National Park Service
U.S. Department of the Interior

Superintendent's Compendium
Appendix A Determinations
Of Designations, Closures, Permit Requirements and Other Restrictions Imposed Under Discretionary Authority.

GLEN CANYON NATIONAL RECREATION AREA
And
RAINBOW BRIDGE NATIONAL MONUMENT

P.O. BOX 1507
Page, Arizona 86040

928-608-6200 phone
928-608-6208 fax

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Determination of needs for Restrictions, Conditions, Public Use Limits, and Closures

Title 36 Code of Federal Regulations

PART 1. GENERAL PROVISIONS

1.5 Closures and public use limits

(a)(1) Visiting hours, public use limits, closures

Unmanned Aircraft:

This pro-active prohibition is necessary to maintain public health and safety of park staff and visitors, to protect environmental and scenic values, protect natural and cultural resources and to avoid conflict among visitor use and staff activities.

Glen Canyon National Recreation Area has 588,855 acres of proposed wilderness in which the use of unmanned aircraft is incompatible per Section 6.4.3.3 of National Park Service Management Policies 2006 which prohibits visitor use of motorized equipment in eligible, study, proposed, recommended, and designated wilderness.

Section 1.5 of National Park Service Management Policies 2006 provides a that a new form of park use may be allowed within a park only after a determination has been made in the professional judgment of the Superintendent that it will not result in unacceptable impacts on park resources and values. The use of unmanned aircraft is new to Glen Canyon National Recreation Area and Rainbow Bridge National Monument. This new use has the potential to cause unacceptable impacts such as harming visitors, interfering with emergency operations, causing excessive noise, impacting view sheds and disturbing wildlife.

Several unacceptable incidents have been documented at other park units such as an unmanned aircraft disturbing a herd of bighorn sheep at Zion National Park in April of 2014. The unmanned aircraft caused the herd to scatter and separated several young sheep from the adults. At Grand Canyon National Park an operator lost control of an unmanned aircraft where a group of 40 visitors had gathered for the sunset. The visitors watched the unmanned aircraft flying loudly back and forth over the canyon until it crashed into the canyon in April of 2014. These are just a few examples of why less restrictive measures will not suffice and a prohibition has been placed in the compendium.

Conditions and Exceptions:

1. This closure determination and notice does not apply to:

(a) The use, authorized in writing prior to the date of the June 19, 2014 Policy Memorandum 14-15, of Model aircraft (as that term is used in Federal Aviation Administration (FAA) Advisory Circular 91-57 and section 336 of the FAA Reauthorization Act of 2012) for hobbyist and recreational use at locations and under conditions (i) established by the superintendent in the compendium; or (ii) issued under a special use permit. Continued activities under these existing authorities are allowed, but renewals and modifications of these compendium provisions or permits must be approved in writing by the Associate Director for Visitor and Resource Protection (ADVRP).

(b) Administrative use of unmanned aircraft as approved in writing by the ADVRP for such purposes as scientific study, search and rescue operations, fire operations and law enforcement. Administrative use includes the use of unmanned aircraft by (i) NPS personnel as operators or crew; (ii) cooperators such as government agencies and universities that conduct unmanned aircraft operations for the NPS pursuant to a written agreement; and (iii) other entities, including commercial entities, conducting unmanned aircraft operations for the NPS, provided such entities are in compliance with all applicable FAA and Department of the Interior requirements.

(c) Activities conducted under Scientific Research and Collecting Permit that specifically authorizes launching, landing, or operating an unmanned aircraft and is approved in writing by the ADVRP in consultation with the Associate Director for Natural Resource Stewardship and Science.

(d) Activities conducted under a special use permit that specifically authorizes launching, landing or operating an unmanned aircraft and is approved in writing by the ADVRP.

Boat Mooring:

Public docks and sewage pump out stations are provided for the temporary convenience of the public. In order for as many visitors as possible to have access to these facilities, time limits on use are necessary. Without time limits, boats would be left blocking public access to these facilities for extended periods of time, preventing timely launching and retrieval of boats and interfering with emergency operations.

Government docks, launch ramps, and facilities are for agency use in efficiently operating and maintaining public areas. Public access to these areas is not needed for public enjoyment and could interfere with efficient management. Vandalism and theft of government property could occur from allowing public access to these facilities.

The area beyond the courtesy dock at Rainbow Bridge is shallow, congested and restricted in turn around area. This area is used for emergency vessel mooring only and would present a safety hazard for the public.

Overnight Boat Mooring:

In order to establish a reasonable schedule for public use limits, the park has implemented restrictions on camping which includes overnight occupancy of a slip, mooring buoy, or specific location, to include a campsite in a campground, on a beach, or any other location. The time limit is consistent for all overnight park stays and is intended to protect environmental and scenic values, equitable allocation and use of resources and avoid visitor conflicts. Park facilities were not designed nor were they intended for long term visitor use.

Unoccupied Vessels:

This public use limitation is required in order to prevent the misuse of beach areas by leaving boats unattended for extended periods of time. Occupied and unattended vessels, especially large houseboats, inhibit the ability of the majority of visitors to gain access to the beach and load and unload in a timely manner. Unattended vessels may be set adrift by sudden storms and create a hazard for persons and boats in the immediate area.

All Motorized Vessels:

Allowing motorized watercraft to be operated up the Escalante Arm of Lake Powell to Coyote Creek will enable motorized visitors reasonable access to view Stevens Arch, a popular geological landmark and sightseeing attraction, as well as to hike nearby canyons - including Coyote Gulch. Areas upstream will subsequently maintain an atmosphere of quiet and solitude, qualities that backpackers and other backcountry hiker's desire while visiting the area. Similarly, fragile riparian areas upstream will be protected from exceeding physical and social carrying capacities due to easy access by motorized watercraft. Also, river water quality will be protected from fuel spills or other discharges and additional human waste accumulations.

Coyote Gulch is the most popular destination of backcountry hikers in the Escalante Canyons and most visitors to the canyon hike all the way to the Escalante River confluence. Allowing motorized watercraft traffic upstream to the Coyote confluence presents a reasonable accommodation of both categories of visitors to the vicinity.

Clay Hills is the traditional termination and takeout retrieval point for rafting parties on the San Juan River. Designating this point for prohibited upstream traffic will preclude recreational use conflicts.

The state of Utah has established the "last active rapid" on The Colorado River as the location where rafting parties are no longer required to wear Personal Flotation Devices at all times (Utah R651-215-12). Upstream-motorized running of rapids is an advanced boating skill that most visitors to the recreation area do not possess. Restricting motorized boating parties to areas below these rapids prevents visitors from endangering themselves to the unrecognized dangers inherent in running up rapids, and in doing so violating State PFD regulations should they not be wearing their life jackets. Boaters attempting to run upstream in these rapids pose a high risk to themselves and to downstream traffic.

In the recent past Imperial Rapid has been the last active rapid on the Colorado River. Extreme fluctuation of the lake levels of Lake Powell could result in other "rapids" being present. For the sake of consistency this rapid will be considered the "last active rapid."

Imperial Rapid has also been used by the commercial rafting companies as a location where they meet river trips with motorized vessels launched at Hite to tow the rafts across the flat water sections to Hite. Restricting motorized travel below this point would alter this traditional use.

For safety purposes, when measurable downstream current is encountered, further upstream motorized travel is prohibited on the Dirty Devil River.

Vessel Operation:

The purpose for this restriction is for public safety and public access.

River Travel Upstream of Lees Ferry:

The area above the closure signs is closed due to safety and security reasons: The proximity to water releases from Glen Canyon Dam, and the possibility of items being dropped from the bridge. Authorized concession, administrative, and scientific work is permitted in the closure. Additionally this area is closed by 33 CFR Part 165 National Security Closure.

Horsepower Limitations Upstream of Lees Ferry:

At 35,000 cfs and above, upstream travel becomes hazardous to lesser-powered vessels. Requiring a minimum of 25 horse power motors are meant to prevent any underpowered vessels from being washed downstream into Grand Canyon during higher water flows.

Fishing:

This order is intended to prevent conflicts between users that might otherwise occur in these high congestion areas and also as a safety measure to prevent persons from being injured when fishing lines are cast or to prevent fishing lines from becoming entangled in propellers or other objects in busy marina areas.

The order prohibiting fishing in the area of the Charles H. Spencer river boat is designed to protect this historic structure from damage or other impacts which may occur should persons climb on or anchor vessels to the structure in order to fish. It also preserves the integrity of the structure by preventing entanglement of fishing line around any part of it.

The Rainbow Bridge GMP has established this activity to be inappropriate within the Monument boundaries.

Vehicle, Vessel and Aircraft Major Maintenance and Repairs:

These restrictions are needed to enhance the water quality of Lake Powell and to protect lands, waters, and resources of Glen Canyon NRA from possible contamination by hazardous materials, industrial wastes, and/or other contaminants that are generated, or inadvertently spilled, during certain operations, use, maintenance, repair, or commercial cleaning operations. These restrictions apply to batteries, filters, used oil, solvents, cleaners, soaps, additives, other chemicals, etc., that are used within Glen Canyon NRA. This closure provides for the management of such work without compromise to paramount NPS stewardship responsibilities.

Vehicle, Vessel and Aircraft Minor Maintenance and Repairs:

These restrictions are needed to enhance the water quality of Lake Powell and to protect lands, waters, and resources of Glen Canyon NRA from possible contamination by hazardous materials, industrial wastes, and/or other contaminants that are generated, or inadvertently spilled, during certain operations, use, maintenance, repair, or commercial cleaning operations. These restrictions apply to batteries, filters, used oil, solvents, cleaners, soaps, additives, other chemicals, etc., that are used within Glen Canyon NRA. This closure provides for the management of such work without compromise to paramount NPS stewardship responsibilities.

Waste and Contaminant Disposal Activities:

These restrictions are needed to enhance the water quality of Lake Powell and to protect lands, waters, and resources of Glen Canyon NRA from possible contamination by hazardous materials, industrial wastes, and/or other contaminants that are generated, or inadvertently spilled, during certain operations, use, maintenance, repair, or commercial cleaning operations. These restrictions apply to batteries, filters, used oil, solvents, cleaners, soaps, additives, other chemicals, etc., that are used within Glen Canyon NRA. This closure provides for the management of such work without compromise to paramount NPS stewardship responsibilities.

Emergency Repairs to Vessels, Motor Vehicles and Aircraft

These restrictions are needed to enhance the water quality of Lake Powell and to protect lands, waters, and resources of Glen Canyon NRA from possible contamination by hazardous materials, industrial wastes, and/or other contaminants that are generated, or inadvertently spilled, during certain operations, use, maintenance, repair, or commercial cleaning operations. These restrictions apply to batteries, filters, used oil, solvents, cleaners, soaps, additives, other chemicals, etc., that are used within Glen Canyon NRA. This closure provides for the management of such work without compromise to paramount NPS stewardship responsibilities.

Waste Oil and Spent Lead-Acid Batteries:

These restrictions are needed to enhance the water quality of Lake Powell and to protect lands, waters, and resources of Glen Canyon NRA from possible contamination by hazardous materials, industrial wastes, and/or other

contaminants that are generated, or inadvertently spilled, during certain operations, use, maintenance, repair, or commercial cleaning operations. These restrictions apply to batteries, filters, used oil, solvents, cleaners, soaps, additives, other chemicals, etc., that are used within Glen Canyon NRA. This closure provides for the management of such work without compromise to paramount NPS stewardship responsibilities.

Scavenging:

While the NPS lauds and encourages individual recycling efforts, rummaging through trash containers for the purpose of salvaging any materials deemed useful, either for personal use or monetary reward, constitutes economic gain and is not a legitimate recreational activity for which the area was established. Further, such efforts result in the scattering of trash, disruption to other visitors, and unsanitary conditions.

Airstrips:

The Wahweap and Halls Crossing airstrips have been relocated to areas outside Glen Canyon. Gordon Flats was closed for environmental concerns and is unsafe for the landing of aircraft.

Climbing:

The prohibition against climbing, rappelling or swinging from natural and man-made structures is intended to protect public safety and preserve the integrity of the natural feature and/or structures against damage.

The prohibition of climbing within 1/4 mile of falcon, condor, or eagle aeries is intended to preclude interference with the mating, nesting, brood rearing, and fledgling activities of these sensitive species and to ensure that known territories remain undisturbed for future use by these species and remain unimpaired for scientific study or monitoring.

The requirement that all gear, including pitons, chocks, or other climbing aids be removed and the prohibition against use of glues, chock, or other aids, is intended to preserve the natural character of cliff faces and preclude visual disturbances which may occur should devices or evidence be left in place.

Rainbow Bridge NM General Management Plan (GMP) establishes this activity as inappropriate within the Monument and is intended for public safety and preservation of the integrity of Rainbow Bridge against wear, damage and vandalism.

Special climbing requirements in the Orange Cliffs Unit are in place to remain consistent with Canyonlands National Park and to limit all climbing to existing routes and for new routes not requiring placement of fixed anchors.

Cliff Jumping/Cliff Diving:

This restriction is necessary for the maintenance of public health and safety.

Bungee Cord Jumping:

The NPS has determined that bungee cord jumping is an inappropriate activity within Glen Canyon National Recreation Area for reasons of safety (for both participants and spectators), interference with traffic patterns or other visitor use activities, and additional workload involved with handling added traffic, crowd control responsibilities, and emergency services. Such activities are also deemed inappropriate off natural features that may be subject to undue impacts of the activity and associated spectator traffic.

Weapons:

For purposes of public safety the listed areas are closed to hunting, trapping and shooting (Superseded in part by 36

CFR 2.4). Water balloons and other objects fired through the air that are capable of breaking windows, damaging other property, and directly injuring Glen Canyon NRA visitors are considered weapons.

Use of Segways:

The use of Segways, or similar devices, at Glen Canyon NRA allows mobility impaired persons to use a powered driven mobility device for locomotion. It is granted the same consideration as a motorized wheelchair. Glen Canyon NRA allows the use of Segways, or other similar devices and motorized wheelchairs for persons with disabilities only.

Park Areas:

The Bullfrog North Beach accessible shoreline area is located in close proximity to the Bullfrog Marina. Currently, this entire shoreline is closed to vehicles through a locked gate across the access road with appropriate signage. This closure is to prevent vehicles from traveling outside the defined camping area (at current water levels, there are no natural topographic features that define the area and prevent further off-road travel).

The Bullfrog South Beach accessible shoreline area is located in close proximity to the Bullfrog Marina. Currently, this entire shoreline is closed to vehicles through a locked gate across the access road with appropriate signage. This closure is to prevent vehicles from traveling outside the defined camping area (at current water levels, there are no natural topographic features that define the area and prevent further off-road travel).

Currently, the Crosby Canyon area is closed to prevent visitors from driving vehicles outside the designated camping area. The closure is effectuated through signage and a physical barrier at the road's terminus at the lake's high water mark. At current lake levels, there are no natural topographic features that define the area and prevent further off-road travel, necessitation the closure. When lake levels allow, Crosby Canyon is accessed by primitive, unmaintained 4-wheel drive road.

Access to the Warm Creek Shorelines area is through a primitive 4-wheel drive road located in a canyon with flash flood dangers. In recent years, the road has washed out and is impassable to most vehicles (including OHV's). As a result, visitor use of this area is extremely low.

Until a record of decision is issued from the ORV Environmental Impact Statement (EIS), the park is closing all ATV traffic within the Orange Cliffs Unit. This will rectify the current long standing practice of managing this unit as a no ATV use area. The entire Glen Canyon National Recreation Area is being looked at in the ORV -EIS and analyzing all roads for the impacts of vehicle traffic.

Day Use Areas:

The listed areas are closed to the public from sunset to sunrise for the maintenance of public safety. The areas are posted Day Use Only.

The Lone Rock Beach Off-Road Vehicle Area is closed to the public from 10:00 p.m. to 6:00 a.m. for the maintenance of public safety. The areas are posted Day Use Only.

The Lonely Dell Ranch Orchard is closed to the public from sunset to sunrise for public safety. This area is posted Day Use Only.

Public Use Limits:

A Programmatic Environmental Assessment for Special Recreation Permits for Organized Use along Hole-in-the – Rock Road (HITR) was prepared by the Bureau of Land Management and the National Park Service to consider increasing the maximum group size (which was 100) for noncommercial educational and heritage focused groups.

The HITR Environmental Assessment concluded in the National Park Service signing a Finding of No Significance Impact and Determination of No Impairment on April 6, 2012.

The group limit that determines whether or not a permit is required (anything over 12 people) is consistent with the park's backcountry camping limits and special use permit stipulations for backcountry use.

(a)(2) Designated areas for specific use or activity or conditions

See specific determinations in this document regarding designated areas and conditions for engaging in certain activities.

Launch Ramps:

During the winter months specific launch ramps will be closed to the launching of motorized vessels to help concentrate aquatic invasive species containment and education efforts at the primary launch ramps.

Possession of Firearms:

On February 22, 2010, a new federal law allows people who can legally possess firearms under federal and state law in the state in which the national park unit is located to possess firearms in that park. However, federal law continues to prohibit possession of firearms in designated "federal facilities". Under Title 18 U.S.C. §930(g)(1), a federal facility must meet all three of the following criteria:

1 – **Be a "building or part thereof."** Common definitions of this term are: "[a] structure with walls and a roof, esp. a permanent structure," (Black's Law Dictionary, 8th ed., 2004); and "a thing built... a constructed edifice designed to stand more or less permanently, covering a space of land, [usually] covered by a roof and more or less completely enclosed by walls," (Webster's Third New International Dictionary of the English Language, Unabridged, 1981). According to one court, the word "building" does not include an outside fenced employee parking lot.

2 – **The building or part thereof is owned or leased by the federal government.**

3 – **Federal employees are regularly present for the purpose of performing their official duties.** While the statute does not define "regularly" the National Park Service generally views this as the scheduled, daily presence of NPS employees performing official duties.

The park has identified federal facilities that meet the above criteria. All buildings are conspicuously posted with signs indicating no firearms allowed inside.

1.6(f) Compilation of activities requiring a permit

No determination necessary.

PART 2. RESOURCE PROTECTION, PUBLIC USE AND RECREATION

2.1(a)(4) Designated areas for collection of dead wood on the ground for firewood

In accordance with Section 2.13(a)(1), fires are allowed within all areas designated as Recreation and Resource Utilization or Natural zones by the GMP except for the Canyons of the Escalante area and in the Orange Cliffs Management Area. Accordingly, this wood collecting designation is established in 2.1(a)(4) as it is determined that wood collecting will not have an adverse resource impact, particularly when drift wood is collected and burned, which is beneficial to lake operations in regards to safety.

2.1(a)(5) Designated areas and conditions for walking on, climbing, entering, ascending, descending, or traversing an archeological or cultural resource, monument, or statue

Both the National Historic Preservation Act and the Archaeological Resources Protection Act mandate that Federal agencies only disclose site locations if no harm, theft, or destruction of cultural resources will result from disclosure. To comply with these mandates, the cultural resources disclosure policy of the Glen Canyon National Recreation Area Archeological Resource Protection Plan establishes a classification of cultural resource sites. Site classification is based on the ability of the resource to withstand visitor impacts due to the nature of the sites themselves, active physical protection, indirect protective mechanisms, and visitor demands to access the sites.

The archeological and cultural resources listed belong to a class of sites possessing characteristics that allow for heavier use without unacceptable damage. Their locational information may be volunteered by Glen Canyon National Recreation Area employees and are open to the public for entering. There are no archeological or cultural resources designated for walking or climbing upon.

2.1(b) Designated trails

Pedestrian traffic within archeological and cultural resources is restricted to the constructed trails due to public safety concerns and site sensitivity. Deviating off the designated trails for any reason is prohibited.

2.1(c)(1) Designated fruits, nuts, berries, and unoccupied seashells to harvest by hand and collection restrictions

Collection of pinon nuts strictly for personal consumption does not significantly impact the resource.

Collection of fruit at the Lonely Dell Ranch Orchard strictly for personal consumption does not significantly impact the resource and assists with the maintenance of the orchard and fruit trees.

2.1 (c)(2) Established quantity of natural products

The amount of pinon nuts that are authorized for personal consumption, shall not exceed 1 pound per person per day. This is considered a reasonable amount for one person to consume in a day.

The amount of fruit that are authorized for personal consumption at the Lonely Dell Ranch Orchard is 5 gallons per person per day. This allows for the continued historical practice of canning and baking with fruit from the orchard.

2.2 (a)(2) Wildlife protection.
Osprey are listed as a special status species in Arizona and Utah. Recreational activities such as boating, fishing, picnicking and hiking in close proximity to the nest have been shown to agitate nesting osprey and could interfere with the birds breeding successfully.

2.2(d) Established conditions and procedures for transporting lawfully taken wildlife through park areas

No determination necessary.

2.2(e) Designated areas for wildlife viewing with artificial light

This order is intended to provide a measure of protection to wildlife species which may be subject to unlawful taking during other than lawful hunting hours or by persons who are otherwise engaged in unlawful wildlife activities. It is also intended to assure that the natural habits or activities of animals are not adversely affected while being artificially illuminated or that animals be unduly harassed which may affect feeding, resting, or mating.

2.3(d)(2) Fresh waters designated as open to bait fishing with live or dead minnows or other bait fish,

amphibians, nonpreserved fish eggs or fish roe

There is a biological need to increase harvest of striped bass in Lake Powell. Striped bass successfully reproduce in Lake Powell, and exhibit cyclic population expansion beyond the capability of forage species to sustain striped bass population in a healthy condition. The health of the striped bass population is dependent upon matching the striped bass abundance with available forage food, which is primarily threadfin shad. Threadfin shad have periodic or cyclic population dynamics in which every two or three years the population declines to minimal abundance, then a year or two of adequate to good abundance. When striped bass numbers greatly exceed available forage, their growth becomes stunted and emaciated to the point that die-offs occur. Anglers lose interest in harvesting striped bass when emaciated fish condition precludes obtaining an edible filet portion. It is preferable to harvest as many striped bass as possible during years when the stripers are both abundant and in good condition. Angler harvest is the only method of control of striped bass abundance, and allowing fishing with anchovies as bait and broadcast attraction (chumming) with anchovies has been found to be an effective method in concentrating and catching striped bass. Use of dead anchovies for bait in Lake Powell conforms to State fishing regulations. The use of dead anchovies will not affect the sport fish, as there are catch and possession limits. To encourage striped bass harvest, there are no catch or possession limits for this species.

The use of dead anchovies as bait for fishing will be allowed in Lake Powell for attracting and taking striped bass. All other methods and materials of chumming remain prohibited. Angler harvest is the only viable method currently available for reducing striped bass numbers and allowing these actions are management tools for maintaining a healthy bass community.

The waters of Lake Powell are designated for the use of live waterdogs as bait for fishing. Scientific data indicate that this established bait would not adversely impact populations of native fish.

2.3(d)(8) Designated areas open for fishing from motor road bridges and public boat docks

By designating the Fishing Dock at the Wahweap Marina and the Antelope Point Marina as the only areas open to fishing from a public dock, it reduces the congestion and possible safety concerns in high traffic areas.

2.4 (a)(2)(i) Carrying, using, or possessing weapons at designated locations and times

Fishing regulations promulgated by the Utah Department of Wildlife Resources and the Arizona Game & Fish Department sanction bow & spear fishing. This section further defines and restricts a broad category of activities allowed by state law.

2.10(a) Camping: conditions and permits

Establishing quiet hours is necessary and appropriate for campgrounds to avoid user conflict.

In order to establish a reasonable schedule for public use limits, the park has implemented restrictions on camping which includes overnight occupancy of a slip, mooring buoy, or specific location, to include a campsite in a campground, on a beach, or any other location. The time limit is consistent for all overnight park stays and is intended to protect environmental and scenic values, equitable allocation and use of resources and avoid visitor conflicts. Park facilities were not designed nor were they intended for long term visitor use.

Limiting camping to specific areas is necessary for the maintenance of public health and safety, protection of the environmental and scenic values, protection of natural resources, implementation of management responsibilities, and equitable use of facilities and avoidance of conflict among visitor use activities.

Most paved roads in the area are major ingress/egress routes to major destinations within Glen Canyon NRA and experience higher volumes of traffic which are traveling at relatively high speeds. These restrictions are intended to provide an additional safety zone away from high-speed traffic and to maintain a visual corridor for motorists.

Camping restrictions in developed areas is intended to control use patterns in these busy areas where facilities are provided for the purpose of camping.

The Colorado River below Glen Canyon Dam experiences high visitation and fluctuating water levels. Campers are restricted to established campsites for visitor safety purposes and for the prevention of additional resource impacts. The San Juan River is managed under a cooperative agreement between the NPS and BLM.

Unrestricted camping would cause carrying capacity levels to be exceeded, resulting in additional resource impacts and intrusions on legitimate river users.

During the period April 1 through June 15, peregrine falcons are nesting at Panorama Point in the Orange Cliffs Management Area. These are a protected species and require special management consideration.

Camping time limits are intended to prevent domination of a campsite or the area by a relative few and to more equitably allocate use of the area. Time limits are also intended as a means to prevent an accumulation of impacts to backcountry campsites. Such impacts include, but are not limited to, improvements to campsites, accumulation of body wastes and litter, expansion of campsite areas and trails, and similar resource impacts. The rule also applies to those camped in developed campgrounds where the number of sites is limited. Finally, this order is intended to prevent "homesteading" in the area by persons whose primary interest is long-term residency.

The maximum group size limit of 12 persons in backcountry areas is established to minimize impacts to the fragile desert environment and on other backcountry users. Large groups cause more impacts to natural resources resulting in a concentration of human waste and trampling of soil and vegetation, especially in campsites. Large groups are also more obtrusive to other visitors and complaints are received each year about oversize groups from individuals or smaller groups who are seeking the quiet and solitude of a wilderness experience. Although not absolutely uniform to all agencies, 12 is a common industry standard and is applicable in the interest of resource protection and consideration for other visitors. The group size limit is not applicable to those persons camping along the Lake Powell shoreline because most of these groups camp aboard vessels or below the high water mark where resource impacts are minimal or easily managed.

The maximum size limit in established campgrounds of 8 per single campsite and 30 per group campsite is established to minimize impacts to a fragile desert environment. These size limits are a common industry standard and are applicable in the interest of resource protection and to minimize obtrusiveness to other visitors. The maximum number of vehicles is established to minimize impacts to natural resources that would otherwise result in soil erosion and trampling of vegetation, and to minimize obtrusiveness to other visitors.

Requiring permits and restricting camping in the Orange Cliffs Unit to designated campsites and establishing a maximum capacity will reduce the impact on ecologically fragile areas. Continuity of regulations between Glen Canyon NRA and Canyonlands NP would ensure that campers would continue using low impact methods when crossing Glen Canyon NRA - Canyonlands NP boundaries.

Requiring permits in the Escalante District will reduce the impact on ecologically fragile areas.

Establishing special conditions is necessary for the maintenance of public safety, protection of environmental and scenic values, protection of natural resources, implementation of management responsibilities, and equitable use of facilities and avoidance of conflict among visitor use activities in public campgrounds.

Persons are permitted to camp within 100 feet of Lake Powell, again because additional impacts to resources are minimal.

Due to low water there are limited areas and facilities for boaters to conduct turn-a-rounds in the developed area of Bullfrog and during these times Hobie Cat Beach may be used for this purpose and vessels may camp on the shore for one night only.

2.10(d) Food storage: designated areas and methods

Glen Canyon NRA is the target destination for millions of visitors each year. The area is renowned for its unimpaired scenery and natural resources, as well as its diversity of recreational opportunities. Due to the limited access to shorelines, and ever increasing competition for acceptable shoreline camps, many areas experience highly concentrated camper use. Areas such as Lone Rock Beach, Stanton's Beach, Crosby Canyon, and a myriad of other boat accessible only camping areas, experience highly concentrated and continual use from mid-May through October. Many of these areas are not provided with trash receptacles serviced by the NPS or the concessionaire/contractor. As a result many of these areas show a significant accumulation of trash, waste and garbage through out the boating season.

As a rule boaters are very conscientious concerning the disposal of their trash and make efforts to leave beaches clean and free of trash. A major factor contributing to the distribution and spread of litter within the NRA are birds and other forms of wildlife entering into camps, or onto vessels in search of food. These animals are easily habituated to the constant supply of available "human" food and have come to associate plastic trash bags, grocery bags, and open boxes with food. Campers and boaters storing their food or trash in plastic bags fall victim to these camp marauders and the result is food, trash, storage bags, and other wastes scattered throughout the camp, beach, and water. Much of this trash and waste is further blown by the near constant summer breezes far from camps and boats where it goes undetected, and un-retrieved. It has been determined that the largest contributing factor to the scatter of food and trash along the beach camps at Lake Powell is due to improper storage in thin, easily torn, plastic bags and/or open boxes.

Park Rangers performing patrols, in both remote and highly concentrated camping areas, are overwhelmed by the constant trash and litter pick up necessary to keep the area pristine and inviting to newly arriving visitors. Rangers are uncomfortable with issuing violation notices to the occupants of camps scattered with food and litter due to the fact that most campers feel that they have fulfilled their obligation to "keep a clean camp" by storing their food and trash in plastic bags. Many campers do not recognize the threat posed by "friendly camp birds" and are surprised when they return to find that their camp and surrounding area is a mess with litter. Efforts to educate newly arriving boaters and campers concerning proper food and trash storage was frustrating due to the fact that there was previously no requirement to adequately containerize food and waste. Additionally, Rangers have noted that pet food, and open bags of pet food, left out in camps and on vessels is especially attractive to birds and animals. Park Rangers feel that a combination of education, special food and trash storage conditions, and enforcement will significantly reduce the amount of litter and waste observed at camps and along the lake shorelines.

The conditions established by this determination are intended to stop the scatter of food, litter, and waste by assuring that birds and other wildlife do not have easy access to un-natural food sources. In addition, properly containerizing trash and other wastes will reduce the otherwise uncontrollable factors of wind and rapidly changing weather conditions which exacerbate the spread of litter throughout camps and shoreline areas.

2.11 Picnicking: designated areas

The use of glass containers in high traffic areas where visitors are most likely to be barefoot greatly increases the possibility of accidental cuts from broken glass due to improper disposal, accidental breakage, or vandalous discarding. Most products the visitor would find necessary to enhance their recreational experience, be it food, beverage, or health and beauty aids, are packaged in plastic, aluminum or steel containers. For this reason, this order does not place unreasonable restrictions on the visitor nor does it unreasonably limit their recreational opportunities.

2.13(a)(1) Fires: designated areas and conditions

Restricting fire debris protects soils and plants, and prevents the blackening of beaches.

These orders relax the prohibitions against fires as found in this section by designating where campfires are allowed. Allowing campfires in these areas will have minimal resource impact at this time because: Fires are restricted to grates installed for this purpose; resource impacts of fires below the high water mark of Lake Powell are negligible

and their remains are washed away or impacts mitigated by fluctuating water levels; and backcountry visitation in other areas away from Lake Powell is slight except for within the Canyons of the Escalante. Limiting fires in developed areas to receptacles in campgrounds provided for that purpose is necessary for the maintenance of public health and safety, protection of environmental and scenic values, protection of cultural and natural resources, implementation of management responsibilities, and avoidance of conflict among visitor use activities.

Permitting charcoal fires in fire pans at designated vehicle campsites within the Orange Cliffs Unit is consistent with Canyonlands National Park.

Restricting campfires to designated campsites will reduce the number of areas impacted by campfires and will provide continuity of backcountry regulations between Glen Canyon NRA and Canyonlands NP.

Prohibiting fires in archaeological sites is meant to protect these sites from damage that may occur from fires. Such damage includes destruction of ancient vegetal or other combustible remains, soot stains on walls or other features, contamination of hearths or ancient fire remains which could preclude accurate dating or other analysis of the site, and detraction from experiencing an undisturbed site by future visitors.

Prohibiting fires at fuel docks, the marina, or vessels moored at these facilities is intended to protect life/health/safety and public and private property at areas where fires are especially hazardous and with severe destructive potential.

Most fire pits are not designated at Glen Canyon and most are constructed at or near beaches where persons are often barefoot. With rising and lowering water levels, sharp objects that were attached to firewood and left in the sand present safety hazards. Fires larger than 4 feet high and 4 feet wide create safety hazards and gathering points for large groups that disturb neighboring camps after quiet hours.

2.14(a)(2) Sanitation and refuse: conditions using government receptacles

No determination necessary.

2.14(a)(5) Sanitation: designated areas for bathing and washing

No determination necessary.

2.14(a)(7) Sanitation: designated areas for disposal of fish remains

Designated fish cleaning stations are located in Wahweap, Lees Ferry, Bullfrog and Halls Crossing for public health purposes.

2.14(a)(9) Sanitation: designated areas for disposal of human waste in nondeveloped areas

Human waste is a threat to public health and environmental and scenic values. Waste matter must be buried completely or packed out as required in the compendium when near water sources. Waste matter that is left on the surface desiccates and creates the possibility of spread of infectious elements and is aesthetically unpleasant to other visitors.

Visitation has drastically increased in the Coyote Gulch area and in other slot canyons of the park. Human waste is being scattered all over the area in close proximity to water sources. In order to address this threat and concern of public health, environmental and scenic values, the park has implemented requirements for visitors to pack out their human waste solids in those identified areas.

Toilet paper tends to dry into a solid mass which decomposes slowly if at all in the desert environment and therefore must be packed out of the area.

2.14(b) Sanitation: conditions concerning disposal, containerization and carrying out of human waste

Existing 36 CFR requirements for disposal of solid human waste do not adequately protect the water quality of Lake Powell and its tributaries because of extenuating visitor use patterns (2 million plus visitor nights per year) and fluctuating lake water levels. Disposal of solid human waste as required above is necessary to protect human health and the environment including water quality.

The use of plastic or paper bags is prohibited in human waste facilities because they clog the system or cause equipment to break. Human waste disposal facilities utilize a vacuum process that cannot work properly if plastic or paper bags are disposed of into them.

2.15(a)(1) Areas designated as closed to pets

The prohibition against pets in archaeological sites is intended to protect such areas from unnecessary impacts due to digging or depositing of waste matter.

Marinas, docks, walkways, and launch ramps are all areas which may be congested at times with many other people (and pets). These areas are restricted in order to prevent the unnecessary intrusion of a pet onto other visitors who may not want the pet in their immediate presence but cannot otherwise avoid it or who may feel the pet is in their way unnecessarily. It is also intended to prevent conflicts between visitors, persons and pets, or between animals by reducing the period during which a pet is in the immediate area. Sanitation is also an important factor in this determination as there are no appropriate places for pets to urinate or defecate.

Pets are prohibited along the San Juan River from Clay Hills Crossing upstream to the Glen Canyon NRA boundary per the Bureau of Land Management permit stipulations.

Pets are prohibited in the Orange Cliffs Management Area to remain consistent with the backcountry management plan for Canyonlands NP, which adjoins the boundary of Glen Canyon NRA. Canyonlands NP issues all permits for this area.

The Rainbow Bridge NM GMP establishes a prohibition against pets as an inappropriate activity within the Monument.

Dogs are prohibited from entering Coyote Gulch in order to preserve the scenic, cultural, and experiential values of this desert riparian habitat. Frequent observations of dogs not kept under physical restraint (leashed) indicates an increased potential for adverse impacts on vegetation, water quality, wildlife habitats, and natural quiet. This restriction further serves to limit the potential for the spread of canine diseases to or from native carnivore populations.

2.15(a)(3) Conditions for leaving pets unattended and tied to an object

No determination necessary.

2.15(a)(5) Pet excrement disposal conditions

Pet excrement contributes to sanitation problems along the shores of Lake Powell. It is imperative that, like human wastes, pet wastes are contained and deposited in appropriate and safe ways in order to keep Lake Powell waters safe.

2.15(b) Conditions for using dogs in support of hunting activities

No determination necessary.

2.16 (a)-(c) Horses and pack animals

Over 80 percent of the NRA is open for grazing by livestock. Horses, mules, llamas, goats and burros are common kinds of livestock traditionally used for packing. Accordingly, their use in an area already used by livestock would in and of itself have no additional negative impact on Glen Canyon NRA resources.

In 1988 the use of llamas as pack animals was examined in connection with a commercial use license application. It was determined that the use of llamas would not have an adverse impact relative to other authorized livestock and that in some respects llamas would have less impact than the other type of livestock. For these reasons, llamas are designated as an acceptable pack animal. The closure to llamas in the Orange Cliffs Management Area is addressed in the Canyonlands National Park/Orange Cliffs Backcountry Management Plan.

Horses, mules, burros, llamas, goats and other type of pack animals are prohibited from Stevens Canyon and Stevens Arch. These areas are known to be frequented by the North American Bighorn sheep (Ovis Canadensis). Bighorn sheep and domestic goats are known carriers of the organism pasteurella. This can be transmitted between Bighorn Sheep and goats if the two come within close contact with one another. This contact and transmission could have a negative impact on the health of the Bighorn herd and the goats as well.

Many studies have shown that both domestic sheep and goats can be a source of vectors for disease transmission to wild bighorn sheep populations in the western United States. Diseases that can affect bighorn populations include bacterial pneumonia, pasteurellosis, and kratoconjunctivitis, with results varying from partial to permanent blindness or death. The general review "Risk Analysis of Disease Transmission between Domestic Sheep and goats and Rocky Mountain Bighorn Sheep, 2012" (US Forest Service) should be consulted. Because the park has several bighorn herds and both the NPS and state game agencies are working to restore and enhance bighorn populations in the region, the use of goats for packing or other recreational use will not be allowed in Glen Canyon NRA.

Excluding horses and pack animals is intended to limit the amount of resource damage to these heavily used areas. Livestock use and associated by-products are not considered as compatible with heavy concentrations of recreational users.

Archeological sites are easily damaged by livestock and require special protection. Alcoves and overhangs are often archeological sites or paleontological sites, even if not obvious to the casual observer, which require protection from trampling or contamination. Likewise, they are sheltered from the weather and with slow to near zero biological decay rates, manure could accumulate and detract from or destroy natural and cultural values.

The group size limit of 12 animals conforms to the same group size limit established for persons in Section 2.10 and is established for similar reasons: To minimize resource impacts (which are considerably greater as livestock hooves can cause more soil disruption and vegetation damage, vegetation damage as a result of grazing or browsing, greater accumulations of manure, and so forth) and the presence of large numbers of livestock can be very obtrusive on other visitors. This group size limit allows for a minimum of one animal per person or up to 12 animals.

The requirement that only certified weed free feed be carried into the area is intended to prevent the introduction or spread of non-native vegetation.

The requirement to tether or picket stock so as to prevent damage to live trees or shrubs is intended to protect root systems, bark, and foliage from excessive damage which can occur if stock is left restrained in one area for an extended period, even overnight.

2.17(a)(1) Aircraft operation

See 1.5 of the Superintendent's Compendium Appendix A Determination.

2.17(a)(2) Aircraft operation near docks, piers, swimming beaches and other designated areas

No determination necessary.

2.17(c)(1) Conditions for removing downed aircraft

Procedures were established to provide designated time frames for owners to remove their downed aircraft. Time frames established are reasonable and provide consistency on requirements. The established procedures allow the Superintendent or his/her designee, to track recovery initiation and operations and provides guidelines for charging recovery operation costs to owners if they fail to remove their downed aircraft.

2.18(c) Snowmobiles: designated areas for use

2.19(a) Winter activities on roads and in parking areas: designated areas

No determination necessary.

2.19(b) The towing of persons on skis, sleds, or other sliding devices by motor vehicle or snowmobile is prohibited, except in designated areas or routes

No determination necessary.

2.20 Skating and skateboards

The residential areas, housing areas for concession and NPS employees, provides the principle areas for play and activity by children of residents. Skating and using skateboards are activities one can expect children to enjoy. These areas do not have any conflicting uses involving visitor recreation and they are areas in which traffic hazards are minimized. Similarly, the other three listed areas are provided for use by visitors and are designated as places where the activity can be conducted safely and without conflict with other visitor uses during the periods specified.

2.21 Smoking

No determination necessary.

2.22 (a)(2) Property: leaving property unattended for longer than 24 hours

Vehicles may be left overnight when parked within designated parking lots and in parking areas at designated trailheads to facilitate access to remote areas and for longer visitation opportunities.

Sunken or grounded golf carts and/or other mechanized equipment cannot be left unattended and must be removed from the park and it's water bodies due to resource concerns.

2.35(a)(3)(i) Alcoholic beverages: areas designated as closed to consumption

No determination necessary.

2.38(b) Fireworks: permits, designated areas, and conditions

No determination necessary.

2.51(e) Public assemblies/meetings: designated areas for public assemblies

This action is necessary in order to comply with 36 CFR 2.51(c)(2) to provide a map (attached) showing the locations available for public assembly and for the sale or distribution of printed matter under 36 CFR 2.52.

The areas provided should not unreasonably interfere with visitor service, but should provide substantial public

recognition for any public assembly activity.

2.52(e) Sale and distribution of printed matter: areas designated for such use

This action is necessary in order to comply with 36 CFR 2.51(c)(2) to provide a map (on file) showing the locations available for public assembly under 36 CFR 2.51 and for the sale or distribution of printed matter.

The sale or distribution of printed matter is allowed within park areas provided the material is not solely commercial advertising.

The areas provided should not unreasonably interfere with visitor service, but should provide substantial public recognition for any public assembly activity or the sale or distribution of printed matter.

2.60(a)(3) Designated areas for grazing

No determination necessary.

2.62(b) Memorialization: designation of areas for scattering ashes

All areas within the Natural and Recreation & Resource Utilization zones, as designated in the 1979 Glen Canyon NRA General Management Plan, excluding archaeological sites, are open to the scattering of human ashes from cremation without a permit. At present the incidence of this type activity is minimal. Such activity can occur without causing any negative impacts to the resources of the area.

Areas listed are outside of the Natural and Recreation & Resource Utilization zones.

Rainbow Bridge National Monument is not open to the scattering of human ashes due to it being a recognized culturally sacred site and the broad expanse of archeological sites throughout the monument.

PART 3. BOATING AND WATER USE ACTIVITIES

3.3 Permits

No determination necessary.

3.8(a)(2) Launching and Retrieval of Vessels:

The listed areas are public launch ramps specifically developed for vessel launching and retrieval or areas accessible by road which are beaches or other areas which are suitable for launching and retrieving boats and which do not suffer undue degradation of natural or cultural values as a result.

Lone Rock Beach, an undeveloped launch area, has an angle of underwater slope that precludes the launching of vessels exceeding 25' in length. Launching of all motorized watercraft will be prohibited November through April.

The launching and retrieval of non-motorized vessels have different suitability requirements than those of motorized vessels. Therefore the entire shoreline of Lake Powell is open for the launching and retrieval of non-motorized vessels. Access to the shoreline must be by legal means (for example no off road vehicle travel).

3.8(a)(4) Operating a vessel in excess of designated size

The 75 foot total length and 22 foot total beam are dictated by natural and/or design limitations of marinas, fairways, docks, slips, buoy fields, boat ramps, and fueling and pump out facilities. Vessels exceeding that length and/or beam pose potential safety hazards when operated in and around these areas. Specifically, those hazards include but are not limited to collision with a fixed object, collision with a floating object, and collision with another vessel or

vessels. The hazards increase when these areas and facilities are congested with other vessel traffic and/or when weather conditions are less than favorable. Vessels equipped with auxiliary equipment such as bow/stern thrusters and camera systems can increase a vessel's maneuverability, but do not necessarily mitigate the hazards. A Special Use Permit must be obtained in order to have a vessel that exceeds the designated size.

3.12(a) Water skiing: designated waters

Heavy visitor use patterns in these areas of natural and architecturally confined spaces, including the frequent passage of tour boats prohibits safe water skiing.

Towing of persons by vessels above the last active rapid on the Colorado River poses a hazard due to terrain.

3.14(a) Removal of sunken, grounded or disabled vessels
Procedures were established to provide designated time frames for owners to remove their sunken, grounded or disabled vessels. Time frames established are reasonable and provide consistency on requirements. The established procedures allow the Superintendent or his/her designee, to track recovery initiation and operations and provides guidelines for charging recovery operation costs to owners if they fail to remove their sunken, grounded or disabled vessels.

3.16 Swimming: areas designated as closed

Safety is the primary factor. These areas require maneuvering by vessels in confined, designated areas with heavy marine traffic that prohibits safe swimming, and areas that experience a high concentration of visitation. Hazards of vessel strikes, electric-shock-induced drowning (ESD), propeller strikes, and carbon monoxide poisoning prohibit safe swimming.

Rainbow Bridge NM GMP has established swimming as an inappropriate activity within the Monument boundaries. Safety is the primary factor. These areas require maneuvering by vessels in confined, designated areas with heavy marine traffic that prohibits safe swimming, and areas that experience a high concentration of visitation.

Rainbow Bridge NM GMP has established swimming as an inappropriate activity within the Monument boundaries.

3.18(a) SCUBA and snorkeling

No determination necessary.

PART 4. VEHICLES AND TRAFFIC SAFETY

4.10 Routes or areas designated for off-road motor vehicle use

No determination necessary.

4.11(a) Load weight and size limits: permit requirements and restrictive conditions

No determination necessary.

4.21(b) Speed limits: designation of a different speed limit

The Wahweap, Bullfrog, Halls Crossing and Hite areas has well-developed road systems that provide for ample, line of sight to on-coming traffic to allow for the 45 mph speed limit in 36 CFR.

The 25 mph speed limit is maintained in specific developed areas.

The 15 mph speed limit is maintained in the Orange Cliffs Unit due to 4 wheel drive road conditions.

Differing speed limits are also used in deceleration zones, in areas with congested motor vehicle and pedestrian traffic, where children may be playing, and where road surface, character, or design does not allow for a faster safe speed. This determination adds additional speed limit designations when roads are signed.

4.30(a) Routes designated as open to bicycles

No determination necessary.

4.31 Hitchhiking: designated areas

No determination necessary.