical Habitat**

### ***Mexican Spotted Owl***

#### Direct and Indirect Effects

Critical habitat is designated for the Mexican spotted owl (USFWS 2012c), with one habitat block (Dark Canyon Primitive and Wilderness Unit CP-14) that includes the Orange Cliffs Unit, and the second (Glen Canyon Reef Unit CP-13) associated with the Waterpocket Fold and east side of the Escalante River. Figures 44, 46, 47, 49, 50, and 51 are detailed maps showing overlap within the project with designated critical habitat as well as other modeled habitat types. The overall overlap with designated critical habitat in the project area can be found in Figures 39-51. These maps also included acreage overlap with critical habitat for shorelines and roads. Four proposed ORV areas in Glen Canyon are within designated critical habitat: Bullfrog North and South and Stanton Creek in CP-13 and Hite Boat Ramp and Dirty Devil in CP-14. This analysis includes both protected and restricted habitat elements (PCE's) within designated critical habitat definitions. The Bullfrog North and South and Stanton Creek ORV areas are open flat-lying stretches of shoreline along Lake Powell, lacking primary PCE's such as required for breeding habitat, although some low cliffs (<30 m) occur along the margins of the accessible shorelines in the

vicinity that could potentially be used for roosting. The Hite Boat Ramp ORV area is a flat, rocky shoreline located between two boat ramps within the developed marina on Lake Powell. The Dirty Devil ORV area is a slick-rock shoreline located between Lake Powell and within 100 meters of Utah State Highway 276. These two areas are open flat rocky and sandy sites, lacking suitable primary and restricted habitat including PCE's such as cliffs, narrow canyons, steep slopes, cool microsites, mixed conifer-hardwood forests species with high canopy density, ground cover, and large trees. Although off-road use would continue at these shorelines under the preferred alternative, the owl is likely to rarely use these areas, probably by dispersing individuals (NPS 2007; Spence 2012). Insignificant impacts on non-PCE features from the preferred alternative might be detectable, but would be localized and would be limited to potential noise-related impacts within roosting or foraging areas, or minor disturbance from construction effects during placement of barriers, signs and information kiosks, and removal of dead and dying tamarisk.

Several existing park roads and proposed ORV routes are situated within designated critical habitat for the Mexican spotted owl (see Figures 39-51). Many of these include the paved state highways as well as paved and developed areas at the Bullfrog, Hall's Crossing and Hite marinas, all established in the 1960's. Effects of road use on the species critical habitat would be considered insignificant, as there are no PCE components on or adjacent to these roads. Highway 98 cuts through some cliffed areas where there are some but not all PCE components, but this road has been in use for >50 years and is a heavily utilized state highway. No previously undisturbed areas within the project area that overlaps with critical habitat will be disturbed in this plan. No PCE's in protected or restricted habitats will be disturbed or affected by this plan.

Prohibiting OHV and street-legal ATV use on the majority of the roads in the Orange Cliffs Unit could also benefit the Mexican spotted owl and its critical habitat by limiting habitat disturbance and noise-related impacts.

#### Cumulative Effects

The proposed action would not contribute to cumulative effects on the owl's designated critical habitat as a result of other plans and projects.

#### Effect Determination

As described above and in the Applicant Committed Conservation Measures (Section 3.3), all potentially disturbing actions will cause insignificant impacts to Mexican spotted owl designated critical habitat, and no impacts to PCE's associated with owl habitat. Thus, the NPS determination is *no effect* on designated critical habitat. The conservation measures, potential impacts and effects determinations are summarized in Table 12.

### ***Southwestern Willow Flycatcher***

#### Direct and Indirect Effects

Critical habitat was revised in 2012 (USFWS 2005, 2012a). There is no designated critical habitat for the species in the project area, with the closest known areas downstream ca. 50 miles from Lees Ferry on the Colorado River and well upstream of Mexican Hat on the San Juan River near the New Mexico border. The project area lacks critical habitat components (Beatty 2013).

**Table 12. Summary of potential effects to Mexican spotted owl designated critical habitat and Primary Constituent Elements (PCEs), proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects                         | PCE's or Other Habitat Elements  | Conservation Measures   | Effect Determination |
|---|--|---|----------------------|
| Impacts to roosting and migration habitat | Some cliff habitats and narrow canyons associated with several project areas, but most PCE's missing | Educational materials for visitors; temporary or permanent closures; project activities outside of breeding season; no new disturbances | None                 |
| Impacts to Protected habitat              | No PCE's within project area   | No project activity associated with protected habitat   | None                 |
| Impacts to Restricted habitat             | No PCE's within project area   | No project activity associated with restricted habitat  | None                 |

### Cumulative Effects

Due to the absence of critical habitat within the action area, the proposed project would have no cumulative effects on designated southwestern willow flycatcher critical habitat.

### Effect Determination

Due to the absence of critical habitat within the action area, the proposed action would have no effects on designated southwestern willow flycatcher critical habitat. Thus, the NPS determination is this action will have *no effect* on designated critical habitat.

## 9.3 Proposed Critical Habitat

### *Yellow-Billed Cuckoo*

#### Direct and Indirect Effects

The USFWS published the proposed critical habitat designation following listing of the western yellow-billed cuckoo (Federal Register, Vol. 79, No. 158, 2014). Proposed habitat unit 66 is situated mostly within Glen Canyon NRA, from several miles upstream of Clay Hills Crossing, down to Paiute Farms on the San Juan Arm of Lake Powell. This area includes the old San Juan marina (long since abandoned) and associated accessible shoreline. In addition, a small portion of the proposed habitat above 3720 feet occurs on the Navajo Nation outside of Glen Canyon.

The proposed habitat unit includes several miles of the San Juan River from ca. Grand Gulch down past Clay Hills Crossing to the waterfall, then below that it includes much of the exposed lake sediments known as Paiute Farms. Because of concerns regarding disturbance including fires, visitation and habitat suitability, Glen Canyon conducted an aerial survey of the area on November 3, 2014. Based on these surveys, as well as general observations based on many San Juan River trips, the river corridor down to the Clay Hills Crossing, and to ca. 1-2 miles below the Clay Hills Crossing on the north side only, may provide suitable migratory and roosting habitat (Figure 59). However, the rest of the proposed habitat unit 66 is currently unsuitable for cuckoos, and is not likely to change significantly in the next 20-30 years, as either these areas will continue to convert to upland vegetation or may be drowned by future lake rises.



The Paiute Farms area consists of exposed sediment from Lake Powell, and has been above water for ca. 10-12 years. Much of the area consists of dead or dying low-statured tamarisk, generally <3 m in height (Figures 60-61). With down cutting, especially below the waterfall, much of this vegetation is dying out as water tables drop and sediments dry out. Areas to the south of the waterfall, where patches of tamarisk occur, are heavily disturbed by fires, wood collection, and off-road vehicle activity, primarily by residents of the Navajo Nation. Some hunting also likely occurs in this area. In this part of the project area, there may be limited impacts to proposed critical habitat through project activities such as construction of barriers, and placement of signs and informational kiosks. These would be done outside of breeding and migration times for the species. Minor impacts to riparian vegetation, primarily removal of dead and dying tamarisk, would occur during these projects. None of the riparian vegetation in proposed unit 66 actually includes the PCE's for breeding by the species based on the proposed habitat rules, primarily due to the narrow width (<50 m) in most areas. Paiute Farms area is dominated by large nearly pure stands of low-statured tamarisk with high mortality from the tamarisk leaf beetle and drying out of the sediments. None of the PCE requirements are met in this area.

As recently as 1998 the area was under Lake Powell, and may be inundated again in the future. With continued down cutting, these large tamarisk patches are likely to contract to narrow fringes along the river, and gradually be replaced by cottonwoods and willows. Most of the areas in the photos is likely to be invaded by upland species and exotics.

New recommendations were submitted to USFWS in January 2015 as part of the general NPS response to this proposed critical habitat based on observations on the vegetation in the area. The NPS suggests that the habitat unit be redrawn to include the high quality habitat along the San Juan River only, from Grand Gulch to ca. one mile below the Crossing (just above the waterfall) on the north side (Figure 62). Except for a small area (<1 acre) at the Clay Hills Crossing takeout for river trips, none of this proposed new critical habitat unit occurs within the project area.

### Cumulative Effects

The proposed action would not contribute to cumulative effects on proposed critical habitat as a result of other plans and projects. If the current boundaries of the proposed habitat unit 66 are maintained, then there may be localized and insignificant cumulative effects in the Paiute Farms area as a result of collecting of tamarisk and willows by the Navajo residents in the vicinity, hunting, or setting of accidental fires.

### Effect Determination

Based on the original mapped proposed critical habitat unit 66 boundaries as indicated by the USFWS, there may be insignificant impacts to habitat such as posting signs and delimiting travel areas and shoreline boundaries. Under this proposed scenario the critical habitat determination would be *may effect, not likely to adversely modify critical habitat*. In order to support the determination, the Applicant Committed Conservation Measures (Section 3.3) include additional measures to protect proposed critical habitat. As part of the NPS response to the proposed critical habitat for western yellow-billed cuckoo, comments on unit 66 were forwarded to the USFWS in January 2015. Based on this revision, all potentially disturbing actions will not disturb any future yellow-billed cuckoo habitat components. Under this scenario the critical habitat determination would be *no effect*. Table 13 summarizes these conservation measures, potential impacts and determination of effects.

**Table 13. Summary of potential effects to western yellow-billed cuckoo designated critical habitat, proposed Applicant Committed conservation measures, and effect determinations.**

| Potential Effects                               | Critical Habitat Elements   | Conservation Measures  | Effect Determination           |
|---|---|--|--------------------------------|
| Impacts to roosting and migration habitat       | Riparian vegetation associated with some project areas, including Last Chance Creek, Lees Ferry | Educational materials for visitors; no impacts to riparian vegetation other than minor exotic plant control                                  | Insignificant and Discountable |
| Impacts to proposed designated critical habitat | Riparian vegetation associated with Paiute Farms accessible shoreline (ca. 100 acres)           | Educational materials for visitors; temporary or permanent closures; no impacts to riparian vegetation other than minor exotic plant control | Insignificant and Discountable |
| Impacts to proposed designated critical habitat | Riparian vegetation associated with Clay Hills Crossing and the San Juan River (<10 acres)      | Educational materials for visitors; temporary or permanent closures; no impacts to riparian vegetation                                       | None                           |



**Figure 59. Dense riparian vegetation at Clay Hills Crossing. Tallest trees are ca. 15 meters, with dense understory of tamarisk and willow.**

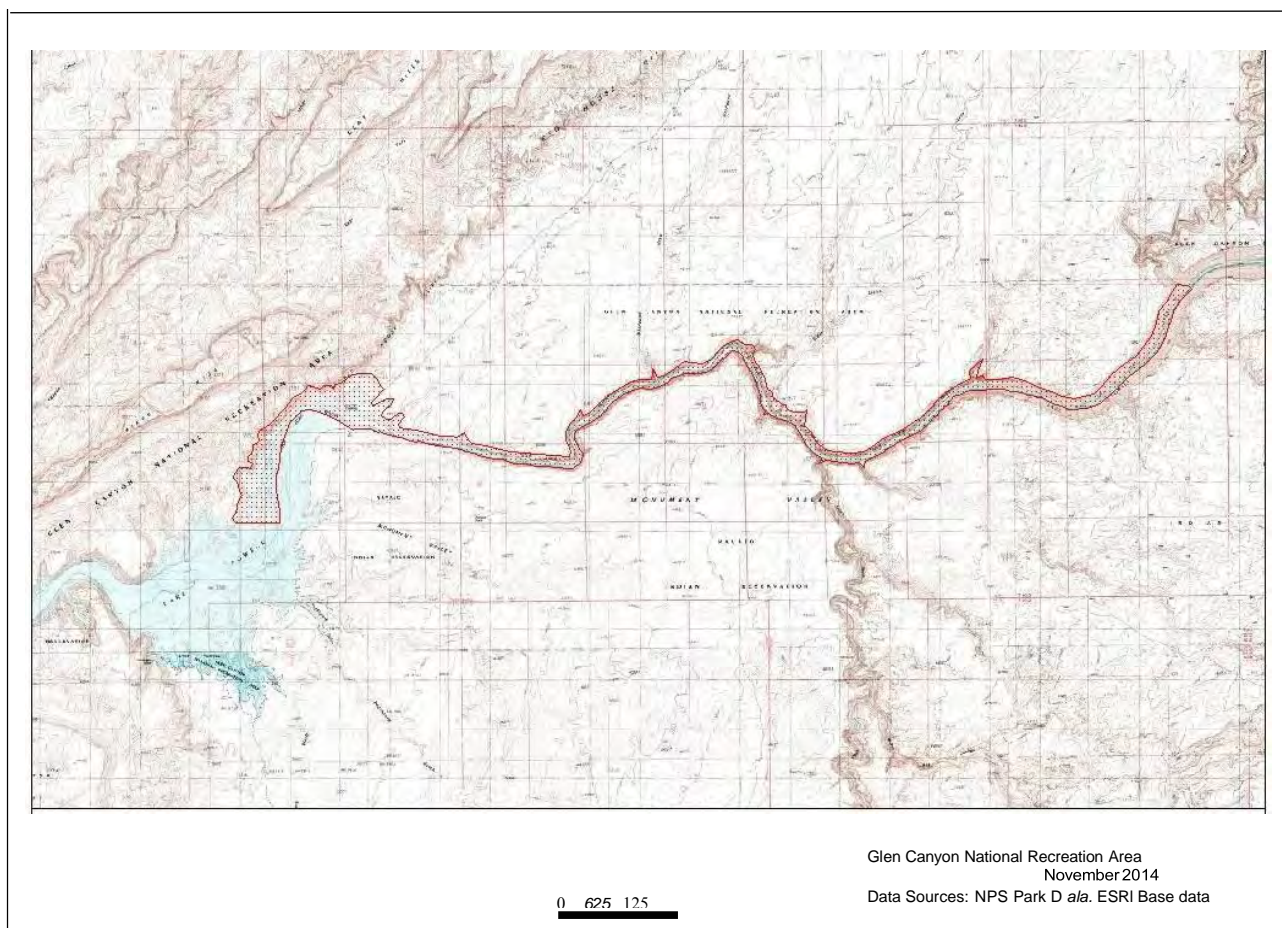




**Figure 60. Paiute Farms accessible shoreline, below Clay Hills Crossing, showing dead and dying tamarisk and a few cottonwoods (ca. 6-8 meters height).**



**Figure 61. Paiute Farms accessible shoreline, looking South towards the San Juan River Waterfall. Note the roads on the south shores, and the large stands of dying tamarisk except directly along the river.**



**Figure 62. Proposed Revised Boundaries for Yellow-billed Cuckoo Critical Habitat Unit 66, San Juan Arm and River, Glen Canyon National Recreation Area, adjacent to the Paiute Farms accessible shoreline.**

## 10.0 Effect Determination Summary

**Table 14. Effect determinations for species addressed.**

| Common Name                           | Scientific Name                               | Status  | Species Determination of Effect | Critical Habitat Determination of Effect |
|---------------------------------------|---|---|---------------------------------|--|
| <i>California Condor</i>              | <i>Gymnogyps californianus</i>                | <i>Experimental Population, Non-essential</i> | <i>NLAA</i>                     |  |
| <i>Mexican Spotted Owl</i>            | <i>Strix occidentalis lucida</i>              | <i>Threatened</i>                             | <i>LAA</i>                      | <i>NE</i>                                |
| <i>Southwestern Willow Flycatcher</i> | <i>Empidonax traillii extimus</i>             | <i>Endangered</i>                             | <i>LAA</i>                      | <i>NE</i>                                |
| <i>Yellow-Billed Cuckoo</i>           | <i>Coccyzus americanus</i>                    | <i>Threatened</i>                             | <i>LAA</i>                      | <i>NLJ</i>                               |
| <i>Jones' Cycladenia</i>              | <i>Cycladenia humilis</i> var. <i>jonesii</i> | <i>Threatened</i>                             | <i>NLAA</i>                     |  |
| <i>Brady pincushion cactus</i>        | <i>Pediocactus bradyi</i>                     | <i>Endangered</i>                             | <i>No Effect</i>                |  |
| <i>Siler's pincushion cactus</i>      | <i>Pediocactus sileri</i>                     | <i>Threatened</i>                             | <i>NLAA</i>                     |  |

<sup>1</sup> **NE**=no effect; **NLAA**=may affect, not likely to adversely affect; **LAA**=may affect, likely to adversely affect; **BI**=beneficial impact; **NLJ**=not likely to jeopardize the continued existence or adversely modify proposed critical habitat



## 11.0 Need for Re-Assessment Based on Changed Conditions

This BA and findings above are based on the best current data and scientific information available. A new analysis and revised BA must be prepared if one or more of the following occurs: (1) new species information (including but not limited to a newly discovered activity area or other species information) reveals effects to threatened, endangered, proposed species, or designated/proposed critical habitat in a manner or to an extent not considered in this assessment; (2) the action is subsequently modified or it is not fully implemented as described herein which causes an effect that was not considered in this assessment; or (3) a new species is listed or critical habitat is designated which may be affected by the action that was not previously analyzed herein.

## 12.0 Literature Cited

Ambrose, S. and C. Florian. 2013 Glen Canyon National Recreation Area and Rainbow Bridge National Monument Acoustic Inventory 2010. Revised Draft. September 4, 2013.

Adams, J.A., A.S. Endo, L.H. Stolzy, P.G. Rowlands, H.B. Johnson. 1982. Controlled Experiments on Soil Compaction Produced by Off-road Vehicles in the Mojave Desert, California. *Journal of Applied Ecology*, 19 pp 167-175.

Anders, A. D. and E. Post. 2006. Distribution-wide effects of climate on population densities of a declining migratory landbird. *Journal of Ecology* 75: 221-227.

Beatty, G. 2013. Personal communication (email) between Greg Beatty, USFWS Fish and Wildlife Biologist, and Lonnie Pilkington, NPS Natural Resource Program Manager, regarding potential effects to Southwestern willow flycatchers. July 18.

Belnap, J. 1993. Recovery Rates of Cryptobiotic Crusts: Inoculant Use and Assessment Methods. *Great Basin Naturalist* 53(1):89-95.

Belnap, J. 1994. Potential role of cryptobiotic soil crust in semiarid rangelands. In: Monsen, S. B., and S. G. Kitchen, eds. Proceedings—Ecology and Management of Annual Rangelands. General Technical Report INT-GTR-313. USDA Forest Service, Intermountain Region Research Station, Ogden, UT. Pages 179-185.

Belnap, J. and J. S. Gardner. 1993. Soil microstructure of the Colorado Plateau: the role of the cyanobacterium *Microcoleus vaginatus*. *Great Basin Naturalist* 53:40-47.

Belnap, J.L. and O.L. Lange (eds). 2001. Biological Soil Crusts: Structure, Function and Management. Springer, New York. 503 pp.

Bich, B.S., J.L. Butler, and C.A. Schmidt. 1995. Effects of differential livestock use on key plant species and rodent populations within selected Orvzoosis hymenoides/*Hilaria jamesii* communities of Glen Canyon National Recreation Area. *Southwestern Naturalist* 40: 281-287.

Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/506>. Accessed February 13, 2012.



Delaney, D.K., T.G. Grubb, P. Beier, L.L. Pater and M.H. Reiser. 1999. Effects of helicopter noise on Mexican spotted owls. *Journal of Wildlife Management* 63: 60-76.

DOI-BLM-UT-0300-0008-EA. 2011. Programmatic Environmental Assessment for Organized Group Activities along Hole-in-the-Rock Road. Grand Staircase Escalante National Monument, Kanab, Utah.

Drost, C. A., R. Platenberg, A. J. Monatesti, and T. Persons. 2008. Reptile and amphibian inventory of Glen Canyon National Recreation Area. U. S. Geological Survey. Flagstaff, AZ.

Escalante River Watershed Partnership. 2011, Escalante River Watershed Restoration, Volume 1, Issue 1. Summer 2011. Accessed online at: [http://gsenm.org/wp-content/uploads/2011/07/ERWRNewsletter\\_2011\\_Final.pdf](http://gsenm.org/wp-content/uploads/2011/07/ERWRNewsletter_2011_Final.pdf).

FAA. 2004. Visual Flight Rules (VFR) Flight Near Noise-sensitive Areas. Advisory Circular 91-36D  
Ganey, J.L. and R.P. Balda. 1994. Habitat selection by Mexican spotted owls in northern Arizona. *The Auk* 111: 162-169.

Fairley, H.C. 1985. An Archaeological Survey of the Proposed Marina Development Site at Paiute Farms, Utah. Northern Arizona University Archaeological Report No. 991. May 21, 1985.

Gutiérrez, R.J., A.B. Franklin, and W.S. Lahaye. 1995. Spotted owl (*Strix occidentalis*). In *The Birds of North America*, No. 179 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, and the American Ornithologist' Union, Washington.

Harms, R.S. and R.D. Hiebert. 2009. Vegetation response following invasive tamarisk (*Tamarix* spp.) removal and implications for riparian restoration. *Restoration Ecology* 14: 461-472.

Halterman, M., M.J. Johnson, J.A. Holmes and S.A. Laymon. 2015. A natural history summary and survey protocol for the western distinct population segment of the yellow-billed cuckoo. U.S. Geological Survey Techniques and Methods Draft Final Report, 45 p.

Haskins, K.E. 2015. Final Report: Pediocactus bradyi survey project. Project No. AAF-04. Arboretum at Flagstaff, AZ. 8 p.

Hill, M. E. and T. Ayers. 2009. Vascular plant inventory of Glen Canyon National Recreation Area. Natural Resource Technical Report NPS/SCPN/NRTR-2009/264.

Hughes, J.M. 1999. Yellow-billed Cuckoo (*Coccyzus americanus*). *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; retrieved from the *Birds of North America Online*: <http://bna.birds.cornell.edu/bna/species/418>. Accessed. January 6, 2012.

Hughes, L. E. 2000. Monitoring Update on Four Listed Plants on the Arizona Strip. In J. Maschinski, L. Holter, tech. eds. *Southwestern Rare and Endangered Plants: Proceedings of the Third Conference*, pp. 78-82. USDA Forest Service, Proceedings RMRS-P-23, Fort Collins, Colorado.

Hughes, L.E. 2005. Brady pincushion cactus. *Desert Plants* 21: 13-20.

Jeffries, D.L. and Klopatek, J.M. 1987. Effects of grazing on the vegetation of the blackbrush association. *J. Range Management* 40: 390-392.

Last, M.P. Intraspecific phylogeography of *Cycladenia humilis* (Apocynaceae). M.Sc. Thesis, Department of Biology, Brigham Young University.

National Park Service.

n.d.a. Fish Checklist. Available online at:  
<http://www.nps.gov/glca/naturescience/upload/FishChecklist.pdf>.

n.d.b. Checklist of Amphibians Found in Glen Canyon National Recreation Area. Available online at: <http://www.nps.gov/glca/naturescience/upload/AmphibianChecklist.pdf>.

n.d.c. Hite Webpage. Accessed online at: <http://www.nps.gov/glca/planyourvisit/hite.htm>

n.d.d. Tamarisk Leaf Beetle. Glen Canyon National Recreation Area. Accessed online at: <http://www.nps.gov/glca/naturescience/tamarisk-leaf-beetle.htm>.

1979. Glen Canyon National Recreation Area General Management Plan. NatureServe Explorer (NatureServe) 2009. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. Available on line at <http://www.natureserve.org/explorer>. Last updated October 2009. Accessed February 4, 2010.

1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment*.

1986 Glen Canyon National Recreation Area in cooperation with Navajo Nation. Paiute Farms/San Juan Marina. Final Development Concept Plan and Environmental Assessment. May 1986.

1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shorelines*. April 1988. Glen Canyon National Recreation Area. National Park Service – Rocky Mountain Region.

1989 Memorandum, (Recreational road system section).

1993 Environmental Assessment for *Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan*.

2007a Glen Canyon National Recreation Area – Updated Recommended OHV Interim Management Plan at Lone Rock Beach OHV Use Area.

2007b Glen Canyon National Recreation Area – Updated Recommended OHV Interim Management Plan at Glen Canyon Accessible Shorelines.

2007c Glen Canyon National Recreation Area – Nature & Science. Last updated 17 August 2007. Available online at: <http://www.nps.gov/glca/naturescience/index.htm>.

2007d Glen Canyon National Recreation Area – Animals. Last updated 16 August 2007. Available online at: <http://www.nps.gov/glca/naturescience/animals.htm>.

2008. Glen Canyon National Recreation Area. 2008 Uplake Development Concept Plan/Environmental Assessment. October 2008.
2014. Glen Canyon Off-road Vehicle Management Plan and Draft Environmental Impact Statement.
2015. Glen Canyon National Recreation Area Cumulative Impacts Assessment, Grazing Management Plan/Environmental Assessment.
- Natural Resources Conservation Service (NRCS). 2010. Web Soil Survey for Glen Canyon National Recreation Area. Survey Area Data: Version 1, Oct 7, 2010. Report generated on December 29, 2010.
- Paxton, E.H., T.C. Theimer, and M.K. Sogge. 2011. Tamarisk biocontrol using tamarisk beetles: potential consequences for riparian birds in the Southwestern United States. *Condor* 113:255-265.
- Payne, G.F., J.W. Foster, and W.C. Leininger. 1983. Vehicle impacts on Northern Great Plains range vegetation. *J. of Range Manage.* 36(3): 327-331.
- Richardson, C.T. and C.K. Miller. 1997. Recommendations for Protecting Raptors from Human Disturbance: A Review. *Wildlife Society Bulletin* 25(3): 634-638. Autumn 1997.
- The Royal Society for the Protection of Birds (RSPB) 2009. Bird guide: Golden eagle. Last published 23 October 2009. Available online at:  
[http://www.rspb.org.uk/wildlife/birdguide/name/g/goldeneagle/threatsand\\_conservation\\_action.aspx](http://www.rspb.org.uk/wildlife/birdguide/name/g/goldeneagle/threatsand_conservation_action.aspx).
- Shryock, D.F., T.C. Esque and L. Hughes. 2014. Population variability of *Pediocactus bradyi* (Cactaceae) in a changing climate. *American Journal of Botany* 101: 1944-1953.
- Sipes, S.D., Tepedino, V.J. 1995. Pollinator Lost? Reproduction by the Enigmatic Jones *Cycladenia*, *Cycladenia humilis* var. *jonesii* (Apocynaceae). In J. Maschinski, H.D. Hammond, and L. Holter, eds. *Southwestern Rare and Endangered Plants: Proceedings of the Second Conference*, pp. 158-166. USDA Forest Service, General Technical Report RM-GTR-283, Fort Collins, Colorado.
- Sipes, S.D., Wolf, P.G. 1997. Clonal Structure and Patterns of Allozyme Diversity in the Rare Endemic *Cycladenia humilis* var. *jonesii* (Apocynaceae). *American Journal of Botany* 84(3): 401-409.
- Snyder, N.F.R., and N. J. Schmitt. 2002. California Condor (*Gymnogyps californianus*). In A. Poole and F. Gill (eds.), *The Birds of North America*, No. 610. The Birds of North America, Inc., Philadelphia, PA.
- Snyder, N. and H. Snyder. 2000. *The California Condor: a saga of natural history and conservation*. Academic Press, San Diego, CA.
- Sogge, M.K., D. Ahlers and S.J. Sferra. 2010. A natural history summary and survey protocol for the Southwestern Willow Flycatcher. U.S. Geological Survey Techniques and Methods 2A-10, 38 p.
- Spence, John R.
- n.d. Inventory and Assessment of Natural Resources at the Lone Rock OHV Area, Glen Canyon NRA. Unpublished document on file at Glen Canyon.
1993. Monitoring plan for *Pediocactus bradyi*, Glen Canyon National Recreation Area.

- Unpublished report. National Park Service, Science & Resource Management Division, Glen Canyon National Recreation Area, Page, Arizona.
1994. Demography and Monitoring of the Threatened *Cycladenia jonesii* Eastwood (Apocynaceae). National Park Service, Science & Resource Management Division, Glen Canyon National Recreation Area, Page, Arizona.
2008. Status of *Pediocactus bradyi* Benson in Glen Canyon National Recreation Area. Five-year review Summary. Unpublished report to the US Fish & Wildlife Service, Arizona Ecological Services Office. National Park Service, Science & Resource Management Division, Glen Canyon National Recreation Area, Page, Arizona.
2012. Special-Status Species and Communities of Glen Canyon National Recreation Area. National Park Service, Science & Resource Management Division, Glen Canyon National Recreation Area, Page, Arizona.
2016. Notes on suitable and breeding habitat for the Southwestern Willow Flycatcher and Western Yellow-billed Cuckoo in Glen Canyon National Recreation Area. National Park Service, Science & Resource Management Division, Glen Canyon National Recreation Area, Page, Arizona.
- Spence, J.R., B.K. Russell and W.B. “Tug” Kangus. 2002. Bald eagle surveys at Glen Canyon National Recreation Area, Utah and Arizona, 1991-2002. *Utah Birds* 16: 12-22.
- Spence, J.R. and J.A. Holmes. 2005. The Riparian and Aquatic Bird Communities along the Colorado River from Glen Canyon Dam to Lake Mead. Final Report Interagency Acquisition No: 1425-98-AA- 40-22680, 2004. Grand Canyon Monitoring and Research Center, USGS, Flagstaff, AZ.
- 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.
- Spence, J.R. and E.C. Palmquist. 2014. *Cycladenia humilis* Bentham var. *jonesii* (Eastwood) Welsh & Atwood (Apocynaceae) in the Circle Cliffs-Escalante region of south-central Utah: Status, Distribution and Monitoring Plan. Unpublished report. National Park Service, Science & Resource Management Division, Glen Canyon National Recreation Area, Page, Arizona.
- Spence, J.R. and L. Whitham. 2015. The Escalante River Watershed Partnership: conservation of an endangered riparian ecosystem. Ch. 23 *In* Huenneke, L.F., C. van Riper III, and K. A. Hays-Gilpin (eds.). Colorado Plateau VI. Science and management at the landscape scale. University of Arizona Press, Tucson (in press).
- Sprinkel, D.A., T.C. Chidsey, P.B. Anderson. 2000. Geology of Utah’s Parks and Monuments. *Utah Geological Association Publication* 28. Salt Lake City, Utah. pp 300-335.
- Stevens, L. n.d. Controlling Aliens: Ravenna Grass in Grand Canyon. Accessed online at <http://www.gcr.org/bqr/6-4/ravenna.htm>.
- Swarthout, E.C.H. and Steidl, R.J. 2001. Flush Responses of Mexican spotted owls to Recreationist. *Journal of Wildlife Management* 65(2): 312-317.

Tuhy, J.S., and J.A. MacMahon. 1988. Vegetation and Relict Communities of Glen Canyon National Recreation Area, Final Report for Contract CX1200-6-B076. The Nature Conservancy and Department of Biology and Ecology Center, Utah State University. Wellsville, UT and Logan, UT.

U.S. Fish and Wildlife Service (USFWS).

1985. Brady pincushion cactus (*Pediocactus bradyi*) recovery plan. U.S. Fish and Wildlife Service, Albuquerque, NM.

1986. Rule to determine *Cycladenia humilis* var. *jonesii* (Jones Cycladenia) to be a threatened species. Federal Register 51(86): 16526-16530.

1987. Endangered and threatened wildlife and plants; final rule determining *Asclepias welshii* (Welsh's milkweed) to be a threatened species with critical habitat. In: Federal Register. 52(208): 41435-41441.

1993. Endangered and threatened wildlife and plants; Reclassification of the plant *Pediocactus sileri* from Endangered to Threatened. FR58: 68476-68480.

1998. Endangered Species Consultation Handbook, Procedures for Conducting Consultation Activities Under Section 7 of the Endangered Species Act.

2002. Final Recovery Plan Southwestern Willow Flycatcher (*Empidonax traillii extimus*). Region 2, Albuquerque, New Mexico.

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](http://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/SWWF/CH_Final_Oct05/EA%20cover-main%20body.pdf).

2011a. Southwestern Willow Flycatcher Species profile. Arizona Ecological Services, Southwestern Willow Flycatcher website, accessed at <http://www.fws.gov/southwest/es/arizona/Southwest.htm>.

2011b. USFWS Species Assessment and Listing Priority Assignment Form for Yellow-Billed Cuckoo (*Coccyzus americanus*). Available on the Internet at [http://ecos.fws.gov/docs/candidate/assessments/2012/r8/B06R\\_V01.pdf](http://ecos.fws.gov/docs/candidate/assessments/2012/r8/B06R_V01.pdf)

2011c. U.S. Fish and Wildlife Service (USFWS) Utah Field Office guidelines for conducting and reporting botanical inventories and monitoring of federally listed, proposed and candidate plants. 19 p.

2012a. Final Environmental Assessment for the Designation of Critical Habitat for the Southwestern Willow Flycatcher. Phoenix, AZ.

2012b. Coconino County Federally Listed Threatened and Endangered Species. Available on the Internet at <http://www.fws.gov/southwest/es/arizona/Documents/CountyLists/Coconino.pdf>

2012c. Mexican spotted owl Recovery Plan, First Revision, (*Strix occidentalis lucida*). Albuquerque, New Mexico.

2014a. Mexican spotted owl Species Profile. Available on the Internet at <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B074#lifeHistory>. Accessed



September 18, 2014.

2014b. Determination of Threatened Status for the Western Distinct Population of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule. Federal Register Volume 79, Number 192: 59992- 60038.

Utah Department of Natural Resources (Utah DNR). n.d. Bald Eagle. Species profile. State of Utah Natural Resources, Division of Wildlife Resources. Accessed online at <http://dwrcdc.nr.utah.gov/rsgis2/Search/Display.asp?FINm=halileuc>, on February 13, 2012.

Utah DNR. 2011. Utah Sensitive Species List. March 29, 2011. State of Utah Department of Natural Resources, Division of Wildlife Resources. Available online at: <http://dwrcdc.nr.utah.gov/ucdc/ViewReports/SSLAppendices20110329.pdf>. Accessed February 13, 2012.

Willey, D. W. 2000. Habitat Use of Mexican spotted owls (*Strix occidentalis lucida*) in National Parks on the Colorado Plateau. U. S. Geological Survey, Flagstaff, AZ.

Winward, A.H. 1980. Taxonomy and Ecology of Sagebrush in Oregon. Station Bulletin No. 642, Oregon State University, Corvallis. 15 pp.

Wise-Gervais, C. 2005. Spotted Owl (*Strix occidentalis*). In Arizona Breeding Bird Atlas. pp. 224-225 (T.E. Corman and C. Wise-Gervais, eds.), University of New Mexico Press, Albuquerque, NM.

# Appendices

## Appendix A. Specific Elements of the Glen Canyon Off-road Vehicle Management Plan Environmental Impact Statement Preferred Alternative.

### Lone Rock Beach ORV Area, Kane County, UT

- No changes to types of motor vehicles currently allowed. Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue.
- The speed limit remains at 15 mph.
- New requirements:
  - The use of Lone Rock Beach ORV area would require an ORV Permit.
  - Approximately 20 acres of the beach would be designated as a vehicle-free zone.

### Lone Rock Beach Play ORV Area, Kane County, UT

- No changes to types of motor vehicles currently allowed. Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue.
- New requirements:
  - The use of Lone Rock Beach Play Area ORV area would require an ORV permit and a safety flag.

### Accessible Shoreline ORV Areas

- All accessible shoreline ORV areas would continue to be subject to closure if low lake levels inhibit adequate management of motor-vehicle use.
- Changes in motorized use:
  - Eight existing ORV areas where conventional motor vehicles are currently allowed would also have street-legal ATV use allowed from March 1 through October 31:
    - Blue Notch, San Juan County, UT
    - Bullfrog North and South, Garfield County, UT
    - Approximately 20 acres would be designated as a vehicle-free zone
    - Crosby Canyon, Kane County, UT
    - Dirty Devil, Garfield County, UT
    - Farley Canyon, San Juan County, UT
    - Red Canyon, San Juan County, UT
    - Stanton Creek, Garfield County, UT
    - Approximately 20 acres as a vehicle-free zone
    - White Canyon, San Juan County, UT
  - Four existing ORV areas where conventional motor vehicles are currently allowed would also have street-legal ATV use allowed year round:
    - Copper Canyon, San Juan County, UT
    - Hite Boat Ramp, San Juan County, UT
    - Neskahi, San Juan County, UT
    - Paiute Canyon, San Juan County, UT
  - Two new ORV areas would be established where conventional motor vehicles and street-legal ATV use would be allowed year round:
    - Nokai Canyon, San Juan County, UT
    - Paiute Farms, San Juan County, UT

- One existing ORV area would be closed to motor vehicle use and restored to natural condition:
  - Warm Creek, Kane County, UT
- New requirements:
  - The use of all accessible shoreline ORV areas would require an ORV permit.
  - The speed limit at accessible shoreline ORV areas would be established at 15 mph.
  - Quiet hours between 10:00 p.m. and 6:00 a.m. would be established at accessible shoreline ORV areas.

## **Park Roads**

- The speed limits on paved park roads would not change and would remain as currently posted.
- Street-legal ATVs would continue to be authorized for use on the following paved park roads in accordance with state law:
  - US Highway 89, Coconino County, AZ and Kane County, UT
  - Wahweap developed area, Coconino County, AZ and Kane County, UT
  - Lone Rock entrance road, Kane County, UT
  - Burr Trail, Garfield County, UT
  - State Highway 276, Garfield, Kane and San Juan Counties, UT
  - Bullfrog developed area, Garfield and Kane Counties, UT
  - State Highway 95, Garfield and San Juan Counties, UT
  - Hite entrance road and developed area, San Juan County, UT
  - Halls Crossing developed area, San Juan County, UT
- Street-legal ATVs would continue to be prohibited from use on the following unpaved roads (Orange Cliffs Unit):
  - A portion of NPS Route 633, Garfield County, UT
  - NPS Route 731, Garfield County, UT
  - NPS Route 756, Garfield County, UT
  - NPS Route 763, Garfield County, UT
  - NPS Route 787, Garfield County, UT
  - NPS Route 633, Wayne County, UT
  - NPS Route 744, Wayne County, UT
  - NPS Route 763, Wayne County, UT
  - NPS Route 765, Wayne County, UT
  - NPS Route 774, Wayne County, UT
  - NPS Route 775, Wayne County, UT
  - NPS Route 777, Wayne County, UT
- Changes in motorized use:
  - Street-legal ATVs would be prohibited from use on the following paved roads:
    - The Lees Ferry Access Road and within the Lees Ferry developed area, Coconino County, AZ
  - Street-legal ATVs would continue to be authorized and OHVs would be authorized on the following unpaved park roads:
    - Seismograph Road, Coconino County, AZ
    - Dump Road, Coconino County, AZ (after administrative closure is lifted)
    - A portion of NPS Route 633, Garfield County, UT (south of Orange Cliffs Unit boundary)

- NPS Route 332, Garfield County, UT
- GC0028D, Garfield County, UT
- GC13480, Garfield County, UT
- GC116050, Garfield County, UT
- NPS Route 231, Kane County, UT
- NPS Route 262, Kane County, UT
- NPS Route 264, Kane County, UT
- NPS Route 265, Kane County, UT
- NPS Route 279, Kane County, UT
- NPS Route 330, Kane County, UT
- K6150, Kane County, UT
- K6160, Kane County, UT
- K7200, Kane County, UT
- K8175, Kane County, UT
- NPS Route 430, San Juan County, UT
- NPS Route 431, San Juan County, UT
- NPS Route 450, San Juan County, UT
- NPS Route 632, San Juan County, UT
- NPS Route 650, San Juan County, UT
- NPS Route 651, San Juan County, UT
- NPS Route 657, San Juan County, UT
- B244, San Juan County, UT
- D0016, San Juan County, UT
- D0138, San Juan County, UT
- D0154, San Juan County, UT
- D1184, San Juan County, UT
- D1880, San Juan County, UT
- D1887, San Juan County, UT
- D2056, San Juan County, UT
- D2639, San Juan County, UT
- Street-legal ATVs and OHVs would be authorized on the following unpaved park roads (eight mile portion of Poison Spring Loop):
  - A portion of NPS Route 633, Garfield County, UT
  - NPS Route 730, Garfield County, UT
- The speed limit on unpaved park roads would be established at 25 mph or as posted.

#### **ORV Routes**

- Conventional vehicles, street-legal ATVs and OHVs would continue to be used and would be authorized for use on the following ORV routes:
  - Corrals Road, Coconino County, AZ
  - Ferry Swale Road (includes portions of BLM Routes 1099 and 1325), Coconino County, AZ
  - Ferry Swale Spur Road, Coconino County, AZ
  - BG Cave Road, Coconino County, AZ
  - Substation Road, Coconino County, AZ
  - Powerline Road, Coconino County, AZ
  - Powerline Loop Road, Coconino County, AZ
  - Ferry Swale Dune Road, Coconino County, AZ

- Seismograph Road Spur 1, Coconino County, AZ
- Seismograph Road Spur 2, Coconino County, AZ
- Seismograph Road Spur 3, Coconino County, AZ
- Middle Moody Trailhead, Garfield County, UT
- Gunsight Springs Trailhead, Kane County, UT
- Studhorse Point Road, Kane County, UT
- East Gypsum Canyon Overlook, San Juan County, UT
- Imperial Valley, San Juan County, UT
- Changes in motorized use:
  - All motor vehicles would be prohibited from the following user-created routes which would be restored to natural conditions if appropriate:
    - Powerline Road extension, Coconino County, AZ
    - Switchyard Roads, Coconino County, AZ
    - Tower Road and extensions, Coconino County, AZ
    - Historic Hwy 89 route, Coconino County, AZ
    - BLM Routes 1405 and 1407 extensions, Coconino County, AZ
    - Ferry Swale Road extensions, Coconino County, AZ
    - ADOT yard extensions, Coconino County, AZ
    - Corrals Road Wash Spur, Coconino County, AZ
    - Corrals Road Admin Fence Spur, Coconino County, AZ
    - Wildcat Tank Road Spur, Coconino County, AZ
    - Corrals Road Spur 3, Coconino County, AZ
    - Seismograph Road Spur 4, Coconino County, AZ
    - Seismograph Road Spur 5, Coconino County, AZ
    - Greenehaven Spurs, Coconino County, AZ
    - Corrals Road Spur, Coconino County, AZ
    - BLM Administrative Route V1128, Coconino County, AZ
  - The speed limit on ORV routes would be established at 25 mph or as posted.
  - Motor vehicle use on all ORV routes would require an ORV permit.



## Appendix B. Official Listing of Federally Listed Species for Glen Canyon Off-road Management Plan (Proposed Project).



### United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Utah Ecological Services Field Office  
2369 WEST ORTON CIRCLE, SUITE 50  
WEST VALLEY CITY, UT 84119  
PHONE: (801)975-3330 FAX: (801)975-3331  
URL: [www.fws.gov](http://www.fws.gov); [www.fws.gov/utahfieldoffice/](http://www.fws.gov/utahfieldoffice/)



Consultation Code: 06E23000-2016-SLI-0013

October 19, 2015

Event Code: 06E23000-2016-E-00029

Project Name: Glen Canyon National Recreation Area ORV EIS

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: Glen Canyon National Recreation Area ORV EIS

## Official Species List

### Provided by:

Utah Ecological Services Field Office  
2369 WEST ORTON CIRCLE, SUITE 50  
WEST VALLEY CITY, UT 84119  
(801) 975-3330  
<http://www.fws.gov>  
<http://www.fws.gov/utahfieldoffice/>

### Expect additional Species list documents from the following office(s):

Arizona Ecological Services Field Office  
2321 WEST ROYAL PALM ROAD, SUITE 103  
PHOENIX, AZ 85021  
(602) 242-0210  
<http://www.fws.gov/southwest/es/arizona/>  
[http://www.fws.gov/southwest/es/EndangeredSpecies\\_Main.html](http://www.fws.gov/southwest/es/EndangeredSpecies_Main.html)

**Consultation Code:** 06E23000-2016-SLI-0013

**Event Code:** 06E23000-2016-E-00029

**Project Type:** LAND - MANAGEMENT PLANS

**Project Name:** Glen Canyon National Recreation Area ORV EIS

**Project Description:** EIS and Off-road Vehicle Plan for Glen Canyon NRA, including primarily 4 counties in UT, with back country roads and accessible shorelines.

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

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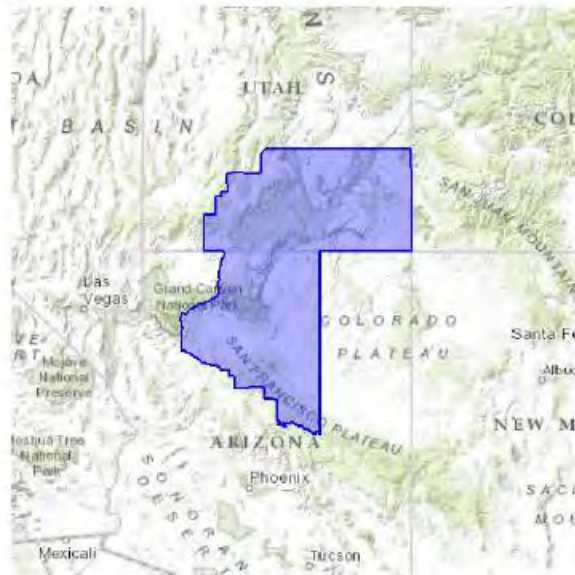




United States Department of Interior  
Fish and Wildlife Service

Project name: Glen Canyon National Recreation Area ORV EIS

**Project Location Map:**



**Project Coordinates:** The coordinates are too numerous to display here.

**Project Counties:** Coconino, AZ | Garfield, UT | Kane, UT | San Juan, UT | Wayne, UT

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United States Department of Interior  
Fish and Wildlife Service

Project name: Glen Canyon National Recreation Area ORV EIS

## Endangered Species Act Species List

There are a total of 26 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 3 of these species should be considered only under certain conditions. Critical habitats listed under the Has Critical Habitat column may or may not lie within your project area. See the Critical habitats within your project area section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

| Birds   | Status                                 | Has Critical Habitat | Condition(s)  |
|---|--|----------------------|---|
| California condor ( <i>Gymnogyps californianus</i> )<br>Population: U.S.A. (specific portions of Arizona, Nevada, and Utah) | Experimental Population, Non-Essential |                      | Species is considered Experimental non-essential population<br>Species is considered Endangered |
| Gunnison sage-grouse ( <i>Centrocercus minimus</i> )<br>Population: entire  | Threatened                             |                      |   |
| Mexican Spotted owl ( <i>Strix occidentalis lucida</i> )<br>Population: Entire  | Threatened                             | Final designated     |   |
| Southwestern Willow flycatcher ( <i>Empidonax traillii extimus</i> )<br>Population: Entire                                  | Endangered                             | Final designated     |   |
| Yellow-Billed Cuckoo ( <i>Coccyzus americanus</i> )<br>Population: Western U.S. DPS   | Threatened                             | Proposed             |   |
| <b>Fishes</b>   |  |                      |   |
| Bonytail chub ( <i>Gila elegans</i> )   | Endangered                             | Final designated     |   |

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Fish and Wildlife Service

Project name: Glen Canyon National Recreation Area ORV EIS

|  |            |                  |  |
|--|------------|------------------|--|
| Population: Entire   |            |                  |  |
| Colorado pikeminnow ( <i>Ptychocheilus lucius</i> )<br>Population: Entire, except EXPN | Endangered | Final designated |  |
| Greenback Cutthroat trout ( <i>Oncorhynchus clarki stomias</i> )<br>Population: Entire | Threatened |                  |  |
| Humpback chub ( <i>Gila cypha</i> )<br>Population: Entire                              | Endangered | Final designated | Watershed discharge that would affect the Grand Canyon |
| Razorback sucker ( <i>Xyrauchen texanus</i> )<br>Population: Entire                    | Endangered | Final designated |  |
| Virgin River Chub ( <i>Gila seminuda</i> (=robusta))<br>Population: Entire             | Endangered | Final designated |  |
| Woundfin ( <i>Plagopterus argentissimus</i> )<br>Population: Entire, except EXPN       | Endangered | Final designated |  |
| <b>Flowering Plants</b>  |            |                  |  |
| Autumn Buttercup ( <i>Ranunculus aestivalis</i> (=acriiformis))                        | Endangered |                  |  |
| Barneby reed-mustard ( <i>Schoenocrambe barnebyi</i> )                                 | Endangered |                  |  |
| Jones Cycladenia ( <i>Cycladenia humilis</i> var. <i>jonesii</i> )                     | Threatened |                  |  |
| Kodachrome bladderpod ( <i>Lesquerella numulosa</i> )                                  | Endangered |                  |  |
|  |            |                  |  |

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Project name: Glen Canyon National Recreation Area ORV EIS

|  |            |                  |  |
|--|------------|------------------|--|
| Last Chance townsendia ( <i>Townsendia aprica</i> )                            | Threatened |                  |  |
| Navajo sedge ( <i>Carex specuicola</i> )                                       | Threatened | Final designated |  |
| San Rafael cactus ( <i>Pediocactus despainii</i> )                             | Endangered |                  |  |
| Siler Pincushion cactus ( <i>Pediocactus (=echinocactus, =utahia) sileri</i> ) | Threatened |                  |  |
| Ute ladies'-tresses ( <i>Spiranthes diluvialis</i> )                           | Threatened |                  |  |
| Welsh's milkweed ( <i>Asclepias welshii</i> )                                  | Threatened | Final designated |  |
| Winkler cactus ( <i>Pediocactus winkleri</i> )                                 | Threatened |                  |  |
| Wright Fishhook cactus ( <i>Sclerocactus wrightiae</i> )                       | Endangered |                  |  |
| <b>Mammals</b>   |            |                  |  |
| Utah prairie dog ( <i>Cynomys parvidens</i> )<br>Population: U.S.A.(UT)        | Threatened |                  | High intensity surveys, as defined by the Utah Prairie Dog Survey Protocol ( <a href="http://www.fws.gov/utahfieldoffice/">http://www.fws.gov/utahfieldoffice/</a> ), are required for all projects with temporary or permanent impacts. Low intensity surveys, as defined by the Utah Prairie Dog Survey Protocol ( <a href="http://www.fws.gov/utahfieldoffice/">http://www.fws.gov/utahfieldoffice/</a> ), are required for all projects with temporary or permanent impacts. |

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United States Department of Interior  
Fish and Wildlife Service

Project name: Glen Canyon National Recreation Area ORV EIS

|  |            |  |  |
|--|------------|--|--|
|  |            |  | tahfieldoffice/), are required for all projects with temporary or permanent impacts. |
| Snails   |            |  |  |
| Kanab ambersnail ( <i>Oxyloma haydeni kanabensis</i> )<br>Population: Entire | Endangered |  |  |

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United States Department of Interior  
Fish and Wildlife Service

Project name: Glen Canyon National Recreation Area ORV EIS

## Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

| Birds  | Critical Habitat Type |
|--|-----------------------|
| Mexican Spotted owl ( <i>Strix occidentalis lucida</i> )<br>Population: Entire             | Final designated      |
| Southwestern Willow flycatcher ( <i>Empidonax traillii extimus</i> )<br>Population: Entire | Final designated      |
| Yellow-Billed Cuckoo ( <i>Coccyzus americanus</i> )<br>Population: Western U.S. DPS        | Proposed              |
| <b>Fishes</b>  |                       |
| Bonytail chub ( <i>Gila elegans</i> )<br>Population: Entire                                | Final designated      |
| Colorado pikeminnow ( <i>Pygoccephalus lucius</i> )<br>Population: Entire, except EXPN     | Final designated      |
| Humpback chub ( <i>Gila cypha</i> )<br>Population: Entire                                  | Final designated      |
| Razorback sucker ( <i>Xyrauchen texanus</i> )<br>Population: Entire                        | Final designated      |
| <b>Flowering Plants</b>  |                       |
| Navajo sedge ( <i>Carex specuicola</i> )   | Final designated      |
| Welsh's milkweed ( <i>Asclepias welshii</i> )  | Final designated      |

<http://ecos.fws.gov/ipac>, 10/19/2015 03:08 PM

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## **APPENDIX E: LETTERS OF CONSULTATION AND COORDINATION**

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## **Cooperating Agencies**

2007 Invitation to U.S. Bureau of Land Management to Become a Cooperating Agency  
2007 Invitations to Cooperating Agencies – Counties  
2007 Responses from Cooperating Agencies – Counties  
2010 Restart Letter to Cooperating Agencies – Counties

## **Agency Consultation**

U.S. Fish and Wildlife Consultation  
Tribal Consultation  
State and Local Agency Consultation

## **National Historic Preservation Act Section 106 Consultation**

Colorado Plateau Archaeological Alliance  
Utah State Historic Preservation Office  
Arizona State Parks  
2013 Correspondence with Consulting Parties  
U.S. Bureau of Land Management

## **Other Federal Agency Correspondence**

U.S. Environmental Protection Agency Correspondence  
U.S. Army Corps of Engineers Correspondence

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## **COOPERATING AGENCIES**

2007 Invitation to U.S. Bureau of Land Management to Become a Cooperating Agency  
2007 Invitations to Cooperating Agencies – Counties  
2007 Responses from Cooperating Agencies – Counties  
2010 Restart Letter to Cooperating Agencies – Counties



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# 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:  
D18 - OHV-EIS

JUN 28 2007

## Memorandum

To: Utah State Director, Bureau of Land Management

From: Superintendent, Glen Canyon National Recreation Area

Re: Off-Highway Vehicle Environmental Impact Statement

Glen Canyon National Recreation Area (NRA) is beginning the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use. The purpose of this EIS is to develop a management plan for OHV use within the recreation area, including to: 1) evaluate the effects of the use of all terrain vehicles (ATVs) on park roads; 2) evaluate the use of motorized vehicles (i.e., ATVs and conventional vehicles) when operated off-road at the Lone Rock Beach area; and 3) evaluate the use of motorized vehicles at designated shoreline areas along Lake Powell.

The Council on Environmental Quality (CEQ) regulations implementing the *National Environmental Policy Act* allows federal agencies to invite other federal agencies to serve as cooperating agencies in the preparation of an EIS. Cooperating agencies serve an important role in ensuring that the lead agency considers and evaluates a wide range of issues, alternatives, and outcomes during an environmental review.

We invite BLM to participate as a cooperating agency as we develop the EIS. This letter serves as our formal request for your participation and outlines shared roles and responsibilities during the EIS process.

CEQ regulations at 40 §1501.6 outline the parameters of a cooperating agency's possible role in the EIS process. Under these regulations, a cooperating agency may help the lead agency to:

- Identify issues and impacts to be addressed in the EIS;
- Identify and arrange for the collection and/or assembly of necessary resource, environmental, social, economic, and institutional data, and analyze such data;
- Develop alternatives;
- Evaluate alternatives and estimate the effects of implementing each alternative; and
- Review the draft EIS before it is released to the public.

Cooperating agency status does not inherently mean that the cooperating agency supports the proposal. In addition, the National Park Service remains solely responsible for selecting and implementing the final decision reached through the EIS process. Any discussions or materials that are to remain confidential through the EIS process will be identified as such as the need arises.

We recognize that many roads pass through BLM lands and Glen Canyon NRA lands. It is important for our agencies to coordinate and communicate on issues concerning the management of these roadways. Your participation in this process, beginning with the internal scoping effort, is intended to ensure that we identify the full range of significant issues, possible impacts, and alternatives to be considered during the EIS review. We are also inviting Kane, Garfield, San Juan, Wayne, and Coconino Counties to participate in this process as cooperating agencies.

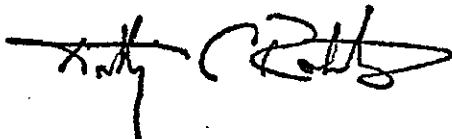
If you accept our invitation to participate as a cooperating agency, we will initiate the process by working with you on the development of issues and alternatives to be considered in the EIS process.

Please let us know if you would like to participate in this process as a cooperating agency by responding in writing to this letter and designating an individual who will represent BLM in this process.

We firmly believe that close cooperation with our partners will result in a more informed, timely, and ultimately effective planning process and decision. We look forward to your response to our request. Attached is a tentative timeline for the completion of the EIS.

If you have any questions about this planning effort, please do not hesitate to contact either Kevin Schneider at 928-608-6208 or Brian Sweatland at 303-969-2103.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kitty L. Roberts', with a stylized flourish at the end.

Kitty L. Roberts  
Superintendent

Attachment

cc:

Kane County Chair  
Garfield County Chair  
San Juan County Chair  
Coconino County Chair

bcc:

KSchneider, GLCA  
BSweatland, GLCA

KSCHNEIDER:sp:6/28/2007:Q:\Management\Management Common Files\OHV\Cooperating Agencies\BLM Invite.doc

## **Off Highway Vehicle Planning Environmental Impact Statement and Rulemaking Tentative Schedule**

|                  |  |
|------------------|--|
| May 2007         | Internal Scoping Begins – Meetings with potential cooperating agencies   |
| June 2007        | Cooperating agencies established   |
| July 2007        | Public Scoping Begins – Notice of Intent published in Federal Register<br>60 day public comment period with public workshops                                     |
| Spring 2008      | Draft EIS available for cooperating agency review  |
| Summer 2008      | Draft EIS available for public review with public workshops<br>Proposed regulation available for public review (if necessary based on the preferred alternative) |
| Winter 2008-2009 | Final EIS available for cooperating agency review  |
| Spring 2009      | Final EIS published  |
| Summer 2009      | Record of Decision signed<br>Final regulation published  |







# 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:  
D18 - OHV-EIS

MAY 23 2007

Chairman Carl Taylor  
Coconino County Board of Supervisors  
219 East Cherry Avenue  
Flagstaff, Arizona 86001

SPH  
5/22  
ks 5/2

Dear Chairman Taylor:

Glen Canyon National Recreation Area (NRA) is beginning the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use. The purpose of this EIS is to develop a management plan for OHV use within the recreation area, including to: 1) evaluate the effects of the use of all terrain vehicles (ATVs) on park roads; 2) evaluate the use of motorized vehicles (i.e., ATVs and conventional vehicles) when operated off-road at the Lone Rock Beach area; and 3) evaluate the use of motorized vehicles at designated shoreline areas along Lake Powell.

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We invite you to participate as a cooperating agency as we develop the EIS. This letter serves as our formal request for your participation and outlines shared roles and responsibilities during the EIS process.

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- Review the draft EIS before it is released to the public.

Cooperating agency status does not inherently mean that the cooperating agency supports the proposal. In addition, the National Park Service remains solely responsible for selecting and implementing the final decision reached through the EIS process. Any discussions or materials that are to remain confidential through the EIS process will be identified as such as the need arises.

We recognize that Coconino County has special localized expertise with socioeconomic issues and local recreational uses that may be affected by OHV use and management within Glen Canyon NRA. Your participation in this process, beginning with the internal scoping effort, is intended to ensure that we identify the full range of significant issues, possible impacts, and alternatives to be considered during the EIS review. We are also inviting Kane, Garfield, San Juan, and Wayne Counties and the Bureau of Land Management to participate in this process as cooperating agencies.

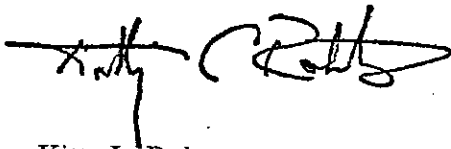
If you accept our invitation to participate as a cooperating agency, we will initiate the process by working with you on the development of issues and alternatives to be considered in the EIS process.

Please let us know if you would like to participate in this process as a cooperating agency by responding in writing to this letter and designating an individual who will represent your county in this process.

We firmly believe that close cooperation with our partners will result in a more informed, timely, and ultimately effective planning process and decision. We look forward to your response to our request. Enclosed is a tentative timeline for the completion of the EIS.

If you have any questions about this planning effort, please do not hesitate to contact either Kevin Schneider at 928-608-6208 or Brian Sweatland at 303-969-2103.

Sincerely,



Kitty L. Roberts  
Superintendent

Enclosure

cc:

Kane County Chair  
Garfield County Chair  
San Juan County Chair  
Wayne County Chair

bcc:

KSchneider, GLCA  
BSweatland, GLCA

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# 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:  
D18 - OHV-EIS

MAY 23 2007

Chairman Maloy Dodds  
Garfield County Commissioners  
P.O. Box 77  
Panguitch, Utah 84759

SPK  
5/22/07  
JCS  
5/22

Dear Chairman Dodds:

Glen Canyon National Recreation Area (NRA) is beginning the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use. The purpose of this EIS is to develop a management plan for OHV use within the recreation area, including to: 1) evaluate the effects of the use of all terrain vehicles (ATVs) on park roads; 2) evaluate the use of motorized vehicles (i.e., ATVs and conventional vehicles) when operated off-road at the Lone Rock Beach area; and 3) evaluate the use of motorized vehicles at designated shoreline areas along Lake Powell.

The Council on Environmental Quality (CEQ) regulations implementing the *National Environmental Policy Act* allows federal agencies to invite tribal, state, and local governments to serve as cooperating agencies in the preparation of an EIS. Cooperating agencies serve an important role in ensuring that the lead agency considers and evaluates a wide range of issues, alternatives, and outcomes during an environmental review.

We invite you to participate as a cooperating agency as we develop the EIS. This letter serves as our formal request for your participation and outlines shared roles and responsibilities during the EIS process.

CEQ regulations at 40 §1501.6 outline the parameters of a cooperating agency's possible role in the EIS process. Under these regulations, a cooperating agency may help the lead agency to:

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- Develop alternatives;
- Evaluate alternatives and estimate the effects of implementing each alternative; and
- Review the draft EIS before it is released to the public.

Cooperating agency status does not inherently mean that the cooperating agency supports the proposal. In addition, the National Park Service remains solely responsible for selecting and implementing the final decision reached through the EIS process. Any discussions or materials that are to remain confidential through the EIS process will be identified as such as the need arises.

We recognize that Garfield County has special localized expertise with socioeconomic issues and local recreational uses that may be affected by OHV use and management within Glen Canyon NRA. Your participation in this process, beginning with the internal scoping effort, is intended to ensure that we identify the full range of significant issues, possible impacts, and alternatives to be considered during the EIS review. We are also inviting Kane, San Juan, Wayne, and Coconino Counties and the Bureau of Land Management to participate in this process as cooperating agencies.

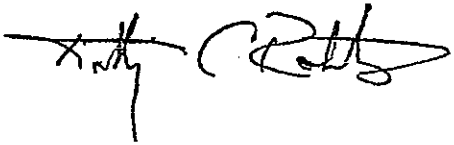
If you accept our invitation to participate as a cooperating agency, we will initiate the process by working with you on the development of issues and alternatives to be considered in the EIS process.

Please let us know if you would like to participate in this process as a cooperating agency by responding in writing to this letter and designating an individual who will represent your county in this process.

We firmly believe that close cooperation with our partners will result in a more informed, timely, and ultimately effective planning process and decision. We look forward to your response to our request. Enclosed is a tentative timeline for the completion of the EIS.

If you have any questions about this planning effort, please do not hesitate to contact either Kevin Schneider at 928-608-6208 or Brian Sweatland at 303-969-2103.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kitty L. Roberts', with a stylized flourish at the end.

Kitty L. Roberts  
Superintendent

Enclosure

cc:

Kane County Chair  
San Juan County Chair  
Wayne County Chair  
Coconino County Chair

bcc:

KSchneider, GLCA  
BSweatland, GLCA

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# 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:  
D18 – OHV-EIS

MAY 23 2007

Chairman Mark Habbeshaw  
Kane County Commissioners  
76 North Main  
Kanab, Utah 84741

Dear Chairman Habbeshaw:

Glen Canyon National Recreation Area (NRA) is beginning the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use. The purpose of this EIS is to develop a management plan for OHV use within the recreation area, including to: 1) evaluate the effects of the use of all terrain vehicles (ATVs) on park roads; 2) evaluate the use of motorized vehicles (i.e., ATVs and conventional vehicles) when operated off-road at the Lone Rock Beach area; and 3) evaluate the use of motorized vehicles at designated shoreline areas along Lake Powell.

The Council on Environmental Quality (CEQ) regulations implementing the *National Environmental Policy Act* allows federal agencies to invite tribal, state, and local governments to serve as cooperating agencies in the preparation of an EIS. Cooperating agencies serve an important role in ensuring that the lead agency considers and evaluates a wide range of issues, alternatives, and outcomes during an environmental review.

We invite you to participate as a cooperating agency as we develop the EIS. This letter serves as our formal request for your participation and outlines shared roles and responsibilities during the EIS process.

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- Review the draft EIS before it is released to the public.

Cooperating agency status does not inherently mean that the cooperating agency supports the proposal. In addition, the National Park Service remains solely responsible for selecting and implementing the final decision reached through the EIS process. Any discussions or materials that are to remain confidential through the EIS process will be identified as such as the need arises.

8/24  
5/22  
100  
5/12



We recognize that Kane County has special localized expertise with socioeconomic issues and local recreational uses that may be affected by OHV use and management within Glen Canyon NRA. Your participation in this process, beginning with the internal scoping effort, is intended to ensure that we identify the full range of significant issues, possible impacts, and alternatives to be considered during the EIS review. We are also inviting Garfield, San Juan, Wayne, and Coconino Counties and the Bureau of Land Management to participate in this process as cooperating agencies.

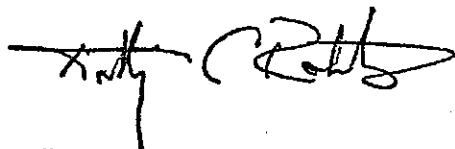
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We firmly believe that close cooperation with our partners will result in a more informed, timely, and ultimately effective planning process and decision. We look forward to your response to our request. Enclosed is a tentative timeline for the completion of the EIS.

If you have any questions about this planning effort, please do not hesitate to contact either Kevin Schneider at 928-608-6208 or Brian Sweatland at 303-969-2103.

Sincerely,



Kitty L. Roberts  
Superintendent

Enclosure

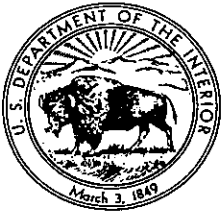
cc:

Garfield County Chair  
San Juan County Chair  
Wayne County Chair  
Coconino County Chair

bcc:

KSchneider, GLCA  
BSweatland, GLCA

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# 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:  
D18 – OHV-EIS

Chairman Bruce Adams  
San Juan County Commissioners  
P.O. Box 9  
Monticello, Utah 84535

SPK  
5/22/16  
15  
5/22

Dear Chairman Adams:

Glen Canyon National Recreation Area (NRA) is beginning the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use. The purpose of this EIS is to develop a management plan for OHV use within the recreation area, including to: 1) evaluate the effects of the use of all terrain vehicles (ATVs) on park roads; 2) evaluate the use of motorized vehicles (i.e., ATVs and conventional vehicles) when operated off-road at the Lone Rock Beach area; and 3) evaluate the use of motorized vehicles at designated shoreline areas along Lake Powell.

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We recognize that San Juan County has special localized expertise with socioeconomic issues and local recreational uses that may be affected by OHV use and management within Glen Canyon NRA. Your participation in this process, beginning with the internal scoping effort, is intended to ensure that we identify the full range of significant issues, possible impacts, and alternatives to be considered during the EIS review. We are also inviting Kane, Garfield, Wayne, and Coconino Counties and the Bureau of Land Management to participate in this process as cooperating agencies.

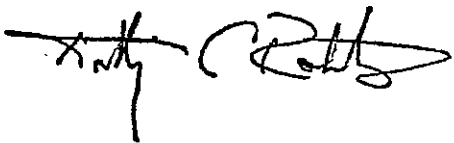
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If you have any questions about this planning effort, please do not hesitate to contact either Kevin Schneider at 928-608-6208 or Brian Sweatland at 303-969-2103.

Sincerely,



Kitty L. Roberts  
Superintendent

Enclosure

cc:

Kane County Chair  
Garfield County Chair  
Wayne County Chair  
Coconino County Chair

bcc:

KSchneider, GLCA  
BSweatland, GLCA

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# 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:  
D18 - OHV-EIS

JUN - 4 2007

Chairman Thomas Jeffery  
Wayne County Commissioners  
P.O. Box 189  
Loa, Utah 84747

SPerkin  
5/22/07  
p. 512

Dear Chairman Jeffery:

Glen Canyon National Recreation Area (NRA) is beginning the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use. The purpose of this EIS is to develop a management plan for OHV use within the recreation area, including to: 1) evaluate the effects of the use of all terrain vehicles (ATVs) on park roads; 2) evaluate the use of motorized vehicles (i.e., ATVs and conventional vehicles) when operated off-road at the Lone Rock Beach area; and 3) evaluate the use of motorized vehicles at designated shoreline areas along Lake Powell.

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We recognize that Wayne County has special localized expertise with socioeconomic issues and local recreational uses that may be affected by OHV use and management within Glen Canyon NRA. Your participation in this process, beginning with the internal scoping effort, is intended to ensure that we identify the full range of significant issues, possible impacts, and alternatives to be considered during the EIS review. We are also inviting Kane, Garfield, San Juan, and Coconino Counties and the Bureau of Land Management to participate in this process as cooperating agencies.

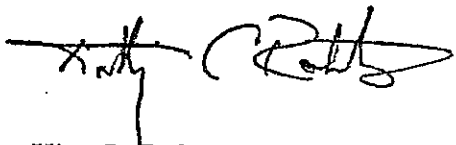
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We firmly believe that close cooperation with our partners will result in a more informed, timely, and ultimately effective planning process and decision. We look forward to your response to our request. Enclosed is a tentative timeline for the completion of the EIS.

If you have any questions about this planning effort, please do not hesitate to contact either Kevin Schneider at 928-608-6208 or Brian Sweatland at 303-969-2103.

Sincerely,



Kitty L. Roberts  
Superintendent

Enclosure

cc:

Kane County Chair  
Garfield County Chair  
San Juan County Chair  
Coconino County Chair

bcc:

KSchneider, GLCA  
BSweatland, GLCA

KSCHNEIDER:sp:5/22/2007:Q:\Management\Management Common Files\OHV\Cooperating Agencies\Invite Letterhd-Wayne.doc





# COCONINO COUNTY ARIZONA

## BOARD OF SUPERVISORS

June 12, 2007

Carl Taylor  
District 1

Elizabeth C. Archuleta  
District 2

Matt Ryan  
District 3

Deb Hill  
District 4

Louise Yellowman  
District 5

Ms. Kitty L. Roberts  
Superintendent  
Glen Canyon National Recreation Area  
P.O. Box 1507  
Page, Arizona 86040

Dear Kitty,

Thank you for your letter dated May 23, 2007, inviting Coconino County to participate in the process to develop an Environmental Impact Statement (EIS) to evaluate off-highway vehicle (OHV) use.

The majority of the land impacted by off-highway vehicle use is in Utah. We would be interested in being part of a larger scale endeavor and more long term planning.

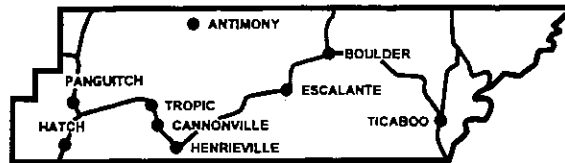
We appreciate being asked to participate in the process but respectfully decline the invitation. Thank you for your consideration.

Sincerely,

Carl Taylor  
Chairman  
Board of Supervisors

Thanks for asking!

# GARFIELD COUNTY



County Commissioners  
D. Maloy Dodds  
H. Dell LeFevre  
Clare M. Ramsay  
Camille A. Moore  
Clerk/Auditor

55 South Main Street, P.O. Box 77 • Panguitch, Utah 84759  
Phone (435) 676-8826 • Fax (435) 676-8239

Joe Thompson, Assessor  
Judy Henrie, Treasurer  
James D. Perkins, Sheriff  
Barry L. Huntington, Attorney  
A. Les Barker, Recorder  
John W. Yardley,  
Justice Court Judge

May 29, 2007

Kitty L. Roberts  
Glen Canyon National Recreation Area  
P.O. Box 1507  
Page, Arizona 86040

Dear Superintendent Roberts:

Please consider this letter Garfield County's acceptance of your invitation to participate in the Environmental Impact Statement to evaluate off-highway vehicle use in Glen Canyon National Recreation Area. Garfield County has designated Commissioner Clare Ramsay as the contact for the project.

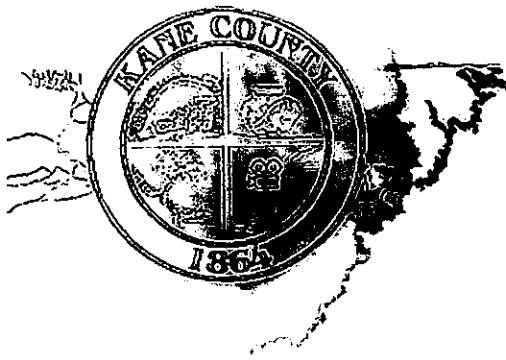
In addition to Garfield County's expertise associated with socioeconomic and local recreation issues, the County also has significant jurisdiction regarding roads in the area. We anticipate that the process will also analyze OHV use on Garfield County's roads, in addition to park roads. We also anticipate there will be some opportunity to discuss open OHV areas beyond the shoreline. Utah's burgeoning OHV registrations and expanding OHV use in Southern Utah are frequently recognized by federal agencies as an important issue in their planning process for providing opportunities for appropriate OHV use, including properly located open areas.

We are anxious to participate cooperatively in this process and complement your efforts to solve OHV issues in the Recreation Area. Please advise us if you need our assistance in developing a Memorandum of Understanding. We are also anxious to initiate our involvement at the earliest possible date. If you have any questions please contact me at 435-676-1162. We thank you in advance for your consideration.

Sincerely,

D. Maloy Dodds  
Garfield County Commission Chairman

cc: Kane County, San Juan County, Wayne County



**Kane County Commission**  
Mark W. Habbeshaw, Daniel W. Hulet, Duke Cox  
76 North Main  
Kanab, Utah 84741  
(435) 644-4901

July 11, 2007

Kitty L Roberts  
Superintendent  
Glen Canyon National Recreational Area  
PO Box 1507  
Page, Arizona 86040

Dear Superintendent Roberts,

Kane County appreciates and accepts your invitation to participate in the GCNRA transportation/OHV NEPA planning effort as a cooperating agency. The County Commission hopes that we can provide local expertise regarding socio-economic issues as well as other areas of the planning effort.

The County Commission has designated Commissioner Mark Habbeshaw to represent the county in this planning effort.

We look forward to working with you and your staff in this important planning effort.

Sincerely,

A handwritten signature in black ink that reads "Mark W. Habbeshaw".

Mark W. Habbeshaw  
Commission Chair  
(435) 644-4902  
[markh@kanab.net](mailto:markh@kanab.net)

cc: San Juan County  
Garfield County



## SAN JUAN COUNTY COMMISSION

Bruce B. Adams - Chairman  
Kenneth Maryboy - Vice-Chairman  
Lynn H. Stevens - Commissioner  
Rick M. Bailey - Administrator

May 30, 2007

Kitty L. Roberts, Superintendent  
Glen Canyon Recreation Area  
PO Box 1507  
Page, Arizona 86040

Dear Ms. Roberts,

I received your invitation to become a participating cooperating agency, in conjunction with the Council on Environmental Quality.

Speaking for myself, and on behalf of the San Juan County Commission, we are eager to be a cooperating agency.

Thank you for the invitation. We look forward to doing our part.

Sincerely,

Bruce Adams, Chairman  
San Juan County Commission

BBA/sd

**Wayne County**  
**18 South Main**  
**Loa, Utah 84747**

Phone 435-836-2765  
Fax 435-836-2479

**COMMISSIONERS**  
Thomas A. Jeffery, Chairman  
Stanley W. Wood  
DeRae Fillmore

Recorder/Treasurer  
Assessor  
Attorney  
Clerk/Auditor  
Sheriff

Colleen Brinkerhoff  
Carolyn Moosman  
Marvin Bagley  
Ryan Torgerson  
Kurt R. Taylor

June 8, 2007

Kitty L. Roberts  
Glen Canyon National Recreation Area  
PO Box 1507  
Page, Arizona 86040

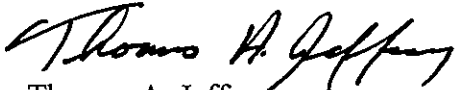
Dear Superintendent Roberts,

Wayne County appreciates your invitation to participate in the Environmental Impact Statement to evaluate off-highway vehicle use in Gen Canyon National Recreation Area. Wayne County accepts your invitation and has designated Commissioner DeRae Fillmore as the contact for the project.

We are anxious to participate cooperatively in this process and complement your efforts. Since OHV use is becoming more popular it is important to address the associated issues in the planning process.

We look forward to participating in this process.

Sincerely,



Thomas A. Jeffery  
Wayne County Commission Chair

cc: Kane County, San Juan County, Garfield County







# 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:  
D18 – OHV-EIS

SEP 17 2010

Chairman Maloy Dodds  
Garfield County Commissioners  
P.O. Box 77  
Panguitch, Utah 84759

Dear Chairman Dodds:

The National Park Service (NPS) at Glen Canyon National Recreation Area (NRA) started work on the Off-Road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) in August 2007. The plan process has been delayed due to changes in staff and funding. With this letter, we would like to restart our communications and cooperation on this planning process.

Thank you for accepting our offer to participate in the ORV plan/environmental impact statement as a cooperating agency. As we discussed in our May 9, 2007 meeting, we issued you a formal invitation to participate on June 4, 2007. You indicated your willingness to participate in your May 29, 2007 response. As our June 4, 2007 letter described, cooperating agencies help the lead agency to:

- Identify issues and impacts to be addressed in the EIS  
*Thank you for sharing your concerns on these topics during our May 9, 2007 meeting.*
- Identify and arrange for the collection and/or assembly of necessary resource, environmental, social, economic, and institutional data, and analyze such data
- Develop alternatives
- Evaluate alternatives and estimate the effects of implementing each alternative  
*We are developing alternatives based on the public scoping information we received from you, other cooperating agencies, and the public, and we hope to be able to meet with you soon to get your feedback on the proposed alternatives.*
- Review the draft EIS before it is released to the public  
*We expect to have a preliminary draft EIS sometime in the spring of 2011. As a cooperating agency, we invite you to provide comments on that EIS based on your special expertise as it relates to socioeconomic issues and local recreational uses. We have the EIS on a tight schedule to meet court-ordered deadlines, so we will need to receive your comments 45 days after you receive the draft EIS.*

As we pointed out in our June 4, 2007 letter, some materials will need to remain confidential throughout the EIS. The proposed alternatives and draft EIS are documents that should not be released.

Glen Canyon will issue a press release to announce the opening of the alternatives public scoping period on Monday, October 18. This scoping period will allow the NPS to better incorporate public input on specific alternatives for the ORV Environmental Impact Statement. Alternatives public scoping will run through November 17.

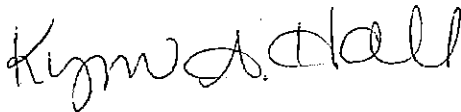
We intend to host seven public workshops on the ORV plan alternatives. These workshops would provide the public with the opportunity to share their ideas and address their questions directly to Glen Canyon staff members. The scoping workshops are tentatively scheduled for late afternoon/early evening on the following dates:

November 1 in Page at National Park Service Headquarters  
November 2 in Blanding at USU/CEU San Juan Campus, Blanding Arts & Events Center  
November 3 in Escalante at the Interagency Visitor Center  
November 4 in Kanab at the Middle School  
November 5 in Flagstaff at the Summit Fire Station 33 on Highway 89  
TBD in Oljato, UT at the Oljato Chapter House  
TBD in Navajo Mountain, UT at the Navajo Mountain Chapter House

We would also like to meet individually with each of our Cooperating Agencies to gather your input and ideas. Please contact Joe David at 928-650-6337 to determine the best available time to meet with you. As cooperators, your comments do not need to fall within the public scoping timeframe, so we can be flexible in scheduling your meetings times prior to the alternatives public scoping period.

Thank you for your input thus far and we look forward to working with you as the EIS process proceeds.

Sincerely,



Kym A. Hall  
Acting Superintendent

Enclosure

cc:  
Kane County Chair  
San Juan County Chair  
Wayne County Chair



# 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:  
D18 – OHV-EIS

SEP 17 2010

Chairman Mark W. Habbeshaw  
Kane County Commissioners  
76 North Main  
Kanab, Utah 84741

Dear Chairman Habbeshaw:

The National Park Service (NPS) at Glen Canyon National Recreation Area (NRA) started work on the Off-Road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) in August 2007. The plan process has been delayed due to changes in staff and funding. With this letter, we would like to restart our communications and cooperation on this planning process.

Thank you for accepting our offer to participate in the ORV plan/environmental impact statement as a cooperating agency. As we discussed in our May 8, 2007 meeting, we issued you a formal invitation to participate on June 4, 2007. You indicated your willingness to participate in your July 1, 2007 response. As our June 4, 2007 letter described, cooperating agencies help the lead agency to:

- Identify issues and impacts to be addressed in the EIS  
*Thank you for sharing your concerns on these topics during our May 8, 2007 meeting.*
- Identify and arrange for the collection and/or assembly of necessary resource, environmental, social, economic, and institutional data, and analyze such data
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*We are developing alternatives based on the public scoping information we received from you, other cooperating agencies, and the public, and we hope to be able to meet with you soon to get your feedback on the proposed alternatives.*
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*We expect to have a preliminary draft EIS sometime in the spring of 2011. As a cooperating agency, we invite you to provide comments on that EIS based on your special expertise as it relates to socioeconomic issues and local recreational uses. We have the EIS on a tight schedule to meet court-ordered deadlines, so we will need to receive your comments 45 days after you receive the draft EIS.*

As we pointed out in our June 4, 2007 letter, some materials will need to remain confidential throughout the EIS. The proposed alternatives and draft EIS are documents that should not be released.

Glen Canyon will issue a press release to announce the opening of the alternatives public scoping period on Monday, October 18. This scoping period will allow the NPS to better incorporate public input on specific alternatives for the ORV Environmental Impact Statement. Alternatives public scoping will run through November 17.

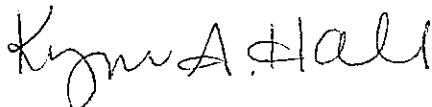
We intend to host seven public workshops on the ORV plan alternatives. These workshops would provide the public with the opportunity to share their ideas and address their questions directly to Glen Canyon staff members. The scoping workshops are tentatively scheduled for late afternoon/early evening on the following dates:

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We would also like to meet individually with each of our Cooperating Agencies to gather your input and ideas. Please contact Joe David at 928-650-6337 to determine the best available time to meet with you. As cooperators, your comments do not need to fall within the public scoping timeframe, so we can be flexible in scheduling your meetings times prior to the alternatives public scoping period.

Thank you for your input thus far and we look forward to working with you as the EIS process proceeds.

Sincerely,



Kym A. Hall  
Acting Superintendent

Enclosure

cc:  
Wayne County Chair  
Garfield County Chair  
San Juan County Chair





# 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:  
D18 – OHV-EIS

SEP 17 2010

Chairman Bruce Adams  
San Juan County Commissioners  
P.O. Box 9  
Monticello, Utah 84535

Dear Chairman Adams:

The National Park Service (NPS) at Glen Canyon National Recreation Area (NRA) started work on the Off-Road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) in August 2007. The plan process has been delayed due to changes in staff and funding. With this letter, we would like to restart our communications and cooperation on this planning process.

Thank you for accepting our offer to participate in the ORV plan/environmental impact statement as a cooperating agency. As we discussed in our May 14, 2007 meeting, we issued you a formal invitation to participate on June 4, 2007. You indicated your willingness to participate in your May 30, 2007 response. As our June 4, 2007 letter described, cooperating agencies help the lead agency to:

- Identify issues and impacts to be addressed in the EIS  
*Thank you for sharing your concerns on these topics during our May 14, 2007 meeting.*
- Identify and arrange for the collection and/or assembly of necessary resource, environmental, social, economic, and institutional data, and analyze such data
- Develop alternatives
- Evaluate alternatives and estimate the effects of implementing each alternative  
*We are developing alternatives based on the public scoping information we received from you, other cooperating agencies, and the public, and we hope to be able to meet with you soon to get your feedback on the proposed alternatives.*
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*We expect to have a preliminary draft EIS sometime in the spring of 2011. As a cooperating agency, we invite you to provide comments on that EIS based on your special expertise as it relates to socioeconomic issues and local recreational uses. We have the EIS on a tight schedule to meet court-ordered deadlines, so we will need to receive your comments 45 days after you receive the draft EIS.*

As we pointed out in our June 4, 2007 letter, some materials will need to remain confidential throughout the EIS. The proposed alternatives and draft EIS are documents that should not be released.

Glen Canyon will issue a press release to announce the opening of the alternatives public scoping period on Monday, October 18. This scoping period will allow the NPS to better incorporate public input on specific alternatives for the ORV Environmental Impact Statement. Alternatives public scoping will run through November 17.

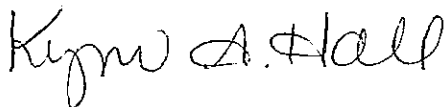
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TBD in Oljato, UT at the Oljato Chapter House  
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We would also like to meet individually with each of our Cooperating Agencies to gather your input and ideas. Please contact Joe David at 928-650-6337 to determine the best available time to meet with you. As cooperators, your comments do not need to fall within the public scoping timeframe, so we can be flexible in scheduling your meetings times prior to the alternatives public scoping period.

Thank you for your input thus far and we look forward to working with you as the EIS process proceeds.

Sincerely,



Kym A. Hall  
Acting Superintendent

Enclosure

cc:  
Kane County Chair  
Garfield County Chair  
Wayne County Chair



# 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:  
D18 – OHV-EIS

**SEP 17 2010**

Chairman Thomas Jeffery  
Wayne County Commissioners  
P.O. Box 189  
Loa, Utah 84747

Dear Chairman Jeffery:

The National Park Service (NPS) at Glen Canyon National Recreation Area (NRA) started work on the Off-Road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) in August 2007. The plan process has been delayed due to changes in staff and funding. With this letter, we would like to restart our communications and cooperation on this planning process.

Thank you for accepting our offer to participate in the ORV plan/environmental impact statement as a cooperating agency. As we discussed in our June 4, 2007 meeting, we issued you a formal invitation to participate on June 4, 2007. You indicated your willingness to participate in your June 8, 2007 response. As our June 4, 2007 letter described, cooperating agencies help the lead agency to:

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*Thank you for sharing your concerns on these topics during our June 4, 2007 meeting.*
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Glen Canyon will issue a press release to announce the opening of the alternatives public scoping period on Monday, October 18. This scoping period will allow the NPS to better incorporate public input on specific alternatives for the ORV Environmental Impact Statement. Alternatives public scoping will run through November 17.

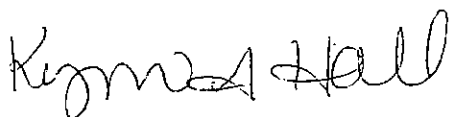
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TBD in Oljato, UT at the Oljato Chapter House  
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We would also like to meet individually with each of our Cooperating Agencies to gather your input and ideas. Please contact Joe David at 928-650-6337 to determine the best available time to meet with you. As cooperators, your comments do not need to fall within the public scoping timeframe, so we can be flexible in scheduling your meetings times prior to the alternatives public scoping period.

Thank you for your input thus far and we look forward to working with you as the EIS process proceeds.

Sincerely,



Kym A. Hall  
Acting Superintendent

Enclosure

cc:

Kane County Chair  
Garfield County Chair  
San Juan County Chair



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Dirk Clayson  
Kane County Commission  
76 N Main  
Kanab, UT 84741

Dear Chairman Clayson,

The National Park Service requests review by the Kane County Commission of the enclosed administrative review copy of two chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/ Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

This plan/FEIS includes all edits to the document that have been made since the release of the Draft Environmental Impact Statement (DEIS) in January 2014. It incorporates technical editing, new effects modeling and environmental analysis, and changes in the preferred alternative as discussed with you previously. The yellow highlighted text represents changes that have been made between an earlier draft of the plan/FEIS and this current administrative review copy. The NPS is using this to track the progress of the document and the highlighted text does not necessarily represent the only changes that have been made since the release of the DEIS.

We are providing you an opportunity as a cooperating agency to review this final draft before it is released to the public. As you know, the proposed alternatives and the plan/FEIS need to remain confidential and should not be released. Once the plan/FEIS is finalized, it will be released to the public following publication of a Notice of Availability in the Federal Register.

We previously agreed to transmit the plan/FEIS to you in chapters to help to expedite your review process. Attached you will find Chapters 1 and 3, which describe the purpose and need for the plan; the background of the plan; the impact topics that will or will not be analyzed; the related laws, regulations, plans and policies; and the description of the affected environment. We would like to have the results of your review of each chapter within a three-week rolling deadline, so we request that any comments on Chapters 1 and 3 be submitted to us in writing no later than March 15, 2016.



Comments can be emailed to Teri Tucker at [teri\\_tucker@nps.gov](mailto:teri_tucker@nps.gov). If you have any questions or need additional information, please feel free to contact Teri at (928) 608-6207. We anticipate sending out the remaining three chapters within a week.

Thanks for your continued assistance with this planning effort.

Sincerely,

A handwritten signature in black ink, appearing to read "William Shott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

William Shott  
Superintendent

Enclosure



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Leland Pollock  
Garfield County Commission  
PO Box 77  
Panguitch, UT 84759

Dear Chairman Pollock,

The National Park Service requests review by the Garfield County Commission of the enclosed administrative review copy of two chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/ Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

This plan/FEIS includes all edits to the document that have been made since the release of the Draft Environmental Impact Statement (DEIS) in January 2014. It incorporates technical editing, new effects modeling and environmental analysis, and changes in the preferred alternative as discussed with you previously. The yellow highlighted text represents changes that have been made between an earlier draft of the plan/FEIS and this current administrative review copy. The NPS is using this to track the progress of the document and the highlighted text does not necessarily represent the only changes that have been made since the release of the DEIS.

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Thanks for your continued assistance with this planning effort.

Sincerely,

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William Shott  
Superintendent

Enclosure



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Phil Lyman  
San Juan County Commission  
PO Box 9  
Monticello, UT 84535

Dear Chairman Lyman,

The National Park Service requests review by the San Juan County Commission of the enclosed administrative review copy of two chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/ Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

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William Shott  
Superintendent

Enclosure





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Stanley Wood  
Wayne County Commission  
PO Box 189  
Loa, UT 84747

Dear Chairman Wood,

The National Park Service requests review by the Wayne County Commission of the enclosed administrative review copy of two chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/ Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

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We previously agreed to transmit the plan/FEIS to you in chapters to help to expedite your review process. Attached you will find Chapters 1 and 3, which describe the purpose and need for the plan; the background of the plan; the impact topics that will or will not be analyzed; the related laws, regulations, plans and policies; and the description of the affected environment. We would like to have the results of your review of each chapter within a three-week rolling deadline, so we request that any comments on Chapters 1 and 3 be submitted to us in writing no later than March 15, 2016.

Comments can be emailed to Teri Tucker at [teri\\_tucker@nps.gov](mailto:teri_tucker@nps.gov). If you have any questions or need additional information, please feel free to contact Teri at (928) 608-6207. We anticipate sending out the remaining three chapters within a week.

Thanks for your continued assistance with this planning effort.

Sincerely,

A handwritten signature in black ink, appearing to read "William Shott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

William Shott  
Superintendent

Enclosure



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 14, 2016

Chairman Dirk Clayson  
Kane County Commission  
76 N Main  
Kanab, UT 84741

Dear Chairman Clayson,

The National Park Service requests review by the Kane County Commission of the enclosed administrative review copy of the remaining chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

This plan/FEIS includes all edits to the document that have been made since the release of the Draft Environmental Impact Statement (DEIS) in January 2014. It incorporates technical editing, new effects modeling, additional environmental analysis, and changes in the preferred alternative which were discussed with you previously. The yellow highlighted text represents changes that have been made between an earlier draft of the plan/FEIS and this current administrative review copy. The NPS is using this to track the progress of the document and the highlighted text does not necessarily represent the only changes that have been made since the release of the DEIS.

We are providing you an opportunity as a cooperating agency to review this final draft before it is released to the public. As you know, the proposed alternatives and the plan/FEIS need to remain confidential and should not be released. Once the plan/FEIS is finalized, it will be released to the public following publication of a Notice of Availability in the Federal Register.

We previously agreed to transmit the plan/FEIS to you in chapters to help to expedite your review process. Chapters 1 and 3 were previously provided to you on February 23. Attached you will find Chapters 2 and 4, which describe the alternatives considered and the environmental impacts of those alternatives. Also included is Chapter 5, which outlines the public scoping and consultation in which the NPS has engaged as well as the references used in the document. Five appendices are also provided. As was the case with the first two chapters that we provided, we would like to have the results of your review within a three-week rolling deadline, so we request that any comments on the remaining chapters be submitted to us in writing no later than April 8, 2016.

Comments can be emailed to Teri Tucker at [teri\\_tucker@nps.gov](mailto:teri_tucker@nps.gov). If you have any questions or need additional information, please feel free to contact Teri at (928) 608-6207. Thanks for your continued assistance with this planning effort.

Sincerely,

A handwritten signature in black ink, appearing to read "William Shott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

William Shott  
Superintendent

Enclosure



## United States Department of the Interior



NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Leland Pollock  
Garfield County Commission  
PO Box 77  
Panguitch, UT 84759

Dear Chairman Pollock,

The National Park Service requests review by the Garfield County Commission of the enclosed administrative review copy of the remaining chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

This plan/FEIS includes all edits to the document that have been made since the release of the Draft Environmental Impact Statement (DEIS) in January 2014. It incorporates technical editing, new effects modeling, additional environmental analysis, and changes in the preferred alternative which were discussed with you previously. The yellow highlighted text represents changes that have been made between an earlier draft of the plan/FEIS and this current administrative review copy. The NPS is using this to track the progress of the document and the highlighted text does not necessarily represent the only changes that have been made since the release of the DEIS.

We are providing you an opportunity as a cooperating agency to review this final draft before it is released to the public. As you know, the proposed alternatives and the plan/FEIS need to remain confidential and should not be released. Once the plan/FEIS is finalized, it will be released to the public following publication of a Notice of Availability in the Federal Register.

We previously agreed to transmit the plan/FEIS to you in chapters to help to expedite your review process. Chapters 1 and 3 were previously provided to you on February 23. Attached you will find Chapters 2 and 4, which describe the alternatives considered and the environmental impacts of those alternatives. Also included is Chapter 5, which outlines the public scoping and consultation in which the NPS has engaged as well as the references used in the document. Five appendices are also provided. As was the case with the first two chapters that we provided, we would like to have the results of your review within a three-week rolling deadline, so we request that any comments on the remaining chapters be submitted to us in writing no later than April 8, 2016.



Comments can be emailed to Teri Tucker at [teri\\_tucker@nps.gov](mailto:teri_tucker@nps.gov). If you have any questions or need additional information, please feel free to contact Teri at (928) 608-6207. Thanks for your continued assistance with this planning effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Wm Shott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

William Shott  
Superintendent

Enclosure



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Phil Lyman  
San Juan County Commission  
PO Box 9  
Monticello, UT 84535

Dear Chairman Lyman,

The National Park Service requests review by the San Juan County Commission of the enclosed administrative review copy of the remaining chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

This plan/FEIS includes all edits to the document that have been made since the release of the Draft Environmental Impact Statement (DEIS) in January 2014. It incorporates technical editing, new effects modeling, additional environmental analysis, and changes in the preferred alternative which were discussed with you previously. The yellow highlighted text represents changes that have been made between an earlier draft of the plan/FEIS and this current administrative review copy. The NPS is using this to track the progress of the document and the highlighted text does not necessarily represent the only changes that have been made since the release of the DEIS.

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We previously agreed to transmit the plan/FEIS to you in chapters to help to expedite your review process. Chapters 1 and 3 were previously provided to you on February 23. Attached you will find Chapters 2 and 4, which describe the alternatives considered and the environmental impacts of those alternatives. Also included is Chapter 5, which outlines the public scoping and consultation in which the NPS has engaged as well as the references used in the document. Five appendices are also provided. As was the case with the first two chapters that we provided, we would like to have the results of your review within a three-week rolling deadline, so we request that any comments on the remaining chapters be submitted to us in writing no later than April 8, 2016.

Comments can be emailed to Teri Tucker at [teri\\_tucker@nps.gov](mailto:teri_tucker@nps.gov). If you have any questions or need additional information, please feel free to contact Teri at (928) 608-6207. Thanks for your continued assistance with this planning effort.

Sincerely,

A handwritten signature in black ink, appearing to read "William Shott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

William Shott  
Superintendent

Enclosure



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

February 23, 2016

Chairman Stanley Wood  
Wayne County Commission  
PO Box 189  
Loa, UT 84747

Dear Chairman Wood,

The National Park Service requests review by the Wayne County Commission of the enclosed administrative review copy of the remaining chapters of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). As a cooperating agency we invite you to provide comments on the plan/FEIS based on your special expertise in socioeconomic and local recreation issues. We appreciate your previous input that has helped inform the development of this plan/FEIS.

This plan/FEIS includes all edits to the document that have been made since the release of the Draft Environmental Impact Statement (DEIS) in January 2014. It incorporates technical editing, new effects modeling, additional environmental analysis, and changes in the preferred alternative which were discussed with you previously. The yellow highlighted text represents changes that have been made between an earlier draft of the plan/FEIS and this current administrative review copy. The NPS is using this to track the progress of the document and the highlighted text does not necessarily represent the only changes that have been made since the release of the DEIS.

We are providing you an opportunity as a cooperating agency to review this final draft before it is released to the public. As you know, the proposed alternatives and the plan/FEIS need to remain confidential and should not be released. Once the plan/FEIS is finalized, it will be released to the public following publication of a Notice of Availability in the Federal Register.

We previously agreed to transmit the plan/FEIS to you in chapters to help to expedite your review process. Chapters 1 and 3 were previously provided to you on February 23. Attached you will find Chapters 2 and 4, which describe the alternatives considered and the environmental impacts of those alternatives. Also included is Chapter 5, which outlines the public scoping and consultation in which the NPS has engaged as well as the references used in the document. Five appendices are also provided. As was the case with the first two chapters that we provided, we would like to have the results of your review within a three-week rolling deadline, so we request that any comments on the remaining chapters be submitted to us in writing no later than April 8, 2016.

Comments can be emailed to Teri Tucker at [teri\\_tucker@nps.gov](mailto:teri_tucker@nps.gov). If you have any questions or need additional information, please feel free to contact Teri at (928) 608-6207. Thanks for your continued assistance with this planning effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Wm Shott", with a long horizontal flourish extending to the right.

William Shott  
Superintendent

Enclosure



## **AGENCY CONSULTATION**

U.S. Fish and Wildlife Consultation  
Tribal Consultation  
State and Local Agency Consultation

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## United States Department of the Interior



NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:

ORV Management Plan

December 24, 2015

Larry Crist  
US Fish and Wildlife Service  
Utah Ecological Services Field Office  
2369 W Orton Circle, Suite 50  
West Valley City, UT 84119

Dear Mr. Crist:

I am requesting your written concurrence of our determination of effects regarding federally listed species as contained in the enclosed Biological Assessment (BA) for the proposed Glen Canyon National Recreation Area Off-road Vehicle Management Plan and Environmental Impact Statement (Plan/EIS). The consultation code for this project is 06E23000-2016-SLI-0013.

Informal consultation was initiated on November 14, 2014 between Melissa Burns of your office and Management Assistant Brian Carey for the National Park Service, and subsequent telephone conversations, email correspondence and resubmittals of draft BAs have occurred in January, March, April, May, June and August of 2015. The proposed Plan/EIS is located in Glen Canyon National Recreation Area.

This BA contains our analysis of effects to the following federally listed species and designated critical habitat: California condor (*Gymnogyps californianus*); Mexican spotted owl (*Strix occidentalis lucida*) and its designated critical habitat; Southwestern Willow flycatcher (*Empidonax traillii extimus*) and its designated critical habitat; Yellow-Billed Cuckoo (*Coccyzus americanus*) and its proposed critical habitat; and Jones Cycladenia (*Cycladenia humilis* var. *jonesii*).

We have determined that this proposed action “may affect, not likely to adversely affect” the California condor (*Gymnogyps californianus*), Mexican spotted owl (*Strix occidentalis lucida*), Southwestern Willow flycatcher (*Empidonax traillii extimus*), Yellow-Billed Cuckoo (*Coccyzus americanus*), and Jones Cycladenia (*Cycladenia humilis* var. *jonesii*) as the effects of this action are insignificant and discountable for the reasons stated in our assessment.

We have determined that this proposed action will have no effect on the designated critical habitat for Mexican spotted owl (*Strix occidentalis lucida*) and Southwestern Willow flycatcher (*Empidonax traillii extimus*), and that this proposed action will not likely jeopardize the continued existence or adversely modify proposed critical habitat for Yellow-Billed Cuckoo (*Coccyzus americanus*). If you agree with these determinations, please send your written concurrence to me.

We appreciate your thorough review and assistance in this consultation process as we are committed to the conservation of federally listed species occurring in Glen Canyon National Recreation Area. We would like to set up a conference call to discuss this BA with your staff in January, and Betsy Herrmann in your office has indicated that January would be a good timeframe.

We will contact your office after the holidays in order to confirm a date. Please contact Assistant Superintendent Teri Tucker at our office at (928) 608-6207 if you have any questions regarding this request.

Sincerely,

A handwritten signature in black ink, appearing to read "William Shott". The signature is fluid and cursive, with the first name "William" and last name "Shott" clearly distinguishable.

William Shott  
Acting Superintendent  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument

*Enclosures:* Glen Canyon ORV EIS Biological Assessment

cc:

Betsy Hermann, Utah Ecological Services Field Office  
Brenda Smith, Northern Arizona FWS Sub-Office



# United States Department of the Interior

U.S. Fish and Wildlife Service  
Arizona Ecological Services Field 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  
22410-2008-I-0007

October 5, 2007

## Memorandum

To: Superintendent, Glen Canyon National Recreation Area, Page, Arizona

From: Field Supervisor

Subject: Glen Canyon National Recreation Area Off-road Vehicle Management Plan

Thank you for your recent scoping newsletter regarding the proposed Glen Canyon National Recreation Area Off-road Vehicle Management Plan. The newsletter requested comments in order to identify issues and alternatives for analysis in an environmental impact statement. We offer the following initial comments.

Based on the description of the project area, the following species may occur in the Arizona portion of the project area. You can find more information on listed species in Coconino County on our website <http://www.fws.gov/southwest/es/arizona/>.

Brady pincushion cactus (*Pediocactus bradyi*) - endangered  
Colorado pikeminnow (*Ptychocheilus lucius*) - endangered  
Razorback sucker (*Xyrauchen texanus*) - endangered  
Brown pelican (*Pelecanus occidentalis californicus*) - endangered  
California condor (*Gymnogyps californianus*) - endangered (threatened within experimental population area)  
Mexican spotted owl (*Strix occidentalis lucida*) - threatened  
Southwestern willow flycatcher (*Empidonax traillii extimus*) - endangered  
Yellow-billed cuckoo (*Coccyzus americanus*) - candidate

The same and other species may occur in the Utah portion of the project area. Our Utah Field Office has posted county species lists for Utah on the Internet. Their information can be found at <http://www.fws.gov/mountain-prairie/endspp/CountyLists/UTAH.htm>.

Endangered and threatened species are protected by Federal law and must be considered prior to project development. If the action agency determines that listed species or critical habitat may be adversely affected by a federally funded, permitted, or authorized activity, the action agency will need to request formal consultation with us pursuant to the Endangered Species Act of 1973, as amended (Act). If the action agency determines that the planned action may jeopardize a proposed species or destroy or adversely modify proposed critical habitat, the action agency will need to enter into a section 7 conference. Candidate species are those for which there is

Off-road Vehicle Management Plan/FEIS

sufficient information to support a proposal for listing; conservation agreement species are those for which we have entered into an agreement to protect the species and its habitat. Although candidate and conservation agreement species have no legal protection under the Act, we recommend that they be considered in the planning process in the event that they become listed or proposed for listing prior to project completion.

If any proposed action occurs in or near areas with trees and shrubs growing along watercourses, known as riparian habitat, we recommend the protection of these areas. Riparian areas are critical to biological community diversity and provide linear corridors important to migratory species. In addition, if the project will result in the deposition of dredged or fill materials into waterways, we recommend you contact the Army Corps of Engineers which regulates these activities under Section 404 of the Clean Water Act.

The State of Arizona and some of the Native American Tribes protect some plant and animal species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department and the Arizona Department of Agriculture for State-listed or sensitive species, or contact the appropriate Native American Tribe to determine if sensitive species are protected by Tribal governments in your project area. In keeping with our trust responsibilities to American Indian Tribes, by copy of this memorandum, we notify the Chemehuevi Tribe, Hopi Tribe, Kaibab Band of Paiute Indians, and the Navajo Nation which may be affected by the proposed action. We also encourage you to invite the Bureau of Indian Affairs to participate in the review of your proposed action.

We look forward to working with you to determine and address possible effects to listed species as the project is developed. If we can be of further assistance, please contact Bill Austin (x102) or Brenda Smith (x101) at (928) 226-0614. Please refer to the consultation number 22410-2008-I-0007 in future correspondence concerning this project.

*Delia T. Bill*  
for Steven L. Spangle

cc: Field Supervisor, Fish and Wildlife Service, West Valley City, UT  
Chairperson, Chemehuevi Tribe, Havasu Lake, CA  
Chairperson, Hopi Tribe, Kykotsmovi, AZ  
Chairperson, Kaibab Band of Paiute Indians, Fredonia, AZ  
President, Navajo Nation, Window Rock, AZ  
Environmental Specialist, Environmental Services, Western Regional Office, Bureau of Indian Affairs, Phoenix, AZ  
NEPA Coordinator, Environmental Services, Navajo Regional Office, Bureau of Indian Affairs, Gallup, NM  
Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ  
Regional Supervisor, Arizona Game and Fish Department, Flagstaff, AZ

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January 7, 2008

Mr. Larry Crist, Project Leader  
Utah Ecological Services Field Office  
US Fish and Wildlife Service  
2369 West Orton Circle, Suite 50  
West Valley City, Utah 84119

Subject: Glen Canyon National Recreation Area Off-Road Vehicle Management Plan

Dear Mr. Crist:

I am writing to request your assistance in the identification of listed or candidate species and designated critical habitat under the Endangered Species Act of 1973 within the project area for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan and Environmental Impact Statement (ORV Plan).

I have enclosed a copy of the scoping brochure for the ORV Plan. The National Park Service is undertaking the ORV Plan to determine the suitability and environmental effects of continued off-road vehicle use on fourteen Lake Powell shoreline camping locations, and at the Lone Rock Beach area. The ORV Plan will also evaluate the suitability and environmental effects of authorizing all-terrain vehicle use on the recreation area's roads. This ORV Plan will not result in the development of new roads, additional shoreline camping areas, or new ORV play areas.

Due to the extent of the recreation area's road network, and the possible effects of authorizing a new type of vehicle use on these roads, the ORV Plan project area includes all of Glen Canyon NRA in Utah. This area incorporates the eastern portions of Garfield, Kane, and Wayne Counties, and the western portion of San Juan County.

Any information you could provide on threatened and endangered species that may occur in the project area would be appreciated. I look forward to working with you to determine the possible effects to listed species and habitat as the project is developed. If you have any questions about this specific project, please contact the ORV project coordinator, Brian Sweatland at (928) 608-6342, or Barb Wilson,

Nancie E. Ames



# 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) 242-2543



In Reply, refer to:

AESO/SE

22410-2008-I-0007

November 3, 2010

RECEIVED BY  
SUPERINTENDENT'S OFFICE

NOV 4 2010

GLEN CANYON NRA

## Memorandum

To: Superintendent, Glen Canyon National Recreation Area, Page, Arizona

From: Field Supervisor

Subject: Glen Canyon National Recreation Area Off-Road Vehicle Management Plan

Thank you for your October 18, 2010, email regarding the public alternatives scoping period for an environmental impact statement to assess off-road vehicle use at Glen Canyon National Recreation Area (GLCA). We also received an October 2010 Glen Canyon National Recreation Area Off-Road Vehicle Management Plan/Environmental Impact Statement brochure. We offer the following comments.


On September 1, 2007, we received a scoping notice for off-road vehicle management at GLCA. We responded with a comment memorandum on October 5, 2007. Those comments included a list of federally-listed threatened and endangered species in Arizona that could occur within the project area, a link to similar information for species that could occur in the project area in Utah, information on how species listed under the Endangered Species Act should be addressed, information regarding riparian areas and Section 404 of the Clean Water Act, and recommendations to coordinate the project proposal with the Arizona Game and Fish Department and any affected Tribes. That information is still relevant to the proposed action, and we refer you to our October 5, 2007, memorandum for those scoping comments.

We understand that California condors have occasionally occurred in the Lone Rock area. That may be due to a variety of reasons including attraction to human activity. Human-condor interactions could result in harm to condors or humans. Such interactions could be addressed in a variety of ways. Appropriate means for addressing that issue would depend on factors such as actual extent and location of condor occurrence, the extent and location of human activity, and the ability to provide information to visitors. Project development and documentation should address these factors.

We understand that the Utah Field Office would like to receive notification when the draft environmental impact statement is available.

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.


 Steven L. Spangle

cc (electronic):

Field Supervisor, Fish and Wildlife Service, West Valley City, UT  
 Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ  
 Regional Supervisor, Arizona Game and Fish Department, Flagstaff, AZ

cc (hard copy):

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

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Martin L. Begaye  
<mlbegaye@navajonati  
onparks.org>

08/27/2007 12:31 PM

MST

Please respond to  
mlbegaye

To: Brian\_Sweatland@nps.gov.  
cc:  
Subject: Re: Glen Canyon NRA off-road vehicle plan

Mr. Sweatland,

Thank you for your message. The Parks and Recreation Department is looking forward to working with the Glen Canyon National Recreation Area. Please keep us informed on the progress of the project. Thank you.

Martin L. Begaye  
Senior Programs/Projects Specialist  
Navajo Parks and Recreation Department

**On Mon Aug 27 9:41 , Brian\_Sweatland@nps.gov sent:**

Mr. Begaye:

I just left a phone message, and thought I would follow-up with an email.

Glen Canyon NRA will announce this week the beginning of our environmental impact statement to evaluate off-road vehicle use within the park. This will include an evaluation of ORV use at our accessible shoreline locations, areas where we allow the public to leave the roadway and drive down and along the shoreline of Lake Powell. 3 of these accessible shoreline locations are located along the arm of the San Juan - Neskahi, Copper Canyon, and Piute - and can only be accessed by vehicle via the Navajo Nation. This plan will also explore the issue of All-Terrain Vehicle use in the park.

Glen Canyon would like to involve the Navajo Nation Department of Parks and Recreation in this process, to make sure your interests are represented in this planning document. We are just beginning the planning process.

Please feel free to call me if you have any questions or would like more information. I will mail additional information to you in the next week. I look forward to working with you.

Thank you



# 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:  
D30 - ORV

FEB - 6 2009

The Honorable Joe Shirley, Jr.  
Office of the President  
Navajo Nation  
PO Box 7440  
Window Rock, Arizona 86515

Dear Dr. Shirley:

The National Park Service (NPS) manages a dozen vehicle-accessible shoreline sites on Lake Powell. Lone Rock beach is the most well-known site; others include Crosby Canyon, Farley Canyon, and Bullfrog. The purpose of these locations is to provide drive-in access to Lake Powell for recreational use.

The NPS is evaluating the current condition and future management of these shoreline sites in an Off-Road Vehicle (ORV) Environmental Impact Statement (EIS). The EIS will determine whether these sites remain open or are closed to future recreational use, or if additional management actions are needed to protect resources.

We would welcome your comments on the Piute Canyon, Neskahi, and Copper Canyon shoreline sites. We are particularly interested in your knowledge of the cultural resource conditions at these sites, and their significance to traditional Navajo. Also, we have little information regarding the level of public use. Any information you could provide regarding these issues at Piute Canyon, Neskahi, and Copper Canyon would be appreciated.

If you have any questions, please contact our Outdoor Recreation Planner, Brian Sweatland, at (928) 608-6342. Thank you for your assistance.

Sincerely,

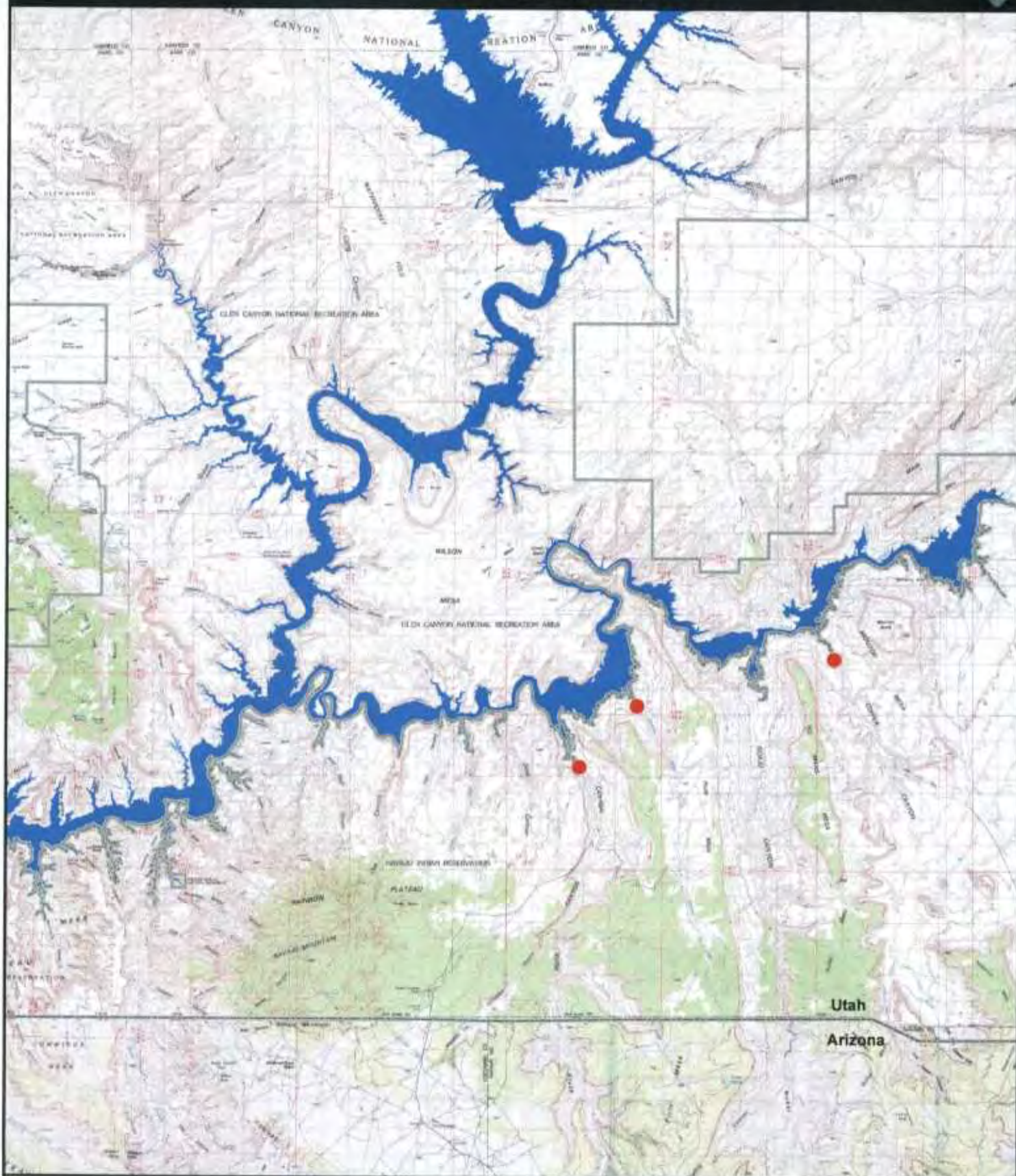
Stan Austin  
Superintendent

Enclosure

cc: Alan Downer, Historic Preservation Department  
Oljato Chapter  
Navajo Mountain Chapter  
Shonto Chapter



## San Juan Accessible Shoreline Sites



Produced by Glen Canyon NRA  
February 5, 2009

● Piute Canyon, Neskahi, Copper Canyon







## United States Department of the Interior

### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Leo Manheimer  
Navajo Mountain Chapter Consultant  
PO Box 7168  
Page, AZ 86040

Dear Mr. Manheimer:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

Currently off-road driving occurs at several of Glen Canyon NRA's accessible shorelines and at Lone Rock Beach. The Off-Road Vehicle Management Plan/Environmental Impact Statement will also evaluate the existing high intensity off-road vehicle use at Lone Rock Beach Play Area, all-terrain vehicle travel on park roads, and off-road vehicle use at the Lees Ferry Swale area.

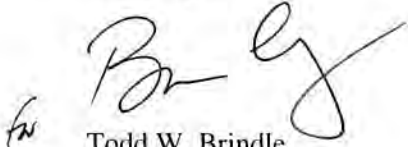
Over 500 comments were received on the draft alternatives that were sent to you and to the public. Presently, Glen Canyon NRA is refining the range of alternatives based on those comments. Revised draft alternatives will be included in the draft Environmental Impact Statement for review this fall or winter.

If you wish to be kept apprised of the off-road vehicle management planning process, please visit Glen Canyon NRA's website at <http://parkplanning.nps.gov/glca>.

Two to three weeks after you receive this letter, one of my staff, Rosemary Sucec, Chief, Branch of Cultural Resources, will be following up with a telephone call. She'll be asking if you have any questions about this process, to learn whether you would like to remain on the mailing list for this project, and to determine if you would like to receive a draft Environmental Impact Statement.

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Sincerely,

A handwritten signature in black ink, appearing to read "Brindle", with a stylized flourish extending from the end.

Todd W. Brindle  
Superintendent



## United States Department of the Interior

### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Manuel Savala  
Kaibab Paiute Tribe Chairperson  
HC 65 Box 2  
Fredonia, AZ 86022

Dear Mr. Savala:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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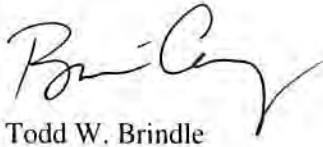
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Sincerely,

*fw*   
Todd W. Brindle  
Superintendent

cc: Ms. Maxine Mayo, Kaibab Paiute Tribe Cultural Preservation  
Ms. Glendora Homer, Kaibab Paiute Tribe Cultural Preservation Officer  
Mr. Charley Bullets, Kaibab Paiute Southern Consortium Director  
Ms. Brittani Wero, Kaibab Paiute Tribe





# United States Department of the Interior

## NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Lee Choe  
San Juan Southern Paiute Tribe Interim Chairman  
PO Box 882  
Tonalea, AZ 86044

Dear Mr. Choe:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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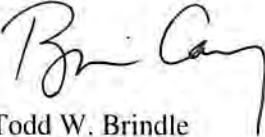
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Sincerely,

*for*   
Todd W. Brindle  
Superintendent

cc: Ms. Natalie Edgewater, San Juan Southern Paiute Tribe Council Member  
Mr. Cecil Homer, San Juan Southern Paiute Tribe Elder  
Mr. Jack Owl, Sr., San Juan Southern Paiute Tribe Elder  
Ms. Mary Ann Owl, San Juan Southern Paiute Tribe





## United States Department of the Interior



### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:

L7617

October 11, 2011

Ms. Charlotte Lomeli  
Shivwits Band of Paiute Tribe Chairwoman  
26 S 400 W  
LaVerkin, UT 84745

Dear Ms. Lomeli:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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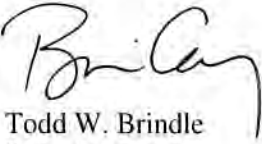
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Sincerely,

  
for Todd W. Brindle  
Superintendent



## United States Department of the Interior

### NATIONAL PARK SERVICE

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Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Gary Hayes  
Ute Mountain Ute Tribe Chairman  
PO Box JJ  
Towoac, CO 81334

Dear Mr. Hayes:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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Sincerely,

  
for Todd W. Brindle  
Superintendent

cc: Ms. Mary Jane Yazzie, White Mesa Ute Band, Ute Mountain Ute Tribe Board Chairperson  
Ms. Elaine Atcity, White Mesa Ute Band, Ute Mountain Ute Tribe Council Representative  
Mr. Terry Knight, Sr., Ute Mountain Ute Tribe, Tribal Historic Preservation Officer  
Ms. Lynn Hartman, Ute Mountain Ute Tribe ALP Cultural Resources Contract Administrator





## United States Department of the Interior

### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Kurt Dongoske  
Zuni Pueblo Tribal Historic Preservation Office Director  
PO Box 49  
Zuni Pueblo, NM 87327

Dear Mr. Dongoske:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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Sincerely,

  
Todd W. Brindle  
Superintendent





## United States Department of the Interior



### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:

L7617

October 11, 2011

Ms. Jeanine Borchardt  
Paiute Indian Tribe of Utah Chairwoman  
440 North Paiute Tribe  
Cedar City, UT 84720

Dear Ms. Borchardt:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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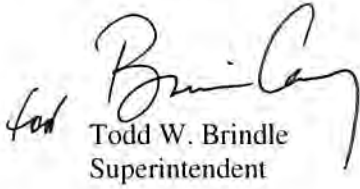
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Sincerely,

 Todd W. Brindle  
Superintendent

cc: Ms. Dorena Martineau, Paiute Indian Tribe of Utah Cultural Resources



# United States Department of the Interior



## NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Leroy Ned Shingoitewa  
Hopi Tribe Chairman  
PO Box 123  
Kykotsmovi, AZ 86039

Dear Mr. Shingoitewa:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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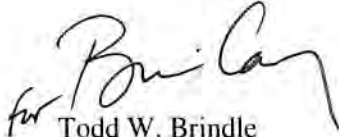
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Sincerely,

  
for Todd W. Brindle  
Superintendent

cc: Mr. Lee Wayne Lomayestewa, Hopi Tribe NAGPRA Consultant  
Mr. Leigh Kuwanwisiwma, Hopi Tribe Cultural Preservation Office Director  
Mr. Terry Morgart, Hopi Tribe Research Assistant





## United States Department of the Interior



### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area

Rainbow Bridge National Monument

P.O. Box 1507

Page, Arizona 86040

(928) 608-6200

IN REPLY REFER TO:

L7617

October 11, 2011

Mr. Ben Shelly  
Navajo Nation President  
PO Box 9000  
Window Rock, AZ 86515

Dear Mr. Shelly:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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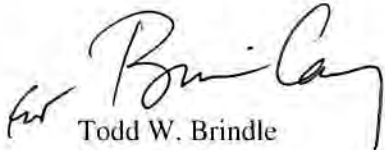
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Sincerely,

A handwritten signature in black ink, appearing to read "Todd W. Brindle". The signature is fluid and cursive, with the first name "Todd" being more prominent.

Todd W. Brindle  
Superintendent

cc: Mr. Tim Begay, Navajo Nation NAGPRA Consultant  
Mr. Alan Downer, Navajo Nation Tribal Historic Preservation Officer  
Mr. Kelly Francis, Navajo Nation Historic Preservation Office  
Mr. Tony Joe, Jr., Navajo Nation Traditional Cultural Program Manager  
Mr. Fred White, Navajo Nation Natural Resource Division Deputy Director  
Mr. Billy Arizona, Jr., Bodaway/Gap Chapter President  
Mr. Floyd Stevens, Coppermine Chapter President  
Ms. Kelsey Begaye, Kaibeto Chapter President  
Mr. Alex Bitsinnie, Navajo Mountain Chapter President  
Mr. Willie Grayeyes, Navajo Mountain Chapter Elder  
Mr. James Black, Oljato Chapter President  
Mr. Larry Goodman, Ts'ah Biikin Chapter President  
Ms. Victoria Bydone, Ts'ah Biikin Community Service Coordinator  
Mr. /Ms. President, Shonto Chapter





## United States Department of the Interior



### NATIONAL PARK SERVICE

Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:

L7617

October 11, 2011

Ms. Corrina Bow  
Kanosh Band of Paiute Indian Tribe Chairwoman  
476 S 700 W  
Cedar City, UT 4720

Dear Ms. Bow:

I wish to update you on an ongoing planning process. Glen Canyon National Recreation Area (NRA) is preparing a long-term plan and associated Environmental Impact Statement to manage off-road vehicle use in the National Recreation Area. The Off-Road Vehicle Management Plan/Environmental Impact Statement evaluates a range of alternatives associated with recreational off-road vehicle use at Glen Canyon NRA and their environmental impacts.

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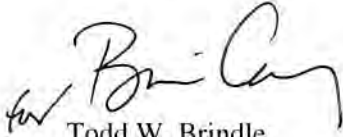
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Sincerely,

  
Todd W. Brindle  
Superintendent



# 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:  
D18 – OHV-EIS

The Honorable Joe Shirley, Jr.  
Office of the President  
Navajo Nation  
P.O. Box 7440  
Window Rock, Arizona 86515

Dear Dr. Shirley:

The National Park Service (NPS) at Glen Canyon National Recreation Area (NRA) started work on the Off-Road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) in August 2007. The purpose of the off-road vehicle plan is to develop a range of alternatives to manage All-Terrain Vehicles (ATV) use on Glen Canyon's backcountry roads, ORV use on the accessible shoreline areas, and use of the Ferry Swale area.

Glen Canyon NRA manages 12 accessible shoreline locations along Lake Powell where the public can drive off-road to access the beach for swimming, fishing, camping, picnicking, and other recreational activities. Three of these managed accessible shorelines are located along the San Juan arm of Lake Powell, on NPS property contiguous to lands of the Navajo Nation. These shorelines are Copper Canyon, Neskahi and Paiute Canyon. Two other areas; Paiute Farms Wash and Nokai Canyon within the Glen Canyon NRA have motorized access from the contiguous Navajo Nation lands.

The plan process has been delayed due to changes in staff and funding. With this letter, we would like to restart our communications and consultations with interested groups, bands and/or tribes in updating the status of the project and proceed with the planning effort. Meanwhile, we have contacted the Navajo Nation chapters (Navajo Mountain and Oljato) to provide updated information.

We are working on preparing an updated planning process timeline for the project and we will provide you a copy once it becomes available.

If you need additional information or have any questions on the proposed plan, please contact our Environmental Protection Specialist, Joe David at (928) 608-6337.

Sincerely,

Kym Hall  
Acting Superintendent

Enclosure

| Tribe/Institution                             | MailingAddress         | City             | State | Zip Code |
|---|------------------------|------------------|-------|----------|
| Bodaway/Gap Chapter/Navajo Nation             | PO Box 1546            | Gap Lake Havasu, | AZ    | 86020    |
| Chemehuevi Indian Tribe                       | PO Box 1976            | CA Kykotsmo      | CA    | 92363    |
| Hopi Tribe                                    | PO Box 123             | vi               | AZ    | 86039    |
| Kaibab Paiute Tribe                           | H.C. 65, Box 2         | Fredonia         | AZ    | 86022    |
| Kanosh Band of Paiute Indian Tribe of Utah    | 476 S. 700 W.          | Cedar City       | UT    | 84720    |
| Koosharem Band of Paiute Indian Tribe of Utah | P.O. Box 205           | Richfield        | UT    | 84701    |
| Navajo Mountain Chapter/Navajo Nation         | PO Box 10264           | Tonalea          | AZ    | 86044    |
| Kaibeto Chapter Navajo Nation                 | PO Box 1761            | Kaibeto          | AZ    | 86053    |
| LeChee Chapter Navajo Nation                  | PO Box 4720            | Page             | AZ    | 86040    |
| Coppermine Chapter Navajo Nation              | PO Box 1323            | Page Monumen     | AZ    | 86040    |
| Oljato Chapter/Navajo Nation                  | PO Box 360455          | t Valley         | UT    | 84536    |
| Paiute Indian Tribe of Utah                   | 440 North Paiute Drive | Cedar City       | UT    | 84720    |
| Pueblo of Zuni                                | PO Box 339             | Zuni             | NM    | 87327    |
| San Juan Southern Paiute Tribe                | PO Box 2710            | Tuba City        | AZ    | 86045    |
| Shivwits Band of Paiute Indian Tribe of Utah  | 26 S. 400 W.           | LaVerkin         | UT    | 84745    |
| Shonto Chapter/Navajo Nation                  | PO Box 7800            | Shonto           | AZ    | 86054    |
| Ts'ah Biiikin Chapter/Navajo Nation           | HC 70 Box 3 PMB 5214   | Tonalea          | AZ    | 86044    |
| White Mesa Ute Band Ute Mountain Ute          | PO Box 251             | Blanding         | UT    | 84511    |
| Ute Mountain Ute Tribe                        | P.O. Box JJ            | Towaoc           | CO    | 81334    |





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Mr. Ben Shelly  
Navajo Nation President  
PO Box 9000  
Window Rock, AZ 86515

Dear Mr. Shelly:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

We request that this draft Executive Summary of the EIS remain confidential. At this time we anticipate a 60 day public review and comment period for the draft EIS will occur in later this summer following publication of a Notice of Availability in the Federal Register.

We request that any comments on the draft EIS be submitted to us in writing no later than May 24, 2013. If you would like to schedule a time to discuss the draft EIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting.

Sincerely,

Todd W. Brindle  
Superintendent

Enclosure

cc: Alan Downer, Navajo Nation, Tribal Historic Preservation Officer  
Tony Joe, Jr., Navajo Nation, Navajo Traditional Cultural Program Manager



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IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Leroy Ned Shingoitewa  
Hopi Tribe Chairman  
PO Box 123  
Kykotsmovi, AZ 86039

Dear Mr. Shingoitewa:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

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IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Manual Savala  
Kaibab Paiute Tribe Chairman  
HC 65 Box 2  
Fredonia, AZ 86022

Dear Mr. Savala:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

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IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Ms. Jeanine Borchardt  
Paiute Indian Tribe of Utah Chairwoman  
440 North Paiute Dr  
Cedar City, UT 84720

Dear Ms. Borchardt:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

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We request that any comments on the draft EIS be submitted to us in writing no later than May 24, 2013. If you would like to schedule a time to discuss the draft EIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting.

Sincerely,

Todd W. Brindle  
Superintendent

Enclosure



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IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Arlen Quetawki, Sr.  
Pueblo of Zuni Chairman  
PO Box 339  
Zuni, NM 87327

Dear Mr. Quetawki:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

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IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Mr. Lee Choe  
Interim Chairman  
San Juan Southern Paiute  
P.O. Box 882  
Tonalea, AZ 86044

Dear Mr. Choe:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

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IN REPLY REFER TO:  
D18 OHV EIS

April 23, 2013

Mr. Gary Hayes  
Ute Mountain Ute Tribe Chairman  
PO Box JJ  
Towaoc, CO 81334

Dear Mr. Hayes:

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the draft Executive Summary from the Glen Canyon National Recreation Area Draft Off-Road Vehicle Management Plan/Environmental Impact Statement (EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like to receive a review copy of the entire draft EIS when it is available and/or if you would like us to follow up with you by telephone or in person concerning any aspects of the EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

Enclosure



## **Glen Canyon National Recreation Area**

### **Off-road Vehicle Management Plan / Draft Environmental Impact Statement**

**April 2013**

***NOT FOR PUBLIC RELEASE***

***GOVERNMENT-TO-GOVERNMENT CONSULTATION COPY***

## EXECUTIVE SUMMARY

This *Glen Canyon National Recreation Area Off-road Vehicle Management Plan / Draft Environmental Impact Statement* (plan/DEIS) analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The plan/DEIS assesses the impacts that could result from continuing current management (the no-action alternative) or implementing any of the four action alternatives.

Upon conclusion of this plan and decision-making process, the alternative selected for implementation will become the Off-Road Vehicle (ORV) Management Plan and form the basis for a special regulation to manage any approved off-road use at Glen Canyon. The plan/DEIS would guide management of off-road use at Glen Canyon for the next 10 to 15 years.

### BACKGROUND

Glen Canyon encompasses 1,254,306 acres in northern Arizona and southeastern Utah. Glen Canyon includes portions of Garfield, Kane, San Juan, and Wayne Counties in Utah and Coconino County in Arizona. The southern boundary runs contiguous to the lands of the Navajo Nation. Glen Canyon shares boundaries with other national park system units, including Grand Canyon National Park, Capitol Reef National Park, and Canyonlands National Park. Glen Canyon also encompasses Rainbow Bridge National Monument. Glen Canyon adjoins approximately 9.3 million acres of other federal lands administered by the Bureau of Land Management (BLM), including the Grand Staircase-Escalante National Monument, Vermilion Cliffs National Monument, and the Paria Canyon-Vermilion Cliffs Wilderness.

The use of motorized vehicles to reach off-road destinations in Glen Canyon predates the establishment of the recreation area in 1972 (PL 92-593). After Lake Powell began to fill behind the completed Glen Canyon Dam in 1963, the public began driving off road to access the new lake for recreational activities. This off-road use continued following the establishment of the national recreation area in 1972.

A comprehensive planning process begun by the National Park Service (NPS) after the establishment of Glen Canyon resulted in the publishing of a General Management Plan (GMP) in 1979. The GMP designated a system of open roads for vehicle travel and closed several existing unpaved roads in the backcountry. After an evaluation of several alternatives for wilderness suitability under the 1964 Wilderness Act, the NPS published a Wilderness Recommendation in 1981 proposing 588,855 acres for designation as wilderness within Glen Canyon.

Following a rapid increase in visitation to Glen Canyon during the 1970s, the NPS determined that site-specific planning for off-road use was warranted. Increasing use at shoreline locations was leading to management concerns, including visitor conflicts, safety issues, resource degradation, and unsystematic off-road use. In

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**Conventional Motor Vehicle:** Vehicles designed primarily for use and operation on streets and highways and that are licensed and registered for interstate travel.

**Nonconventional Motor Vehicle:** ATVs, OHVs, dirt bikes, sand rails, side-by-sides, dune buggies, and other vehicles primarily designed for off-road use.

**Off-road Vehicle (ORV):** Any motorized vehicle (conventional or nonconventional) designed for or capable of cross-country travel on or immediately over natural terrain.

**Off-highway Vehicle (OHV):** State law describes these as a nonconventional motor vehicle designed primarily for off-road use.

**Street-legal ATV:** An ATV that qualifies under the state's motor vehicle and traffic code to be operated on state roads and highways.

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response, NPS developed a management plan for Lone Rock Beach (1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment*) as well as a management plan for 20 accessible shoreline areas on Lake Powell (1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shorelines*). Twelve of the 20 accessible shoreline sites were developed to provide for off-road driving.

In 1986 a Paiute Farms/San Juan Marina Development Concept Plan Environmental Assessment evaluated the development of a marina which was subsequently constructed and then destroyed by a flash flood several years later. Off-road use at this former marina site continues in order to access the San Juan Arm of the Lake Powell at this location. In addition the 2006 Uplake Development Concept Plan designated an area at the Hite Boat Ramp to continue its use for primitive shoreline camping, which is accessed by off-road use between the public boat launch ramp and the former Hite marina site. An additional area bordering the Navajo Nation, Nokai Canyon, is not authorized for off-road use but is currently being accessed and has not been addressed in past planning efforts.

In 2005, NPS was challenged in federal court over the failure to comply with the executive orders 11644 and 11989 and 36 CFR §4.10[b]. Although NPS had implemented ORV management plans for various parts of Glen Canyon in 1981 (Lone Rock Beach) and 1988 (20 accessible shoreline areas on Lake Powell), past planning efforts failed to comply with the CFR requiring promulgation of a special regulation to designate off-road use areas.

Glen Canyon is preparing this plan/DEIS under the terms of the May 12, 2008, settlement agreement between Friends of the Earth, the National Parks Conservation Association, and Wildlands CPR (known collectively as Bluewater Network) and the Department of the Interior and NPS (*Friends of the Earth, Bluewater Network Division, et al. v. United States Department of the Interior, et al.* [Case 1:05-cv-02302-RCI]).

This plan/DEIS will address the future management of these accessible shoreline areas and their suitability for use by conventional motor vehicles, as well as by non-conventional vehicles such as street-legal all-terrain vehicles (ATVs) and off-highway vehicles (OHVs). This plan/DEIS will also evaluate the designation of ORV routes in other areas of Glen Canyon such as at Ferry Swale near Page, AZ. Lastly, this plan/DEIS will evaluate the use of street-legal ATVs and OHVs on GMP roads in Glen Canyon.

## PURPOSE OF THIS PLAN

The purpose of this plan/DEIS is to evaluate off-road use by conventional and nonconventional motor vehicles and on-road use by non-conventional motor vehicles and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

## NEED FOR ACTION

A plan/DEIS is needed for the following reasons:

- To evaluate the impacts associated with allowed but unauthorized off-road use in Glen Canyon and determine what management action should be taken.
- To determine whether the National Park Service (NPS) will authorize off-road use in accordance with Executive Orders 11644 and 11989 (off-road vehicles on public lands), NPS laws, regulations (36 CFR 4.10), and policies to minimize impacts to Glen Canyon.
- To evaluate the impacts resulting from on-road use by nonconventional motor vehicles in Glen Canyon and determine what management actions should be taken.
- To address changes in vehicular access at visitor use areas due to fluctuating lake levels.



This plan/EIS has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500–1508) and NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-Making*.

## OBJECTIVES IN TAKING ACTION

The objectives for managing off-road use are based on Glen Canyon's enabling legislation and prior planning documents and are compatible with NPS mission and policy guidance. All alternatives considered in this ORV management plan must, to a large degree, accomplish the following objectives:

- Manage authorized vehicle uses to provide safe and healthful opportunities for visitor access and recreation.
- Manage authorized vehicle uses to protect the biological and physical environment, including natural processes and systems.
- Manage authorized vehicle uses to protect cultural resources.
- Establish clear policies to guide authorized vehicle uses.

## ISSUES AND IMPACT TOPICS

Glen Canyon staff identified issues associated with implementing an ORV management plan during internal scoping meetings and the public identified issues during the public scoping process at three public meetings. Table ES-1 details the issues that are discussed and analyzed in the plan/DEIS.

**TABLE ES-1: ISSUES AND IMPACT TOPICS**

| ISSUE                         | REASON FOR ANALYSIS   |
|-------------------------------|---|
| Geology and Soils             | Damage to soils from off-road use includes the destruction of soil stabilizers, soil compaction and reduced rates of water infiltration, accelerated rates of surface water runoff and erosion, accelerated rates of wind erosion, and declines in soil productivity. Cyanobacterial soil crusts stabilize soils, increase water infiltration, and concentrate essential nutrients for vascular plant growth. Damage to these living soil crusts can occur with a single pass of a vehicle. |
| Vegetation                    | Off-road use can adversely impact native plants and plant communities directly, by crushing and uprooting of plants, and indirectly, by altering soil properties and by serving as a vector for invasive plant species that replace native vegetation.  |
| Wildlife and Wildlife Habitat | Wildlife is known to be affected by off-road motor vehicle use. Impacts occur in four primary categories: direct mortality, disturbance, noise, and habitat alteration. The most vulnerable species to off-road activity include burrowing species, such as rodents that nest in open sandy sites and whose burrows are easily crushed.   |
| Special-status Species        | A number of federally listed species are likely to occur in the project area and may be affected by management actions. If this plan/DEIS indicates that there may be an adverse effect on any listed species, NPS will engage in consultation with the U.S. Fish and Wildlife Service (USFWS) as required under Section 7 of the Endangered Species Act (16 USC 1536 [a](2)).  |

| ISSUE                      | REASON FOR ANALYSIS   |
|----------------------------|---|
| Soundscapes                | The natural soundscape is considered a resource, and qualifies as an inherent component of "the scenery and the natural and historic objects and the wild life therein" that is protected by the NPS Organic Act. Vehicular noise has the potential to impact other users in these areas. Motor vehicle noise could also discourage wildlife from using these areas or directly impact their ability to hear.   |
| Visitor Use and Experience | The use of motorized vehicles is an integral component of the experience for some visitors and the extent to which this use may be authorized in Glen Canyon could impact the amount and range of recreational opportunities accessible to visitors, especially if certain restrictions or user fees are involved. While ORV use may provide a positive experience for some visitors, this can also conflict with the experiences sought by others.                                       |
| Cultural Resources         | Off-road use has been demonstrated to be a source of direct and indirect damage to cultural resources. Due to the potential for adverse impacts on archeological and ethnographic resources through the adoption of one or more of the action alternatives, these two resources have been assessed for their potential to be affected by the alternatives.  |
| Archeological Resources    | Glen Canyon is known to contain archeological resources eligible for inclusion in the National Register of Historic Places; archeological resources do exist in the study area.   |
| Ethnographic Resources     | Ethnographic resources that are archeological sites have been documented in association with the accessible lakeshores and within Lone Rock Beach Play Area. Archeological sites have been recorded within and adjacent to the unpaved General Management Plan (GMP) roads. Some of these sites may also be ethnographic resources. One traditional cultural property (TCP) is located within the study area and the Hole-in-the-Rock Road corridor may also meet the criteria for a TCP. |
| Socioeconomics             | The alternatives associated with the management of ORVs at Glen Canyon could have an impact on the socioeconomic environment of the recreation area and the region, including a greater demand for recreation and tourism-related amenities, the potential for increased profitability of commercial services in the area, and the enhancement of local economies.  |
| Health and Safety          | Both the park resources which attract visitors and some of the specific recreational activities in which visitors participate can present sources of potential hazards. Off-road use is of particular concern regarding visitor health and safety. ATVs in particular have been the subject of actions by the Consumer Product Safety Commission.   |
| Paleontological Resources  | All sedimentary rock formations in Glen Canyon hold the potential for fossil discovery. Certain formations are more sensitive than others and warrant special management concern. Some formations contain dinosaur tracks and traces and are targets for illegal collection and trade in the black market.  |
| Wilderness                 | Approximately 588,855 acres (47%) of Glen Canyon have been proposed for addition to the National Wilderness Preservation System and an additional 48,955 (4%) are identified as potential wilderness. The general policy of NPS is to manage all lands with wilderness characteristics so as not to diminish the wilderness eligibility of these areas.   |

## ALTERNATIVES

NPS held seven meetings to inform the public about the preliminary alternatives for the plan/EIS. The alternatives analyzed in this document are the result of internal and public scoping. These alternatives meet the management objectives of the recreation area while also meeting the overall purpose of and need for the proposed action.

Alternative elements that were considered but were not technically or economically feasible, did not meet the purpose of and need for the project, created unnecessary or excessive adverse impacts on resources, and/or conflicted with the overall management of Glen Canyon or its resources were dismissed from further analysis. The elements of all five alternatives, including the no-action alternative, are summarized in table ES-2.

## ELEMENTS COMMON TO ALL ALTERNATIVES

The following management actions are common to all alternatives, including the no-action alternative. NPS will implement these actions upon adoption of the final Record of Decision (ROD) regardless of which alternative is selected. Additional details of each element can be found in the plan/EIS.

- **Clarification of the Management of Glen Canyon Lands below Lake Powell Full Pool** The Lake Powell shoreline area below full pool (3,700-foot elevation contour) is not open to off-road use unless designated.
- **Motor Vehicle Operator and Equipment Requirements:** All motor vehicle use must comply with state motor vehicle and operator requirements. Operators of conventional and non-conventional motor vehicles are responsible for complying with all applicable NPS and state statutes and regulations pertaining to the lawful operation of motor vehicles in Glen Canyon.
- **Use Area Rules:** All rules applicable to public use, recreation, and travel at Glen Canyon would remain in effect.
- **Administrative Uses and Other Authorized Uses:** Administrative uses would continue, including use by government officials, lease holders, permit holders, or any other individual with authority from NPS to operate at Glen Canyon.
- **NPS Authority to Alter or Adopt State Motor Vehicle Laws:** NPS would review any future change to state law that may affect motor vehicle operation and use in Glen Canyon for conformity with this plan/EIS. Title 36 CFR 4.2 allows NPS to adopt non-conflicting state laws.

## ELEMENTS COMMON TO ALL ACTION ALTERNATIVES (ALTERNATIVES B, C, D, AND E)

The following management actions are common to all action alternatives. The NPS would implement these actions upon adoption of the final ROD and subsequent regulation if one of the four action alternatives were selected. Additional details of each element can be found in the plan/EIS.

- **Designation of Roads Open to OHV and Street-Legal ATV Use:** GMP roads that are identified as either open or closed to OHV and street-legal ATV use will be adequately marked.
- **Communications Strategy:** The multiple government jurisdictions, the transboundary nature of roads, and the lack of active management from NPS has resulted in confusion about which regulations apply throughout Glen Canyon. To address this confusion, a communications strategy would be developed that will include partnerships, web site development, partnerships and informational brochures.
- **Closing Undesignated Off-Road Vehicle Routes and Areas and Restoring Them to Natural Conditions:** NPS would close routes and areas not designated for off-road use. NPS may use a number of different techniques to close and restore routes and areas where unauthorized off-road use has occurred.

## **ORV FEE PERMIT SYSTEM**

- Permits would be used to recover NPS costs for managing areas designated for off-road use. Costs include monitoring, signs, education programs, and partnerships, as well as the administrative costs associated with administering the permit system.
- Permits would have an educational component to further reduce visitor use conflicts, prevent resource damage and provide for visitor safety.
- Permits would be required for all off-road travel at accessible shoreline areas, Lone Rock Beach, Lone Rock Beach Play Area, and designated ORV routes in Ferry Swale.
- Permits would be available at designated permit issuing stations and by mail.
- Permits could be revoked for violation of applicable Glen Canyon regulations or terms and conditions of the permit.

## **MEASURES TO MONITOR, AVOID, MINIMIZE, OR MITIGATE OFF-ROAD MOTOR VEHICLE IMPACTS UNDER ALTERNATIVES C, D, AND E**

NPS developed management and mitigation strategies to address the impacts from off-road use as proposed in this plan/EIS. The objectives are to improve site design and control, reduce incidents of disturbance to lands, restore disturbed areas, track findings and accomplishments, and increase public awareness of the environmental impacts related to off-road use.

### **ALTERNATIVE A: NO ACTION**

The no-action alternative represents the continuation of existing management policies and actions related to the use of ORVs in Glen Canyon. This alternative is consistent with the 1979 Glen Canyon GMP and other planning documents and management policies related to off-road use in Glen Canyon. If the no-action alternative were selected, NPS would be required to promulgate a special regulation to authorize existing ORV areas in compliance with 36 CFR 4.10.

### **ALTERNATIVE B: NO OFF-ROAD USE**

Under alternative B, the remote, undeveloped, and lightly traveled nature that characterizes much of Glen Canyon would be maintained by limiting the operation of motor vehicles only to designated roads. Nearly 669,000 acres of Glen Canyon is classified as “Natural” under Glen Canyon’s management zones, where maintaining isolation and natural processes is the primary management objective. There would be no designated ORV routes or areas and existing off-road use areas would be closed and restored to natural conditions.

### **ALTERNATIVE C: INCREASED MOTORIZED ACCESS**

Under alternative C, ORVs would be managed in a manner that would expand the recreational opportunities in Glen Canyon by increasing the number of ORV routes and areas. Alternative C is designed to enhance the visitor experience by identifying and designating specific areas capable of supporting off-road use and on-road OHV and street-legal ATV use, while prohibiting such uses in areas where natural and cultural resources and visitor experience may be adversely impacted.



## **ALTERNATIVE D: DECREASED MOTORIZED ACCESS**

The isolated and primitive characteristics of the Glen Canyon backcountry would be enhanced by limiting the areas open to off-road use and by prohibiting the operation of OHVs and street-legal ATVs throughout Glen Canyon. These actions are intended to enhance the protection of Glen Canyon resources and values, as well as to promote recreation opportunities that are based on a sense of solitude, remoteness, and natural conditions. Alternative D would reduce the number of available ORV areas.

## **ALTERNATIVE E: MIXED USE**

Alternative E is designed to protect resources and enhance the visitor experience by identifying and designating specific areas capable of supporting off-road use while prohibiting such uses in areas where resources and values may be at risk.

## **ENVIRONMENTAL CONSEQUENCES**

Impacts of the alternatives were assessed in accordance with Director's Order 12 in terms of their context, duration, and intensity. The analysis provides the public and decision-makers with an understanding of the implications of ORV management actions in the short and long term, cumulatively, and within context, based on an understanding and interpretation by resource professionals and specialists.

For each impact topic, methods were identified to assess the change in the park's resources that would occur with the implementation of each management alternative. Each management alternative was compared to baseline conditions (Alternative A: No Action) to determine the context, duration, and intensity of resource impacts.

Table ES-3 summarizes the results of the impact analysis for the impact topics that were assessed. The full impact analysis is in Chapter 4, Environmental Consequences. For all of the alternatives in this draft plan/EIS, impacts from operations in the park would be mitigated to avoid impairment of park resources and values.



TABLE ES-2. ALTERNATIVE ELEMENTS OVERVIEW

|                           | <b>ALTERNATIVE A:<br/>NO ACTION</b>  | <b>ALTERNATIVE B:<br/>NO OFF-ROAD USE</b>   | <b>ALTERNATIVE C:<br/>INCREASED MOTORIZED ACCESS</b>  | <b>ALTERNATIVE D:<br/>DECREASED MOTORIZED<br/>ACCESS</b>  | <b>ALTERNATIVE E:<br/>MIXED USE (NPS PREFERRED<br/>ALTERNATIVE)</b>  |
|---------------------------|--|---|---|---|--|
| Highlights                | <ul style="list-style-type: none"> <li>Off-road use would continue at 14 designated ORV areas.</li> <li>Only conventional motor vehicles and street-legal ATVs would be authorized for use on GMP roads.</li> <li>No ATVs would be allowed within the Orange Cliffs Unit.</li> <li>No ORV routes would be designated.</li> </ul> | <ul style="list-style-type: none"> <li>No ORV routes or areas would be designated.</li> <li>Only conventional motor vehicles and street-legal ATVs would be authorized for use on designated GMP roads.</li> <li>No ATVs would be allowed within the Orange Cliffs Unit.</li> </ul> | <ul style="list-style-type: none"> <li>Conventional motor vehicles, OHVs, and street-legal ATVs would be authorized for use at 17 designated ORV areas only by permit, subject to water level closures.</li> <li>Conventional motor vehicles, OHVs, and street-legal ATVs would be authorized for use on all GMP roads to include the Orange Cliffs Unit.</li> <li>ORV routes would be designated.</li> </ul> | <ul style="list-style-type: none"> <li>Conventional motor vehicles would be authorized for use at five designated ORV areas (Lone Rock Beach, Hite Boat Ramp, Farley Canyon, Dirty Devil, and Stanton Creek), only by permit, subject to water level closures.</li> <li>No OHVs or street-legal ATVs would be authorized for use in Glen Canyon.</li> <li>No ORV routes would be designated.</li> </ul> | <ul style="list-style-type: none"> <li>Conventional motor vehicles and street-legal ATVs would be authorized for use at 15 areas only by permit, subject to water-level closures.</li> <li>A vehicle-free area would be designated at Lone Rock Beach.</li> <li>Conventional motor vehicles and street-legal ATVs would be authorized for use on paved GMP roads. OHVs would also be authorized for use on unpaved GMP roads. No ATVs or OHVs would be authorized for use in the Orange Cliffs Unit.</li> <li>ORV routes would be designated.</li> </ul> |
| Lone Rock Beach           | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue. Utah rules regulating OHVs and street-legal ATVs would remain in effect.  | Off-road use by all vehicles would be discontinued and the area would be restored to natural conditions.  | Same as alternative A, with additional requirement for an ORV permit.   | Off-road use by conventional motor vehicles would be authorized only by permit. No OHVs or street-legal ATVs would be allowed.  | Same as alternative C except approximately 20 acres of the beach would be designated as a vehicle-free zone (no vehicles of any type would be allowed in this zone).   |
| Lone Rock Beach Play Area | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue. Utah rules regulating OHVs and street-legal ATVs would remain in effect.  | Off-road use by all vehicles would be discontinued and the area would be restored to natural conditions.  | Same as alternative A, with additional requirement for an ORV permit and safety flag.   | Same as alternative B.  | Same as alternative C.   |

|                            | <b>ALTERNATIVE A:<br/>NO ACTION</b>  | <b>ALTERNATIVE B:<br/>NO OFF-ROAD USE</b>  | <b>ALTERNATIVE C:<br/>INCREASED MOTORIZED ACCESS</b>  | <b>ALTERNATIVE D:<br/>DECREASED MOTORIZED<br/>ACCESS</b>   | <b>ALTERNATIVE E:<br/>MIXED USE (NPS PREFERRED<br/>ALTERNATIVE)</b>  |
|----------------------------|--|--|---|--|--|
| Accessible Shoreline Areas | Off-road use by conventional vehicles only would continue at twelve existing areas (Blue Notch, Bullfrog North and South, Copper Canyon, Crosby Canyon, Dirty Devil, Farley Canyon, Neskahi, Paiute Canyon, Red Canyon, Stanton Creek, Warm Creek, and White Canyon), subject to water-level closures. | Off-road use at 15 areas (12 existing areas plus Hite Boat Ramp, Nokai Canyon and Paiute Farms) would be discontinued and these areas would be restored to natural conditions. | 15 areas (12 existing areas plus Hite Boat Ramp, Paiute Farms and Nokai Canyon) would be authorized for use by conventional motor vehicles, OHVs, and street-legal ATVs, only by permit, subject to water-level closures. | Four areas (Dirty Devil, Farley Canyon, Hite Boat Ramp, and Stanton Creek) would be authorized for use only by conventional motor vehicles, only by permit, subject to water-level closures. Off-road use at eleven areas would be discontinued. | 14 areas (11 existing areas plus Hite Boat Ramp, Nokai Canyon and Paiute Farms) would be authorized for use by conventional motor vehicles and street-legal ATVs, only by permit, subject to water-level closures. Off-road use at Warm Creek would be discontinued. |
| GMP Roads                  | In addition to conventional motor vehicles, street-legal ATVs would be authorized for use on GMP roads in Glen Canyon with the exception of the Orange Cliffs Unit.  | Same as alternative A.   | Conventional motor vehicles, OHVs, and street-legal ATVs would be authorized for use on all GMP roads to include the Orange Cliffs Unit.  | Only conventional motor vehicles would be authorized for use on GMP roads in Glen Canyon.  | Conventional motor vehicles and street-legal ATVs would be authorized for use on paved GMP roads. OHVs would also be authorized for use on unpaved GMP roads. No ATVs or OHVs would be authorized for use in the Orange Cliffs Unit.                                 |
| Ferry Swale                | No ORV routes would be designated.   | Same as alternative A.   | Conventional vehicles, OHVs, and street-legal ATVs would be authorized for use on designated ORV routes by permit.  | Same as alternative A.   | Same as alternative C.   |



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

Ben Shelly  
Navajo Nation President  
PO Box 9000  
Window Rock, AZ 86515

Dear Mr. Shelly:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

As part of our government-to-government responsibilities and in recognition of your Tribe's traditional, cultural, and historical associations with Glen Canyon, we have been regularly corresponding with you regarding the development of this Plan/DEIS.

We are writing now to inform you of and invite you to a meeting/webcast to learn more about how Glen Canyon is fulfilling its Section 106 responsibilities under the National Historic Preservation Act (NHPA) for the Plan/DEIS. Additional consulting parties under Section 106 will also be invited to this event. **In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

The purpose of the meeting is to:

1. Provide a summary of Glen Canyon's methods for identifying cultural resources that may be affected under any of the Plan/DEIS alternatives and that are also eligible to the National Register of Historic Places (referred to as "historical properties") under Section 106; and
2. Request your input on Glen Canyon's determination of the "Area of Potential Effect (APE)" including the proposed level of identification and the appropriate level of effort. Section 106 requires agencies to make a good faith effort to identify the geographic areas within which the integrity of any historic properties may be directly or indirectly affected by this undertaking.

At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled**

Off-road Vehicle Management Plan/FEIS

E-103



**“Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement.”** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

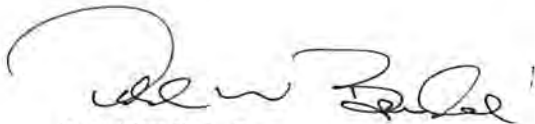
Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

For this Plan/DEIS, the APE involves the following geographic areas: 1) Accessible shorelines and Lone Rock Beach; 2) park roads and proposed ORV routes; and 3) Lone Rock Beach Play Area. For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. For the state of Arizona, relevant aspects of the proposed action include park roads and proposed ORV routes in Coconino County.

We understand that as input is received from you and other consulting parties, alternatives are refined and the APE may be adjusted accordingly. We continue to look forward to receiving your input throughout this planning process. We believe that your input will ensure that cultural resources are adequately considered during the planning process, and at the same time meet ORV management needs and objectives.

More information about the off-road vehicle management planning process can be obtained at the Glen Canyon planning website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Brian Carey at 928-608-6209, or by email at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov).

Sincerely,



Todd W. Brindle  
Superintendent

Enclosure

cc: Tony Joe, Jr., Navajo Traditional Cultural Program/Program Manager, Navajo Nation  
Fred White, Deputy Director, Division of Natural Resources, Navajo Nation  
Alan Downer, Tribal Historic Preservation Officer, Navajo Nation  
Irene Nez-Whitekiller, President, LeChee Chapter, Navajo Nation  
Alex Bitsinnie, President, Navajo Mountain Chapter, Navajo Nation  
Herman Daniels, Jr., President, Oljato Chapter, Navajo Nation  
Martha Tate, President, Ts'ah Biikin Chapter, Navajo Nation  
Felix Fuller, President, Shonto Chapter, Navajo Nation  
Floyd Stevens, President, Coppermine Chapter, Navajo Nation  
Billy Arizona, Jr., President, Bodaway/Gap Chapter, Navajo Nation  
Kelsey Begaye, President, Kaibeto Chapter, Navajo Nation



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

Arlen Quetawki, Sr.  
Governor  
Zuni Tribe  
PO Box 339  
Zuni, NM 87327

Dear Mr. Quetawki:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

As part of our government-to-government responsibilities and in recognition of your Tribe's traditional, cultural, and historical associations with Glen Canyon, we have been regularly corresponding with you regarding the development of this Plan/DEIS.

We are writing now to inform you of and invite you to a meeting/webcast to learn more about how Glen Canyon is fulfilling its Section 106 responsibilities under the National Historic Preservation Act (NHPA) for the Plan/DEIS. Additional consulting parties under Section 106 will also be invited to this event. **In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

The purpose of the meeting is to:

1. Provide a summary of Glen Canyon's methods for identifying cultural resources that may be affected under any of the Plan/DEIS alternatives and that are also eligible to the National Register of Historic Places (referred to as "historical properties") under Section 106; and
2. Request your input on Glen Canyon's determination of the "Area of Potential Effect (APE)" including the proposed level of identification and the appropriate level of effort. Section 106 requires agencies to make a good faith effort to identify the geographic areas within which the integrity of any historic properties may be directly or indirectly affected by this undertaking.



At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement."** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

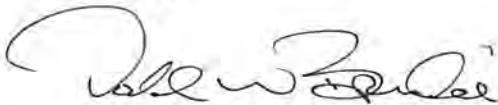
Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

For this Plan/DEIS, the APE involves the following geographic areas: 1) Accessible shorelines and Lone Rock Beach; 2) park roads and proposed ORV routes; and 3) Lone Rock Beach Play Area. For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. For the state of Arizona, relevant aspects of the proposed action include park roads and proposed ORV routes in Coconino County.

We understand that as input is received from you and other consulting parties, alternatives are refined and the APE may be adjusted accordingly. We continue to look forward to receiving your input throughout this planning process. We believe that your input will ensure that cultural resources are adequately considered during the planning process, and at the same time meet ORV management needs and objectives.

More information about the off-road vehicle management planning process can be obtained at the Glen Canyon planning website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Brian Carey at 928-608-6209, or by email at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov).

Sincerely,



Todd W. Brindle  
Superintendent

Enclosure

cc: Kurt Dongoske, Director, Tribal Historic Preservation Office, Zuni Tribe



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

Gari Lafferty  
Chairwoman  
Paiute Indian Tribe of Utah  
440 North Paiute Drive  
Cedar City, UT 84720

Dear Ms. Lafferty:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

As part of our government-to-government responsibilities and in recognition of your Tribe's traditional, cultural, and historical associations with Glen Canyon, we have been regularly corresponding with you regarding the development of this Plan/DEIS.

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The purpose of the meeting is to:

1. Provide a summary of Glen Canyon's methods for identifying cultural resources that may be affected under any of the Plan/DEIS alternatives and that are also eligible to the National Register of Historic Places (referred to as "historical properties") under Section 106; and
2. Request your input on Glen Canyon's determination of the "Area of Potential Effect (APE)" including the proposed level of identification and the appropriate level of effort. Section 106 requires agencies to make a good faith effort to identify the geographic areas within which the integrity of any historic properties may be directly or indirectly affected by this undertaking.



At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement."** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

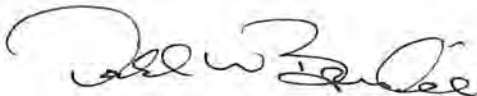
Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

For this Plan/DEIS, the APE involves the following geographic areas: 1) Accessible shorelines and Lone Rock Beach; 2) park roads and proposed ORV routes; and 3) Lone Rock Beach Play Area. For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. For the state of Arizona, relevant aspects of the proposed action include park roads and proposed ORV routes in Coconino County.

We understand that as input is received from you and other consulting parties, alternatives are refined and the APE may be adjusted accordingly. We continue to look forward to receiving your input throughout this planning process. We believe that your input will ensure that cultural resources are adequately considered during the planning process, and at the same time meet ORV management needs and objectives.

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Sincerely,



Todd W. Brindle  
Superintendent

Enclosure

cc: Corrina Bow, Chairwoman, Kanosh Band of Paiute Indian Tribe of Utah  
Elliot Yazzie, Chairman, Koosharem Band of Paiute Indian Tribe of Utah  
Jetta Wood, Chairwoman, Shivwits Band of Paiute Indian Tribe of Utah



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

Gary Hayes  
Chairman  
Ute Mountain Ute Tribe  
PO Box JJ  
Towoac, CO 81334

Dear Mr. Hayes:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

As part of our government-to-government responsibilities and in recognition of your Tribe's traditional, cultural, and historical associations with Glen Canyon, we have been regularly corresponding with you regarding the development of this Plan/DEIS.

We are writing now to inform you of and invite you to a meeting/webcast to learn more about how Glen Canyon is fulfilling its Section 106 responsibilities under the National Historic Preservation Act (NHPA) for the Plan/DEIS. Additional consulting parties under Section 106 will also be invited to this event. **In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

The purpose of the meeting is to:

1. Provide a summary of Glen Canyon's methods for identifying cultural resources that may be affected under any of the Plan/DEIS alternatives and that are also eligible to the National Register of Historic Places (referred to as "historical properties") under Section 106; and
2. Request your input on Glen Canyon's determination of the "Area of Potential Effect (APE)" including the proposed level of identification and the appropriate level of effort. Section 106 requires agencies to make a good faith effort to identify the geographic areas within which the integrity of any historic properties may be directly or indirectly affected by this undertaking.



At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement."** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

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Sincerely,



Todd W. Brindle  
Superintendent

Enclosure

cc: Terry Knight, Sr., Tribal Historic Preservation Officer, Ute Mountain Ute Tribe  
Elaine Atcity, Council Representative, Ute Mountain Ute Tribe





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

May Preston  
President  
San Juan Southern Paiute Tribe  
PO Box 1989  
Tuba City, AZ 86045

Dear Ms. Preston:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

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At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement."** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

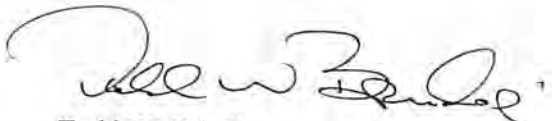
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Sincerely,



Todd W. Brindle  
Superintendent

Enclosure





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

Manual Savala  
Chairperson  
Kaibab Paiute Tribe  
HC 65 Box 2  
Fredonia, AZ 86022

Dear Mr. Savala:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

As part of our government-to-government responsibilities and in recognition of your Tribe's traditional, cultural, and historical associations with Glen Canyon, we have been regularly corresponding with you regarding the development of this Plan/DEIS.

We are writing now to inform you of and invite you to a meeting/webcast to learn more about how Glen Canyon is fulfilling its Section 106 responsibilities under the National Historic Preservation Act (NHPA) for the Plan/DEIS. Additional consulting parties under Section 106 will also be invited to this event. **In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

The purpose of the meeting is to:

1. Provide a summary of Glen Canyon's methods for identifying cultural resources that may be affected under any of the Plan/DEIS alternatives and that are also eligible to the National Register of Historic Places (referred to as "historical properties") under Section 106; and
2. Request your input on Glen Canyon's determination of the "Area of Potential Effect (APE)" including the proposed level of identification and the appropriate level of effort. Section 106 requires agencies to make a good faith effort to identify the geographic areas within which the integrity of any historic properties may be directly or indirectly affected by this undertaking.

At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement."** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

For this Plan/DEIS, the APE involves the following geographic areas: 1) Accessible shorelines and Lone Rock Beach; 2) park roads and proposed ORV routes; and 3) Lone Rock Beach Play Area. For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. For the state of Arizona, relevant aspects of the proposed action include park roads and proposed ORV routes in Coconino County.

We understand that as input is received from you and other consulting parties, alternatives are refined and the APE may be adjusted accordingly. We continue to look forward to receiving your input throughout this planning process. We believe that your input will ensure that cultural resources are adequately considered during the planning process, and at the same time meet ORV management needs and objectives.

More information about the off-road vehicle management planning process can be obtained at the Glen Canyon planning website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Brian Carey at 928-608-6209, or by email at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov).

Sincerely,



Todd W. Brindle  
Superintendent

Enclosure

cc: Charley Bullets, Southern Paiute Consortium Director, Kaibab Paiute Tribe  
Glendora Homer, Cultural Preservation Officer, Kaibab Paiute Tribe





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 22, 2013

Leroy Ned Shingoitewa  
Chairman  
Hopi Tribe  
PO Box 123  
Kykotsmovi, AZ 86039

Dear Mr. Shingoitewa:

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement (Plan/DEIS)*. The Plan/DEIS analyzes alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The Plan/DEIS also evaluates the range of impacts that could result from any of the four action alternatives, as well as the no-action alternative. The vehicle types mentioned above are defined in the enclosed document.

As part of our government-to-government responsibilities and in recognition of your Tribe's traditional, cultural, and historical associations with Glen Canyon, we have been regularly corresponding with you regarding the development of this Plan/DEIS.

We are writing now to inform you of and invite you to a meeting/webcast to learn more about how Glen Canyon is fulfilling its Section 106 responsibilities under the National Historic Preservation Act (NHPA) for the Plan/DEIS. Additional consulting parties under Section 106 will also be invited to this event. **In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

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At this stage in the development of the Plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. **Enclosed for your review is a document titled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement."** This document identifies how Glen Canyon developed the model to determine the APE, provides information about the identification efforts, and recommends a strategy to initiate identification efforts.

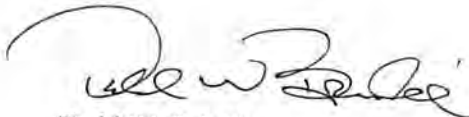
Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

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More information about the off-road vehicle management planning process can be obtained at the Glen Canyon planning website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Brian Carey at 928-608-6209, or by email at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov).

Sincerely,



Todd W. Brindle  
Superintendent

Enclosure

cc: Leigh Kuwanwiswma, Cultural Preservation Office Director, Hopi Tribe  
Terry Morgart, Research Assistant, Hopi Tribe

July 2013

## Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement

Prepared by  
Thann Baker  
Archeologist

May 2010

Updated March 2012  
Final for SHPO October 2012  
Final for consulting parties July 2013

### Document Information

|                         |  |
|-------------------------|--|
| <b>Title</b>            | Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement |
| <b>Author</b>           | Thann Baker, Glen Canyon National Recreation Area Archeologist   |
| <b>Document Type</b>    |  |
| <b>Publication Date</b> | 2012 Draft   |

### Change History

| Original Version # | Date of Revision | Revised By  | Changes                       | Justification                | New Version # |
|--------------------|------------------|-------------|-------------------------------|------------------------------|---------------|
|                    | May 2010         | Thann Baker | Original                      | DRAFT                        | 1.0           |
| 1.0                | March 2012       | Thann Baker | Detail added                  | DRAFT #2                     | 1.1           |
| 1.1                | October 2012     | Thann Baker | Detail added                  | Final for SHPO               | 1.2           |
| 1.2                | July 2013        | Brian Carey | Road/route terminology change | Final for consulting parties | 1.3           |

## **Purpose**

To provide proposed guidance on how Glen Canyon National Recreation Area (NRA) proceeds toward compliance with Section 106 of the National Historic Preservation Act (NHPA) concerning designation and management of areas to control for off-road vehicle (ORV) use. Attention is directed toward defining (1) the Area of Potential Effect (APE); and (2) the appropriate level of effort for identification of historic properties within the APEs.

## **Terminology**

*Off-road Vehicle (ORV):* A motorized vehicle (all-terrain or conventional) designed for or capable of cross-country travel on or immediately over natural terrain.

*All-terrain Vehicle (ATV):* A nonconventional motor vehicle that is designed primarily for off-road travel (falling under the broader term ORV) and that is not registered for interstate travel.

*Street-legal ATV:* An ATV that qualifies under the state's motor vehicle and traffic code to be operated on state roads and highways. Dune buggies, sand rails, go-karts, and rock crawlers cannot be licensed as street-legal.

*Park Road:* A road designated as open to motorized vehicle travel in the 1972 Glen Canyon General Management Plan.

## **ORV Authorities and Policy**

Glen Canyon NRA was established in 1972 "to provide for public outdoor recreation use and enjoyment of Lake Powell and adjacent lands, and to preserve and protect the scenic, scientific, and historic features contributing to public enjoyment of the area" (PL 92-593). The primary management objective of the recreation area, as established in the GMP, is "to manage the recreation area so that it provides maximal recreational enjoyment to the American public and their guests" (USDI 1979).

The potential effect of increasingly numerous and popular recreational vehicles on public lands was addressed in Executive Order (EO) 11644, (as amended by EO 11989), *Use of Off-Road Vehicles on Public Lands* in 1972. To protect resources, promote safety of users and minimize land use conflicts, *E.O. 11644* established a Federal policy of designating all public lands as either available or not available for ORV use and required every agency to develop a process for directing and controlling the ORV use. The National Park Service (NPS) administration process for controlling ORV use is in 36 CFR Part 4.10.

Given the overall beneficial effects of route designation on cultural resources, the size of the planning areas, and Glen Canyon NRA's continuing management responsibilities for designated areas and routes, the National Park Service should consider the potential for ORV accessible areas and road designations to affect historic properties as it complies with the NPS Servicewide Programmatic Agreement (PA) for Section 106 compliance and 36 CFR Part 800.

## **Potential for Adverse Effects**

The primary threats to cultural resources from ORV use include both unintentional and intentional vandalism. Unintentional vandalism results from driving across sites, creating non-motorized and motorized trails across or near sites with fragile features, and dispersed camping on sites. Intentional vandalism includes site damage or destruction from illegal excavation and the collection of surface artifacts.

According to a recent survey of ORV owners in Utah (2001), of those who used their vehicle to access other activities, greater than 75% of both conventional 4-wheel drive vehicle and motorcycle users responded that hiking was the most popular activity. It is unclear to what extent ORV users hike after reaching a destination in GLCA, but the potential exists for visitor impacts to occur outside the range of ORV operational capabilities. The primary threats to cultural resources outside the range of ORV operational capabilities include intentional vandalism. It is reasonable to expect hiking activities associated with ORV use to extend up to .5 miles beyond a vehicles operational capability and threaten cultural resources.

### **Area(s) of Potential Effect**

Section 106 requires agencies to identify the geographic area or areas within which the character or use of any historic properties may be directly or indirectly affected by an undertaking. The range of alternatives identified in the ORV EIS include actions that open, close, or limit in some fashion ORV use in designated areas of Glen Canyon NRA. The greatest potential for effects across all alternative action components in the ORV EIS includes: 1) all accessible shorelines to remain open to conventional vehicles and all ATVs by permit; 2) Lone Rock Beach and Lone Rock Beach Play Area to remain open to conventional vehicles and all ATVs; 3) all park roads to remain open to conventional vehicles and all ATVs; and 4) proposed designation of ORV routes in Ferry Swale open to conventional vehicles and all ATVs.

For the purposes of this EIS, the APEs are modeled according to parameters relevant to the scale and nature of the undertaking, which facilitates the classification of modeling parameters based on the type and extent of anticipated impacts. The type of anticipated impacts derives from ORV use and visitor access across the extent of accessible shorelines, park roads, Lone Rock Beach, and Lone Rock Beach Play Area. For this EIS, separate parameters are established to model the APEs for 1) accessible shorelines and Lone Rock Beach; 2) park roads and ORV routes; and 3) Lone Rock Beach Play Area. The APEs include areas designated as open, closed, or limited for ORV use in the EIS.

#### Accessible Shorelines

The vehicle-accessible shoreline areas at Glen Canyon NRA are managed under the 1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shoreline* (USDI 1988). These designated ORV areas are intended to provide the public with conventional motor vehicle access to the Lake Powell shoreline for the purposes of primitive recreational use. The public is allowed to depart the road and drive directly to the shoreline and park in designated ORV areas. The ORV areas are not intended to be play areas; climbing hills in vehicles, driving at high speeds, and similar behavior is prohibited.

Since the establishment of ORV accessible shoreline areas in 1988 at full pool levels (3700 feet amsl), decreasing lake levels have stranded the designated areas by as much as a mile from the current lakeshore. An additional consequence of decreasing lake levels has resulted in opening the natural topographic barriers that restricted ORV use to designated roads and shoreline areas. GLCA management has allowed users to "chase the water" to take advantage of the recreational opportunities intended by the establishment of ORV areas. ORV users chasing the shoreline proceed beyond the designated areas along networks of unprescribed routes. In numerous cases, the routes taken are not intended to access the shoreline, but rather provide access to a larger expanse of open terrain.



Without the benefit of natural topographic barriers and prescribed routes, accessibility is limited by the operational capabilities of the ORV in use. The limiting capabilities beyond user experience levels include maximum approach, departure, breakover, and side-slope angles. Factory standard specifications for conventional vehicles provide a range of maximum values to assess limitation parameters with generalized averages at approximately 35 degrees.

**For the purposes of modeling APEs associated with accessible shorelines, GLCA recommends using 35 degree slope as the restricting limit of accessibility for ORV use below the 1988 ORV area designations at full pool (3700') and extending to anticipated low lake levels (3600') to define the Primary Area of Impact (PIA), with an additional .5 mile buffer extending beyond to define the Secondary Area of Impact (SAI).**

#### Park Roads and ORV Routes

Roads open for all motor vehicle travel are those roads designated in Glen Canyon NRA's 1979 General Management Plan. All other roads are closed to any type of motorized vehicle travel. As of October 1, 2008, management of motor vehicles at Glen Canyon NRA authorizes the operation of street-legal ATVs on all designated roads within the recreation area. The ORV EIS will evaluate the use of ATVs on the designated park roads, as well as the proposed designation of ORV routes in the Ferry Swale area. Under federal regulations that govern traffic on park roads (36 CFR 4.2), Glen Canyon NRA has adopted Utah and Arizona traffic code to govern the use of vehicles on roads in their respective state.

For all currently designated roads, the EIS will evaluate continued use of existing routes. In the Ferry Swale area, a few miles of unpaved roads exist that access, and are accessed by, federal lands administered by the Bureau of Land Management (BLM) Arizona Field Office. To maintain uniformity with travel management policies, the EIS will evaluate these roads as proposed designations of new routes open to ORV use.

**For the purposes of modeling APEs associated with backcountry (non-paved) roads, Glen Canyon NRA recommends using a 120 meter buffer zone extending 60 meters on either side of the centerline for designated park roads and the proposed designation of ORV routes in the Ferry Swale area.**

#### Lone Rock Beach and Lone Rock Beach Play Area

Off-road driving at Lone Rock Beach and Play Area occurred prior to the formal establishment of Glen Canyon NRA in 1972. The NPS designated Lone Rock Beach as an ORV area and the Lone Rock Beach Play Area as open to ATVs under the 1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment* (USDI 1981). Lone Rock Beach is currently open to all street-legal vehicles, including conventional vehicles and street-legal ATVs. Non-street-legal vehicles may be operated from the operator's camping location at Lone Rock Beach to the Play Area only to access the play area.

**Lone Rock Beach Play Area is a fence-enclosed 180-acre area that is open to high-intensity ATV and motor vehicle use. For the purposes of modeling the APE associated with the Lone Rock Beach Play Area, Glen Canyon NRA recommends using the fenced boundary with no additional buffer zone.**

**For the purposes of modeling APEs associated with Lone Rock Beach, Glen Canyon NRA recommends using the same parameters defined for other accessible shorelines: 35 degree slope as the restricting limit of accessibility for ORV use below the 1988 ORV area designations at full pool (3700') and extending to anticipated low lake levels (3600') to define the Primary Area of Impact (PIA), with an additional .5 mile buffer extending beyond to define the Secondary Area of Impact (SAI).**



### **Level of Inventory**

The potential effects of proposed designations differ according to the extent of anticipated change in ORV use by alternative actions. Proposed designations that will not change or will reduce ORV use are unlikely to adversely affect historic properties and will require less intensive identification efforts. Inventory requirements, priorities, and strategies will vary depending on the effect and nature of the proposed ORV activity and the expected density and nature of historic properties based on existing inventory information.

Class III inventory should not be required prior to designations that (1) allow continued use of an existing route; (2) impose new limitations on an existing route; (3) close an open area or travel route; (4) keep a closed area closed; or (5) keep an open area open. Where there is a reasonable expectation that a proposed designation will shift, concentrate or expand travel into areas where historic properties are likely to be adversely affected, Class III inventory and compliance with section 106, focused on areas where adverse effects are likely to occur, should be required prior to designation. Proposed designations of new routes or new areas as open to ORV use should require Class III inventory of the APE and compliance with section 106 prior to designation. Class III inventory of the APE and compliance with section 106 should also be required prior to identifying new locations proposed as staging areas or similar areas of concentrated ORV use. Class II inventory, or development and field testing of a cultural resources probability model, followed by Class III inventory in high potential areas and for specific projects, may be appropriate for larger planning areas for which limited information is currently available.

### **Accessible Shorelines**

For accessible shorelines (including Lone Rock Beach), decreasing lake levels have stranded previously designated areas by as much as a mile from the current lakeshore effectively expanding travel into areas where historic properties are likely to be adversely affected. These large planning areas have received minimal inventory in the past and limited information is currently available on the presence of historic properties. Information derived through Class I archival research efforts suggest a low probability for historic properties to occur within the proposed accessible shoreline APEs and that site integrity has been compromised by repeated inundation and exposure accompanied by the effects of wave action and visitor impacts.

**At this stage in the development process of the EIS, Glen Canyon NRA recommends Class II inventory of the primary area of impact for accessible shorelines to evaluate the potential for the presence of historic properties and estimate the frequency and types of properties present. The recommended strategy will facilitate a determination of the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties.**

### **Park Roads and ORV Routes**

For park roads, the proposed designation reflects continued use of existing routes, which will not change ORV use. These large planning areas have received minimal inventory in the past and limited information is currently available on the presence of historic properties. Glen Canyon NRA recognizes that the continued use of existing routes is unlikely to adversely affect documented or previously unidentified historic properties.

For the Ferry Swale area, the proposed designation establishes new routes open to ORV use. This planning area has received minimal inventory in the past and limited information is currently available

on the presence of historic properties. Glen Canyon NRA recognizes that the designation of new routes has the potential to adversely affect documented or previously unidentified historic properties.

**At this stage in the development process of the EIS, Glen Canyon NRA recommends Class I inventory of all park roads to evaluate the potential for the presence of historic properties and estimate the frequency and types of properties present. The recommended strategy will facilitate a determination of the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties. Glen Canyon NRA further recommends Class III inventory of all designated ORV routes in the Ferry Swale area to identify historic properties.**

Lone Rock Beach and Lone Rock Beach Play Area

For Lone Rock Beach and Lone Rock Beach Play Area, the proposed designation reflects continued use of existing routes and areas, which will not change or will reduce ORV use. These planning areas received intensive pedestrian inventory during the development of the *Lone Rock Beach Development Concept Plan and Environmental Assessment* (USDI 1981). All historic properties were identified and management recommendations to mitigate adverse effects associated with designating the ORV areas were implemented.

**At this stage in the development process of the EIS, Glen Canyon NRA recommends no additional inventory efforts at Lone Rock Beach and Lone Rock Beach Play Area.**

## References

Fisher, Andrea L., Dale J. Blahna, and Rosalind Bahr

- 2001 Off Highway Vehicle Uses and Owner Preferences in Utah. Utah State University Institute for Outdoor Recreation and Tourism. Submitted to the Utah Department of Natural Resources, Division of Parks and Recreation. Professional Report IORT PR2001-02.

U.S. Department of the Interior

- 1979 General management Plan, Glen Canyon National Recreation Area. National Park Service.
- 1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment*. National Park Service.
- 1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shoreline*. National Park Service.

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United States Department of the Interior



NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

Chairman Gary Hayes  
Ute Mountain Ute Tribe  
PO Box JJ  
Towaoc, CO 81334

Dear Chairman Hayes,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

This final draft was prepared following comments from and discussions with agency staff, tribes and cooperating agencies on an earlier administrative review version of the draft plan/EIS. You were previously provided with a draft of the Executive Summary from that earlier version. We request that this draft plan/EIS remain confidential. At this time we anticipate a 60 day public review and comment period will occur later this fall following publication of a Notice of Availability in the Federal Register.

We request that any comments on the draft plan/EIS be submitted to us in writing no later than October 9, 2013. If you would like to schedule a time to discuss the draft EIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting. We will continue our consultation with tribes throughout the public comment period as well.

Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)

cc: Mr. Terry Knight, Sr., Tribal Historic Preservation Officer, Ute Mountain Ute Tribe





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

Chairman Manual Savala  
Kaibab Band of Paiute Indians  
#1 North Pipe Spring Road  
H.C. 65, Box 2  
Fredonia, AZ 86022

Dear Chairman Savala,

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Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)

cc: Mr. Charley Bullets, Southern Paiute Consortium Director  
Mr. Roland Maldonado, Cultural Preservation Officer, Kaibab Band of Paiute Indians



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
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IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

Chairman Leroy N. Shingoitewa  
Hopi Tribe  
PO Box 123  
Kykotsmovi, AZ 86039

Dear Chairman Shingoitewa,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

This final draft was prepared following comments from and discussions with agency staff, tribes and cooperating agencies on an earlier administrative review version of the draft plan/EIS. You were previously provided with a draft of the Executive Summary from that earlier version. We request that this draft plan/EIS remain confidential. At this time we anticipate a 60 day public review and comment period will occur later this fall following publication of a Notice of Availability in the Federal Register.

We request that any comments on the draft plan/EIS be submitted to us in writing no later than October 9, 2013. If you would like to schedule a time to discuss the draft EIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting. We will continue our consultation with tribes throughout the public comment period as well.

Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)

cc: Mr. Leigh Kuwanwisiwma, Cultural Preservation Office Director, Hopi Tribe





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

President Ben Shelley  
Navajo Nation  
P.O. Box 9000  
Window Rock, AZ 86515

Dear President Shelley,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)

cc: Mr. Tony Joe, Jr., Traditional Cultural Program Manager, Navajo Nation  
Mr. Allan Downer, Tribal Historic Preservation Officer, Navajo Nation



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

Chairman Gary Hayes  
Ute Mountain Ute Tribe  
PO Box JJ  
Towaoc, CO 81334

Dear Chairman Hayes,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)

cc: Mr. Terry Knight, Sr., Tribal Historic Preservation Officer, Ute Mountain Ute Tribe





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

Governor Arlen Quetawki Sr.  
Pueblo of Zuni  
PO Box 339  
1203 B State Highway 53  
Zuni, NM 87327

Dear Governor Quetawki Sr.,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)

cc: Mr. Kurt Dongoske, Tribal Historic Preservation Office Director, Pueblo of Zuni





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

President May Preston  
San Juan Southern Paiute Tribe  
PO Box 1989  
Tuba City, AZ 86045

Dear President Preston,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

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Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

September 18, 2013

Chairwoman Gari Laferty  
Paiute Indian Tribe of Utah  
440 North Paiute Drive  
Cedar City, UT 84721

Dear Chairwoman Laferty,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Draft Off-road Vehicle Management Plan/Environmental Impact Statement (draft plan/EIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the draft plan/EIS.

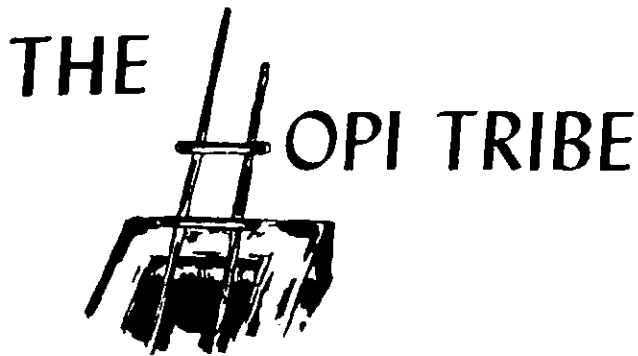
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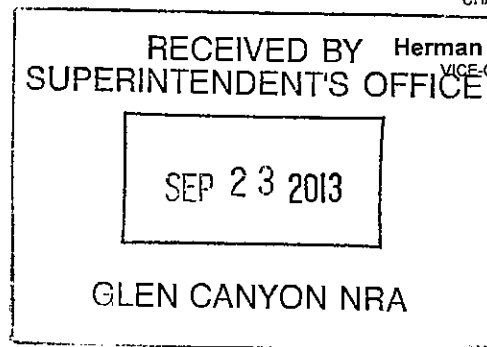
Sincerely,

Todd W. Brindle  
Superintendent

Enclosure (DVD)



LeRoy N. Shingoitewa  
CHAIRMAN



Herman G. Honanie  
VICE-CHAIRMAN

September 13, 2013

Todd W. Brindle, Superintendent  
Attention: Rosemary Sucec, Brian Carey  
Glen Canyon National Recreation Area, Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040

Dear Superintendent Brindle,

This letter is in response to your correspondences dated April 23, July 22, and September 10, 2013, regarding the National Park Service (NPS) continuing to develop the Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan/ Draft Environmental Impact Statement.

The Hopi Tribe claims cultural affiliation to prehistoric cultural groups at Glen Canyon and Rainbow Bridge. The Hopi Cultural Preservation Office supports the identification and avoidance of prehistoric archaeological sites, and we consider the prehistoric archaeological sites of our ancestors to be "footprints" and Traditional Cultural Properties. Therefore, we appreciate the NPS's continuing solicitation of our input and your efforts to address our concerns.

Unfortunately, the Hopi Cultural Preservation Office was unable to send a representative to the August 22<sup>nd</sup> meeting. However we understand that the purpose of the off-road vehicle plan is to develop a range of alternatives to manage ORV use on the accessible shoreline areas, unpaved roads and Ferry Swale area, and that the environmental impact statement was begun in 2007, and draft alternatives were developed in 2010.

We have reviewed the enclosed Draft Executive Summary for Off-road Vehicle (ORV) Management Plan/ Draft Environmental Impact Statement and Clarification of Cultural Resource Considerations. To manage OHV use to prevent impairment and unacceptable impacts to natural and cultural resources, and to protect cultural resources and the biological and physical environment, we generally support the most restrictive alternative in federal agencies' travel management plans.

Therefore, we support Alternative B: No Off-road Use in the draft Executive Summary and we will support this alternative in the draft Environmental Impact Statement. Under this

Todd W. Brindle  
September 13, 2013  
Page 2

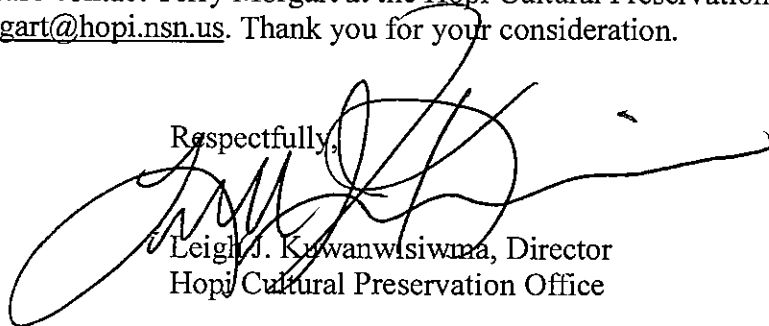
Alternative:

the remote, undeveloped, and lightly traveled nature that characterizes much of Glen Canyon would be maintained by limiting the operation of motor vehicles only to designated roads. Nearly 669,000 acres of Glen Canyon is classified as "Natural" under Glen Canyon's management zones, where maintaining isolation and natural processes is the primary management objective.

We do not support the NPS Preferred Alternative, Alternative E, Mixed Use. It is our understanding that the NPS is not a multi-use land management federal agency and its mission is to protect and preserve natural and cultural resources unimpaired for future generations.

We look forward to being provided with copies of the cultural resources survey reports and the Draft Environmental Impact Statement for review and comment. If you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office at 928-734-3619 or [tmorgart@hopi.nsn.us](mailto:tmorgart@hopi.nsn.us). Thank you for your consideration.

Respectfully,

A large, stylized handwritten signature in black ink, likely belonging to Leigh J. Kuwanwisiwma, is written over the typed name and title.

Leigh J. Kuwanwisiwma, Director  
Hopi Cultural Preservation Office

xc: Arizona and Utah State Historic Preservation Offices





## United States Department of the Interior



NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:

September 3, 2014

Leigh Kuwanwisiwma  
Director Hopi Cultural Preservation Office  
P.O. Box 123  
Kykotsmovi, AZ 86039

Dear Mr. Kuwanwisiwma:

We are writing in response to your letter of February 19th, 2014 in which you requested specific eligibility determinations and treatment of four sites in the Ferry Swale Planning Area associated with the Glen Canyon National Recreation Area (Glen Canyon) *Off-road Vehicle Management Plan/Draft Environmental Impact Statement*.

You sent us the letter in response to the National Park Service (NPS) letter of February 6th, 2014 in which we engaged the Hopi Tribe in government-to-government consultation concerning our determinations of eligibility and effects to historic properties in partial fulfillment of the agency's Section 106 obligations. At that time the NPS provided recommendations for the historic properties in the Ferry Swale Planning Area.

The Hopi Tribe specifically requested that: 1) two sites ( [REDACTED] "be considered eligible and [that] route closure and not archaeologically testing be proposed as treatments"; and 2) "route closure and not data recovery [be]... the proposed treatment" at two other sites [REDACTED]

*Revised Recommendations for [REDACTED] to Resolve Formal Determinations of Eligibility and Effect:* We took seriously your perspectives and wish to offer the following revised recommendations for your consideration and approval prior to engaging with the remaining consulting parties.

- We will determine these sites "Eligible" under Criterion D for the potential of buried deposits, which may be likely to yield information important in prehistory or history.<sup>1</sup>
- We will implement a monitoring program directed at detecting changes in motorized vehicle use and visitor activities that have the potential to result in changes to site condition. Monitoring efforts at these two sites would include special consideration given to the identification of disturbance to the possible subsurface remains. Further treatment recommendations would be identified through the process established in the programmatic agreement (PA) being developed for this undertaking

<sup>1</sup> As you will recall, our observations did suggest the potential for buried deposits to occur at both sites and the NPS recommended limited subsurface testing to determine the presence and extent of potential buried remains. At the time, we viewed the assessment of effects and recommendations to resolve potential adverse effects as dependent on identifying, if present, those subsurface property components contributing to significance.  
Off-road Vehicle Management Plan/FEIS



(please expect a letter with the latest revisions to the PA that will be inclusive of a treatment plan process).

- We will consider *not* designating that portion of the route in the vicinity of [REDACTED] as open to recreational off-road vehicle use. However, please be advised that this route is currently utilized for administrative access to a main electric transmission line along which upgrades and maintenance activities have received compliance reviews in 1989 and 2013. To help make that decision, we wish to extend a formal invitation to you and your designated representatives to visit these and the two other sites discussed in this letter. More information is contained at the base of the letter.


*Revised Recommendations for [REDACTED]* In response to the second request, the NPS will explore the following treatment recommendations specific to these sites. These may include:

- Fence or construct another type of barrier around sensitive areas at site [REDACTED] to prevent indirect visitor impacts.
- Control erosion in the vicinity of site [REDACTED] to reduce and/or abate the propagation of gullies, which might lead to driving over other parts of the site.
- Provide interpretive/educational displays covering the culture history of the Ferry Swale Planning Area.
- Implement a monitoring program directed at detecting changes in motorized vehicle use and visitor activities that may result in changes to site condition. Monitoring efforts at these two sites would include special consideration given to the identification of disturbance to the possible subsurface remains. Further treatment recommendations would be identified through the process established in the programmatic agreement being developed for this undertaking.

To help you decide if the revised recommendations meet with your approval, we wish to extend an invitation for a site visit to the Ferry Swale Planning Area. At that time, we can further clarify how the potential effects to the four historic properties in Ferry Swale might be resolved. Your presence with us at these sites will be helpful and may also result in additional ideas for protection.

We will plan to follow-up this letter with a telephone call to Mr. Morgart. In the meantime, if you should have any questions and/or concerns, please don't hesitate to be in contact with Rosemary Sucec, Cultural Resources Program Manager, at [rosemary\\_sucec@nps.gov](mailto:rosemary_sucec@nps.gov) or at 928-608-6277.

Respectfully,



Todd W. Brindle  
Superintendent

cc:

- Terry Mogart, Legal Researcher, Hopi Tribe
- Stewart Koyiyumptewa, Tribal Archivist, Hopi Tribe
- David Jacobs, Compliance Specialist/Archeologist, State Historic Preservation Office



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

Mr. Ben Shelly  
Navajo Nation President  
PO Box 7440  
Window Rock, AZ 86515

Dear President Shelly:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

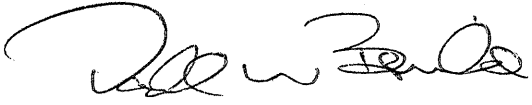
Following the 60-day review and comment period for the Draft Environmental Impact Statement, which was released on January 3<sup>rd</sup>, 2014, the NPS reviewed the comments in order to prepare responses and make any changes in the Plan/FEIS.

We will be making some modifications to Alternative E: Mixed Use in order to reflect the changes that were prompted by agency and public comment. Alternative E designates a mixture of opportunities for motorized recreation on park roads and designated ORV routes and at remote shoreline ORV areas while prohibiting such uses in areas where resources and values may be at risk. The changes to Alternative E are reflected in the enclosed table; these will be analyzed for environmental impact in the Plan/FEIS.

In addition, the Plan/FEIS will include additional information on the proposed permit system, the communication/education plan, and the monitoring/mitigation plan, and additional analysis on air quality (fugitive dust) and soundscapes impacts. We anticipate publishing the Plan/FEIS for public review and a 30 day waiting period in January 2015.

We will provide a copy of the Plan/FEIS to you prior to its public release. Other information on the planning process may be downloaded at <http://parkplanning.nps.gov/glca-orvplan>. If you have any questions on the planning process, please contact Brian Carey, Management Assistant, at (928) 608-6209 or via email at [Brian\\_Carey@nps.gov](mailto:Brian_Carey@nps.gov) or alternatively, contact Rosemary Sucec, Branch Chief of Cultural Resources at (928) 608-6277 or via email at [Rosemary\\_Sucec@nps.gov](mailto:Rosemary_Sucec@nps.gov).

Sincerely,



Todd W. Brindle  
Superintendent

Enclosures:

- GLCA ORV EIS Alternative E: Mixed Use Changes Table

cc:

- Tim Begay, Navajo Cultural Specialist, Navajo Nation
- Tony Joe, Sr., Navajo Traditional Cultural Program Manager, Navajo Nation
- Fred White, Deputy Director, Division of Natural Resources, Navajo Nation
- Ron Maldonado, Acting Tribal Historic Preservation Office, Navajo Nation
- Effie Yazzie, Lake Powell Navajo Tribal Park, Navajo Nation
- Kelly Francis, Navajo Cultural Specialist, Navajo Nation
- Kelsey Begay, Chapter President, Navajo Nation
- Peter Corbell, Chapter Manager, Navajo Nation
- Irene Nez-Whitekiller, Chapter President, Navajo Nation
- Herman Daniels, Jr., Chapter President, Navajo Nation
- Martha Tate, Chapter President, Navajo Nation
- Elizabeth Whitethorne-Benally, Chapter President, Navajo Nation
- Alex Bitsinnie, Chapter President, Navajo Nation
- Willie Greyeyes, Elder, Navajo Nation
- Floyd Stevens, Chapter President, Navajo Nation
- Billy Arizona, Chapter President, Navajo Nation





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

May Preston  
San Juan Southern Paiute Chairwoman  
P. O. Box 2862  
Tuba City, AZ 86045

Dear Chairwoman Preston:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

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Sincerely,

A handwritten signature in black ink, appearing to read 'Todd W. Brindle', with a large, sweeping initial 'T'.

Todd W. Brindle  
Superintendent

Enclosures:

- GLCA ORV EIS Alternative E: Mixed Use Changes Table

cc:

- Natalie Edgewater, Council Member, San Juan Southern Paiute Tribe





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

Mr. Manuel Heart  
Ute Mountain Ute Tribe Chairman  
P.O. Box JJ  
Towaoc, CO 81334

Dear Chairman Heart:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

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Sincerely,

A handwritten signature in black ink, appearing to read "Todd W. Brindle". The signature is fluid and cursive, with the first name "Todd" being the most prominent.

Todd W. Brindle  
Superintendent

Enclosures:

- GLCA ORV EIS Alternative E: Mixed Use Changes Table

cc:

- Terry Knight, Sr., Tribal Historic Preservation Officer, Ute Mountain Ute Tribe
- Lynn Hartman, ALP Cultural Resources Contractor Administrator, Ute Mountain Ute Tribe
- Malcolm Lehi, Council Representative, White Mesa Ute Band



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

Gari Lafferty  
Paiute Indian Tribe of Utah Chairman  
440 North Paiute Drive  
Cedar City, UT 84721

Dear Chairwoman Lafferty:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

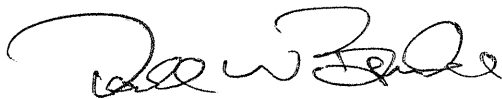
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We will provide a copy of the Plan/FEIS to you prior to its public release. Other information on the planning process may be downloaded at <http://parkplanning.nps.gov/glca-orvplan>. If you have any questions on the planning process, please contact Brian Carey, Management Assistant, at (928) 608-6209 or via email at [Brian\\_Carey@nps.gov](mailto:Brian_Carey@nps.gov) or alternatively, contact Rosemary Sucec, Branch Chief of Cultural Resources at (928) 608-6277 or via email at [Rosemary\\_Sucec@nps.gov](mailto:Rosemary_Sucec@nps.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Todd W. Brindle". The signature is fluid and cursive, with the first name "Todd" being more prominent than the last name "Brindle".

Todd W. Brindle  
Superintendent

Enclosures:

- GLCA ORV EIS Alternative E: Mixed Use Changes Table

cc:

- Jeanine Borchardt, Vice Chairperson, Paiute Indian Tribe of Utah
- Elliott Yazzie, Chairman, Koosharem Band
- Georgetta Wood, Chairwoman, Shivwits Band
- Corrina Bow, Chairwoman, Kanosh Band





## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

Mr. Arlen Quetawki Sr.  
Pueblo of Zuni Governor  
P O Box 339  
Zuni, NM 87327

Dear Governor Quetawki:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

Following the 60-day review and comment period for the Draft Environmental Impact Statement, which was released on January 3<sup>rd</sup>, 2014, the NPS reviewed the comments in order to prepare responses and make any changes in the Plan/FEIS.

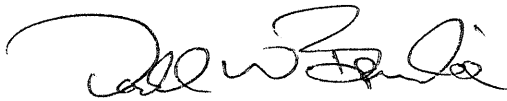
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Todd W. Brindle  
Superintendent

Enclosures:

- GLCA ORV EIS Alternative E: Mixed Use Changes Table

cc:

- Kurt Dongoske, Tribal Historic Preservation Officer, Pueblo of Zuni



## United States Department of the Interior



NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200

IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

Mr. Manuel Savala  
Kaibab Paiute Tribe Chairman  
HC 65 Box 2  
Fredonia, AZ 86022

Dear Chairman Savala:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

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Todd W. Brindle  
Superintendent

Enclosures:

- GLCA ORV EIS Alternative E: Mixed Use Changes Table

cc:

- Charley Bullets, Director, Southern Paiute Consortium, Kaibab Paiute Tribe



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Plan/EIS

September 24, 2014

Mr. Herman Honanie  
Hopi Tribe Chairman  
PO Box 123  
Kykotsmovi, AZ 86039

Dear Chairman Honanie:

As part of our process of government-to-government consultation with American Indian tribes associated with Glen Canyon National Recreation Area (Glen Canyon), the National Park Service (NPS) would like to update you on the next steps in the production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement (Plan/FEIS) for Glen Canyon. The Plan/FEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles.

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|                                   | <b>Alternative E: MIXED USE<br/>(NPS Preferred Alternative) identified in DEIS</b>  | <b>Modifications to Alternative E: MIXED USE which will be<br/>analyzed in FEIS</b>  |
|-----------------------------------|---|--|
| <b>Highlights</b>                 | <p>Conventional motor vehicles and street-legal ATVs would be authorized for use at 16 areas only by permit, subject to water-level closures.</p> <p>A vehicle-free area would be designated at Lone Rock Beach.</p> <p>Street-legal ATVs would be authorized for use on paved GMP roads. OHVs and street-legal ATVs would also be authorized for use on unpaved GMP roads. No OHVs or street-legal ATVs would be authorized for use in the Orange Cliffs Unit.</p> <p>Fifteen miles of ORV routes would be designated.</p> | <p>Seasonal closures would be put into effect at eight accessible shorelines.</p> <p>Vehicle-free zones would be established at two additional accessible shorelines.</p> <p>The Poison Spring Loop in Orange Cliffs Unit would be open to OHVs and street-legal ATVs by permit only.</p> <p>Lees Ferry Access Road (paved) would only be open to conventional motor vehicles.</p> <p>Some ORV routes will be designated outside of Ferry Swale as part of mapping corrections; total mileage will not differ significantly.</p>                                 |
| <b>Lone Rock Beach</b>            | <p>Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue only by permit. Utah rules regulating OHVs and street-legal ATVs would remain in effect.</p> <p>Approximately 20 acres of the beach would be designated as a vehicle-free zone (no vehicles of any type would be allowed in this zone).</p>  | <p>NPS would designate the vehicle-free zone during the seasons of highest use and vary the size and location in relation to the lake level.</p>   |
| <b>Lone Rock Beach Play Area</b>  | <p>Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue only by permit. Utah rules regulating OHVs and street-legal ATVs would remain in effect.</p> <p>The display of a safety flag would be required.</p>  | <p>No change.</p>  |
| <b>Accessible Shoreline Areas</b> | <p>Fourteen areas (12 existing areas plus Nokai Canyon and Paiute Farms) would be authorized for use by conventional motor vehicles and street-legal ATVs, only by permit, subject to water-level closures. Off-road use at Warm Creek would be discontinued.</p>   | <p>Eight areas (Blue Notch, Bullfrog North and South, Crosby Canyon, Dirty Devil, Farley Canyon, Red Canyon, Stanton Creek and White Canyon) would be closed to street-legal ATV use from November 1 through March 1.</p> <p>Approximately 20 acres of the beach would be designated as a vehicle-free zone (no vehicles of any type would be allowed in this zone) at Bullfrog North and South and Stanton Creek. NPS would designate the vehicle-free zone during the seasons of highest use and vary the size and location in relation to the lake level.</p> |
| <b>GMP Roads</b>                  | <p>Street-legal ATVs would be authorized for use on paved GMP roads. OHVs and street-legal ATVs would also be authorized on unpaved GMP roads. No OHVs or street-legal ATVs would be authorized on GMP roads in the Orange Cliffs Unit.</p> <p>Conventional motor vehicles are currently and would continue to be authorized on all GMP roads in Glen Canyon, including the Orange Cliffs Unit.</p>   | <p>Approximately seven miles of roads at the southern end of the Orange Cliffs unit (Route 633 proceeding north to Route 730 and proceeding west to the park boundary) would be open to OHVs and street-legal ATVs as the "Poison Spring Loop" by permit only.</p> <p>The Lees Ferry Access Road (paved) would be open only to conventional motor vehicles.</p>  |



|                   |  |  |
|-------------------|--|--|
| <b>ORV Routes</b> | <p>Conventional vehicles, OHVs, and street-legal ATVs would be authorized for use on approximately 15 miles of designated ORV routes by permit. Other existing routes would be restored to natural conditions.</p> | <p>ORV routes will be designated primarily in the Ferry Swale area, with the addition of one ORV route off NPS Route 264 to Gunsight Springs Trailhead, one ORV route off NPS Route 332 to Middle Moody Trailhead, and two ORV routes in the Imperial-Bull Valley area: SJC Road D0154 to East Gypsum Canyon Overlook and SJC Road D1880 in Imperial Valley.</p> |
|-------------------|--|--|





Herman G. Honanie  
CHAIRMAN

Alfred Lomahquahu Jr.  
VICE-CHAIRMAN

RECEIVED BY  
SUPERINTENDENT'S OFFICE

SEP 22 2014

GLEN CANYON NRA

September 17, 2014

Todd W. Brindle, Superintendent  
Attention: Rosemary Sucec, Brian Carey  
Glen Canyon National Recreation Area, Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040

Dear Superintendent Brindle,

Thank you for your correspondence dated September 3, 2014, in response to our February 19, 2014 letter, regarding the National Park Service (NPS) determination of eligibility and effect on historic properties for the proposed Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan/ Draft Environmental Impact Statement. The Hopi Tribe claims cultural affiliation to earlier identifiable cultural groups at Glen Canyon and Rainbow Bridge. The Hopi Cultural Preservation Office supports the identification and avoidance of our ancestral sites, and we consider the prehistoric archaeological sites of our ancestors to be "footprints" and Traditional Cultural Properties. Therefore, we appreciate the NPS's continuing solicitation of our input and your efforts to address our concerns.

In a letter dated September 13, 2013, the Hopi Cultural Preservation Office stated we understood that the purpose of the off-road vehicle plan is to develop a range of alternatives to manage ORV use on the accessible shoreline areas, unpaved roads and Ferry Swale area, and that the environmental impact statement was begun in 2007, and draft alternatives were developed in 2010. We reviewed the Draft Executive Summary for Off-road Vehicle (ORV) Management Plan/ Draft Environmental Impact Statement and Clarification of Cultural Resource Considerations and stated that to manage OHV use to prevent impairment and unacceptable impacts to natural and cultural resources, and to protect cultural resources and the biological and physical environment, we generally supported the most restrictive alternative in federal agencies' travel management plans.

In a letter dated January 17, 2014, we reiterated our support for Alternative B: No Off-road Use in the draft Environmental Impact Statement. Under this environmentally preferred alternative, "the remote, undeveloped, and lightly traveled nature that characterizes much of Glen Canyon would be maintained by limiting the operation of motor vehicles only to designated



roads. Nearly 669,000 acres of Glen Canyon is classified as "Natural" under Glen Canyon's management zones, where maintaining isolation and natural processes is the primary management objective." We also reiterated that we do not support the NPS Preferred Alternative, Alternative E, Mixed Use, because it is our understanding that the NPS is not a multi-use land management federal agency and its mission is to protect and preserve natural and cultural resources unimpaired for future generations.

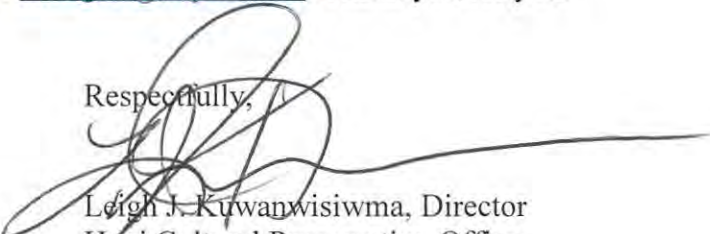
In a letter dated February 19, 2014, we reviewed the cultural resources survey reports and recommendations to resolve potential adverse effects, and stated we understood 35 historic properties were identified within the area of potential effect for all roads, accessible shorelines, and proposed route designations. 13 prehistoric sites were identified in the Ferry Swale project area, 6 of which are recommend as National Register eligible, 2 of which are unevaluated, and 5 of which are recommended not eligible. 15 prehistoric sites and a Paiute site were identified in the accessible shorelines project area, 8 of which are recommended as eligible and 8 of which are recommended as not eligible.

We appreciate your September 3, 2014 correspondence that includes revised recommendations including route closure, fencing, erosion control and monitoring, and not data recovery, at sites [REDACTED] described as an early formative open artifact scatter, and [REDACTED], described as a rockshelter and open artifact scatter. We also appreciate the revised recommendations that sites [REDACTED] described as open artifact and lithic scatters, be considered National Register eligible, and route closures and monitoring, and not archaeologically testing, be implemented as treatments.

In a letter dated June 30, 2014, regarding the draft Programmatic Agreement, we deferred to the Advisory Council on Historic Preservation, State Historic Preservation Office and other interested parties. However we request continuing consultation on this proposal including being provided with copies of any proposed treatment plans to mitigate the adverse effects pursuant to the Programmatic Agreement.

We reiterate our appreciation for the revised recommendations for these sites, and if the revised recommendations are implemented a site visit will not be necessary. If you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office at 928-734-3619 or [tmorgart@hopi.nsn.us](mailto:tmorgart@hopi.nsn.us). Thank you for your consideration.

Respectfully,

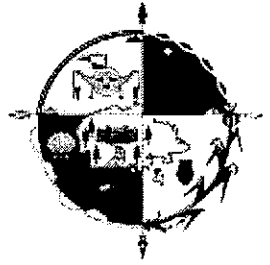


Leigh J. Kuwanwisiwma, Director  
Hopi Cultural Preservation Office

xc: Arizona and Utah State Historic Preservation Offices



THE  
NAVAJO  
NATION



BEN SHELLY  
PRESIDENT

Historic Preservation Department, POB 4950, Window Rock, AZ 86515 • PH: 928.871-7198 • FAX: 928.871.7886

REX LEE JIM  
VICE-PRESIDENT

November 21, 2014

Todd W. Brindle, Superintendent  
National Park Service  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, AZ 86040

Subject: **OFF-ROAD VEHICLE MANAGEMENT PLAN/FINAL ENVIRONMENTAL IMPACT  
STATEMENT FOR GLEN CANYON**

Dear: Mr. Brindle,

The Historic Preservation Department-Traditional Culture Program, hereafter (HPD-TCP) is in receipt of the letter notification for the updates regarding next step in production of the Off-road Vehicle Management Plan/Final Environmental Impact Statement for Glen Canyon, and the analyzes of range alternatives and actions for managing off road use of motor vehicles and on road use of off highway vehicles and street-legal all terrain vehicles.

After reviewing the information documents provided, HPD-TCP has concluded that this particular initiative **will not** have adverse affects to Navajo Traditional Cultural Properties, and look forward to future notifications and consultation. HPD-TCP on behalf of the Navajo Nation has no concerns at this time.

If the proposed application inadvertently discovers habitation sites, plant gathering areas, human remains and objects of cultural patrimony, HPD-TCP request that we be notified respectively in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). *(The Navajo Nation claims cultural affiliation to all Anasazi people (periods from Archaic to Pueblo IV) of the southwest. The Navajo Nation makes this claim through Navajo oral history and ceremonial history, which has been documented as early as 1880 and taught from generation to generations).*

The HPD-TCP appreciates the National Park Service's consultation efforts regarding this document. Should you have any additional concerns and/or questions do not hesitate to contact me electronically at [tony@navajohistoricpreservation.org](mailto:tony@navajohistoricpreservation.org) or telephone at 928-871-7750.

Sincerely,

Tony H. Joe, Jr., Supervisory Anthropologist  
Section 106 Consultation  
Traditional Culture Program  
Historic Preservation Department

TCP  
cc: 14-550  
National Park Service



Window Rock, AZ 86515

Page, AZ 86040



SECRET

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GLEN CANYON NRA



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

Navajo Nation  
President Russell Begaye  
PO Box 7440  
Window Rock, AZ 86515

Dear President Begaye,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

This final draft was prepared following comments from and discussions with agency staff, tribes, cooperating agencies and other stakeholders on the Draft Environmental Impact Statement which was released for public review in January 2014. We request that this draft plan/FEIS remain confidential during your current review. Once the plan/FEIS is made available to the public following publication of a Notice of Availability in the Federal Register, the NPS must wait a minimum of 30 days before publishing a Record of Decision.

Enclosed please find a printed version of the Executive Summary as well as a CD containing the entire plan/FEIS. We request that any comments on the plan/FEIS be submitted to us in writing no later than April 22, 2016. If you would like to schedule a time to discuss the plan/FEIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting.

Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
- Off-road Vehicle Plan/Final Environmental Impact Statement Executive Summary

cc:

- Ora Marek-Martinez, Tribal Historic Preservation Officer
- Tim Begay, Navajo Cultural Specialist
- Fred White, Deputy Director, Division of Natural Resources
- Effie Yazzie, Lake Powell Navajo Tribal Park
- Kelly Francis, Navajo Cultural Specialist
- Kelsey Begay, Chapter President
- Peter Corbell, Chapter Manager
- Irene Nez-Whitekiller, Chapter President
- Herman Daniels, Jr., Chapter President
- Martha Tate, Chapter President
- Elizabeth Whitethorne-Benally, Chapter President
- Alex Bitsinnie, Chapter President
- Willie Greyeyes, Elder
- Floyd Stevens, Chapter President
- Billy Arizona, Chapter President



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

Hopi Tribe  
Chairman Herman Honanie  
P.O. Box 123  
Kykotsmovi, AZ 86039

Dear Chairman Honanie,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

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Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
- Off-road Vehicle Plan/Final Environmental Impact Statement Executive Summary

cc:

- Terry Morgart, Legal Researcher
- Leigh Kuwanwisiwma, Director Cultural Historic Preservation Office
- Stewart Koyiyumptewa, Tribal Archivist





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

Kaibab Paiute Tribe  
Chariman Roland Maldonado  
HC 65 Box 2  
Fredonia, AZ 86022

Dear Chariman Maldonado,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

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Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
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cc:

- Charley Bullets, Director, Southern Paiute Consortium



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

San Juan Southern Paiute Tribe  
Chairwoman Tashina Williams  
P. O. Box 340  
Tuba City, AZ 86045

Dear Chairwoman Williams,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

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Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
- Off-road Vehicle Plan/Final Environmental Impact Statement Executive Summary

cc:

- Natalie Edgewater, Council Member





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

Ute Mountain Ute Tribe  
Chairman Manuel Heart  
P.O. Box JJ  
Towaoc, Co 81334

Dear Chairman Heart,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

This final draft was prepared following comments from and discussions with agency staff, tribes, cooperating agencies and other stakeholders on the Draft Environmental Impact Statement which was released for public review in January 2014. We request that this draft plan/FEIS remain confidential during your current review. Once the plan/FEIS is made available to the public following publication of a Notice of Availability in the Federal Register, the NPS must wait a minimum of 30 days before publishing a Record of Decision.

Enclosed please find a printed version of the Executive Summary as well as a CD containing the entire plan/FEIS. We request that any comments on the plan/FEIS be submitted to us in writing no later than April 22, 2016. If you would like to schedule a time to discuss the plan/FEIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting.

Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
- Off-road Vehicle Plan/Final Environmental Impact Statement Executive Summary



cc:

- Terry Knight, Sr., Tribal Historic Preservation Officer
- Lynn Hartman, ALP Cultural Resources Contractor Administrator
- Malcolm Lehi, Council Representative



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

Paiute Indian Tribe of Utah  
Chairwoman Corrina Bow  
440 North paiute Drive  
Cedar City, UT 84721

Dear Chairwoman Bow,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

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Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
- Off-road Vehicle Plan/Final Environmental Impact Statement Executive Summary

cc:

- Toni Pikyavit, Band Chairman
- Georgetta Wood, Band Chairwoman
- Phil Pikyavit, Band Chairman



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
Off-road Vehicle Management Plan/EIS

March 17, 2016

Pueblo of Zuni  
Governor Val Panteah  
P O Box 339  
Zuni, NM 87327

Dear Governor Panteah,

As part of our process of government-to-government consultation with tribes on important issues at Glen Canyon National Recreation Area, the National Park Service is pleased to be able to provide to you the final draft of the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (plan/FEIS). Your tribe is being provided an opportunity to review the draft before it is released to the public. Please let us know if you would like us to follow up with you by telephone or in person concerning any aspects of the plan/FEIS.

This final draft was prepared following comments from and discussions with agency staff, tribes, cooperating agencies and other stakeholders on the Draft Environmental Impact Statement which was released for public review in January 2014. We request that this draft plan/FEIS remain confidential during your current review. Once the plan/FEIS is made available to the public following publication of a Notice of Availability in the Federal Register, the NPS must wait a minimum of 30 days before publishing a Record of Decision.

Enclosed please find a printed version of the Executive Summary as well as a CD containing the entire plan/FEIS. We request that any comments on the plan/FEIS be submitted to us in writing no later than April 22, 2016. If you would like to schedule a time to discuss the plan/FEIS, please contact Rosemary Sucec, Branch Chief of Cultural Resources, at (928) 608-6277 to determine an appropriate time for a follow-up telephone call or meeting.

Sincerely,

William Shott  
Acting Superintendent

Enclosures:

- Off-road Vehicle Plan/Final Environmental Impact Statement (cd)
- Off-road Vehicle Plan/Final Environmental Impact Statement Executive Summary

cc:

- Kurt Dongoske, Tribal Historic Preservation Officer
- Octavius Seowtewa, Zuni Cultural Advisory Team



1 UNITED STATES DEPARTMENT OF THE INTERIOR – NATIONAL PARK SERVICE

2 OFF-ROAD VEHICLE MANAGEMENT PLAN /  
3 FINAL ENVIRONMENTAL IMPACT STATEMENT

4 Lead Agency: National Park Service (NPS), U.S. Department of the Interior

5 This *Off-Road Vehicle Management Plan / Final Environmental Impact Statement* (plan/FEIS) describes five alternatives for managing off-  
6 road use and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) and assesses the impacts that could  
7 result from continuing current management (the no-action alternative) or implementation of any of the action alternatives.

8 The purpose of this plan/EIS is to evaluate off-road use by conventional and non-conventional motor vehicles and on-road use by non-  
9 conventional motor vehicles and to develop management actions that preserve Glen Canyon's scientific, scenic, and historic features;  
10 provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a  
11 unit of the national park system. Therefore, a plan is needed for the following reasons:

- 12 • To evaluate the impacts associated with allowed but unauthorized off-road use in Glen Canyon and determine what  
13 management action should be taken.
- 14 • To determine whether NPS will authorize off-road use in accordance with Executive Orders 11644 and 11989 (off-road vehicles  
15 (ORVs) on public lands), NPS laws, regulations (36 CFR 4.10), and policies to minimize impacts to Glen Canyon.
- 16 • To evaluate the impacts resulting from on-road use by non-conventional motor vehicles in Glen Canyon, and determine what  
17 management actions should be taken.
- 18 • To address changes in vehicular access at visitor use areas due to fluctuating lake levels.

19 Under alternative A, the no-action alternative, there would be a continuation of existing management policies and actions related to the  
20 use of ORVs in Glen Canyon. This alternative represents no change from the current level of management direction and level of  
21 management intensity. This alternative is consistent with the 1979 Glen Canyon General Management Plan, other planning documents,  
22 and management policies related to off-road use in Glen Canyon. If the no-action alternative were selected, NPS would be required to  
23 promulgate a special regulation to authorize existing ORV routes and areas in compliance with 36 CFR 4.10.

24 Under alternative B, the remote, undeveloped, and lightly traveled nature that characterizes much of Glen Canyon would be maintained by  
25 limiting the operation of motor vehicles only to designated roads. Nearly 669,000 acres of Glen Canyon is classified as "Natural" under  
26 Glen Canyon's management zones, where maintaining isolation and natural processes is the primary management objective. There would  
27 be no designated ORV routes or areas and existing off-road use areas would be closed and restored to natural conditions.

28 Under alternative C, ORVs would be managed in a manner that would expand the recreational opportunities in Glen Canyon by increasing  
29 the number of ORV routes and areas. Alternative C is designed to enhance the visitor experience by identifying and designating specific  
30 areas capable of supporting off-road use and on-road OHV and street-legal ATV use, while prohibiting such uses in areas where natural  
31 and cultural resources and visitor experience may be adversely impacted. The isolated and primitive characteristics of the Glen Canyon  
32 backcountry would be enhanced by limiting the areas open to off-road use and by prohibiting the operation of OHVs and street-legal  
33 ATVs throughout Glen Canyon. These actions are intended to enhance the protection of Glen Canyon resources and values, as well as to  
34 promote recreation opportunities that are based on a sense of solitude, remoteness, and natural conditions. Alternative D would reduce  
35 the number of available ORV areas.

36 Under alternative E, the preferred alternative, resources would be protected and the visitor experience enhanced by identifying and  
37 designating specific areas capable of supporting off-road use while prohibiting such uses in areas where resources and values may be at  
38 risk.

39 The potential environmental consequences of the alternatives were addressed for geology and soils, vegetation, wildlife and wildlife  
40 habitat, special-status species, soundscapes, visitor use and experience, archeological and ethnographic resources, socioeconomics, health  
41 and safety, paleontological resources, and wilderness.

42 The *Off-Road Vehicle Management Plan / Draft Environmental Impact Statement* was available for public and agency review from January 3  
43 to March 4, 2014. Copies of the document were distributed to individuals, agencies, organizations, and local businesses. This plan/FEIS  
44 provides responses to substantive stakeholder and public comments, incorporates those comments and suggested revisions where  
45 necessary, and provides copies of relevant agency and organization letters. Once this document is released and a Notice of Availability is  
46 published by the U.S. Environmental Protection Agency, a 30-day no-action period will follow. Following the 30-day period, the alternative  
47 or actions constituting the approved plan will be documented in a record of decision (ROD) that will be signed by the Regional Director of  
48 the Intermountain Region. For further information regarding this document, please contact:

49 Glen Canyon National Recreation Area  
50 c/o Superintendent  
51 PO Box 1507  
52 Page, AZ 86040-1507  
53 (928) 608-6200



# **Glen Canyon National Recreation Area**

## **Off-road Vehicle Management Plan / Final Environmental Impact Statement**

**Second Internal Draft**

**February 2016**

## EXECUTIVE SUMMARY

This *Glen Canyon National Recreation Area Off-road Vehicle Management Plan / Final Environmental Impact Statement* (plan/FEIS) analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The plan/FEIS assesses the impacts that could result from continuing current management (the no-action alternative) or implementing any of the four action alternatives.

Upon conclusion of this plan and decision-making process, the alternative selected for implementation will become the Off-road Vehicle (ORV) Management Plan and form the basis for a special regulation to manage any approved off-road use or changes to on-road use at Glen Canyon. The plan/FEIS would guide management of off-road use at Glen Canyon for the next 10 to 15 years.

### BACKGROUND

Glen Canyon encompasses 1,254,306 acres in northern Arizona and southeastern Utah. Glen Canyon includes portions of Garfield, Kane, San Juan, and Wayne Counties in Utah and Coconino County in Arizona. The southern boundary runs contiguous to the lands of the Navajo Nation. Glen Canyon shares boundaries with other national park system units, including Grand Canyon National Park, Capitol Reef National Park, and Canyonlands National Park. Glen Canyon also encompasses Rainbow Bridge National Monument. Glen Canyon adjoins approximately 9.3 million acres of other federal lands administered by the Bureau of Land Management (BLM), including the Grand Staircase Escalante National Monument, Vermilion Cliffs National Monument, and the Paria Canyon-Vermilion Cliffs Wilderness.

The use of motorized vehicles to reach off-road destinations in Glen Canyon predates the establishment of the recreation area in 1972 (PL 92-593). After Lake Powell began to fill behind the completed Glen Canyon Dam in 1963, the public began driving off-road to access the new lake for recreational activities. This off-road use continued following the establishment of the national recreation area in 1972.

A comprehensive planning process begun by NPS after the establishment of Glen Canyon resulted in the publishing of a general management plan (GMP) in 1979. The GMP designated a system of open roads for vehicle travel and closed several existing unpaved roads in the backcountry. After an evaluation of several alternatives for wilderness suitability under the 1964 Wilderness Act, NPS published a Wilderness Recommendation in 1980 proposing 588,855 acres for designation as wilderness within Glen Canyon.

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**Conventional Motor Vehicle:** *A motor vehicle designed primarily for use and operation on streets and highways and is licensed and registered for interstate travel but can be used off-road.*

**ORV:** *National Park Service (NPS) defines ORVs broadly as a motorized vehicle (conventional or non-conventional) designed for or capable of cross-country travel on or immediately over natural terrain.*

**OHV:** *State law defines these as a non-conventional motor vehicle designed primarily for off-road use.*

**Street-legal ATV:** *An ATV that qualifies under the state's motor vehicle and traffic code to be operated on state roads and highways.*

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Following a rapid increase in visitation to Glen Canyon during the 1970s, NPS determined that site-specific planning for off-road use was warranted. Increasing use at shoreline locations was leading to management concerns, including visitor conflicts, safety issues, resource degradation, and unsystematic off-road use. In response, NPS developed a management plan for Lone Rock Beach (1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment*) as well as a management plan for 20 accessible shoreline areas on Lake Powell (1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shorelines*). Twelve of the 20 accessible shoreline sites were developed to provide for off-road driving.

In 1986 the Paiute Farms/San Juan Marina Development Concept Plan Environmental Assessment evaluated the development of a marina that was subsequently constructed and then destroyed by a flash flood several years later. Off-road use at this former marina site continues in order to access the San Juan Arm of the Lake Powell at this location. In addition, the 2006 Uplake Development Concept Plan designated an area at the Hite Boat Ramp to continue its use for primitive shoreline camping, which is accessed by off-road use between the public boat launch ramp and the former Hite marina site. An additional area bordering the Navajo Nation, Nokai Canyon, is not authorized for off-road use but is currently being accessed and has not been addressed in past planning efforts.

In 2005, NPS was challenged in federal court over the failure to comply with the executive orders 11644 and 11989 and 36 CFR 4.10(b). Although NPS had implemented ORV management plans for various parts of Glen Canyon in 1981 (Lone Rock Beach) and 1988 (20 accessible shoreline areas on Lake Powell), past planning efforts failed to comply with the CFR requiring promulgation of a special regulation to designate off-road use areas.

Glen Canyon is preparing this plan/FEIS under the terms of the May 12, 2008, settlement agreement between Friends of the Earth, the National Parks Conservation Association, and Wildlands CPR (known collectively as Bluewater Network) and the Department of the Interior and NPS (*Friends of the Earth, Bluewater Network Division, et al. v. United States Department of the Interior, et al.* [Case 1:05-cv-02302-RCL]).

This plan/FEIS addresses the future management of accessible shoreline areas and their suitability for use by conventional motor vehicles, as well as by non-conventional vehicles such as OHVs and street-legal ATVs. This plan/FEIS also evaluates the designation of ORV routes in other areas of Glen Canyon such as at Ferry Swale near Page, AZ. Lastly, this plan/FEIS evaluates the use of OHVs and street-legal ATVs on GMP roads in Glen Canyon.

## PURPOSE OF THIS PLAN

The purpose of this plan/FEIS is to evaluate off-road use by conventional and non-conventional motor vehicles and on-road use by non-conventional motor vehicles and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

## NEED FOR ACTION

A plan/FEIS is needed for the following reasons:

- To evaluate the impacts associated with allowed but unauthorized off-road use in Glen Canyon and determine what management action should be taken.
- To determine whether NPS will authorize off-road use in accordance with Executive Orders 11644 and 11989 ORVs on public lands), NPS laws, regulations (36 CFR 4.10), and policies to minimize impacts to Glen Canyon.

- To evaluate the impacts resulting from on-road use by non-conventional motor vehicles in Glen Canyon and determine what management actions should be taken.
- To address changes in vehicular access at visitor use areas due to fluctuating lake levels.

This plan/FEIS has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500–1508), and NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-Making*.

## OBJECTIVES IN TAKING ACTION

The objectives for managing off-road and on-road use of motor vehicles are based on Glen Canyon's enabling legislation and prior planning documents and are compatible with NPS mission and policy guidance. All alternatives considered in this ORV management plan must, to a large degree, accomplish the following objectives:

- Manage authorized vehicle uses to provide safe and healthful opportunities for visitor access and recreation.
- Manage authorized vehicle uses to protect the biological and physical environment, including natural processes and systems.
- Manage authorized vehicle uses to protect cultural resources.
- Establish clear policies to guide authorized vehicle uses.

## ISSUES AND IMPACT TOPICS

Glen Canyon staff identified issues associated with implementing an ORV management plan during internal scoping meetings and the public identified issues during the public scoping process at three public meetings. Table ES-1 details the issues that are discussed and analyzed in the plan/FEIS.

**TABLE ES-1: ISSUES AND IMPACT TOPICS**

| ISSUE                         | REASON FOR ANALYSIS   |
|-------------------------------|---|
| Geology and Soils             | Damage to soils from off-road use includes the destruction of soil stabilizers, soil compaction and reduced rates of water infiltration, accelerated rates of surface water runoff and erosion, accelerated rates of wind erosion, and declines in soil productivity. Cyanobacterial soil crusts stabilize soils, increase water infiltration, and concentrate essential nutrients for vascular plant growth. Damage to these living soil crusts can occur with a single pass of a vehicle. |
| Vegetation                    | Off-road use can adversely impact native plants and plant communities directly, by crushing and uprooting of plants, and indirectly, by altering soil properties and by serving as a vector for invasive plant species that replace native vegetation.  |
| Wildlife and Wildlife Habitat | Wildlife is known to be affected by off-road motor vehicle use. Impacts occur in four primary categories: direct mortality, disturbance, noise, and habitat alteration. The most vulnerable species to off-road activity include burrowing species, such as rodents that nest in open sandy sites and whose burrows are easily crushed.   |



| ISSUE                      | REASON FOR ANALYSIS  |
|----------------------------|--|
| Special-status Species     | A number of federally listed species are likely to occur in the project area and may be affected by management actions. Because this plan/FEIS may affect, but is not likely to adversely affect, listed species, NPS has engaged in consultation with the U.S. Fish and Wildlife Service (USFWS) as required under Section 7 of the Endangered Species Act (16 USC 1536 [a][2]).  |
| Soundscapes                | The natural soundscape is considered a resource, and qualifies as an inherent component of "the scenery and the natural and historic objects and the wild life therein" that is protected by the NPS Organic Act. Vehicular noise has the potential to impact other users in these areas. Motor vehicle noise could also discourage wildlife from using these areas or directly impact their ability to hear.  |
| Visitor Use and Experience | The use of motorized vehicles is an integral component of the experience for some visitors and the extent to which this use may be authorized in Glen Canyon could impact the amount and range of recreational opportunities accessible to visitors, especially if certain restrictions or user fees are involved. While off-road use may provide a positive experience for some visitors, this can also conflict with the experiences sought by others. |
| Cultural Resources         | Off-road use has been demonstrated to be a source of direct and indirect damage to cultural resources. Due to the potential for adverse impacts on archeological and ethnographic resources through the adoption of one or more of the action alternatives, these two resources have been assessed for their potential to be affected by the alternatives.   |
| Archeological Resources    | Glen Canyon is known to contain archeological resources eligible for inclusion in the National Register of Historic Places; archeological resources do exist in the study area.  |
| Ethnographic Resources     | Ethnographic resources that are archeological sites have been documented in association with the accessible lakeshores and within Lone Rock Beach Play Area. Archeological sites have been recorded within and adjacent to the GMP roads. Some of these sites may also be ethnographic resources. One traditional cultural property (TCP) is located within the study area and the Hole-in-the-Rock Road corridor may also meet the criteria for a TCP.  |
| Socioeconomics             | The alternatives associated with the management of ORVs at Glen Canyon could have an impact on the socioeconomic environment of the recreation area and the region, including a greater demand for recreation and tourism-related amenities, the potential for increased profitability of commercial services in the area, and the enhancement of local economies.   |
| Health and Safety          | NPS recognizes that both the Glen Canyon National Recreation Area resources which attract visitors and some of the specific recreational activities in which visitors participate can present sources of potential hazards. Off-road use is of particular concern regarding visitor health and safety. ATVs in particular have been the subject of actions by the Consumer Product Safety Commission.  |
| Paleontological Resources  | All sedimentary rock formations in Glen Canyon hold the potential for fossil discovery. Certain formations are more sensitive than others and warrant special management concern. Some formations contain dinosaur tracks and traces and are targets for illegal collection and trade in the black market.   |
| Wilderness                 | Approximately 588,855 acres (47%) of Glen Canyon have been proposed for addition to the National Wilderness Preservation System and an additional 48,955 (4%) are identified as potential wilderness. The general policy of NPS is to manage all lands with wilderness characteristics so as not to diminish the wilderness eligibility of these areas.  |

## ALTERNATIVES

NPS held seven meetings to inform the public about the preliminary alternatives for the plan/FEIS. The alternatives analyzed in this document are the result of internal and public scoping. These alternatives meet the management objectives of the recreation area while also meeting the overall purpose of and need for the proposed action. Alternative elements that were considered but were not technically or economically feasible, did not meet the purpose of and need for the project, created unnecessary or excessive adverse impacts on resources, and/or conflicted with the overall management of Glen Canyon or its resources were dismissed from further analysis. The elements of all five alternatives, including the no-action alternative, are summarized in table ES-2.

### ELEMENTS COMMON TO ALL ALTERNATIVES

The following management actions are common to all alternatives, including the no-action alternative. NPS will implement these actions upon adoption of the final record of decision (ROD) regardless of which alternative is selected. Additional details of each element can be found in the plan/FEIS.

- **Clarification of the Management of Glen Canyon Lands below Lake Powell Full Pool:** The Lake Powell shoreline area below full pool (3,700-foot elevation contour) is not open to off-road use unless designated. Designated ORV routes and areas would be clearly marked using fences, barriers, signs, flagging and other visitor use management techniques.
- **Conventional Motor Vehicle Operator Requirements:** All conventional motor vehicle use must comply with applicable NPS and state statutes and regulations regarding conventional motor vehicle use.
- **Use Area Rules:** All rules applicable to public use, recreation, and travel at Glen Canyon will remain in effect.
- **Administrative Uses and Other Authorized Uses:** Administrative uses will continue, including use by government officials, lease holders, permit holders, or any other individual with authority from NPS to operate at Glen Canyon.
- **NPS Authority to Alter or Adopt State Motor Vehicle Laws:** NPS will review any future change to state law that may affect motor vehicle operation and use in Glen Canyon for conformity with this plan/FEIS. Title 36 CFR 4.2 allows NPS to adopt non-conflicting state laws.

### ELEMENTS COMMON TO ALL ACTION ALTERNATIVES (ALTERNATIVES B, C, D, AND E)

The following management actions are common to all action alternatives. NPS would implement these actions upon adoption of the final ROD and subsequent regulation if one of the four action alternatives were selected. Additional details of each element can be found in the plan/FEIS.

- **Designation of Roads Open to OHV and Street-Legal ATV Use:** GMP roads that are identified as either open or closed to OHV and street-legal ATV use would be adequately marked.
- **Communications Strategy:** The multiple government jurisdictions, the transboundary nature of roads, and the lack of active management from NPS has resulted in confusion about which regulations apply throughout Glen Canyon. To address this confusion, a communications strategy would be developed that would include partnerships, online based applications, informational brochures, and media.
- **Motor Vehicle Operator and Equipment Requirements:** All motor vehicle use must comply with state motor vehicle and operator requirements. Operators of conventional and non-conventional motor vehicles are responsible for complying with all applicable NPS and state statutes and regulations

pertaining to the lawful operation of motor vehicles in Glen Canyon. In addition, the NPS would establish a new sound limit for operating a motor vehicle that emits more than 96 decibels of sound.

- **Closing Undesignated ORV Routes and Areas and Restoring Them to Natural Conditions:** NPS would close routes and areas not designated for off-road use. NPS may use a number of different techniques to close and restore routes and areas where unauthorized off-road use has occurred.

## **MEASURES TO MONITOR, AVOID, MINIMIZE, OR MITIGATE OFF-ROAD MOTOR VEHICLE IMPACTS UNDER ALTERNATIVES C, D, AND E**

NPS developed strategies to address the impacts from off-road use as proposed in this plan/FEIS. The objectives are to improve site design and control, reduce incidents of disturbance to lands, restore disturbed areas, track findings and accomplishments, and increase public awareness of the environmental impacts related to off-road use.

### **MITIGATION**

Most mitigation measures were developed and incorporated into the alternatives to avoid impacts to park resources or to minimize the extent of the impacts by limiting the degree or magnitude of the proposed vehicle uses. The majority of these mitigation measures were designed to confine the impacts attributable to the use of ORVs to designated areas. NPS designed other mitigation measures to limit conflicts between visitors seeking recreational opportunities that may not be compatible with the use of ORVs. Still other mitigation measures were designed to preserve the wilderness characteristics of proposed wilderness within Glen Canyon or to comply with existing laws such as the Endangered Species Act. NPS would also mitigate environmental impacts through the rehabilitation of user-created routes or ORV areas that would be closed as a result of implementing this plan.

### **MONITORING**

Monitoring procedures would be developed to identify resource impacts, assess and document the extent of disturbance, and mitigate impacts or restore areas affected by off-road use and disturbance. NPS would monitor potential indicators to determine whether to take additional management actions.

## **MONITORING AND MITIGATION FOR CULTURAL RESOURCES UNDER THE PROGRAMMATIC AGREEMENT AMONG THE NATIONAL PARK SERVICE, THE ARIZONA STATE HISTORIC PRESERVATION OFFICE, AND THE UTAH STATE HISTORIC PRESERVATION OFFICE REGARDING OFF-ROAD VEHICLE MANAGEMENT PLAN FOR GLEN CANYON**

Archeological surveys were conducted to sample the study areas under discussion in this plan/FEIS. After consultation with the State Historic Preservation Office (SHPO), the Tribes, and other interested parties, additional archeological surveys may be conducted if deemed necessary based on the analysis of this data in conjunction with relevant environmental variables. Surveys may be conducted to identify resource areas of traditional importance to the Tribes as deemed necessary following consultation with the Tribes, the SHPO, and other interested parties. Cultural resource identification efforts and mitigation strategies for National Register-eligible sites and landscapes are stipulated as provisions of a programmatic memorandum of agreement.

## **MONITORING AND MITIGATION FOR ENDANGERED SPECIES UNDER THE GLEN CANYON OFF-ROAD VEHICLE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT BIOLOGICAL ASSESSMENT (BA)**

NPS has outlined a series of applicant committed conservation measures for the protection of species listed under the Endangered Species Act. These measures were submitted to the USFWS as part of the biological assessment in compliance with Section 7 of the Endangered Species Act. The measures would be implemented to mitigate most effects on endangered species. These measures would be carried out by trained NPS staff and project personnel using USFWS protocols. The implementation of these measures would avoid adverse effects to listed species that may be found in the vicinity of the proposed action area. NPS would include protection measures for listed species – Southwestern willow flycatcher, California condor, Mexican Spotted owl, yellow-billed cuckoo, and Jones cycladenia, as part of the educational materials developed for the ORV permit and the communication strategy.

### **TEMPORARY CLOSURES**

Under alternatives C, D, and E, Glen Canyon may temporarily close areas that would be designated open under this plan. These areas would be temporarily closed for resource protection purposes, including cultural and natural resource survey and monitoring. Any temporary closures would be published in the Superintendent's Compendium and would be posted at the closed area.

### **ORV PERMIT SYSTEM**

- Permits would be used to recover NPS costs for managing areas designated for off-road use. Costs include monitoring, signs, education programs, and partnerships, as well as the administrative costs associated with administering the permit system.
- Permits would have an educational component to further reduce visitor use conflicts, prevent resource damage and provide for visitor safety.
- Permits would be required for all off-road travel at accessible shoreline areas, Lone Rock Beach, Lone Rock Beach Play Area, and designated ORV routes in Ferry Swale and other areas.
- Permits would be available at designated permit issuing stations and by mail.
- Permits could be revoked for violation of applicable Glen Canyon regulations or terms and conditions of the permit.

### **ALTERNATIVE A: NO ACTION**

The no-action alternative represents the continuation of existing management policies and actions related to the use of ORVs in Glen Canyon and represents “no change” from the current level of management direction and level of management intensity. This alternative is consistent with the 1979 Glen Canyon GMP and other planning documents and management policies related to off-road use in Glen Canyon. If the no-action alternative were selected, NPS would be required to promulgate a special regulation to authorize existing ORV routes and areas in compliance with 36 CFR 4.10.

### **ALTERNATIVE B: NO OFF-ROAD USE**

Under alternative B, the remote, undeveloped, and lightly traveled nature that characterizes much of Glen Canyon would be maintained by limiting the operation of motor vehicles only to designated roads. Nearly 669,000 acres of Glen Canyon are classified as “Natural” under Glen Canyon's management zones, where maintaining isolation and

natural processes is the primary management objective. There would be no designated ORV routes or areas and existing off-road use areas would be closed and restored to natural conditions.

### **ALTERNATIVE C: INCREASED MOTORIZED ACCESS**

Under alternative C, ORVs would be managed in a manner that would expand the recreational opportunities in Glen Canyon by increasing the number of ORV routes and areas. Alternative C is designed to enhance the visitor experience by identifying and designating specific areas capable of supporting off-road use and on-road OHV and street-legal ATV use, while prohibiting such uses in areas where natural and cultural resources and visitor experience may be adversely impacted.

### **ALTERNATIVE D: DECREASED MOTORIZED ACCESS**

The isolated and primitive characteristics of the Glen Canyon backcountry would be enhanced by limiting the areas open to off-road use and by prohibiting the operation of OHVs and street-legal ATVs throughout Glen Canyon. These actions are intended to enhance the protection of Glen Canyon resources and values, as well as to promote recreation opportunities that are based on a sense of solitude, remoteness, and natural conditions. Alternative D would reduce the number of available ORV areas.

### **ALTERNATIVE E: MIXED USE (NPS PREFERRED ALTERNATIVE)**

Alternative E is designed to protect resources and enhance the visitor experience by identifying and designating specific areas capable of supporting off-road use while prohibiting such uses in areas where resources and values may be at risk.

## **ENVIRONMENTAL CONSEQUENCES**

Impacts of the alternatives were assessed in accordance with Director's Order 12 in terms of their context, duration, and intensity. The analysis provides the public and decision-makers with an understanding of the implications of ORV management actions in the short and long term, cumulatively, and within context, based on an understanding and interpretation by resource professionals and specialists.

For each impact topic, methods were identified to assess the change in Glen Canyon resources that would occur with the implementation of each management alternative. Each management alternative was compared to baseline conditions (Alternative A: No Action) to determine the context, duration, intensity, and timing of resource impacts.

Table ES-3 summarizes the results of the impact analysis for the impact topics that were assessed. The full impact analysis is in "Chapter 4: Environmental Consequences." For all of the alternatives in this plan/FEIS, impacts from operations in the Glen Canyon would be mitigated to avoid impairment of Glen Canyon resources and values.



**TABLE ES-2. ALTERNATIVE ELEMENTS OVERVIEW**

|                        | <b>ALTERNATIVE A:<br/>NO ACTION</b>  | <b>ALTERNATIVE B:<br/>NO OFF-ROAD USE</b>  | <b>ALTERNATIVE C:<br/>INCREASED MOTORIZED ACCESS</b>   | <b>ALTERNATIVE D:<br/>DECREASED MOTORIZED<br/>ACCESS</b>   | <b>ALTERNATIVE E:<br/>MIXED USE (NPS PREFERRED<br/>ALTERNATIVE)</b>   |
|------------------------|--|--|--|--|---|
| <b>Highlights</b>      | <p>Off-road use would continue at 15 designated ORV areas.</p> <p>Street-legal ATVs would be authorized for use on GMP roads.</p> <p>No OHVs or street-legal ATVs would be allowed within the Orange Cliffs Special Management Unit (Orange Cliffs Unit).</p> <p>Approximately 54 miles of ORV routes would be designated.</p> | <p>No ORV areas would be designated.</p> <p>Street-legal ATVs would be authorized for use on designated GMP roads.</p> <p>No OHVs or street-legal ATVs would be allowed within the Orange Cliffs Unit.</p> <p>No ORV routes would be designated.</p> | <p>Conventional motor vehicles, OHVs, and street-legal ATVs would be authorized for use at 17 designated ORV areas only by permit, subject to water level closures.</p> <p>OHVs and street-legal ATVs would be authorized for use on all GMP roads to include the Orange Cliffs Unit.</p> <p>Approximately 22 miles of ORV routes would be designated.</p> | <p>Conventional motor vehicles would be authorized for use at five designated ORV areas (Lone Rock Beach, Hite Boat Ramp, Farley Canyon, Dirty Devil, and Stanton Creek), only by permit, subject to water level closures.</p> <p>No OHVs or street-legal ATVs would be authorized for use in Glen Canyon.</p> <p>No ORV routes would be designated.</p> | <p>Conventional motor vehicles and street-legal ATVs would be authorized for use at 16 areas only by permit, subject to water-level closures and seasonal restrictions.</p> <p>A vehicle-free area would be designated at Lone Rock Beach and two accessible shorelines.</p> <p>Street-legal ATVs would be authorized for use on all paved GMP roads except the Lees Ferry Access Road. OHVs and street-legal ATVs would also be authorized for use on most unpaved GMP roads. No OHVs or street-legal ATVs would be authorized for use in the Orange Cliffs Unit, with the exception of the Poison Spring Loop.</p> <p>Approximately 21 miles of ORV routes would be designated.</p> |
| <b>Lone Rock Beach</b> | <p>Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue. Utah rules regulating OHVs and street-legal ATVs would remain in effect.</p>   | <p>Off-road use by all vehicles would be discontinued and the area would be restored to natural conditions.</p>  | <p>Same as alternative A, with additional requirement for an ORV permit.</p>   | <p>Off-road use by conventional motor vehicles would be authorized only by permit. No OHVs or street-legal ATVs would be allowed.</p>  | <p>Same as alternative C except NPS would designate a vehicle-free zone (no vehicles of any type would be allowed in this zone) during seasons of highest use and would vary the size and location of these zones in relation to the lake level.</p>  |

|   | <b>ALTERNATIVE A:<br/>NO ACTION</b>  | <b>ALTERNATIVE B:<br/>NO OFF-ROAD USE</b>  | <b>ALTERNATIVE C:<br/>INCREASED MOTORIZED ACCESS</b>   | <b>ALTERNATIVE D:<br/>DECREASED MOTORIZED<br/>ACCESS</b>   | <b>ALTERNATIVE E:<br/>MIXED USE (NPS PREFERRED<br/>ALTERNATIVE)</b>  |
|---|--|--|--|--|--|
| <b>Lone Rock<br/>Beach Play<br/>Area</b>  | Off-road use by conventional motor vehicles, OHVs, and street-legal ATVs would continue. Utah rules regulating OHVs and street-legal ATVs would remain in effect.  | Off-road use by all vehicles would be discontinued and the area would be restored to natural conditions.   | Same as alternative A, with additional requirement for an ORV permit and safety flag.  | Same as alternative B.   | Same as alternative C.   |
| <b>Accessible<br/>Shoreline<br/>Areas</b> | Off-road use by conventional vehicles only would continue at 13 existing areas (Blue Notch, Bullfrog North and South, Copper Canyon, Crosby Canyon, Dirty Devil, Farley Canyon, Neskahi, Paiute Canyon, Red Canyon, Stanton Creek, Warm Creek, White Canyon, and Hite Boat Ramp), subject to water-level closures. | Off-road use at 15 areas (13 existing areas plus Nokai Canyon and Paiute Farms) would be discontinued and these areas would be restored to natural conditions. | Fifteen areas (13 existing areas plus Nokai Canyon and Paiute Farms) would be authorized for use by conventional motor vehicles, OHVs, and street-legal ATVs, only by permit, subject to water-level closures. | Four areas (Dirty Devil, Farley Canyon, Hite Boat Ramp, and Stanton Creek) would be authorized for use only by conventional motor vehicles, only by permit, subject to water-level closures. Off-road use at eleven areas would be discontinued. | Fourteen areas (12 existing areas plus Nokai Canyon and Paiute Farms) would be authorized for use by conventional motor vehicles and street-legal ATVs, only by permit, subject to water-level closures. Eight areas (Blue Notch, Bullfrog North and South, Crosby Canyon, Dirty Devil, Farley Canyon, Red Canyon, Stanton Creek, and White Canyon) would be closed to street-legal ATV use from November 1 through March 1. Off-road use at Warm Creek would be discontinued. NPS would designate vehicle-free zones (no vehicles of any type would be allowed in this zone) at Bullfrog North and South and Stanton Creek during seasons of highest use and would vary the size and location of these zones in relation to the lake level. |

|   | <b>ALTERNATIVE A:<br/>NO ACTION</b>   | <b>ALTERNATIVE B:<br/>NO OFF-ROAD USE</b>  | <b>ALTERNATIVE C:<br/>INCREASED MOTORIZED ACCESS</b>   | <b>ALTERNATIVE D:<br/>DECREASED MOTORIZED<br/>ACCESS</b>   | <b>ALTERNATIVE E:<br/>MIXED USE (NPS PREFERRED<br/>ALTERNATIVE)</b>   |
|---|---|--|--|--|---|
| <b>GMP<br/>Roads</b>                                | Street-legal ATVs would be authorized for use on GMP roads in Glen Canyon with the exception of the Orange Cliffs Unit.<br><br>Conventional motor vehicles are currently and would continue to be authorized on all GMP roads in Glen Canyon, including the Orange Cliffs Unit. | Same as alternative A.   | OHVs and street-legal ATVs would be authorized for use on all GMP roads, including the Orange Cliffs Unit.<br><br>Conventional motor vehicles are currently and would continue to be authorized on all GMP roads in Glen Canyon, including the Orange Cliffs Unit. | OHVs and street-legal ATVs would not be authorized for use on any GMP roads.<br><br>Conventional motor vehicles are currently and would continue to be authorized on all GMP roads in Glen Canyon, including the Orange Cliffs Unit. | Street-legal ATVs would be authorized for use on all paved GMP roads except the Lees Ferry Access Road and other paved roads in the Lees Ferry developed area. Both OHVs and street-legal ATVs would be authorized for use on most unpaved GMP roads. No OHVs or street-legal ATVs would be authorized for use in the Orange Cliffs Unit, except on approximately 8 miles of roads (Route 633 proceeding north to Route 730 and proceeding west to the park boundary) which are part of the Poison Spring Loop.<br><br>Conventional motor vehicles are currently and will continue to be authorized on all GMP roads in Glen Canyon, including in the Orange Cliffs Unit. |
| <b>Ferry<br/>Swale and<br/>Other ORV<br/>Routes</b> | Conventional motor vehicles, OHVs, and street-legal ATVs would be authorized for use on approximately 54 miles of designated ORV routes.  | No ORV routes would be designated and existing routes would be restored to natural conditions. | Conventional vehicles, OHVs, and street-legal ATVs would be authorized for use on approximately 22 miles of designated ORV routes by permit. Other existing routes would be restored to natural conditions.  | Same as alternative B.   | Conventional vehicles, OHVs, and street-legal ATVs would be authorized for use on approximately 21 miles of designated ORV routes by permit. Other existing routes would be restored to natural conditions.   |

TABLE ES-3: ENVIRONMENTAL IMPACT SUMMARY BY ALTERNATIVE

| IMPACT TOPIC      | Alternative A:<br>No Action  | Alternative B:<br>No Off-road Use  | Alternative C:<br>Increased Motorized Access   | Alternative D:<br>Decreased Motorized Access  | Alternative E:<br>Mixed Use (NPS Preferred Alternative)   |
|-------------------|--|--|--|---|---|
| Geology and Soils | Direct adverse impacts from crushing, shearing, compaction, and erosion on 250 acres of soil and geology at Lone Rock Beach; 180 acres at Lone Rock Beach Play Area; approximately 5,900 acres at 13 accessible shorelines; and along approximately 54 miles of ORV routes. Approximately 858 acres of low to moderately erodible soils directly disturbed at accessible shoreline areas and approximately 105 acres along designated ORV routes. No impacts on soils from conventional motor vehicle and street-legal ATV use on paved GMP roads; direct impacts on 555 acres of low to moderately erodible soils from compaction and indirect impacts on 2,726 acres of low to moderately erodible soils along unpaved GMP roads.  | Beneficial impacts on soils and geology at approximately 250 acres at Lone Rock Beach, 180 acres at Lone Rock Beach Play Area; 7,300 acres at 15 accessible shorelines; and along user-created ORV routes as a result of discontinuation of off-road use in Glen Canyon. Direct and indirect impacts on soils and geology along GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A. | Direct adverse impacts from crushing, shearing, compaction, and erosion on 250 acres of soils and geology at Lone Rock Beach; 180 acres at Lone Rock Beach Play Area; approximately 7,300 acres at 15 accessible shorelines; and along approximately 22 miles of ORV routes. Approximately 867 acres of low to moderately erodible soils directly disturbed at accessible shoreline areas and approximately 60 acres along designated ORV routes. Direct and indirect impacts on soils and geology along GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs would be similar to but more intense than alternative A.  | Direct adverse impacts from crushing, shearing, compaction, and erosion on 250 acres of soil and geology at Lone Rock Beach; and approximately 1,100 acres at four accessible shorelines. Approximately 138 acres of low to moderately erodible soils directly disturbed at accessible shoreline areas. Beneficial impacts on soils and geology at Lone Rock Beach Play Area, 11 accessible shorelines, and along user-created ORV routes as a result of discontinuation of off-road use. Direct and indirect impacts on soils and geology along GMP roads from conventional motor vehicle would be similar to but less intense than alternative A. | Direct adverse impacts from crushing, shearing, compaction, and erosion on 250 acres of soil and geology at Lone Rock Beach; 180 acres at Lone Rock Beach Play Area, and approximately 6,175 acres at 14 accessible shorelines; and along approximately 21 miles of ORV routes. Beneficial impacts on soils at Warm Creek from discontinuation of off-road use with other beneficial impacts to eight shorelines from seasonal closures and a vehicle free zone at Bullfrog North and South and at Stanton Creek. Approximately 888 acres of low to moderately erodible soils directly disturbed at accessible shoreline areas and approximately 56 acres along designated ORV routes. Direct and indirect impacts on soils and geology along paved GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A and more intense along unpaved GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs. |
| Vegetation        | Direct adverse impacts on vegetation communities consisting primarily of grasses, weeds, and bushes at Lone Rock Beach and Lone Rock Beach Play Area. Direct impact on vegetation at 13 accessible shorelines consisting primarily of blackbrush (416 acres), sand sagebrush (933 acres), and shadscale (612 acres) –dominant shrub species in upland shrublands of Glen Canyon. No direct impacts on vegetation from conventional motor vehicle and street-legal ATV use along paved GMP roads. Approximately 642 acres of blackbrush and 500 acres of shadscale are directly impacted and 3,205 acres of blackbrush and 1,423 acres of shadscale are indirectly impacted along unpaved GMP roads. Direct and indirect impacts on vegetation along 54 miles of designated ORV routes – primarily to shadscale and fourwing saltbrush. | Beneficial impacts on vegetation at Lone Rock Beach, Lone Rock Beach Play Area; 15 accessible shorelines; and along user-created ORV routes from discontinuation of off-road use in Glen Canyon. Direct and indirect impacts on vegetation along GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A.  | Direct adverse impacts on vegetation communities consisting primarily of grasses, weeds, and bushes at Lone Rock Beach and Lone Rock Beach Play Area. Direct impact on vegetation at 15 accessible shorelines consisting primarily of blackbrush (688 acres), sand sagebrush (933 acres), and shadscale (1,684 acres). Direct and indirect impacts on vegetation along GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs would be similar to but more intense than alternative A. Direct and indirect impacts on vegetation along 22 miles of designated ORV routes – primarily to shadscale and fourwing saltbrush. | Direct adverse impacts on vegetation communities consisting primarily of grasses, weeds, and bushes at Lone Rock Beach. Continued direct impacts on vegetation at four accessible shorelines consisting primarily of blackbrush (166 acres) and shadscale (215 acres) –dominant shrub species in upland shrublands of Glen Canyon. Direct and indirect impacts on vegetation along GMP roads from conventional motor vehicles would be similar to but less intense than alternative A. No direct or indirect impacts on vegetation at Lone Rock Beach Play Area or along user-created ORV routes as a result of discontinuation of off-road use.    | Direct adverse impacts on vegetation communities consisting primarily of grasses, weeds, and bushes at Lone Rock Beach and Lone Rock Beach Play Area. Direct impact on vegetation at 14 accessible shorelines consisting primarily of blackbrush (688 acres), sand sagebrush (933 acres) and shadscale (1,561 acres). Beneficial impacts on vegetation at Warm Creek from discontinuation of off-road use with other beneficial impacts to eight shorelines from seasonal closures and a vehicle free zone at Bullfrog North and South and at Stanton Creek. Direct and indirect impacts on vegetation along paved GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A and more intense than conventional motor vehicles, OHVs, and street-legal ATVs. Direct and indirect impacts on vegetation along approximately 21 miles of designated ORV routes – primarily to shadscale and fourwing saltbrush.         |

| IMPACT TOPIC                  | Alternative A:<br>No Action  | Alternative B:<br>No Off-road Use  | Alternative C:<br>Increased Motorized Access   | Alternative D:<br>Decreased Motorized Access   | Alternative E:<br>Mixed Use (NPS Preferred Alternative)  |
|-------------------------------|--|--|--|--|--|
| Wildlife and Wildlife Habitat | Direct adverse impacts on wildlife and wildlife habitat at Lone Rock Beach, Lone Rock Beach Play Area, approximately 5,900 acres at 13 accessible shorelines, and along 54 miles of designated ORV routes as a result of disturbance, dust, displacement, vehicle-wildlife collisions, noise, and habitat destruction. Direct and indirect adverse impacts on wildlife along GMP roads from habitat disturbance and reduction, dust, and habitat fragmentation; and to wildlife habitat from erosion and sedimentation and potential for transport of invasive species.  | Beneficial impacts on wildlife and wildlife habitat at Lone Rock Beach, Lone Rock Beach Play Area, 15 accessible shorelines, and along user-created ORV routes from discontinuation of off-road use. Direct and indirect impacts on wildlife and wildlife habitat along GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A.   | Direct adverse impacts on wildlife and wildlife habitat at Lone Rock Beach, Lone Rock Beach Play Area, approximately 7,300 acres at 15 accessible shorelines, and concentrated along 22 miles of designated ORV routes as a result of disturbance, displacement, vehicle-wildlife collisions, noise, and habitat destruction. Direct and indirect impacts on vegetation along GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs would be similar to but more intense than alternative A.   | Direct adverse impacts on wildlife and wildlife habitat at Lone Rock Beach and at approximately 1,100 acres at four accessible shorelines as a result of disturbance, displacement, vehicle-wildlife collisions, noise, and habitat destruction. Beneficial impacts on wildlife and wildlife habitat at 11 accessible shorelines and along user-created ORV routes as a result of discontinuation of off-road use. Direct and indirect impacts on vegetation along GMP roads from conventional motor vehicles would be similar to but less intense than alternative A.   | Direct adverse impacts on wildlife and wildlife habitat at Lone Rock Beach, Lone Rock Beach Play Area, and approximately 6,175 acres at 14 accessible shorelines as a result of disturbance, displacement, vehicle-wildlife collisions, noise, and habitat destruction. Beneficial impacts on wildlife and wildlife habitat at Warm Creek as a result of discontinuation of off-road use with other beneficial impacts to eight shorelines from seasonal closures and a vehicle free zone at Bullfrog North and South and at Stanton Creek. Impacts at from designated ORV routes would be similar as alternative C. Direct and indirect impacts on wildlife and wildlife habitat along paved GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A and more intense than alternative A along unpaved GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs.   |
| Special-status Species        | Adverse impacts on special-status species at Lone Rock Beach, Lone Rock Beach Play Area, 13 accessible shorelines, and along 54 miles of designated ORV routes as a result of habitat destruction, vehicle-wildlife collisions, and species disturbance and displacement. Adverse impacts on special-status species along GMP roads from habitat disturbance and reduction, dust, and habitat fragmentation; and to their habitat from erosion and sedimentation, and potential for transport of invasive species. Alternative A may affect, but is not likely to adversely affect the following federally or state-listed, or Glen Canyon species of concern. No effect on federally listed southwestern willow flycatcher, yellow-billed cuckoo, Brady's pincushion cactus, Navajo sedge, and Jones cycladenia are expected as these species are not known to occur in habitat that would be impacted by management actions. | Beneficial impacts on special-status species at Lone Rock Beach, Lone Rock Beach Play Area, 15 accessible shorelines, and along user-created ORV routes as a result of discontinuation of off-road use. Impacts on special-status species along GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A. Alternative B may affect, but is not likely to adversely affect the following federally or state-listed, or Glen Canyon species of concern. No effect on federally listed southwestern willow flycatcher, yellow-billed cuckoo, Brady's pincushion cactus, Navajo sedge, and Jones cycladenia are expected as these species are not known to occur in habitat that would be impacted by management actions. | Adverse impacts on special-status species at Lone Rock Beach, Lone Rock Beach Play Area, 15 accessible shorelines, and along 22 miles of designated ORV routes as a result of habitat destruction, vehicle-wildlife collisions, and species disturbance and displacement. Impacts on special-status species along GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs would be similar to but more intense as alternative A. Alternative C may affect, but is not likely to adversely affect the following federally or state-listed, or Glen Canyon species of concern. No effect on federally listed southwestern willow flycatcher, yellow-billed cuckoo, Brady's pincushion cactus, Navajo sedge, and Jones cycladenia are expected as these species are not known to occur in habitat that would be impacted by management actions. | Adverse impacts on special-status species at Lone Rock Beach and four accessible shorelines as a result of habitat destruction, vehicle-wildlife collisions, and species disturbance and displacement. Beneficial impacts on special-status species at Lone Rock Beach Play Area and along user-created ORV routes plus 11 accessible shorelines as a result of discontinuation of off-road use. Impacts on special-status species along GMP roads from conventional motor vehicles would be similar to but potentially less intense than alternative A. Alternative D may affect, but is not likely to adversely affect the following federally or state-listed, or Glen Canyon species of concern. No effect on federally listed southwestern willow flycatcher, yellow-billed cuckoo, Brady's pincushion cactus, Navajo sedge, and Jones cycladenia are expected as these species are not known to occur in habitat that would be impacted by management actions. | Adverse impacts on special-status species at Lone Rock Beach, Lone Rock Beach Play Area, and 14 accessible shorelines as a result of habitat destruction, vehicle-wildlife collisions, and species disturbance and displacement. Beneficial impacts on special-status species at Warm Creek as a result of discontinuation of off-road use with other beneficial impacts to eight shorelines from seasonal closures and a vehicle free zone at Bullfrog North and South and at Stanton Creek. Impacts from designated ORV routes would be similar as alternative C. Impacts on special-status species along paved GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A and more intense along unpaved GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs. Alternative E may affect, but are not likely to adversely affect the following federally or state-listed, or Glen Canyon species of concern. No effect on federally listed southwestern willow flycatcher, yellow-billed cuckoo, Brady's pincushion cactus, Navajo sedge, and Jones cycladenia are expected as these species are not known to occur in habitat that would be impacted by management actions. |



| IMPACT TOPIC               | Alternative A:<br>No Action   | Alternative B:<br>No Off-road Use   | Alternative C:<br>Increased Motorized Access   | Alternative D:<br>Decreased Motorized Access  | Alternative E:<br>Mixed Use (NPS Preferred Alternative)  |
|----------------------------|---|---|--|---|--|
| Soundscapes                | Direct impacts as a result of noise generated from conventional motor vehicles, OHVs, and street-legal ATVs total 265,690 acres of land (21.3% of the Glen Canyon land area). These areas could potentially experience a 3-dBA increase in natural ambient due to motorized vehicle operations. During times when no motorized vehicles are operating in a particular area, no impacts would occur.   | Direct impacts as a result of noise generated from conventional motor vehicles, OHVs, and street-legal ATVs total 326,335 acres of land (26.1% of the Glen Canyon land area). These areas could potentially experience a 3-dBA increase in natural ambient due to motorized vehicle operations. During times when no motorized vehicles are operating in a particular area, no impacts would occur. The degree and geographic extent of impacts on soundscapes would be substantially decreased through implementation of the 96-dBA limit on OHVs and street-legal ATVs (77,893 fewer acres within the direct impact noise effect zone or 21.2% of Glen Canyon). | Direct impacts as a result of noise generated from conventional motor vehicles, OHVs, and street-legal ATVs total 454,534 acres of land (36.4% of the Glen Canyon land area). These areas could potentially experience a 3-dBA increase in natural ambient due to motorized vehicle operations. During times when no motorized vehicles are operating in a particular area, no impacts would occur. The degree and geographic extent of impacts on soundscapes would be substantially increased through implementation of the 96-dBA limit on OHVs and street-legal ATVs (100,022 fewer acres within the direct impact noise effect zone or 28.4% of Glen Canyon land area).   | Direct impacts as a result of noise generated from conventional motor vehicles total 6,357 acres of land (0.5% of the Glen Canyon land area). These areas could potentially experience a 3-dBA increase in natural ambient due to conventional vehicle operations. During times when no motorized vehicles are operating in a particular area, no impacts would occur. The degree and geographic extent of impacts on soundscapes would not be affected by the 96-dBA limit because no OHV or street-legal ATV use would be allowed (the limit only applies to OHVs and street-legal ATVs).   | Direct impacts as a result of noise generated from conventional motor vehicles, OHVs, and street-legal ATVs total 355,863 acres of land (28.5% of the Glen Canyon land area). These areas could potentially experience a 3-dBA increase in natural ambient due to motorized vehicle operations. During times when no motorized vehicles are operating in a particular area, no impacts would occur. The degree and geographic extent of impacts on soundscapes would be substantially increased through implementation of the 96-dBA limit on OHVs and street-legal ATVs (82,408 fewer acres within the direct impact noise effect zone or 21.9% of Glen Canyon).  |
| Visitor Use and Experience | Current visitor use patterns would continue at Lone Rock Beach, Lone Rock Beach Play Area, and 13 accessible shorelines. Some visitor experience could be diminished at Lone Rock Beach, Lone Rock Beach Play Area, and along designated ORV routes as a result of noise and air emissions produced by OHVs and street-legal ATVs. No measurable changes are expected on visitors using conventional motor vehicles or street-legal ATVs on GMP roads. Visitors seeking a quiet, backcountry experience may be adversely impacted by the noise street-legal ATVs produce in the more remote areas of Glen Canyon. | Visitor use patterns would be considerably impacted at Lone Rock Beach, Lone Rock Beach Play Area, 15 accessible shorelines, and along user-created ORV routes due to the discontinuation of off-road use. Although visitors would not be able to engage in off-road use in these areas, they would still be able to access the sites by parking at the end of the road and walking to the site. Impacts on visitor use and experience from conventional motor vehicles and street-legal ATVs on GMP roads would be the same as alternative A.  | Impacts on visitor use and experience at Lone Rock Beach and Lone Rock Beach Play Area would be similar to alternative A, but with an additional small adverse impact on visitor experience with the requirement to obtain a permit. An increase in number of accessible shorelines and authorization of OHVs and street-legal ATVs for use at accessible shorelines, in addition to conventional motor vehicles, would increase the areas available for OHVs and street-legal ATV opportunities and provide a beneficial impact for these users. Expansion and authorization of OHV and street-legal ATV use at accessible shorelines could result in adverse impacts on visitors seeking a quieter experience as a result of increase in noise and air emissions from OHVs and street-legal ATVs. Impacts on visitor use and experience from conventional motor vehicles, OHVs, and street-legal ATVs on GMP roads would be similar to but more intense and widespread than alternative A. | Impacts on visitor use and experience at Lone Rock Beach would be similar to alternative A, but with an additional small adverse impact on visitor experience with the requirement to obtain a permit. Visitor use patterns would be considerably impacted at Lone Rock Beach Play Area and along user-created ORV routes as a result of discontinuation of off-road use in these areas, resulting in severe adverse impacts. Four accessible shoreline areas would remain available for use by conventional motor vehicles, but depending on the level of use, visitors may experience a negative impact from increased crowding. However, generally, visitor experience at these shoreline areas would not be noticeably impacted and overall visitor use patterns would not likely change because two of the four accessible shorelines already experience high visitation comparable to other accessible shorelines. Visitor use patterns would change substantially as access by OHVs or street-legal ATVs within Glen Canyon would not be authorized. | Impacts on visitor use and experience at Lone Rock Beach, Lone Rock Beach Play Area, and from designated ORV routes would be similar to alternative C. An increase in number of accessible shorelines and authorization of street-legal ATVs for use at accessible shorelines, in addition to conventional motor vehicles, would increase the areas available for street-legal ATV opportunities and provide a beneficial impact for those users. Expansion and authorization of street-legal ATV use at accessible shorelines could result in adverse impacts on visitors seeking a quieter experience as a result of increase in noise and air emissions from street-legal ATVs. Impacts on visitor use and experience from conventional motor vehicles and street-legal ATVs on paved GMP roads would be the same as alternative A and more intense and widespread from on unpaved GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs. |
| Archeology                 | Direct adverse impacts on archeological resources could involve 3 not evaluated sites in Lone Rock Beach Play Area; 7 eligible sites and 2 not evaluated sites at accessible shorelines; and 7 eligible sites and 2 not evaluated sites in Ferry Swale and other ORV areas. Indirect impacts on archeological resources could involve 3 not evaluated sites at Lone Rock Beach; 1 not evaluated site at Lone Rock Beach Play Area; and 5 eligible sites and 27 not evaluated sites at accessible shorelines; and 39 eligible sites and 23 not evaluated sites along GMP roads.                                    | Indirect adverse impacts on archeological resources could involve 39 eligible sites and 23 not evaluated sites along GMP roads.   | Direct adverse impacts on archeological resources could involve 3 not evaluated sites in Lone Rock Beach Play Area; 8 eligible sites and 2 not evaluated sites at accessible shorelines; Indirect impacts on archeological resources could involve 3 not evaluated sites at Lone Rock Beach; 1 not evaluated site at Lone Rock Beach Play Area; and 5 eligible sites and 36 not evaluated sites at accessible shorelines; and 39 eligible sites and 23 not evaluated sites along GMP roads.  | Indirect impacts on archeological resources could involve 3 not evaluated sites at Lone Rock Beach; 8 eligible sites and 5 not evaluated sites at accessible shorelines; and no eligible sites or not evaluated sites along GMP roads.  | Direct adverse impacts on archeological resources could involve 3 not evaluated sites in Lone Rock Beach Play Area; and 8 eligible sites at accessible shorelines. Indirect impacts on archeological resources could involve 3 not evaluated sites at Lone Rock Beach; 1 not evaluated site at Lone Rock Beach Play Area; and 5 eligible and 36 not evaluated sites at accessible shorelines; and 39 eligible sites and 23 not evaluated sites along GMP roads.  |

| IMPACT TOPIC           | Alternative A:<br>No Action   | Alternative B:<br>No Off-road Use  | Alternative C:<br>Increased Motorized Access   | Alternative D:<br>Decreased Motorized Access  | Alternative E:<br>Mixed Use (NPS Preferred Alternative)   |
|------------------------|---|--|--|---|---|
| Ethnographic Resources | Beneficial impact as a result of continued access to the Hole-in-the-Rock traditional cultural property (TCP) site by members of The Church of Jesus Christ of Latter-day Saints for permitted activities. Potential for indirect adverse impacts on the Hole-in-the-Rock and potentially National Register-eligible Hole-in-the-Rock landscape TCP as a result of conventional motor vehicles and street-legal ATVs allowed on the Hole-in-the-Rock Road (an unpaved GMP road).  | Impacts would be the same as alternative A.  | Increased beneficial impacts for members of The Church of Jesus Christ of Latter-day Saints as a result of continued and increased access (by conventional motor vehicles, OHVs, and street-legal ATVs on Hole-in-the-Rock Road) to the Hole-in-the-Rock TCP site for permitted activities. Increased potential for indirect adverse impacts on the Hole-in-the-Rock and potentially National Register-eligible Hole-in-the-Rock landscape TCP as a result of conventional motor vehicles, OHVs, and street-legal ATVs allowed on the Hole-in-the-Rock Road.   | Decreased beneficial impacts for members of The Church of Jesus Christ of Latter-day Saints as a result of continued but decreased access (only by conventional motor vehicles on Hole-in-the-Rock Road) to the Hole-in-the-Rock TCP site for permitted activities. Decreased potential for indirect adverse impacts on the Hole-in-the-Rock and potentially National Register eligible Hole-in-the-Rock landscape TCP as a result of reduction in the type of motor vehicles (conventional motor vehicles only) allowed on the Hole-in-the-Rock Road.  | Impacts would be the same as alternative C, as the Hole-in-the-Rock would be accessed by conventional motor vehicles, OHVs, and street-legal ATVs.  |
| Socioeconomics         | The current level of visitation at Glen Canyon is expected to continue. Visitation and use of Lone Rock Beach, Lone Rock Beach Play Area, 13 accessible shorelines, and on designated ORV routes is expected to continue, beneficially contributing to local economies and supporting jobs, income, and gross regional product. The ability to continue to ride conventional motor vehicles and street-legal ATVs on GMP roads would likely have a minimal impact on socioeconomic resources. Use of 54 miles of designated ORV routes would have limited impacts on socioeconomic resources. | Potential adverse impacts would occur with decreased visitor spending as a result of discontinuation of off-road use within Glen Canyon. Impacts on socioeconomic resources from use of GMP roads by conventional motor vehicles and street-legal ATVs would be the same as alternative A. | Visitation and use of Lone Rock Beach and Lone Rock Beach Play Area would remain similar to alternative A, beneficially contributing to local economies and supporting jobs, income, and gross regional product; although a permit system may discourage a small amount of visitation to these sites. Additional opportunities for OHV and street-legal ATV use at the 15 accessible shorelines and on GMP roads could also contribute to the local economy. Because off-road use has been rapidly increasing in Utah and Arizona, allowing OHVs and street-legal ATVs at accessible shorelines could result in increased visitation to these areas. Beneficial impacts on socioeconomic resources from use of GMP roads and 22 miles of designated ORV routes by conventional motor vehicles, OHVs, and street-legal ATVs would be limited. | Prohibition of OHV and street-legal ATVs within Glen Canyon would lead to decreased visitation by these types of vehicles at Lone Rock Beach and Lone Rock Beach Play Area, although this portion of visitation is very small. Visitation overall within Glen Canyon would be expected to slightly decrease, with slight adverse effects on local economies. The loss of visitation at 11 accessible shoreline areas where off-road use would be discontinued would adversely impact local economies (assumed to equal the total visitation at Stanton Creek – approximately 14,000 annual visitors) with a potential loss of \$2.3 million in visitor spending and 28 jobs. These economic impacts would account for a very small portion of the employment and economic activity in the study area. Impacts on socioeconomic resources from use of GMP roads by conventional motor vehicles would be limited. | Impacts on socioeconomic resources would be expected to be the similar to those described under alternative C, where visitation and visitor spending associated with users at Lone Rock Beach, Lone Rock Beach Play Area, and from designated ORV routes would continue to beneficially contribute and support local economies. Additional opportunities would beneficially contribute to local economies as a result of expanded street-legal ATV use at the 14 accessible shorelines and OHV uses on unpaved GMP roads. Because off-road use has been rapidly increasing in Utah and Arizona, allowing street-legal ATVs at accessible shorelines could result in increased visitation to these areas. However, it is expected that beneficial effects on local economies would be limited. |
| Health and Safety      | Adverse impacts on health and safety as conventional motor vehicles, OHVs, and street-legal ATVs would be allowed to operate together at Lone Rock Beach, Lone Rock Beach Play Area, along 54 miles of designated ORV routes.   | Beneficial impacts on health and safety of conventional motor vehicle users, OHV users, and street-legal ATV users, as off-road use would be eliminated from Lone Rock Beach, Lone Rock Beach Play Area, all accessible shorelines areas, and along user-created ORV routes.               | Adverse impacts on health and safety as conventional motor vehicles, OHVs and street-legal ATVs would be allowed to operate together at Lone Rock Beach, Lone Rock Beach Play Area, at 15 accessible shorelines, along GMP roads, and along 22 miles of designated ORV routes. Additional requirement for ORV permit and flag at Lone Rock Beach Play Area would provide some beneficial impacts.  | Beneficial impacts on health and safety of conventional vehicle users, OHV users, and street-legal ATV users, as off-road use would be eliminated from Lone Rock Beach Play Area and along user-created ORV routes. Additional beneficial impacts as a result of only conventional vehicles authorized for use within Glen Canyon – at Lone Rock Beach and four authorized accessible shorelines.   | Adverse impacts for health and safety as conventional motor vehicles, OHVs, and street-legal ATVs would be allowed to operate together at Lone Rock Beach, Lone Rock Beach Play Area, along unpaved GMP roads, and along approximately 21 miles of designated ORV routes. Additional requirement for ORV permit and flag at Lone Rock Beach Play Area would provide some beneficial impacts, similar to alternative C.  |

| IMPACT TOPIC              | Alternative A:<br>No Action  | Alternative B:<br>No Off-road Use  | Alternative C:<br>Increased Motorized Access  | Alternative D:<br>Decreased Motorized Access   | Alternative E:<br>Mixed Use (NPS Preferred Alternative)   |
|---------------------------|--|--|---|--|---|
| Paleontological Resources | Adverse impacts on paleontological resources stemming from erosion as a result of motor vehicle use on 250 acres Lone Rock Beach, 180 acres at Lone Rock Beach Play Area, approximately 5,900 acres at 13 accessible shorelines, and along approximately 54 miles of ORV routes. Approximately 1,057 acres of geologic formation with varying degrees of trace paleontological resources (including Organ Rock, Moenkopi, Chinle, Tropic Shale, and Carmel Formations) directly disturbed at accessible shoreline areas and approximately 96 acres along designated ORV routes. No direct impacts on paleontological resources from conventional motor vehicle and street-legal ATV use on paved GMP roads; direct impacts on approximately 775 acres and indirect impacts on approximately 3,824 acres of geologic formations with potential for paleontological resources along unpaved GMP roads. | Beneficial impacts on paleontological resources at approximately 250 acres at Lone Rock Beach, 180 acres at Lone Rock Beach Play Area, 7,300 acres at 15 accessible shorelines, and along user-created ORV routes from discontinuation of off-road use in Glen Canyon. Direct and indirect impacts on paleontological resources along GMP roads from conventional motor vehicles and street-legal ATVs would be the same as alternative A. | Adverse impacts on paleontological resources stemming from erosion as a result of motor vehicle use on 250 acres Lone Rock Beach, 180 acres at Lone Rock Beach Play Area, approximately 7,300 acres at 15 accessible shorelines, and along approximately 22 miles of ORV routes. Approximately 1,152 acres of geologic formation with varying degrees of trace paleontological resources (including Organ Rock, Moenkopi, Chinle, Tropic Shale, and Carmel Formations) directly disturbed at accessible shoreline areas and approximately 46 acres along designated ORV routes. Direct and indirect impacts on paleontological resources along GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs would be similar to alternative A. | Adverse impacts on paleontological resources stemming from erosion as a result of motor vehicle use on 250 acres Lone Rock Beach and approximately 1,100 acres at 4 accessible shorelines. Approximately 230 acres of geologic formation with varying degrees of trace paleontological resources (including Organ Rock, Moenkopi, Chinle, Tropic Shale, and Carmel Formations) directly disturbed at accessible shoreline areas. No direct or indirect impacts at Lone Rock Beach Play Area, 11 accessible shorelines and along user-created ORV routes from discontinuation of off-road use in those areas. Impacts on paleontological resources along GMP roads from conventional motor vehicles, would be similar to alternative A. | Adverse impacts on paleontological resources stemming from erosion as a result of motor vehicle use on 250 acres Lone Rock Beach, 180 acres at Lone Rock Beach Play Area, approximately 6,175 acres at 14 accessible shorelines, and along approximately 21 miles of ORV routes. Beneficial impacts on paleontological resources at Warm Creek from discontinuation of off-road use with other beneficial impacts to eight shorelines from seasonal closures and a vehicle free zone at Bullfrog shorelines and Stanton Creek. Approximately 1,074 acres of geologic formation with varying degrees of trace paleontological resources (including Organ Rock, Moenkopi, Chinle, Tropic Shale, and Carmel Formations) directly disturbed at accessible shoreline areas and approximately 38 acres along designated ORV routes. Impacts on paleontological resources along paved GMP roads from conventional motor vehicles, and street-legal ATVs and along unpaved GMP roads from conventional motor vehicles, OHVs, and street-legal ATVs would be similar to alternative A. |
| Wilderness                | Without the 96-dBA limit, 9.10% of proposed wilderness areas would be directly impacted by motor vehicle noise.  | With the 96-dBA limit, 8.71% of proposed wilderness areas would be directly impacted by motor vehicle noise.   | With the 96-dBA limit, 15.49% of proposed wilderness areas would be directly impacted by motor vehicle noise.   | With (and without the 96-dBA limit) 0.11% of proposed wilderness areas would be directly impacted by motor vehicle noise. The degree and geographic extent of impacts on soundscapes and thus wilderness would not be affected by the 96-dBA limit because no OHV or street-legal ATV use would be allowed (the limit only applies to OHVs and street-legal ATVs).   | With the 96-dBA limit, 8.89% of proposed wilderness areas would be directly impacted by motor vehicle noise.  |



State of Utah

GARY R. HERBERT  
*Governor*

GREG BELL  
*Lieutenant Governor*

Office of the Governor  
PUBLIC LANDS POLICY COORDINATION

JOHN HARJA  
*Director*

RECEIVED BY  
SUPERINTENDENT'S OFFICE

DEC 13 2010

GLEN CANYON NRA

December 7, 2010

Stan Austin  
Superintendent  
Glen Canyon National Recreation Area  
PO Box 1507  
Page, AZ 86040

Subject: Glen Canyon NRA Off-Road Vehicle Management Plan  
RDCC Project No. 24100

Dear Mr. Austin:

The State of Utah appreciates the opportunity to participate in the scoping process for the Glen Canyon NRA Off-Road Vehicle Management Plan as a cooperating agency, and identifies the following issues for further analysis as the study proceeds.

Consistency with state and local travel management plans and regulatory structures should be maintained in the Glen Canyon National Recreation Area's (GCNRA) General Management Plan (GMP). The use of definitions and data sets that are unique to the GMP will cause confusion during the analysis, and ultimately hinder implementation of the Park Service's final plan. Two areas of consistency, definitional and jurisdictional, are presented by the information presented to this point.

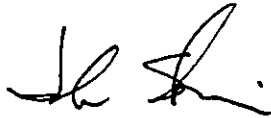
First, off-highway vehicles are defined in Utah Code Section 41-22-2 as "any snowmobile, all-terrain type I vehicle, all-terrain type II vehicle or motorcycle." An all-terrain type I vehicle is further defined in UC Section 41-22-(3) (a). Utah statute allows off-highway vehicles to be operated on public lands that are designated by map or description as open to off-highway vehicle use by the controlling federal, state, county or municipal agency. The information presented in the scoping documents, in contrast, defines ATV as "(a) class of vehicles that are primarily designed for off-road travel, including all-terrain vehicles, utility vehicles, and off-road dirt or trail bikes." This proposed language creates a dual regime of vehicle classification, which, in turn, creates ambiguity and confusion. This will create and present problems for the proposed plan's purposes. In addition, the proposed language does not distinguish between motorized, partially motorized, and non-motorized vehicles.

Second, GCNRA is bordered by several Bureau of Land Management Districts, and many, if not most, of the roads in GCNRA are extensions of roads in these districts. The roads within these districts are managed in accordance with each district's Resource Management Plan (RMP) and associated Travel Plan. The proposed alternatives are not yet sufficient in number or scope to accommodate consistency with the federal management prescriptions for the roads that extend into the GCNRA from these districts. The various counties maintain the roads identified in the scoping material as county roads, and the state and the counties jointly own the right-of-way for the roads, pursuant to R.S. 2477, as recorded in the offices of the various county recorders. In addition, county adopted travel maps include several roads not currently included in the scoping information.

The process for the GMP analysis from this point should address the existence of both state and local government travel plans to assure an accurate accounting and coordination of roads and rights-of-way in the GCNRA. The purpose and need section off the NEPA analysis should include the issues of signage, maintenance, enforcement and transportation planning across these various jurisdictions.

The State of Utah appreciates the opportunity to review this proposal, and looks forward to working with the GCNRA as the work proceeds. Please direct any other written questions regarding this correspondence to the Public Lands Policy Coordination Office at the address below, or call Judy Edwards at (801) 537-9023.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Harja', with a stylized flourish at the end.

John Harja  
Director



# **NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION**

Colorado Plateau Archaeological Alliance  
Utah State Historic Preservation Office  
Arizona State Parks  
2013 Correspondence with Consulting Parties  
U.S. Bureau of Land Management

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## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:

ORV Management Plan/DEIS

August 28, 2013

Mr. Jerry Springer  
Executive Director  
Colorado Plateau Archaeological Alliance  
2529 Jackson Avenue  
Ogden, UT 84401

Dear Mr. Springer,

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. We have recently conducted an NHPA consultation meeting with regards to the areas of potential effect and the proposed level of inventory for historic properties. At this meeting, your organization was proposed as a potential additional consulting party.

With this letter, the NPS would like to invite your organization to become a consulting party for this project under Section 106 of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.2(c)(3) and part 800.2(d). Section 106 consulting parties for the project will be designated by the NPS – the lead federal agency for this project. NPS must consider all written requests for participation as consulting parties, and in consultation with the Utah and Arizona State Historic Preservation Office, determine which requests should be granted. A written request does not guarantee an invitation to participate in Section 106 consultation. Section 106 consulting parties will receive project information and have the opportunity to make their views known at various points in the project development process. More information about Section 106 and the role of consulting parties is available on the Advisory Council on Historic Preservation's website at <http://www.achp.gov/>.

To be considered for consulting party status under Section 106, please complete the enclosed application and submit to the NPS at the address provided within **15 working days**. In the letter you should describe your interest in the project and its effects on historic properties, to include 1) your legal interest, 2) your economic interest, and 3) your concern with the effects on historic properties. If you have an affiliation with an organization, name the organization and include an address and telephone number. Make sure to include all the information necessary for the NPS to recognize your interest in the effects of the project on historic properties of specific interest to you or your group.

Consulting party status entitles you to share your views, receive and review pertinent information, offer ideas, and consider possible solutions together with the NPS and other consulting parties. Because consultation is a dynamic good-faith process of discussing options, considering multiple views, and seeking agreement among a variety of parties, active participation and constructive comments from all Section 106 consulting parties will be expected throughout the process.

The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area;

and promote the resources and values for which the area was established as a unit of the national park system.

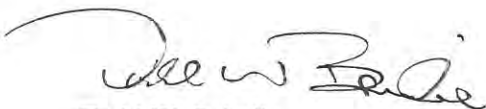
The objectives for managing both off-road and on-road use of motor vehicles are based on Glen Canyon's enabling legislation and prior planning documents and are compatible with NPS mission and policy guidance. All alternatives considered in this ORV Management Plan/EIS must, to a large degree, accomplish the following objectives:

- Manage authorized vehicle uses to provide safe and healthful opportunities for visitor access and recreation.
- Manage authorized vehicle uses to protect the biological and physical environment, including natural processes and systems.
- Manage authorized vehicle uses to protect cultural resources.
- Establish clear policies to guide authorized vehicle uses.

The purpose of this step in the Section 106 process is to gather input about historic properties and the potential effects from the proposed project on such properties. Section 106 consultation is being conducted concurrently with the EIS analysis and development following public involvement under the National Environmental Policy Act. Opportunities for public involvement in lieu of requests for consulting party status under Section 106 are provided on the Planning, Environment & Public Comment (PEPC) website for the project at <http://parkplanning.nps.gov/projectHome.cfm?projectID=19520>. We have also posted the presentation and meeting notes from the August 22, 2013 consultation meeting at this site.

Thank you for your interest.

Sincerely,



Todd W. Brindle  
Superintendent

cc: Rosemary Sucec, Cultural Resources Program Manager, Glen Canyon National Recreation Area & Rainbow Bridge National Monument

Glen Canyon National Recreation Area Off-road Vehicle Management  
Plan/Environmental Impact Statement

APPLICATION TO BE CONSIDERED A SECTION 106 CONSULTING PARTY

(Please Print)

|               |         |
|---------------|---------|
| Organization: |         |
| Contact Name: |         |
| Title:        |         |
| Address:      |         |
| Phone:        | (     ) |
| E-mail:       |         |

Section 106 of the National Historic Preservation Act, as Amended, requires Federal agencies to consider the effect of their actions on properties listed on the National Register of Historic Places (NRHP) or eligible for listing on the NRHP. The Section 106 process encourages incorporation of historic preservation values into the project planning process by consultation among parties with an interest in the effects of the undertaking on historic properties. Because consultation is a dynamic good-faith process of discussing options, considering multiple views, and seeking agreement among a variety of parties, your participation and constructive comments will be expected throughout the process. Please summarize your interest in historic properties as related to this undertaking.

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Please mail to:

Todd W. Brindle

Superintendent

Glen Canyon National Recreation Area

P.O. Box 1507

56040



# Colorado Plateau Archaeological Alliance

Sept. 26, 2013

## CPAA Comments Regarding

### **Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement**

**By**

**Jerry D. Spangler, MA RPA  
Executive Director**

***For the purposes of modeling APEs associated with Lone Rock Beach, Glen Canyon NRA recommends using the same parameters defined for other accessible shorelines: 35 degree slope as the restricting limit of accessibility for ORV use below the 1988 ORV area designations at full pool (3700') and extending to anticipated low lake levels (3600') to define the Primary Area of Impact (PIA), with an additional .5 mile buffer extending beyond to define the Secondary Area of Impact (SAI).***

I am unfamiliar with the specific topographic nature of the PIA and SAI. My question relates primarily to the SAI: If the APE is limited to those areas with less than a 35-degree slope, are there also areas within the PIA and SAI that are greater than 35 degrees with topographic features where archaeological sites are visible from the play area or they are likely to be discovered (e.g., rockshelters). If such features are located here, our research has found that these sites are especially vulnerable to intentional and unintentional vandalism, and these areas should be included in the APE.

**For the purposes of modeling APEs associated with backcountry (non-paved) roads, Glen Canyon NRA recommends using a 120 meter buffer zone extending 60 meters on either side of the centerline for designated park roads and the proposed designation of ORV routes in the Ferry Swale area.**

The 60-meter buffer identified may adequately address direct impacts to cultural resources along those routes, but it is insufficient in terms of cultural resources that could be indirectly affected (e.g., nature, setting, feels, association). The APE can and often does include a much greater area than the area that is subjected to subsequent inventories. For example, in Nine Mile Canyon the APE is canyon rim-to-canyon rim, even though the area subjected to inventory was only 50 feet on either side of the road centerline. The "potential" effects along designated routes can and often do extend far beyond the

route itself, and this potential should be considered. Our research has consistently shown that that malicious vandalism (looting, graffiti, destruction of features) occurs within 200 meters of an existing route. Rockshelters are particularly vulnerable regardless of distance from a route if they are visible from the route.

***Class III inventory should not be required prior to designations that (1) allow continued use of an existing route ....***

We would concur with that assessment but only if (1) Class III inventory has previously been conducted along those routes, and (2) those inventories were conducted within the past 25 years, and (3) inventory methods of past inventories meet currently acceptable standards. DOI practices have commonly exempted “traditional” routes already in use, but this exemption (internal DOI instructional guidance that is in conflict with 36CFR800) is currently being challenged in the federal courts related to BLM travel plans throughout Utah, and one federal court in the Midwest has already ruled against the exemption. The federal code of regulations 36CFR800.16(y) related to the National Historic Preservation Act clearly defines an undertaking as “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency.” Whereas the routes fall under the jurisdiction of a federal agency, the agency has responsibility to identify all cultural resources that could be affected.

***Where there is a reasonable expectation that a proposed designation will shift, concentrate or expand travel into areas where historic properties are likely to be adversely affected, Class III inventory and compliance with section 106, focused on areas where adverse effects are likely to occur, should be required prior to designation. Proposed designations of new routes or new areas as open to ORV use should require Class III inventory of the APE and compliance with section 106 prior to designation. Class III inventory of the APE and compliance with section 106 should also be required prior to identifying new locations proposed as staging areas or similar areas of concentrated ORV use. Class II inventory, or development and field testing of a cultural resources probability model, followed by Class III inventory in high potential areas and for specific projects, may be appropriate for larger planning areas for which limited information is currently available.***

We would concur with this approach, but we would also recommend that any Class III inventory of areas directly affected also include an adequate buffer to consider possible indirect effects (see comments above).

***For park roads, the proposed designation reflects continued use of existing routes, which will not change ORV use. These large planning areas have received minimal inventory in the past and limited information is currently available on the presence of historic properties. Glen Canyon NRA recognizes that the continued use of existing routes is unlikely to adversely affect documented or previously unidentified historic properties.***

This statement is very problematic. How can the NRA recognize that continued use of an existing route is *unlikely* to adversely affect known and unknown historic properties if the agency does not know what those properties are and how they being effected by continued use of the route? You acknowledge the area has received minimal inventory in the past and that limited information is available. Hence you do not know if historic properties are affected or not. As discussed above, we have long argued that designated routes are subject to Section 106 and its implementing regulations, and that Class III inventories should be conducted along those routes to identify historic properties that are being or

could be adversely affected by use of the route. Our recent research in the Kanab Field Office, Richfield Field Office and Monticello Field Office has demonstrated unequivocally that “exempted” routes pass through eligible properties and use of the routes is causing ongoing damage to the National Register qualities of those sites. In the Kanab area, the designated routes often passed over and through Ancestral Puebloan residential sites. The BLM was unaware that these sites existed prior to our inventory of the routes.

***General Comment 1:***

It is inferred in the statement regarding the 120-meter wide APE along routes that the inventory will also be 60 meters on either side of center line. But the width of the Class III inventory is not expressly stated. A Class III inventory of that width can be sufficient to identify direct impacts to historic properties along the route itself, but it does not address impacts to sites that are visible from the route (e.g., rockshelters, cliff structures, rock art sites). We would strongly recommend that inventories include efforts to identify and document cultural resources that are visible from the routes.

***General Comment 2:***

If any of the routes are used specifically to enhance access to historic properties then we would recommend that the full nature of those historic properties be documented, regardless of whether or not they are next to or visible from the route. This effort should also include a monitoring plan whereby ongoing degradation of the properties can be evaluated and appropriate mitigation measures implemented.

**Citations and Reports Related to CPAA research into OHV travel available upon request.**

Jerry D. Spangler  
Executive Director  
Colorado Plateau Archaeological Alliance  
2529 Jackson Avenue  
Ogden, Utah 84401  
801-392-2646







## State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

## Department of Community and Culture

PALMER DePAULIS  
*Executive Director*

### State History

PHILIP F. NOTARIANNI  
*Division Director*

September 19, 2007

ORV Management Plan  
Glen Canyon NRA  
PO Box 1507  
Page, AZ 86040-1507

RE: ORV Use at Glen Canyon National Recreation Area

In reply, please refer to Case No. 07-1611

To Whom It May Concern:

The Utah State Historic Preservation Office received your request for public scoping comments on the above referenced project on September 18, 2007.

We are certain that the National Park Service is already aware of the numerous historic and prehistoric cultural resources that could be involved in this undertaking. Indeed, we have recently met with specialists to discuss the high density of sites in some of the areas that have ORV roads and we have also discussed the recent emergence of long submerged sites on newly exposed beach areas. While the issues are complex, we have no doubt that through careful consideration it is possible to develop a balanced approach to ORV use that balances the value of these resources with the need to provide recreational opportunities.

We are fully confident that the National Park Service will draw on its cultural resource expertise to fully analyze alternatives and potential effects to the many valuable cultural resources within Glen Canyon National Recreation Area and comply with Section 106 of the National Historic Preservation Act for this undertaking. Given the complexity of issues surrounding off-road vehicle use and cultural resources, we would like to offer our assistance early in the planning process. Specifically, we are interested in consulting with your agency on potential consulting parties (per 36CFR800.3(f)), on determining the scope of the Area of Potential Effects (per 36CFR800.4(a)(1)), on reasonable and good faith identification efforts (per 36CFR800.4(b)(1)) and on resource eligibility and effects (per 36CFR800.(c)(2) and 36CFR800.5(a)).

UTAH STATE  
HISTORY

UTAH STATE HISTORICAL SOCIETY  
ANTIQUITIES  
HISTORIC PRESERVATION

RESEARCH CENTER & COLLECTIONS

Off-road Vehicle Management Plan/FEIS

300 S. RIO GRANDE STREET, SALT LAKE CITY, UT 84101-1182 • TELEPHONE 801 533-3500 • FACSIMILE 801 533-3503 • HISTORY.UTAH.GOV

E-201

Please contact our office as early as possible so that we can arrange for meetings and/or discussions on these issues and approaches. We believe that through early and careful consideration, the process can be streamlined and good cultural resource consideration can be conducted.

Thank you for taking our comment and we look forward to further consultation under the National Historic Preservation Act and its implementing regulations.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matthew T. Seddon', enclosed within a large, loopy oval flourish.

Matthew T. Seddon, Ph.D., RPA

Deputy State Historic Preservation Officer – Archaeology



---

## ORV Management Plan paperwork

1 message

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djacobs@azstateparks.gov <djacobs@azstateparks.gov>  
To: thann\_baker@nps.gov

Fri, Nov 2, 2012 at 12:01 PM

Thann-

Our office has received the ORV Management Plan paperwork that initiates Section 106 and addresses the topics of identifying consulting parties, the scope of identification efforts [APE], and determining the agency's reasonable and good faith effort to carry out the appropriate identification effort per 36 CFR 800.4(b)(1).

Given the vicissitudes of water levels and ORV use, one can easily appreciate the potential for impacts to cultural resources. The approach discussed in your attachment [Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement] dated October 2012 is reasonable and appropriate. The use of a Class II inventory of the primary area of impact for accessible shorelines to evaluate the potential for the presence of historic properties and to estimate the frequency and types of properties present is a very good strategy to ultimately achieve the final identification and evaluation of historic properties.

Our office concurs with the recommendations in your attachment.

---

David Jacobs  
Compliance Specialist / Archaeologist  
State Historic Preservation Office

Phone: (602) 542-7140  
Fax: (602) 542-4180  
Email: [djacobs@azstateparks.gov](mailto:djacobs@azstateparks.gov)  
Web: <http://AZStateParks.com>

[Arizona State Parks](#)





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



October 17, 2012

Lori Hunsaker  
Deputy State Historic Preservation Officer  
300 Rio Grande  
Salt Lake City, UT 84101-1182

RE: Continued consultation on the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Environmental Impact Statement (Case No. 07-1611)

Dear Ms. Hunsaker:

The National Park Service is continuing to develop a Management Plan/Environmental Impact Statement (EIS) to evaluate off-road vehicle (ORV) use addressing three spheres of ORV use at Glen Canyon National Recreation Area in Arizona and Utah: 1) At the Lone Rock beach and play area; 2) at designated vehicle-accessible shoreline areas; and 3) on 388 miles of park roads. The purpose of this ORV Management Plan/EIS is to guide management of ORV areas and all-terrain vehicle use within Glen Canyon in order to preserve the recreation area's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the National Park System.

Following initial consultation with your office (September 2007), and further discussions at the 2010 Biennial Meeting held at Glen Canyon National Recreation Area, we wish to formally invite your participation and assistance with the following topics in accordance with Section 106 of the National Historic Preservation Act (NHPA): 1) Identifying other consulting parties (per 36CFR800.3(f)); 2) determining the scope of identification efforts (per 36CFR800.4(a)) to include determining the area of potential effects (APE) (per 36CFR800.4(a)(1)); and 3) determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts (per 36CFR800.4(b)(1)).

**Identify other consulting parties (36CFR800.3(f))**

Glen Canyon National Recreation Area is coordinating public involvement requirements of Section 106 through the agency's procedures under the National Environmental Policy Act to solicit public review and comment. The agency will consider those comments in a way that reflects the nature and complexity of the undertaking, its effects on historic properties, and the relationship of the Federal involvement to the undertaking (36CFR800.2(d)(1). Individual stakeholders have been identified and continue to be informed during the planning and development process. A list of current stakeholder is available upon request.

Glen Canyon National Recreation Area has initiated formal consultation under Section 106 with the Utah and Arizona State Historic Preservation Offices, the 19 Tribes, bands, and chapters associated with Glen



Canyon, and the Church of Jesus Christ of Latter-day Saints. We would like to request your recommendations for additional consulting parties who may possess a demonstrated interest in the undertaking or concern with the undertaking's effects on historic properties.

**Determine the scope of identification efforts (36CFR800.4(a)) and level of effort (36CFR800.4(b)(1))**

Glen Canyon National Recreation Area recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties. At this stage in the development process of the EIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. Attention is directed here toward defining the APE and the appropriate level of effort for identification of historic properties within the APE.

Enclosed for your review is:

1. **Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement** identifying the parameters used to model the APE, providing a rationale for determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts, and recommending a strategy to initiate identification efforts.
2. **Glen Canyon National Recreation Area Accessible Shorelines: Addendum to Design for Archaeological Survey** providing an archeological survey design and options for inventory of accessible shoreline locations.

Glen Canyon National Recreation Area has determined an APE (as defined at 36CFR800.16(d)) based on the action alternative offering the greatest potential for adverse effects across all alternative components. The APE is modeled according to parameters relevant to the scale and nature of the undertaking, which facilitates the classification of modeling parameters based on the type and extent of anticipated impacts. For this EIS, separate parameters are established to model the APE for: 1) Accessible shorelines and Lone Rock Beach; 2) all unpaved park roads; and 3) Lone Rock Beach Play Area. We understand that as input is received from consulting parties and alternatives are refined, the APE may be adjusted accordingly.

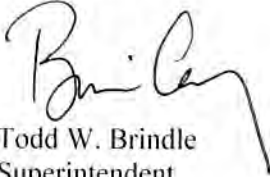
The preliminary strategy for appropriate identification efforts are proposed in pursuance with 36CFR800.4(b) and vary according to the three spheres of ORV use at Glen Canyon as reflected in the APE model. Inventory requirements, priorities, and strategies vary depending on the effect and nature of the proposed ORV activity and the expected density and nature of historic properties based on existing inventory information. The proposed strategy will allow for further consultation to determine the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties pursuant with 36CFR800.4(b)(2).

For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; unpaved park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. We would like to request your input on: 1) determinations of the APE as defined at 26CFR800.16(d) and following the parameters provided in the clarification of cultural considerations document; and 2) the proposed level of identification to assist planning efforts and aid in determining the appropriate level of effort for final identification and evaluation.

We look forward to receiving your input on the planning process. We believe that it will ensure that cultural resources are adequately considered during the planning process while meeting ORV management needs and objectives.

If you wish to be kept apprised of the off-road vehicle management planning process, please visit Glen Canyon National Recreation Area's website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Thann Baker of my staff at 928-608-6263, or by email at [thann\\_baker@nps.gov](mailto:thann_baker@nps.gov).

Sincerely,

  
fw Todd W. Brindle  
Superintendent

Enclosures



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



October 17, 2012

Mr. James Garrison  
State Historic Preservation Officer  
Arizona State Parks  
1300 West Washington  
Phoenix, AZ 85007

RE: Continued consultation on the Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Environmental Impact Statement

Dear Mr. Garrison:

The National Park Service is continuing to develop a Management Plan/Environmental Impact Statement (EIS) to evaluate off-road vehicle (ORV) use addressing three spheres of ORV use at Glen Canyon National Recreation Area in Arizona and Utah: 1) At the Lone Rock beach and play area; 2) at designated vehicle-accessible shoreline areas; and 3) on 388 miles of park roads. The purpose of this ORV Management Plan/EIS is to guide management of ORV areas and all-terrain vehicle use within Glen Canyon in order to preserve the recreation area's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the National Park System.

Following initial consultation with your office (September 2007), and further discussions at the 2010 Biennial Meeting held at Glen Canyon National Recreation Area, we wish to formally invite your participation and assistance with the following topics in accordance with Section 106 of the National Historic Preservation Act (NHPA): 1) Identifying other consulting parties (per 36CFR800.3(f)); 2) determining the scope of identification efforts (per 36CFR800.4(a)) to include determining the area of potential effects (APE) (per 36CFR800.4(a)(1)); and 3) determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts (per 36CFR800.4(b)(1)).

**Identify other consulting parties (36CFR800.3(f))**

Glen Canyon National Recreation Area is coordinating public involvement requirements of Section 106 through the agency's procedures under the National Environmental Policy Act to solicit public review and comment. The agency will consider those comments in a way that reflects the nature and complexity of the undertaking, its effects on historic properties, and the relationship of the Federal involvement to the undertaking (36CFR800.2(d)(1)). Individual stakeholders have been identified and continue to be informed during the planning and development process. A list of current stakeholder is available upon request.



Glen Canyon has initiated formal consultation under Section 106 with the Utah and Arizona State Historic Preservation Offices, the 19 Tribes, bands, and chapters associated with Glen Canyon, and the Church of Jesus Christ of Latter-day Saints. We would like to request your recommendations for additional consulting parties who may possess a demonstrated interest in the undertaking or concern with the undertaking's effects on historic properties.

**Determine the scope of identification efforts (36CFR800.4(a)) and level of effort (36CFR800.4(b)(1))**

Glen Canyon National Recreation Area recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties. At this stage in the development process of the EIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. Attention is directed here toward defining the APE and the appropriate level of effort for identification of historic properties within the APE.

Enclosed for your review is:

- **Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement** identifying the parameters used to model the APE, providing a rationale for determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts, and recommending a strategy to initiate identification efforts.

Glen Canyon National Recreation Area has determined an APE (as defined at 36CFR800.16(d)) based on the action alternative offering the greatest potential for adverse effects across all alternative components. The APE is modeled according to parameters relevant to the scale and nature of the undertaking, which facilitates the classification of modeling parameters based on the type and extent of anticipated impacts. For this EIS, separate parameters are established to model the APE for: 1) Accessible shorelines and Lone Rock Beach; 2) all unpaved park roads; and 3) Lone Rock Beach Play Area. We understand that as input is received from consulting parties and alternatives are refined, the APE may be adjusted accordingly.

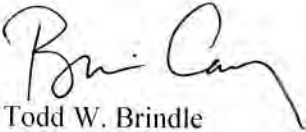
The preliminary strategy for appropriate identification efforts are proposed in pursuance with 36CFR800.4(b) and vary according to the three spheres of ORV use at Glen Canyon as reflected in the APE model. Inventory requirements, priorities, and strategies vary depending on the effect and nature of the proposed ORV activity and the expected density and nature of historic properties based on existing inventory information. The proposed strategy will allow for further consultation to determine the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties pursuant with 36CFR800.4(b)(2).

For the state of Arizona, relevant aspects of the proposed action include unpaved park roads in Coconino County. We would like to request your input on: 1) determinations of the APE as defined at 26CFR800.16(d) and following the parameters provided in the enclosed clarification of cultural considerations document; and 2) the proposed level of identification to assist planning efforts and aid in determining the appropriate level of effort for final identification and evaluation of unpaved park roads in Coconino County.

We look forward to receiving your input on the planning process. We believe that it will ensure that cultural resources are adequately considered during the planning process while meeting ORV management needs and objectives. If you wish to be kept apprised of the off-road vehicle management

planning process, please visit Glen Canyon National Recreation Area's website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Thann Baker of my staff at 928-608-6263, or by email at [thann\\_baker@nps.gov](mailto:thann_baker@nps.gov).

Sincerely,

  
fw Todd W. Brindle  
Superintendent

Enclosure



October 2012

## **Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement**

Prepared by  
Thann Baker  
Archeologist

May 2010

Updated March 2012  
Final October 2012

### **Document Information**

|                         |  |
|-------------------------|--|
| <b>Title</b>            | Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement |
| <b>Author</b>           | Thann Baker, Glen Canyon National Recreation Area Archeologist   |
| <b>Document Type</b>    |  |
| <b>Publication Date</b> | 2012 Draft   |

### **Change History**

| <b>Original Version #</b> | <b>Date of Revision</b> | <b>Revised By</b> | <b>Changes</b> | <b>Justification</b> | <b>New Version #</b> |
|---------------------------|-------------------------|-------------------|----------------|----------------------|----------------------|
|                           | May 2010                | Thann Baker       | Original       | DRAFT                | 1.0                  |
| 1.0                       | March 2012              | Thann Baker       | Detail added   | DRAFT #2             | 1.1                  |
| 1.1                       | October 2012            | Thann Baker       | Detail added   | Final                | 1.2                  |

## **Purpose**

To provide proposed guidance on how Glen Canyon National Recreation Area (NRA) proceeds toward compliance with Section 106 of the National Historic Preservation Act (NHPA) concerning designation and management of areas to control for off-road vehicle (ORV) use. Attention is directed toward defining (1) the Area of Potential Effect (APE); and (2) the appropriate level of effort for identification of historic properties within the APEs.

## **Terminology**

*Off-road Vehicle (ORV):* A motorized vehicle (all-terrain or conventional) designed for or capable of cross-country travel on or immediately over natural terrain.

*All-terrain Vehicle (ATV):* A nonconventional motor vehicle that is designed primarily for off-road travel (falling under the broader term ORV) and that is not registered for interstate travel.

*Street-legal ATV:* An ATV that qualifies under the state's motor vehicle and traffic code to be operated on state roads and highways. Dune buggies, sand rails, go-karts, and rock crawlers cannot be licensed as street-legal.

*Unpaved General Management Plan (GMP) Road:* An unpaved backcountry road designated as open to motorized vehicle travel in the 1972 Glen Canyon GMP.

## **ORV Authorities and Policy**

Glen Canyon NRA was established in 1972 "to provide for public outdoor recreation use and enjoyment of Lake Powell and adjacent lands, and to preserve and protect the scenic, scientific, and historic features contributing to public enjoyment of the area" (PL 92-593). The primary management objective of the recreation area, as established in the GMP, is "to manage the recreation area so that it provides maximal recreational enjoyment to the American public and their guests" (USDI 1979).

The potential effect of increasingly numerous and popular recreational vehicles on public lands was addressed in Executive Order (EO) 11644, (as amended by EO 11989), *Use of Off-Road Vehicles on Public Lands* in 1972. To protect resources, promote safety of users and minimize land use conflicts, *E.O. 11644* established a Federal policy of designating all public lands as either available or not available for ORV use and required every agency to develop a process for directing and controlling the ORV use. The National Park Service (NPS) administration process for controlling ORV use is in 36 CFR Part 4.10.

Given the overall beneficial effects of route designation on cultural resources, the size of the planning areas, and Glen Canyon NRA's continuing management responsibilities for designated areas and routes, the National Park Service should consider the potential for ORV accessible areas and road designations to affect historic properties as it complies with the NPS Servicewide Programmatic Agreement (PA) for Section 106 compliance and 36 CFR Part 800.

## **Potential for Adverse Effects**

The primary threats to cultural resources from ORV use include both unintentional and intentional vandalism. Unintentional vandalism results from driving across sites, creating non-motorized and motorized trails across or near sites with fragile features, and dispersed camping on sites. Intentional vandalism includes site damage or destruction from illegal excavation and the collection of surface artifacts.

According to a recent survey of ORV owners in Utah (2001), of those who used their vehicle to access other activities, greater than 75% of both conventional 4-wheel drive vehicle and motorcycle users responded that hiking was the most popular activity. It is unclear to what extent ORV users hike after reaching a destination in GLCA, but the potential exists for visitor impacts to occur outside the range of ORV operational capabilities. The primary threats to cultural resources outside the range of ORV operational capabilities include intentional vandalism. It is reasonable to expect hiking activities associated with ORV use to extend up to .5 miles beyond a vehicles operational capability and threaten cultural resources.

### **Area(s) of Potential Effect**

Section 106 requires agencies to identify the geographic area or areas within which the character or use of any historic properties may be directly or indirectly affected by an undertaking. The range of alternatives identified in the ORV EIS include actions that open, close, or limit in some fashion ORV use in designated areas of Glen Canyon NRA. The greatest potential for effects across all alternative action components in the ORV EIS includes: 1) all accessible shorelines to remain open to conventional vehicles and all ATVs by permit; 2) Lone Rock Beach and Lone Rock Beach Play Area to remain open to conventional vehicles and all ATVs; 3) all unpaved GMP roads to remain open to conventional vehicles and street-legal ATVs; and 4) proposed designation of ORV routes in Ferry Swale open to conventional vehicles and street-legal ATVs.

For the purposes of this EIS, the APEs are modeled according to parameters relevant to the scale and nature of the undertaking, which facilitates the classification of modeling parameters based on the type and extent of anticipated impacts. The type of anticipated impacts derives from ORV use and visitor access across the extent of accessible shorelines, unpaved GMP roads, Lone Rock Beach, and Lone Rock Beach Play Area. For this EIS, separate parameters are established to model the APEs for 1) accessible shorelines and Lone Rock Beach; 2) all unpaved GMP roads; and 3) Lone Rock Beach Play Area. The APEs include areas designated as open, closed, or limited for ORV use in the EIS.

#### Accessible Shorelines

The vehicle-accessible shoreline areas at Glen Canyon NRA are managed under the 1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shoreline* (USDI 1988). These designated ORV areas are intended to provide the public with conventional motor vehicle access to the Lake Powell shoreline for the purposes of primitive recreational use. The public is allowed to depart the road and drive directly to the shoreline and park in designated ORV areas. The ORV areas are not intended to be play areas; climbing hills in vehicles, driving at high speeds, and similar behavior is prohibited.

Since the establishment of ORV accessible shoreline areas in 1988 at full pool levels (3700 feet amsl), decreasing lake levels have stranded the designated areas by as much as a mile from the current lakeshore. An additional consequence of decreasing lake levels has resulted in opening the natural topographic barriers that restricted ORV use to designated roads and shoreline areas. GLCA management has allowed users to "chase the water" to take advantage of the recreational opportunities intended by the establishment of ORV areas. ORV users chasing the shoreline proceed beyond the designated areas along networks of unprescribed routes. In numerous cases, the routes taken are not intended to access the shoreline, but rather provide access to a larger expanse of open terrain.

Without the benefit of natural topographic barriers and prescribed routes, accessibility is limited by the operational capabilities of the ORV in use. The limiting capabilities beyond user experience levels include maximum approach, departure, breakover, and side-slope angles. Factory standard specifications for conventional vehicles provide a range of maximum values to assess limitation parameters with generalized averages at approximately 35 degrees.

**For the purposes of modeling APEs associated with accessible shorelines, GLCA recommends using 35 degree slope as the restricting limit of accessibility for ORV use below the 1988 ORV area designations at full pool (3700') and extending to anticipated low lake levels (3600') to define the Primary Area of Impact (PIA), with an additional .5 mile buffer extending beyond to define the Secondary Area of Impact (SAI).**

#### Unpaved GMP Roads

Roads open for all motor vehicle travel are those roads designated in Glen Canyon NRA's 1979 General Management Plan. All other roads are closed to any type of motorized vehicle travel. As of October 1, 2008, management of motor vehicles at Glen Canyon NRA authorizes the operation of street-legal ATVs on all designated roads within the recreation area. The ORV EIS will evaluate the use of ATVs on the designated park roads, as well as the proposed designation of ORV routes in the Ferry Swale area. Under federal regulations that govern traffic on park roads (36 CFR 4.2), Glen Canyon NRA has adopted Utah and Arizona traffic code to govern the use of vehicles on roads in their respective state.

For all currently designated roads, the EIS will evaluate continued use of existing routes. In the Ferry Swale area, a few miles of unpaved roads exist that access, and are accessed by, federal lands administered by the Bureau of Land Management (BLM) Arizona Field Office. To maintain uniformity with travel management policies, the EIS will evaluate these roads as proposed designations of new routes open to ORV use.

**For the purposes of modeling APEs associated with backcountry (non-paved) roads, Glen Canyon NRA recommends using a 120 meter buffer zone extending 60 meters on either side of the centerline for designated park roads and the proposed designation of ORV routes in the Ferry Swale area.**

#### Lone Rock Beach and Lone Rock Beach Play Area

Off-road driving at Lone Rock Beach and Play Area occurred prior to the formal establishment of Glen Canyon NRA in 1972. The NPS designated Lone Rock Beach as an ORV area and the Lone Rock Beach Play Area as open to ATVs under the 1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment* (USDI 1981). Lone Rock Beach is currently open to all street-legal vehicles, including conventional vehicles and street-legal ATVs. Non-street-legal vehicles may be operated from the operator's camping location at Lone Rock Beach to the Play Area only to access the play area.

**Lone Rock Beach Play Area is a fence-enclosed 180-acre area that is open to high-intensity ATV and motor vehicle use. For the purposes of modeling the APE associated with the Lone Rock Beach Play Area, Glen Canyon NRA recommends using the fenced boundary with no additional buffer zone.**

**For the purposes of modeling APEs associated with Lone Rock Beach, Glen Canyon NRA recommends using the same parameters defined for other accessible shorelines: 35 degree slope as the restricting limit of accessibility for ORV use below the 1988 ORV area designations at full pool (3700') and extending to anticipated low lake levels (3600') to define the Primary Area of Impact (PIA), with an additional .5 mile buffer extending beyond to define the Secondary Area of Impact (SAI).**



## **Level of Inventory**

The potential effects of proposed designations differ according to the extent of anticipated change in ORV use by alternative actions. Proposed designations that will not change or will reduce ORV use are unlikely to adversely affect historic properties and will require less intensive identification efforts. Inventory requirements, priorities, and strategies will vary depending on the effect and nature of the proposed ORV activity and the expected density and nature of historic properties based on existing inventory information.

Class III inventory should not be required prior to designations that (1) allow continued use of an existing route; (2) impose new limitations on an existing route; (3) close an open area or travel route; (4) keep a closed area closed; or (5) keep an open area open. Where there is a reasonable expectation that a proposed designation will shift, concentrate or expand travel into areas where historic properties are likely to be adversely affected, Class III inventory and compliance with section 106, focused on areas where adverse effects are likely to occur, should be required prior to designation. Proposed designations of new routes or new areas as open to ORV use should require Class III inventory of the APE and compliance with section 106 prior to designation. Class III inventory of the APE and compliance with section 106 should also be required prior to identifying new locations proposed as staging areas or similar areas of concentrated ORV use. Class II inventory, or development and field testing of a cultural resources probability model, followed by Class III inventory in high potential areas and for specific projects, may be appropriate for larger planning areas for which limited information is currently available.

### Accessible Shorelines

For accessible shorelines (including Lone Rock Beach), decreasing lake levels have stranded previously designated areas by as much as a mile from the current lakeshore effectively expanding travel into areas where historic properties are likely to be adversely affected. These large planning areas have received minimal inventory in the past and limited information is currently available on the presence of historic properties. Information derived through Class I archival research efforts suggest a low probability for historic properties to occur within the proposed accessible shoreline APEs and that site integrity has been compromised by repeated inundation and exposure accompanied by the effects of wave action and visitor impacts.

**At this stage in the development process of the EIS, Glen Canyon NRA recommends Class II inventory of the primary area of impact for accessible shorelines to evaluate the potential for the presence of historic properties and estimate the frequency and types of properties present. The recommended strategy will facilitate a determination of the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties.**

### Unpaved GMP Roads

For unpaved GMP roads, the proposed designation reflects continued use of existing routes, which will not change ORV use. These large planning areas have received minimal inventory in the past and limited information is currently available on the presence of historic properties. Glen Canyon NRA recognizes that the continued use of existing routes is unlikely to adversely affect documented or previously unidentified historic properties.

For the Ferry Swale area, the proposed designation establishes new routes open to ORV use. This planning area has received minimal inventory in the past and limited information is currently available



on the presence of historic properties. Glen Canyon NRA recognizes that the designation of new routes has the potential to adversely affect documented or previously unidentified historic properties.

**At this stage in the development process of the EIS, Glen Canyon NRA recommends Class I inventory of all unpaved GMP roads to evaluate the potential for the presence of historic properties and estimate the frequency and types of properties present. The recommended strategy will facilitate a determination of the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties. Glen Canyon NRA further recommends Class III inventory of all designated ORV routes in the Ferry Swale area to identify historic properties.**

#### Lone Rock Beach and Lone Rock Beach Play Area

For Lone Rock Beach and Lone Rock Beach Play Area, the proposed designation reflects continued use of existing routes and areas, which will not change or will reduce ORV use. These planning areas received intensive pedestrian inventory during the development of the *Lone Rock Beach Development Concept Plan and Environmental Assessment* (USDI 1981). All historic properties were identified and management recommendations to mitigate adverse effects associated with designating the ORV areas were implemented.

**At this stage in the development process of the EIS, Glen Canyon NRA recommends no additional inventory efforts at Lone Rock Beach and Lone Rock Beach Play Area.**

## References

Fisher, Andrea L., Dale J. Blahna, and Rosalind Bahr

- 2001 Off Highway Vehicle Uses and Owner Preferences in Utah. Utah State University Institute for Outdoor Recreation and Tourism. Submitted to the Utah Department of Natural Resources, Division of Parks and Recreation. Professional Report IORT PR2001-02.

U.S. Department of the Interior

- 1979 General management Plan, Glen Canyon National Recreation Area. National Park Service.

- 1981 *Lone Rock Beach Development Concept Plan and Environmental Assessment*. National Park Service.

- 1988 *Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shoreline*. National Park Service.



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Mr. Bill Hedden  
Executive Director  
Grand Canyon Trust  
2601 N. Fort Valley Road  
Flagstaff, AZ 86001

Dear Mr. Hedden:

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

The objectives for managing both off-road and on-road use of motor vehicles are based on Glen Canyon's enabling legislation and prior planning documents and are compatible with NPS mission and policy guidance. All alternatives considered in this ORV Management Plan/EIS must, to a large degree, accomplish the following objectives:

- Manage authorized vehicle uses to provide safe and healthful opportunities for visitor access and recreation.
- Manage authorized vehicle uses to protect the biological and physical environment, including natural processes and systems.
- Manage authorized vehicle uses to protect cultural resources.
- Establish clear policies to guide authorized vehicle uses.

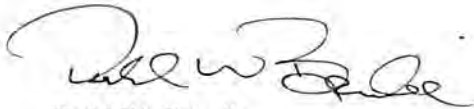
With this letter, the NPS would like to invite you or your organization to apply to become a consulting party for this project under Section 106 of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.2(c)(3) and part 800.2(d). Section 106 consulting parties for the project will be designated by the NPS – the lead federal agency for this project. NPS must consider all written requests for participation as consulting parties, and in consultation with the Utah and Arizona State Historic Preservation Office, determine which requests should be granted. A written request does not guarantee an invitation to participate in Section 106 consultation. Section 106 consulting parties will receive project information and have the opportunity to make their views known at various points in the project development process. More information about Section 106 and the role of consulting parties is available on the Advisory Council on Historic Preservation's website at <http://www.achp.gov/>.

The purpose of this step in the Section 106 process is to gather input about historic properties and the potential effects from the proposed project on such properties. Section 106 consultation is being conducted concurrently with the EIS analysis and development following public involvement under the National Environmental Policy Act. Opportunities for public involvement in lieu of requests for consulting party status under Section 106 are provided on the Planning, Environment & Public Comment (PEPC) website for the project at <http://parkplanning.nps.gov/projectHome.cfm?projectID=19520>.

To be considered for consulting party status under Section 106, please complete the enclosed application and submit to the NPS at the address provided within **15 working days**. In the letter you should describe your interest in the project and its effects on historic properties, to include 1) your legal interest, 2) your economic interest, and 3) your concern with the effects on historic properties. If you have an affiliation with an organization, name the organization and include an address and telephone number. Make sure to include all the information necessary for the NPS to recognize your interest in the effects of the project on historic properties of specific interest to you or your group.

Consulting party status entitles you to share your views, receive and review pertinent information, offer ideas, and consider possible solutions together with the NPS and other consulting parties. Because consultation is a dynamic good-faith process of discussing options, considering multiple views, and seeking agreement among a variety of parties, active participation and constructive comments from all Section 106 consulting parties will be expected throughout the process. Thank you for your interest.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Todd W. Brindle', is written over a horizontal line.

Todd W. Brindle  
Superintendent

Enclosure





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Great Old Broads for Wilderness  
PO Box 2924  
Durango, CO 81302

To Whom It May Concern:

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

The objectives for managing both off-road and on-road use of motor vehicles are based on Glen Canyon's enabling legislation and prior planning documents and are compatible with NPS mission and policy guidance. All alternatives considered in this ORV Management Plan/EIS must, to a large degree, accomplish the following objectives:

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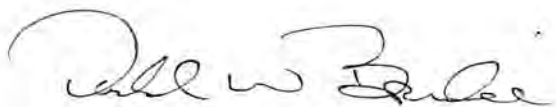


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Sincerely,

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Todd W. Brindle  
Superintendent

Enclosure



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Ms. Reba Grandrud  
President  
Old Spanish Trail Association  
PO Box 909  
Las Vegas, NM 87701

Dear Ms. Grandrud:

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

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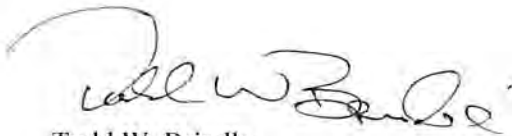


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Sincerely,

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Todd W. Brindle  
Superintendent

Enclosure

cc: Mr. James Page, President, Armijo Chapter, Old Spanish Trail Association



United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Mr. Ben Everitt  
President  
Utah Rock Art and Research Association  
PO Box 511324  
Salt Lake City, UT 84151-1324

Dear Mr. Everitt:

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Todd W. Brindle  
Superintendent

Enclosure





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Mr. Dale Hatch  
President  
Utah Statewide Archeological Society  
PO Box 2474  
Cedar City, UT 84721-2474

Dear Mr. Hatch:

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

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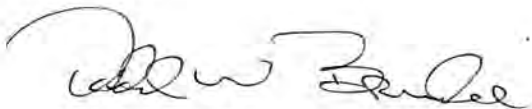
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Todd W. Brindle  
Superintendent

Enclosure





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Mr. Brent Johansen  
President  
San Juan Public Entry and Access Rights  
PO Box 353  
Blanding, UT 84511

Dear Mr. Johansen:

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

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Todd W. Brindle  
Superintendent

Enclosure





United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Ms. Liz Thomas  
Southern Utah Wilderness Alliance  
PO Box 968  
Moab, UT 84532

Dear Ms. Thomas:

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Superintendent

Enclosure



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NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
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P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



April 30, 2013

Mr. Byron Loosle  
Utah Professional Archeological Council Presiden  
BLM- State Office  
PO Box 45155  
Salt Lake City, UT 84145-0155

Dear Mr. Loosle:

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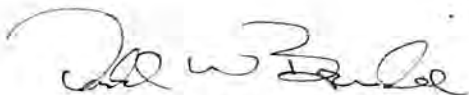


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Todd W. Brindle  
Superintendent

Enclosure



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Glen Canyon National Recreation Area  
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(928) 608-6200



April 30, 2013

Mr. Derk Beckstrand  
President  
UT Shared Access Alliance  
PO Box 131  
Payson, UT 84651

Dear Mr. Beckstrand:

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Enclosure





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P.O. Box 1507  
Page, Arizona 86040  
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April 30, 2013

Mr. Matt Westrich  
Utah 4 Wheel Drive Association  
PO Box 65745  
Salt Lake City, UT 84165-0745

Dear Mr. Westrich:

The National Park Service (NPS) is developing an Off-road Vehicle (ORV) Management Plan/Environmental Impact Statement (EIS) to analyze a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles and street-legal all-terrain vehicles at Glen Canyon National Recreation Area in Arizona and Utah. The purpose of this plan/EIS is to evaluate these uses and develop management actions that preserve Glen Canyon's scientific, scenic, and historic features; provide for the recreational use and enjoyment of the area; and promote the resources and values for which the area was established as a unit of the national park system.

The objectives for managing both off-road and on-road use of motor vehicles are based on Glen Canyon's enabling legislation and prior planning documents and are compatible with NPS mission and policy guidance. All alternatives considered in this ORV Management Plan/EIS must, to a large degree, accomplish the following objectives:

- Manage authorized vehicle uses to provide safe and healthful opportunities for visitor access and recreation.
- Manage authorized vehicle uses to protect the biological and physical environment, including natural processes and systems.
- Manage authorized vehicle uses to protect cultural resources.
- Establish clear policies to guide authorized vehicle uses.

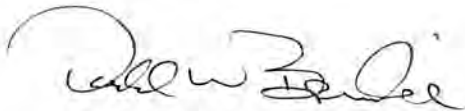
With this letter, the NPS would like to invite you or your organization to apply to become a consulting party for this project under Section 106 of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.2(c)(3) and part 800.2(d). Section 106 consulting parties for the project will be designated by the NPS – the lead federal agency for this project. NPS must consider all written requests for participation as consulting parties, and in consultation with the Utah and Arizona State Historic Preservation Office, determine which requests should be granted. A written request does not guarantee an invitation to participate in Section 106 consultation. Section 106 consulting parties will receive project information and have the opportunity to make their views known at various points in the project development process. More information about Section 106 and the role of consulting parties is available on the Advisory Council on Historic Preservation's website at <http://www.achp.gov/>.

The purpose of this step in the Section 106 process is to gather input about historic properties and the potential effects from the proposed project on such properties. Section 106 consultation is being conducted concurrently with the EIS analysis and development following public involvement under the National Environmental Policy Act. Opportunities for public involvement in lieu of requests for consulting party status under Section 106 are provided on the Planning, Environment & Public Comment (PEPC) website for the project at <http://parkplanning.nps.gov/projectHome.cfm?projectID=19520>.

To be considered for consulting party status under Section 106, please complete the enclosed application and submit to the NPS at the address provided within **15 working days**. In the letter you should describe your interest in the project and its effects on historic properties, to include 1) your legal interest, 2) your economic interest, and 3) your concern with the effects on historic properties. If you have an affiliation with an organization, name the organization and include an address and telephone number. Make sure to include all the information necessary for the NPS to recognize your interest in the effects of the project on historic properties of specific interest to you or your group.

Consulting party status entitles you to share your views, receive and review pertinent information, offer ideas, and consider possible solutions together with the NPS and other consulting parties. Because consultation is a dynamic good-faith process of discussing options, considering multiple views, and seeking agreement among a variety of parties, active participation and constructive comments from all Section 106 consulting parties will be expected throughout the process. Thank you for your interest.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd W. Brindle". The signature is fluid and cursive, with a large initial "T" and "B".

Todd W. Brindle  
Superintendent

Enclosure

# Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Environmental Impact Statement

## APPLICATION TO BE CONSIDERED A SECTION 106 CONSULTING PARTY

(Please Print)

|               |         |
|---------------|---------|
| Organization: |         |
| Contact Name: |         |
| Title:        |         |
| Address:      |         |
| Phone:        | (     ) |
| Email:        |         |

Section 106 of the National Historic Preservation Act, as Amended, requires Federal agencies to consider the effect of their actions on properties listed on the National Register of Historic Places (NRHP) or eligible for listing on the NRHP. The Section 106 process encourages incorporation of historic preservation values into the project planning process by consultation among parties with an interest in the effects of the undertaking on historic properties.

Because consultation is a dynamic good-faith process of discussing options, considering multiple views, and seeking agreement among a variety of parties, your participation and constructive comments will be expected throughout the process. Please summarize your interest in historic properties as related to this undertaking.

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## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 9, 2013

Dear

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement* (plan/DEIS). The plan/DEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The plan/DEIS assesses the impacts that could result from continuing current management (the no-action alternative) or implementing any of the four action alternatives.

The NPS is coordinating the public involvement requirements of Section 106 of the National Historic Preservation Act (NHPA) through the agency's procedures under the National Environmental Policy Act in order to solicit public review and comment for this plan/DEIS. In addition the NHPA identifies consulting parties which may have an interest in the effects of the federal undertaking (the plan/DEIS) on historic properties. You are being contacted as a potential or invited consulting party in the further development of this plan/DEIS.

Following our consultation with the Arizona and Utah State Historic Preservation Offices, we wish to formally invite your participation and assistance with the following topics in accordance with Section 106 of the National Historic Preservation Act (NHPA):

1. Determining the scope of identification efforts (per 36CFR800.4(a)) to include determining the area of potential effects (APE) (per 36CFR800.4(a)(1)); and
2. Determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts (per 36CFR800.4(b)(1)).

At this stage in the development process of the plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. Enclosed for your review is a document entitled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement." This document identifies the proposed parameters used to model the APE, provides a rationale for determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts, and recommends a strategy to initiate identification efforts.

Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.



Glen Canyon NRA has proposed an APE based on the action alternative offering the greatest potential for adverse effects across all alternative components. The APE is modeled according to parameters relevant to the scale and nature of the undertaking, which facilitates the classification of modeling parameters based on the type and extent of anticipated impacts. For this plan/DEIS, separate parameters are established to model the APE for: 1) Accessible shorelines and Lone Rock Beach; 2) park roads and proposed ORV routes; and 3) Lone Rock Beach Play Area. We understand that as input is received from consulting parties and alternatives are refined, the APE may be adjusted accordingly.

The preliminary strategy for appropriate identification efforts also vary according to the three spheres of ORV use at Glen Canyon as reflected in the APE model. Inventory requirements, priorities, and strategies vary depending on the effect and nature of the proposed ORV activity and the expected density and nature of historic properties based on existing inventory information. The proposed strategy will allow for further consultation to determine the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties pursuant with 36CFR800.4(b)(2).

For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. For the state of Arizona, relevant aspects of the proposed action include park roads and proposed ORV routes in Coconino County.

We would like to request your input on: 1) determinations of the APE as defined at 36CFR800.16(d) and following the parameters provided in the "Clarification of Cultural Considerations" document; and 2) the proposed level of identification to assist planning efforts and aid in determining the appropriate level of effort for final identification and evaluation. Written comments can be submitted to Glen Canyon National Recreation Area, PO Box 1507, Page, AZ 86040.

**In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

We look forward to receiving your input on the planning process. We believe that your input will ensure that cultural resources are adequately considered during the planning process while meeting ORV management needs and objectives. If you wish to be kept apprised of the off-road vehicle management planning process, please visit Glen Canyon planning website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Brian Carey at 928-608-6209, or by email at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov).

Sincerely,

Todd W. Brindle  
Superintendent

Enclosure



## United States Department of the Interior

NATIONAL PARK SERVICE  
Glen Canyon National Recreation Area  
Rainbow Bridge National Monument  
P.O. Box 1507  
Page, Arizona 86040  
(928) 608-6200



IN REPLY REFER TO:  
ORV Management Plan

July 29, 2013

Jonathon B Ratner, Director  
Western Watersheds Project – WY Office  
PO Box 1160  
Pinedale, AZ 82941

Dear Mr. Ratner,

The National Park Service (NPS) is continuing to develop the *Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan / Draft Environmental Impact Statement* (plan/DEIS). The plan/DEIS analyzes a range of alternatives and actions for managing off-road use of motor vehicles and on-road use of off-highway vehicles (OHVs) and street-legal all-terrain vehicles (ATVs) at Glen Canyon National Recreation Area (Glen Canyon). The plan/DEIS assesses the impacts that could result from continuing current management (the no-action alternative) or implementing any of the four action alternatives.

The NPS is coordinating the public involvement requirements of Section 106 of the National Historic Preservation Act (NHPA) through the agency's procedures under the National Environmental Policy Act in order to solicit public review and comment for this plan/DEIS. In addition the NHPA identifies consulting parties which may have an interest in the effects of the federal undertaking (the plan/DEIS) on historic properties. You are being contacted as an invited consulting party in the further development of this plan/DEIS.

Following our consultation with the Arizona and Utah State Historic Preservation Offices, we wish to formally invite your participation and assistance with the following topics in accordance with Section 106 of the National Historic Preservation Act (NHPA):

1. Determining the scope of identification efforts (per 36CFR800.4(a)) to include determining the area of potential effects (APE) (per 36CFR800.4(a)(1)); and
2. Determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts (per 36CFR800.4(b)(1)).

At this stage in the development process of the plan/DEIS, Glen Canyon proposes a strategy for how to proceed toward compliance with Section 106 of NHPA. Enclosed for your review is a document entitled "Clarification of Cultural Resource Considerations for the Glen Canyon National Recreation Area Off-Road Vehicle Management Plan / Environmental Impact Statement." This document identifies the proposed parameters used to model the APE, provides a rationale for determining the agency's reasonable and good faith efforts to carry out appropriate identification efforts, and recommends a strategy to initiate identification efforts.

Glen Canyon recognizes that the potential effects on historic properties differ according to the scale and nature of ORV use designations and the extent of anticipated change in existing ORV use by alternative actions. Determinations of the APE and proposed strategies for appropriate identification efforts take into

account these factors and will vary depending on the proposed ORV activity and the density and nature of historic properties.

Glen Canyon NRA has proposed an APE based on the action alternative offering the greatest potential for adverse effects across all alternative components. The APE is modeled according to parameters relevant to the scale and nature of the undertaking, which facilitates the classification of modeling parameters based on the type and extent of anticipated impacts. For this plan/DEIS, separate parameters are established to model the APE for: 1) Accessible shorelines and Lone Rock Beach; 2) park roads and proposed ORV routes; and 3) Lone Rock Beach Play Area. We understand that as input is received from consulting parties and alternatives are refined, the APE may be adjusted accordingly.

The preliminary strategy for appropriate identification efforts also vary according to the three spheres of ORV use at Glen Canyon as reflected in the APE model. Inventory requirements, priorities, and strategies vary depending on the effect and nature of the proposed ORV activity and the expected density and nature of historic properties based on existing inventory information. The proposed strategy will allow for further consultation to determine the appropriate level of identification efforts, which may include the use of a phased approach to achieve final identification and evaluation of historic properties pursuant with 36CFR800.4(b)(2).

For the state of Utah, relevant aspects of the proposed action include: accessible shorelines in Garfield, Kane, and San Juan counties; park roads in Garfield, Kane, San Juan, and Wayne counties, as well as Lone Rock Beach and play area in Kane County. For the state of Arizona, relevant aspects of the proposed action include park roads and proposed ORV routes in Coconino County.

We would like to request your input on: 1) determinations of the APE as defined at 36CFR800.16(d) and following the parameters provided in the "Clarification of Cultural Considerations" document; and 2) the proposed level of identification to assist planning efforts and aid in determining the appropriate level of effort for final identification and evaluation. Written comments can be submitted to Glen Canyon National Recreation Area, PO Box 1507, Page, AZ 86040.

**In order to facilitate the consultation process, Glen Canyon will host a meeting in Page, AZ on August 22, 2013 for consulting parties.** The meeting will also be webcast in order to provide additional opportunities for participation. If you are interested in attending the meeting in person or via webcast, please email Brian Carey at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov) so that we can provide you with additional logistical information.

We look forward to receiving your input on the planning process. We believe that your input will ensure that cultural resources are adequately considered during the planning process while meeting ORV management needs and objectives. If you wish to be kept apprised of the off-road vehicle management planning process, please visit Glen Canyon planning website at <http://parkplanning.nps.gov/glca>. A copy of the draft EIS will be submitted for your review when available. If you should have questions or need any additional information, please contact Brian Carey at 928-608-6209, or by email at [brian\\_carey@nps.gov](mailto:brian_carey@nps.gov).

Sincerely,



Todd W. Brindle  
Superintendent

Enclosure



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Arizona Strip Field Office  
345 East Riverside Drive  
St. George, Utah 84790  
[www.blm.gov/az/](http://www.blm.gov/az/)



September 24, 2013

In Reply Refer To:  
1220:A010

Mr. Todd W. Brindle, Superintendent  
Glen Canyon National Recreation Area  
PO Box 1507  
Page, AZ 86040

RE: Strategy for Complying with Section 106 for development of the Glen Canyon National Recreation Area Off-road Vehicle (ORV) Management Plan/Draft EIS

Dear Mr. Brindle:

The Arizona Strip Field Office of the Bureau of Land Management (BLM) is in receipt of two letters from Glen Canyon National Recreation Area (NRA), one dated July 9, 2013 and the other dated September 10, 2013, requesting feedback on complying with Section 106 of the National Historic Preservation Act for Glen Canyon NRA's Off-road Vehicle Management Plan/Draft EIS. We also received a copy of the document "Clarification of Cultural Resource Consideration for the Glen Canyon NRA ORV Management Plan/Draft EIS" dated July 2013.

We concur with Glen Canyon's determination of the Area of Potential Effects and recommendation to use a phased cultural resource identification and inventory effort for routes in the Ferry Swale area. This includes the recommendation to conduct a Class III (intensive) inventory of all designated ORV routes in order to identify historic properties in the Ferry Swale area.

We value our working relationship with the National Park Service (NPS) in the Ferry Swale area and would like to continue to work with Glen Canyon NRA so that routes on NPS-administered lands that connect to routes on the BLM-administered portion of the Ferry Swale area have a corresponding designation to those made in our 2008 resource management plan (i.e., open for public use, closed, or limited to administrative use). This will facilitate public use of these routes.

If you require additional information, please contact Diana Hawks at (435) 688-3266, or by email at [dhawks@blm.gov](mailto:dhawks@blm.gov). If we can assist with cultural resource information or inventory efforts for the Ferry Swale area, please contact John Herron at (435) 688-3262 or by email at [jherron@blm.gov](mailto:jherron@blm.gov).

Sincerely,

Lorraine M. Christian  
Field Manager

## **OTHER FEDERAL AGENCY CORRESPONDENCE**

U.S. Environmental Protection Agency Correspondence

U.S. Army Corps of Engineers Correspondence



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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

SEP 20 2007

Ref: EPR-N

Kevin Schneider  
ORV Management Plan  
Glen Canyon NRA  
P.O. Box 1507  
Page, AZ 86040-1507

RE: Glen Canyon NRA Off-Road Vehicle Management  
Scoping Comments

Dear Mr. Schneider:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the *Notice of Intent to Prepare an Environmental Impact Statement* (EIS) for the Glen Canyon National Recreation Area (NRA) Off-Road Vehicle (ORV) Management project. We provide these comments in anticipation of our review of the Draft EIS (DEIS) and in accordance with our authorities and responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The popularity of ORVs has increased dramatically since the 1981 Environmental Assessment and Development Concept Plan (EA/DCP) designated the 180-acre ORV high-intensity use area that runs contiguous to the Lone Rock Beach shoreline. A 1988 EA/DCP which governs use at 20 accessible shoreline locations also permits ORV use at some of those locations. EPA supports Glen Canyon NRA's effort to address motorized use resource impacts at these areas and evaluate alternatives to managing All-Terrain Vehicle (ATV) travel on the NRA's 388-mile road network. This effort is also consistent with 36 CFR 4.10, which prohibits all off-road travel except on routes and areas designated by special regulation as open to ORV use, and changes in the Arizona and Utah state traffic codes. EPA notes that the trend of increased ORV use is expected to continue, due to population growth, advances in recreation technology, increased availability of information and improved access to remote areas.

EPA supports the transition from unmanaged motorized recreation to restricted travel. Restricted or limited travel is necessary to ensure that Glen Canyon's resources are protected and that other non-motorized recreation is accommodated. Unmanaged ORV use on federal lands can cause unplanned roads and trails, erosion, damaged shorelines, soils and stream channels, and

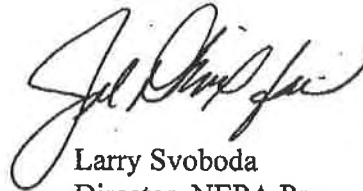
degradation of recreational experiences such as horseback riding, fishing, boating, camping, swimming and hunting.

EPA's primary focus in reviewing the DEIS will be to assess how well the proposed ORV management plan:

- Identifies and describes prevention or mitigation of adverse impacts from ORVs to soils, watersheds, vegetation, wildlife habitat, water quality, cultural resources and other assets of the Glen Canyon NRA. The DEIS should provide water quality data for the water bodies of Glen Canyon NRA, particularly at the Lone Rock Beach shoreline to understand how the current, unrestricted ORV access has impacted the resource. The analysis should look at the impact of fluctuating lake levels on ORVs access to shoreline areas and how those changes have impacted soils, vegetation and water quality.
- Addresses in sufficient detail the direct, indirect and cumulative impacts of the various alternatives.
- Fulfills the requirements of 36 CFR 4.10 as described above, and prohibits "the operation of motor vehicles in a manner that causes unreasonable damage to the surface of a park road or route." The DEIS should clearly describe the current condition of land and water resources where ORVs have historically had unrestricted access to determine whether any unreasonable damage has occurred, and whether a change in management is warranted to protect the resources.
- Provides for enforcement of the ORV route network and monitoring of impacts to ensure natural resources are protected. EPA encourages the Glen Canyon NRA to consider enforcement a significant issue driving the analysis of alternatives for motorized travel management.

We appreciate your willingness to consider our comments at this stage of your planning process. These comments are intended to help ensure a comprehensive assessment of the project's environmental impacts, adequate public disclosure and an informed decision-making process for alternative selection. If you would like to discuss our comments, please feel free to contact Jody Ostendorf of my staff at (303) 312-7814.

Sincerely,



Larry Svoboda  
Director, NEPA Program  
Office of Ecosystems Protection and Remediation



"Hellige, Kara A SPK"  
<Kara.A.Hellige@usace  
.army.mil>

10/10/2007 04:33 PM  
MST

To: <Brian\_Sweatland@nps.gov>, <Barbara\_Wilson@nps.gov>  
cc:  
Subject: RE: Off-Road Vehicle planning at Glen Canyon

Brian:

Thanks for contacting me.

I hope I can clarify your questions regarding our relationship with the NPS at Glen Canyon.

Any activity below the spillway elevation of 3,700' requires a Department of the Army permit under Section 10 of the Rivers and Harbors Act and potentially Section 404 of the Clean Water Act. The purpose for Section 10 of the Rivers and Harbors Act is to protect navigability within our nations waterways. Section 404 of the Clean Water Act protects the chemical, physical, and biological integrity of our nations waters. If the project involves grading, cutting, or filling for roads or the installation of associated infrastructure, below the 3,700' elevation, a DA permit will be needed. Depending on the nature of the project, we may have to review the project as an Individual Permit, which requires us to do a full NEPA assessment on the project. If this is the case, I would like to be able to combine NEPA measures and potentially act as a coordinating agency for your EIS process. If activities below the 3,700' elevation is minimal and work can be conducted under our Nationwide Permit Program, then I do not need to be involved in your NEPA assessment.

Please let me know if we should be an active partner or keep me updated as the EIS develops further.

If you have any questions, please do not hesitate to contact me.

Sincerely

Kara Hellige  
Durango Regulatory Field Office  
Sacramento District  
799 E 3rd Street, #2  
Durango, Colorado 81301  
(970)375-9452 (phone)  
(970)375-9531 (fax)

-----Original Message-----

From: Brian\_Sweatland@nps.gov [mailto:Brian\_Sweatland@nps.gov]  
Sent: Wednesday, October 10, 2007 8:43 AM  
To: Hellige, Kara A SPK  
Subject: Off-Road Vehicle planning at Glen Canyon

Good Morning Kara:

Barb Wilson just provided to me your business card, and told me of your interest in our ORV EIS at Glen Canyon. I have attached a scoping brochure that provides some information on the subject.

I'm interested in learning more about the relationship and jurisdictions between the USACE and NPS at Glen Canyon. I understand the

USACE has jurisdiction below 3,700 (?).

Part of the need for this EIS is the lower lake level, and how that has affected our management of our accessible shorelines, or those areas where we allow the public to drive down to the Lake Powell shoreline for camping and fishing and whatnot. At full pool, many of these accessible shorelines have natural topographical barriers which limit the space or size of the accessible shoreline area, and prevent people essentially from driving cross country for miles and miles. The lower water levels have changed a lot of the topography associated with our accessible shoreline areas, and we are going to study how to manage these areas.

Let me know if you have any questions or concerns. I look forward to working with you.

Brian S.

(See attached file: GLCA ORV brochure.pdf)

Brian Sweatland  
Outdoor Recreation Planner  
Glen Canyon National Recreation Area  
PO Box 1507  
Page, AZ 86040  
(928) 608-6342





William\_Austin@fws.gov  
01/31/2008 03:17 PM

To Kate\_Schwager@fws.gov  
cc Betsy\_Herrmann@fws.gov, Brenda\_Smith@fws.gov,  
Brian\_Sweatland@nps.gov, Elise\_Boeke@fws.gov,  
Laura\_Romin@fws.gov  
bcc

Subject Re: Glen Canyon OHV EIS Project

Brian: Your message to Kate indicates the proposed action includes all of GLCA in Utah. Does it not also include the portion of GLCA in Arizona? If it does include Arizona, there may be additional species to consider. For example, Brady pincushion cactus occurs in GLCA in Arizona. Our county lists can be found at <http://www.fws.gov/southwest/es/arizona/Threatened.htm> (click on the county of interest on the map). Please let me know if we can help you further with species lists or anything else. Although Kate's office is likely to be the FWS lead for the project, Kate is correct in stating that we would like to be involved if the project also occurs in Arizona. Thanks. Bill

William Austin  
U.S. Fish and Wildlife Service  
323 N. Leroux, Suite 201  
Flagstaff AZ 86001  
928-226-0614 x102  
fax: 928-226-1099

Kate  
Schwager/R6/FWS/D  
OI

01/31/2008 10:33  
AM

Brian\_Sweatland@nps.gov

To

cc

William Austin/R2/FWS/DOI@FWS,  
Betsy Herrmann/R6/FWS/DOI@FWS,  
Brenda Smith/R2/FWS/DOI@FWS, Elise  
Boeke/R6/FWS/DOI@FWS, Laura  
Romin/R6/FWS/DOI@FWS

Subject

Glen Canyon OHV EIS Project  
(Document link: William Austin)

Hello Brian,  
I did get your voicemail today and will give you a call back. In the mean time, here is an updated species list for Utah and some additional information. I have also cc'd Betsy Herrmann in my office (Betsy works on all EIS projects in our office and may be the lead for Utah on this one)

