CHAPTER 2: ALTERNATIVES

INTRODUCTION

This chapter describes the actions that the National Park Service (NPS) may implement to manage off-road use and on-road off-highway vehicle (OHV) and street-legal all-terrain vehicle (ATV) use on general management plan (GMP) roads in Glen Canyon National Recreation Area (Glen Canyon). Off-road use is evaluated and described under four geographic components: Lone Rock Beach, Lone Rock Beach Play Area, accessible shoreline areas, and the Ferry Swale area. A fifth geographic component, Glen Canyon GMP roads (paved and unpaved), addresses on-road OHV and street-legal ATV use. This chapter presents the proposed alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options.

The Council on Environmental Quality (CEQ) requires NPS to "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated" (40 CFR 1502.14[a]). According to the CEQ, a reasonable alternative is one that is technically and economically feasible and shows evidence of common sense. The alternative must also meet project objectives to a large degree and resolve the project need.

The CEQ requires that the alternatives under consideration include a no-action alternative (40 CFR 1502.14[d]). The no-action alternative "sets a baseline of existing impact continued into the future against which to compare impacts of action alternatives" (NPS 2011a, section 2.7). The no-action alternative would be a continuation of existing management practices and assumes that no new management actions would be implemented beyond those available when the ORV management planning process started. NPS is also required to identify its "preferred alternative" if one exists (40 CFR 1502.14). Further, NPS is required to identify the "environmentally preferable alternative," which is the alternative that best protects the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources.

Alternatives initially identified by the interdisciplinary team (IDT) or the public which failed to meet these criteria were dismissed from further evaluation (see "Alternatives Eliminated from Further Consideration" later in this chapter for the explanations of dismissal). This chapter presents a no-action alternative and four action alternatives.

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.

Off-road Vehicle (ORV): NPS defines
ORVs broadly as a motorized vehicle
(conventional or nonconventional)
designed for or capable of crosscountry travel on or immediately over
natural terrain.

OHV: State law defines 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.

ALTERNATIVES DEVELOPMENT PROCESS

NPS began the process of developing alternatives in the summer of 2007. NPS conducted internal scoping with Glen Canyon employees to identify issues and constraints on the planning process. Then in September 2007 NPS conducted public scoping to seek input on the planning process and issues related to off-road use and on-road OHV and street-legal ATV use at Glen Canyon.

In the fall of 2010, Glen Canyon released a range of preliminary alternatives for this Off-road Vehicle Management Plan / Draft Environmental Impact Statement (plan/DEIS) for public review and comment. The preliminary alternatives, which were developed in part with the input received during the 2007 public scoping period (including three public scoping meetings), were presented in a brochure that was available locally at public meetings, and on the NPS planning website (http://parkplanning.nps.gov/glca). NPS invited the public to submit comments from October 18, 2010, through November 30, 2010, on the scope of the planning process and the elements of the preliminary alternatives. NPS met with a number of cooperating agencies, including the adjacent counties and the Bureau of Land Management (BLM), throughout the process. Additionally, NPS continued to work with neighboring Tribes to address off-road use issues and concerns with these governments. The alternatives presented in this chapter include changes made as a result of the public and internal scoping process.

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.

CLARIFICATION OF THE MANAGEMENT OF GLEN CANYON LANDS BELOW LAKE POWELL FULL POOL

Comments received during internal and public scoping for this plan/DEIS reflected general confusion regarding the status of Glen Canyon lands "below full pool" of Lake Powell. Succinctly stated, the shoreline area below full pool is not open to off-road use by any vehicle unless designated for off-road use. For the purposes of the NPS prohibition against off-road use, there is no distinction between NPS-managed lands above or below full pool.

As it relates to off-road use, the shoreline of Lake Powell, regardless of lake elevation, is managed under the same laws, policies, and management plans as those lands that exist above the normal high water mark, or full pool, of Lake Powell. As described in chapter 3 under the heading "Management Zoning," full pool for Lake Powell is the 3,700-foot elevation contour. The management zones established by the Glen Canyon GMP (NPS 1979) are coincident with the fluctuating water levels of Lake Powell. As Lake Powell drops in elevation, the lands exposed by the receding waters are subject to the same environmental protections and public use regulations as those lands above the high water mark.

Off-road use in all alternatives would be restricted to designated ORV routes and areas. Driving along the shoreline of Lake Powell, including below full pool, would be prohibited outside any designated ORV area. Driving along washes or streambeds below full pool to the lakeshore would be prohibited.

CONVENTIONAL MOTOR VEHICLE OPERATOR REQUIREMENTS

In addition to NPS traffic regulations, operators of conventional motor vehicles at Glen Canyon are responsible for complying with all applicable statutes and regulations.

NPS adopts non-conflicting state traffic and vehicle laws for the management of motor vehicles. This action is authorized under 36 CFR 4.2, "State law applicable," which states, "Unless specifically addressed by regulation in this chapter, traffic and the use of vehicles within a park are governed by State law. State law that is now or may later be in effect is adopted and made a part of the regulations in this part." All GMP roads (paved and unpaved) at Glen Canyon are open to travel by conventional motor vehicles. Any future change to state law that may affect motor vehicle operation and use at Glen Canyon would be reviewed by NPS for conformity with this plan/DEIS. NPS maintains the authority to alter or adopt additional motor vehicle use rules and requirements as needed for the maintenance of public health and safety, the protection of environmental or scenic values, the protection of natural or cultural resources, the furtherance of scientific research, the implementation of management responsibilities, the equitable allocation and use of facilities, or the avoidance of conflict between visitor use activities.

USE AREA RULES

All rules applicable to public use, recreation, and travel at Glen Canyon would remain in effect. These include, but are not limited to, the following types of rules:

- Those pertaining to designated roads, posted speed limits, operating hours, quiet hours, fees, zebra mussel
 decontamination, pack-it-in/pack-it-out litter management, human waste management, and prohibitions
 against collection and defacing/damaging resources.
- Other area use rules and regulations found in the Superintendent's Compendium (NPS 2013a), the Code of Federal Regulations (CFR), and any other statute, document, policy, or plan that provides for the use and regulation of national park system units.

Under all alternatives, the Glen Canyon superintendent may take action as warranted under 36 CFR 1.5 to impose public use limits, place limits or restrictions on activities, or close areas, if the action is necessary for the maintenance of public health and safety, the protection of environmental or scenic values, the protection of natural or cultural resources, the furtherance of scientific research, the implementation of management responsibilities, the equitable allocation and use of facilities, or the avoidance of conflict between visitor use activities. These public use limits or closures are compiled annually in a Superintendent's Compendium.

ADMINISTRATIVE USES AND OTHER AUTHORIZED USES

Administrative uses at Glen Canyon would continue, including use by government officials. NPS off-road use outside of public access areas or NPS operation areas is infrequent. Other users such as lease holders, permit holders, or any other individual with authority from NPS to operate at Glen Canyon may continue these uses.

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.

DESIGNATION OF ROADS OPEN TO OHV AND STREET-LEGAL ATV USE

Alternatives B, C, D, and E identify GMP roads as either open or closed to on-road OHV and street-legal ATV use. OHVs and street-legal ATVs are prohibited on any GMP road identified as closed under the given alternative regardless of local county ordinances or state law. To understand which GMP roads are open for OHV and street-legal ATV use, see figures 5, 6, 8, and 9, later in this chapter. Generally, state OHV equipment and vehicle requirements apply to OHV and street-legal ATV use on paved and unpaved GMP roads (see the "Motor Vehicle Operator and Equipment Requirements" section later in this chapter).

All designated areas for off-road use, including proposed ORV routes under alternatives A, C, and E, and GMP roads open to OHV and street-legal ATV use would be designated and posted with appropriate signs that include use rules and regulations.

Roads in Glen Canyon would be designated and posted with road numbers. Signs would indicate the status of a road segment as open or closed to OHV and street-legal ATV use and signs would delineate the designated travel routes. Signs indicating that off-road use is prohibited would remain in place or would be posted as needed.

COMMUNICATIONS STRATEGY

A noteworthy problem identified during scoping was the lack of clear guidance regarding regulations governing recreational off-road use and on-road OHV and street-legal ATV use in Glen Canyon. 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 the following features:

- The Glen Canyon website would provide information about the ORV Management Plan. The site would include detailed information regarding the authorized activities or prohibited use implemented under the selected alternative.
- Glen Canyon would produce an informational brochure describing the ORV Management Plan. The brochure would be provided to the public.
- NPS interpretive and law enforcement staff would be informed and equipped to answer visitor questions and concerns regarding the ORV Management Plan.
- NPS would develop partnerships with Tread Lightly!, off-roading groups, and other appropriate entities in the community to improve communications, distribute information, and develop community awareness regarding on- and off-road ATV and OHV use and the stewardship of Glen Canyon's resources and values.

MOTOR VEHICLE OPERATOR AND EQUIPMENT REQUIREMENTS

All motor vehicle use must comply with state motor vehicle and operator requirements. Operators of conventional motor vehicles, OHVs, and street-legal ATVs are responsible for complying with all applicable Utah and Arizona statutes and regulations pertaining to the lawful operation of motor vehicles in Glen Canyon.

Table 1 lists OHV^{2, 3} operator (see clarification of ORV and OHV in chapter 1) and vehicle requirements for Arizona and Utah. These requirements are subject to change and may not be inclusive of all requirements.

TABLE 1: OFF-HIGHWAY VEHICLE OPERATOR AND EQUIPMENT REQUIREMENTS (2011) FOR UTAH AND ARIZONA

REQUIREMENT	Uтан	Arizona
Registration/ decal	All OHVs must be registered.	OHV decal required (see exceptions).
Age restrictions	certificate. Operators age 16 and older must have a valid driver's license or education certificate.	
	All children under the age of 18 must be under the direct supervision of an adult 18 years or older. Other requirements apply.	
Helmets	Operators and passengers under 18 years of age must have a helmet with a Department of Transportation (DOT)–approved safety rating.	Operators and passengers under 18 years of age must have a helmet with a DOT-approved safety rating.
Brakes	Brakes must be sufficient to stop and hold the machine.	Brakes must be sufficient to stop and hold the machine.
Headlights and taillights	A headlight and taillight are required when the vehicle is being operated between sunset and sunrise.	Lighted head and taillights are required if the vehicle is operated between one half-hour after sunset and one half-hour before sunrise.
		Brake light and at least one red rear reflector are required if the taillight does not reflect.
Flags	Flags are required in certain situations.* See regulations.	Flags are required in certain areas. See regulations.
Mufflers / spark arresters	Both a muffler and a spark arrester are required.	A muffler or noise dissipative device that prevents sound above 96 decibels is required.
		A U.S. Department of Agriculture–approved spark arrester is required.
Eye protection		Eye protection is required for operators of vehicles not equipped with windshields.
License plate		The license plate is required to be securely fastened to the rear of the OHV and clearly visible.
Seat and footrest		The vehicle must have a seat and footrest for the operator as well as for passengers if the vehicle is designed to carry passengers.
Mirrors		A rearview mirror is required.

^{*}Required for Lone Rock Beach Play Area under alternatives C and E.

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² Utah definition of OHV is any snowmobile, all-terrain Type I vehicle, all-terrain Type II vehicle, or motorcycle (Utah State Parks and Recreation n.d.)

³ Arizona definition of OHV is any vehicle operated on unimproved roads, trails and approved use areas not suitable for conventional two-wheel-drive vehicular travel. Examples include ATVs, trail motorcycles and dirt bikes. It does not apply to pickup trucks, SUVs, cars, and other recreational vehicles (RVs) (Arizona n.d.).

Under Utah state law, no one under the age of 8 is allowed to operate any OHV on public lands, roads, or trails. Operators ages 8 through 15 may drive an OHV provided that they possess an education certificate issued by Utah State Parks and Recreation or the equivalent from their home state. Resident operators aged 16 years or older may operate an OHV if they possess either a valid driver's license or an approved OHV education certificate. Education certificates are issued to anyone aged 8 years or older who completes the Utah State Parks and Recreation's "Know Before You GO!" OHV education course.

CLOSING UNDESIGNATED OFF-ROAD VEHICLE ROUTES AND RESTORING THEM TO NATURAL CONDITIONS

Under all action alternatives, NPS would close areas not designated for off-road use. NPS may use a number of different techniques to close and restore areas where unauthorized off-road use has occurred. These techniques include using signs, boulders, or other physical barriers and reestablishing native vegetation in these areas where appropriate.

MEASURES TO MONITOR, AVOID, MINIMIZE, OR MITIGATE OFF-ROAD VEHICLE IMPACTS UNDER ALTERNATIVES C, D, AND E

NPS developed the following management and mitigation strategies to address the impacts that may occur from the implementation of alternatives C, D, and E, which would allow off-road use as proposed in this plan/DEIS. 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.

The IDT developed a preliminary set of indicators (table 2) for each resource or value analyzed in this plan/DEIS. The indicators were selected by consulting scientific literature, conducting research, and applying guidance from management documents and NPS policies, including Executive Order 11644.

MONITORING AND MITIGATION

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 techniques would include staff observations and documentation of potential indicators described above. Some 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 may be monitored periodically by aerial photography. Glen Canyon staff would regularly monitor the number of motor vehicle accidents, vandalism, and other compliance issues resulting from off-road use and on-road OHV and street-legal ATV use.

TABLE 2: POTENTIAL INDICATORS FOR MONITORING AND MANAGEMENT ACTIONS

RESOURCE OR VALUE					
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.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; restoration of native plants; and closures.		
Vegetation (including threatened and endangered vegetation)	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.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; restoration of native plants; closures; and additional restrictions on vehicle type or other alterations to use.		
Safety	Motor vehicle accidents / personal injury	These incidents can indicate unsafe operator behavior and/or unsafe operating conditions or poor site design.	Improved signs and communication/education with partners and users; traffic requirements such as speed limit changes; and additional closures.		
Recreation Resources and Visitor Experience	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.	Improved signs and communication/education with partners and users and enhanced NPS presence; and closures.		
	Conflict	Conflict indicates crowding, inappropriate forms of use or user behavior, degraded conditions, impacts on soundscapes, or similar issues.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; and 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.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; restoration of native plants; and closures.		
	Social routes	The creation of social routes indicates inappropriate user behavior, poor site design, ineffective enforcement, and degradation of resources.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; restoration of native plants; and 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.		

RESOURCE OR VALUE	Potential Indicator(s)	WHAT DOES IT POTENTIALLY INDICATE / WHAT IS THE CAUSE FOR CONCERN?	POTENTIAL MANAGEMENT ACTIONS	
Cultural Resources	Evidence of site disturbance, vandalism / evidence of visitation to areas near ORV routes and areas where off-road use would be discontinued	Archeological resources are at risk due to inappropriate user behavior, poor site selection, or intentional disturbance of archeological sites.	Monitoring efforts at National Register-eligible sites; reduction of use during particular times of the year and/or at specific locations based on surface conditions; relocation of road segments that are threatening or causing resource damages; improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; closures; and data recovery. Additional site-specific treatments could include repairs, rehabilitation, or other preservation treatments to historic fabric to stabilize resources that have been damaged or are threatened by damage; and revegetation and drainage control to stabilize the resource-supporting sediment matrix that is damaged or threatened by damage.	
Paleontological Resources	Evidence of site disturbance, vandalism / evidence of visitation to areas near ORV routes and areas where off-road use would be discontinued	Paleontological resources are at risk due to inappropriate user behavior, poor site selection, or intentional disturbance of paleontological sites.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; and inventories, monitoring, and either closing the shoreline and/or removing the artifacts if they are uncovered, depending on the fossil or the type of paleontological site resource.	
Invasive Plants	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.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence, restoration of native plants; closures; and additional restrictions on vehicle type or other alterations to use.	
Special-status Species	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 monitoring plans for species that survey data suggest may be affected; use education, physical barriers, enhanced NPS presence, or closures. Closure or seasonal closure for lambing areas for Desert Bighorn Sheep at Ferry Swale.	
Compliance	Number of incidents	Poor compliance may be due to poor site design, selection, monitoring, and/or enforcement.	Improved signs and communication/education with partners and users; physical barriers; enhanced NPS presence; and closures.	

Monitoring serves three critical functions. First, monitoring allows Glen Canyon managers to understand whether conditions are stable or changing, what the trends of any change may be, and whether conditions are approaching or exceeding management standards. Second, monitoring allows Glen Canyon managers to assess the effectiveness of current management actions. Third, monitoring provides the data necessary for managers to make informed judgments and take defensible management actions.

Off and on-road vehicle management actions would be implemented if monitoring indicates that off-road use or on-road use is impacting resources, or that trends are negative and resources are at risk. The decision to implement any management action would 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 NPS. The management actions that could be employed to reduce, minimize, or mitigate impacts are described in table 2. The management actions may be taken in any order and are not described by preference.

Archeological surveys were conducted to sample the study areas under discussion in this plan/DEIS. 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 will be stipulated as provisions of a programmatic memorandum of agreement. Consultation concerning the provisions to be incorporated into the programmatic memorandum of agreement is ongoing.

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.

ALTERNATIVES

The alternatives for managing off-road use and on-road OHV and street-legal ATV use at Glen Canyon are detailed below. Table 3 provides a comparison by alternative for each of the five components.

ALTERNATIVE A: NO ACTION

See figures 3 and 4.

The Department of the Interior regulations implementing National Environmental Policy Act (NEPA) state that there are two interpretations of the term "no-action." First, "no-action" may mean "no change" from a current management direction or level of management intensity (e.g., if no ground-disturbance is currently underway, no action means no ground-disturbance). Second, "no-action" may mean "no project" in cases where a new project is proposed for implementation (43 CFR 46.30). The no-action alternative is developed for two purposes; a no-action alternative may represent the agency's past and current actions or inaction on an issue continued into the future and may serve to set a baseline of existing impacts continued into the future against which to compare the impacts of action alternatives. The no-action alternative presented here meets both of these purposes and represents "no change" from the current level of management direction and level of management intensity (figures 3 and 4).

TABLE 3: ALTERNATIVES OVERVIEW MATRIX

	ALTERNATIVE A: NO ACTION	ALTERNATIVE B: NO OFF-ROAD USE	ALTERNATIVE C: INCREASED MOTORIZED ACCESS	ALTERNATIVE D: DECREASED MOTORIZED ACCESS	ALTERNATIVE E: MIXED USE (NPS PREFERRED ALTERNATIVE)
Highlights	Off-road use would continue at 15 designated ORV areas. Street-legal ATVs would be authorized for use on GMP roads. No OHVs or street-legal ATVs would be allowed within the Orange Cliffs Special Management Unit (Orange Cliffs Unit). Approximately 53 miles of ORV routes would be designated.	No ORV areas would be designated. Street-legal ATVs would be authorized for use on designated GMP roads. No OHVs or street-legal ATVs would be allowed within the Orange Cliffs Unit. No ORV routes would be designated.	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. OHVs and street-legal ATVs would be authorized for use on all GMP roads to include the Orange Cliffs Unit. Fifteen miles of ORV routes would be designated.	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. No OHVs or street-legal ATVs would be authorized for use in Glen Canyon. No ORV routes would be designated.	Conventional motor vehicles and street-legal ATVs would be authorized for use at 16 areas only by permit, subject to water-level closures. A vehicle-free area would be designated at Lone Rock Beach. 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. Fifteen miles of ORV routes would be designated.
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.

	ALTERNATIVE A: NO ACTION	ALTERNATIVE B: NO OFF-ROAD USE	ALTERNATIVE C: INCREASED MOTORIZED ACCESS	ALTERNATIVE D: DECREASED MOTORIZED ACCESS	ALTERNATIVE E: MIXED USE (NPS PREFERRED ALTERNATIVE)
Accessible Shoreline Areas	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.	Paiute Farms) would be authorized for use by	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. Off-road use at Warm Creek would be discontinued.
GMP Roads	Street-legal ATVs would be authorized for use on GMP roads in Glen Canyon with the exception of the Orange Cliffs Unit. 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. 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. 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 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. Conventional motor vehicles are currently and would continue to be authorized on all GMP roads in Glen Canyon, including the Orange Cliffs Unit.
Ferry Swale	Conventional motor vehicles, OHVs, and street- legal ATVs would be authorized for use on approximately 53 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 15 miles of designated ORV routes by permit. Other existing routes would be restored to natural conditions.	Same as alternative B.	Same as alternative C.

In compliance with the settlement agreement reached in Friends of the Earth v. Department of Interior, Glen Canyon developed interim OHV management plans for the accessible shorelines, Lone Rock Beach, and Lone Rock Beach Play Area. The interim OHV plans will remain in effect until the completion of this plan/DEIS. The interim OHV plans serve as the no-action alternative for off-road use at the accessible shorelines and at Lone Rock Beach and Lone Rock Beach Play Area. These plans reflect long-standing off-road use in Glen Canyon and are consistent with recreation area planning documents over previous decades which repeatedly reaffirm and plan for off-road use, including the Proposed General Management Plan (1979), Lone Rock Beach Development Concept Plan and Environmental Assessment (1981), Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shorelines (1988), Uplake Development Concept Plan and Environmental Assessment (2006), and the 2008 Uplake Development Concept Plan and Environmental Assessment (2008). Therefore, the no-action alternative reflects off-road use at accessible shorelines and the Lone Rock Beach and Lone Rock Beach Play Area that Glen Canyon has planned for in previous NEPA documents. The no-action alternative for Ferry Swale represents current levels of use, which the NPS has allowed, in some cases by posting signage and information about access to that area.

Lone Rock Beach

Under the no-action alternative, current management practices would continue at Lone Rock Beach. Off-road driving at Lone Rock Beach occurred prior to the formal establishment of Glen Canyon in 1972. NPS designated Lone Rock Beach as an ORV area under the 1981 Lone Rock Beach Development Concept Plan and Environmental Assessment (Lone Rock DCP/EA) (NPS 1981).

Lone Rock Beach is currently open to conventional vehicles, OHVs, and street-legal ATVs. Motor vehicle operators must conform to all applicable state licensing, registration, and insurance requirements. The speed limit at Lone Rock Beach is 15 miles per hour (mph).

Lone Rock Beach and the play area (described below) are the only locations in Glen Canyon where the use of OHVs is allowed. Utah's OHV program, currently described in Utah Code Annotated (UCA) 41-22-1 et seq., authorizes riders as young as 8 years of age to participate in recreational OHV⁴ use, which includes the use of ATVs, dirt bikes, and similar vehicles. The program includes the following requirements:

- All OHV owners and out-of-state operators must purchase an annual OHV registration fee and display a registration decal.
- No person under 8 years of age is allowed to operate any OHV on public lands in Utah.
- Participants between the ages of 8 and 15 are required to complete an OHV education program sponsored by Utah State Parks.
- Participants 16 years or older may operate an OHV if they possess either a valid driver's license or an OHV education certificate.
- OHVs must have mufflers and approved spark arresters, brakes, and headlights and taillights if operated between sunset and sunrise.
- Individuals under 18 years of age must wear a DOT-approved helmet.

⁴ NPS uses the term off-road vehicle (ORV) rather than off-highway vehicle (OHV) in order to be consistent with NPS-specific laws and policies. This paragraph refers to state law.

- Currently, riders who comply with applicable Utah OHV requirements are allowed to operate their OHVs and street-legal ATVs on Lone Rock Beach and in the play area.
- All operators of motor vehicles must obey all traffic laws while on Lone Rock Beach. The current speed limit on Lone Rock Beach is 15 mph.

Lone Rock Beach Play Area

Located on a hill above and to the southwest of Lone Rock Beach is a fence-enclosed 180-acre area that is open to high-intensity motor vehicle use. This area was set aside under the same 1981 Lone Rock DCP/EA that analyzed use at Lone Rock Beach (NPS 1981).

The play area is the only location in Glen Canyon where conventional motor vehicles, OHVs, and street-legal ATVs are allowed to be operated in an unrestricted manner. This area is intended as a place where motor vehicle operators can challenge themselves, develop riding skills, operate at high speeds, perform jumps and hill climbs, and so on. All vehicle operators in the play area must conform to the same requirements as those for Lone Rock Beach. There is no speed limit at the play area.

Accessible Shoreline Areas

Twelve accessible shoreline areas at Glen Canyon are managed under the 1988 Environmental Assessment and Management/Development Concept Plans for Lake Powell's Accessible Shoreline (EA/DCP) (NPS 1988) and one (Hite Boat Ramp) is managed under the 2006 Uplake Development Concept Plan / Environmental Assessment (NPS 2006b). These designated ORV areas are intended to provide public access by conventional motor vehicle to the Lake Powell shoreline for the purposes of recreational use (fishing, swimming, boating, etc.). 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 behaviors are prohibited.

These 13 accessible shoreline areas would remain open only to conventional motorized vehicle use (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. Motor vehicle operators would be required to conform to all applicable state licensing, registration, and insurance requirements. The operation of any OHV or street-legal ATV would be prohibited in the 13 ORV areas.

As described in chapter 3, the designated ORV areas were established at a time when Lake Powell was at or near full pool. When the surface of Lake Powell is at these higher elevations, the designated ORV areas are bounded by natural topographical features, resulting in a confined space. Because the Lake Powell shoreline has fluctuated in recent years, more topography has been exposed at the ORV areas. In some instances the designated ORV area is no longer bounded by natural features. The result is that land beyond the designated ORV area has been exposed to off-road use. These laterally expanded areas would not be open, however, travel perpendicular to the water level would be allowed.

Currently, three ORV areas are temporarily closed through the Superintendent's Compendium: Bullfrog North and South, Crosby Canyon, and Warm Creek. These areas have been closed because low-water conditions have created access to acreage beyond the designated ORV area, but the areas could be reopened if future conditions allowed.

In addition, Paiute Farms and Nokai Canyon are shoreline areas that are currently being accessed by the public, but are not officially open under the 1988 Accessible Shorelines EA/DCP or the 2006 DCP/EA. The no-action alternative would discontinue use of these two areas and management actions taken to prevent access.

Travel on GMP Roads

Conventional motor vehicles would continue to be authorized for operation on all GMP roads (paved and unpaved) in Glen Canyon. In addition, street-legal ATVs would be authorized to operate on all GMP roads in Glen Canyon, including GMP roads in the Ferry Swale area, with the exception of the Orange Cliffs Special Management Unit, subject to the same restrictions and rules as conventional motor vehicles. All GMP roads in the Orange Cliffs Special Management Unit would be closed to OHV and street-legal ATV use. Roads open for conventional motor vehicle and street-legal ATV use are those roads designated in the 1979 Glen Canyon GMP (NPS 1979). The speed limit on unpaved GMP roads is currently 45 mph unless otherwise posted. Speed limit on paved GMP roads is 45 mph but varies between 35 and 65 mph on U.S. Highways and State Routes.

See Arizona Revised Statutes (ARS) 28-1171–1181, "Off-highway Vehicles." for the applicable Arizona motor vehicle and operator requirements. The Utah Statute is described above under "Lone Rock Beach." Additionally, in Utah, Chapter 41-22-30 Utah Annotated Codes governs the use of OHVs on roads, where:

- (2) A person may not operate and an owner may not give that person permission to operate an off-highway vehicle on any public land, trail, street, or highway of this state unless the person:
- (a) is under the direct supervision of a certified off-highway vehicle safety instructor during a scheduled safety training course;
- (b) (i) has in the person's possession the appropriate safety certificate issued or approved by the division; and
 - (ii) if under 18 years of age, is under the direct supervision of a person who is at least 18 years of age if operating on a public highway that is:
 - (A) open to motor vehicles; and
 - (B) not exclusively reserved for off-highway vehicle use; or
- (c) has in the person's immediate possession a valid motor vehicle operator's license, as provided in Title 53, Chapter 3, Uniform Driver License Act.

Direct supervision is defined as oversight at a distance of no more than 300 feet and within which visual contact is maintained and advice and assistance can be given and received.

Ferry Swale

Several GMP roads exist in the Arizona portion of Glen Canyon in an area known as Ferry Swale. These roads connect Glen Canyon to BLM property in the Vermilion Cliffs. Over the years, new routes extending from these GMP roads have been established by users. Some of these routes connect Glen Canyon to existing BLM routes and roads while others do not provide access. Currently there exists approximately 70 miles of unauthorized ORV visitor-created routes, of which approximately 53 miles of user-created routes would be designated and authorized for use by conventional motor vehicles, OHVs, and street-legal ATVs under the no-action alternative. GMP roads in Ferry Swale are addressed above in the section "Travel on GMP Roads."

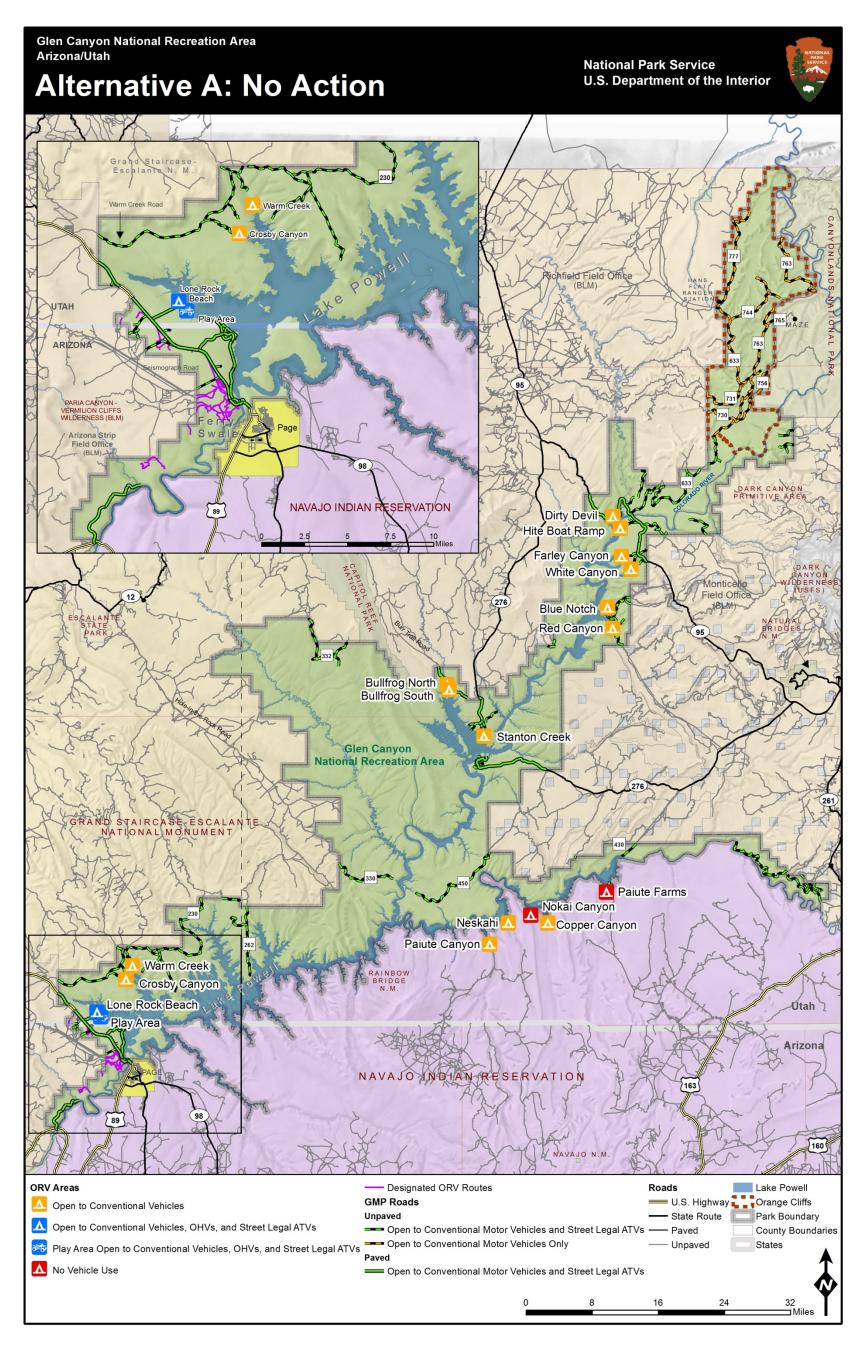


FIGURE 3: ALTERNATIVE A: NO ACTION

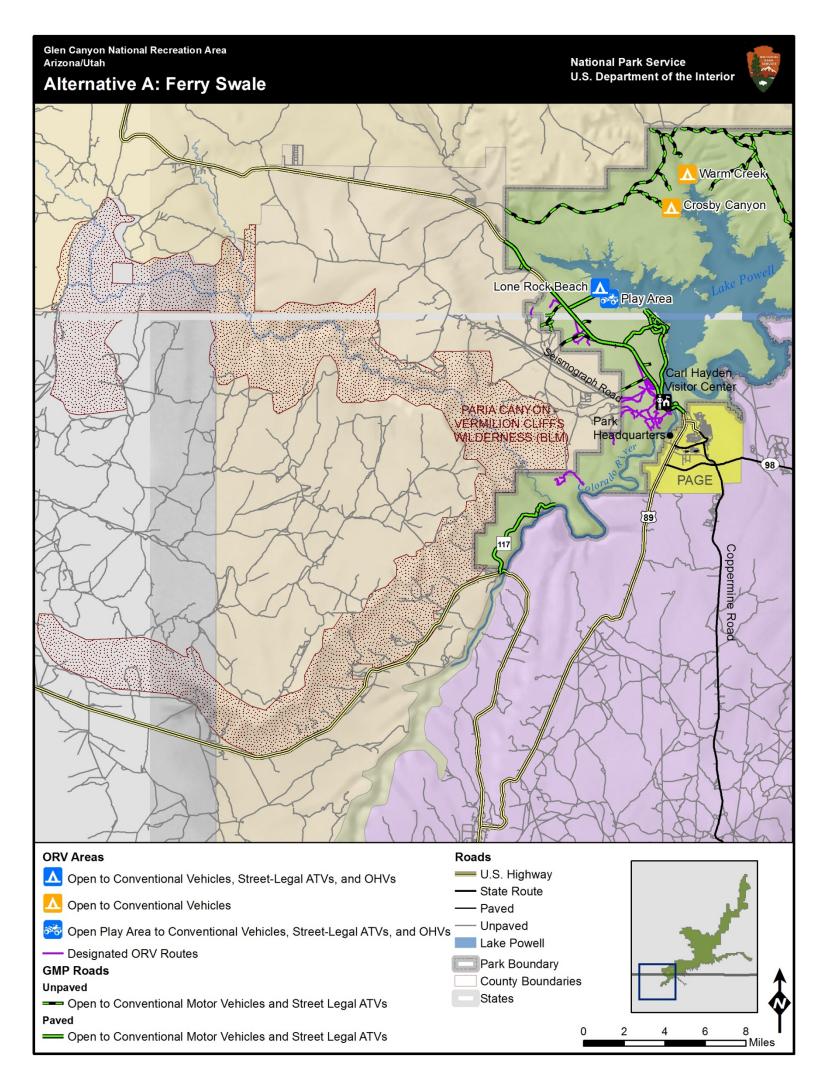


FIGURE 4: DESIGNATED ORV ROUTES IN FERRY SWALE: ALTERNATIVE A

ALTERNATIVE B: NO OFF-ROAD USE

PROJECT COMPONENTS UNDER ALTERNATIVE B

See figure 5.

Lone Rock Beach

Off-road use at Lone Rock Beach would be discontinued permanently to conventional motor vehicles, OHVs, and street-legal ATVs and the area restored to natural conditions.

Lone Rock Beach Play Area

Off-road use at the Lone Rock Beach Play Area would be discontinued permanently to conventional motor vehicles, OHVs and street-legal ATVs and the area restored to natural conditions.

Accessible Shoreline Areas

No areas would be designated for off-road use. Off-road use at 13 accessible shoreline areas, in addition to Paiute Farms and Nokai Canyon, would be permanently discontinued and the areas restored to natural conditions.

Travel on GMP Roads

Alternative B would be the same as alternative A. Conventional motor vehicles would continue to be authorized to operation on all GMP roads (paved and unpaved) in Glen Canyon. In addition, street-legal ATVs would be authorized to operate on all GMP roads (paved and unpaved) in Glen Canyon, subject to the same restrictions and rules as conventional motor vehicles. All GMP roads in the Orange Cliffs Special Management Unit would be closed to OHV and street-legal ATV use. The speed limit on unpaved GMP roads would be reduced to 25 mph or as posted. The speed limits on paved GMP roads would not change and would remain as currently posted.

Ferry Swale

No ORV routes would be designated and any existing user-created routes would be restored to natural conditions. Off-road use by any type of motor vehicle in the Ferry Swale area would be illegal. GMP roads in Ferry Swale are addressed above in the section "Travel on GMP Roads."

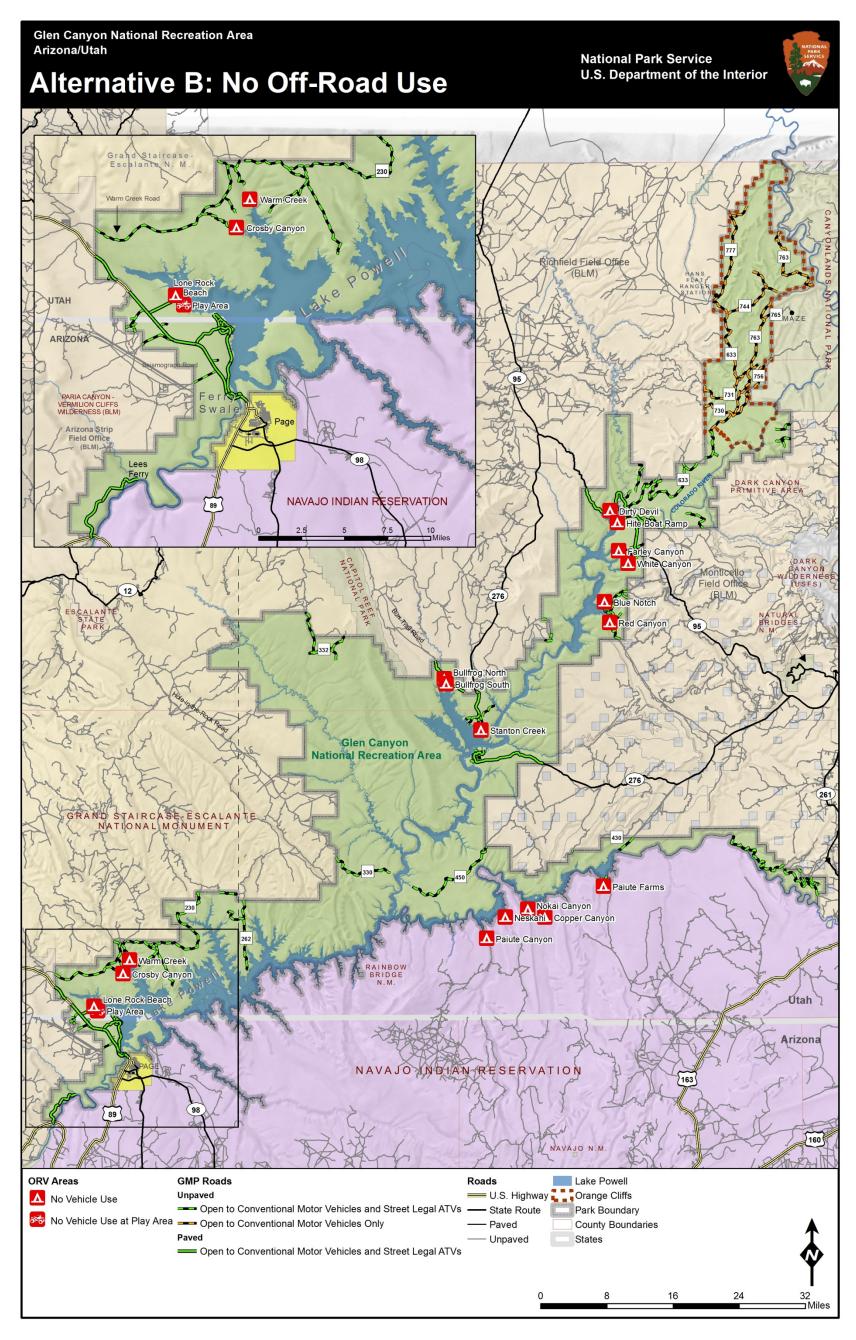


FIGURE 5: ALTERNATIVE B: NO OFF-ROAD USE