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12-8-81  
Date  

12-13-81  
Date
COLORADO RIVER MANAGEMENT PLAN

Grand Canyon National Park
The Colorado River Management Plan has been developed to provide a strategy for protecting the Grand Canyon environment while providing visitors with a high quality river running experience.

The plan is divided into two components: the Colorado River Management Plan and the Annual Operating Requirements. The Colorado River Management Plan presents the general concepts which will guide river management for a five to ten year period. The Annual Operating Requirements (AOR) contain a detailed description of procedures for compliance with the plan that are subject to change on an annual basis. Various elements in the Colorado River Management Plan are cross-referenced to more detailed information in the AOR. These two components complement each other and are intended to be used together for a full understanding of the plan. Both motor and oar trips will be available under this plan. The combinations of motor and oar trips allowed are described in detail in the plan.
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"A river traverses time as well as topography; it runs not only through country but through mankind."  Wallace Stegner

The Colorado River, after draining nearly one-twelfth of the continental United States, cuts west at the southern edge of the Colorado Plateau and begins its traverse of the Grand Canyon. For the next 277 miles the Colorado courses through some of the most spectacular scenery in North America.

The Colorado River through the Grand Canyon, the longest stretch of recreational whitewater in the world, offers one of the most sought-after river trips in the United States. People come to the river with many different expectations. Some come with a dream, hoping for an experience capable of temporarily dismantling their lives, rearranging them around a world of wind and sand and water and rock, a world in which the purposeful flight of the snowy egret against black, ageless rock takes precedent; where the clear, descending solo of the canyon wren echoes off sandstone walls; where icy water slaps skin stretched taut by hot sun; where elusive desert bighorn truly own the landscape and people come to participate rather than to dominate.

For many, it is a place that offers discomfort and bares hidden fears, marked at times by exhaustion, tension and sand encrusted sleeping bags, where human interaction necessarily means cooperation in everything from setting up the cook table to identifying the small bird seen in the shoreside willow.

On the river underpinnings are removed and people quickly have to face themselves and those in their small, isolated group. It is a place where one can feel the hypnotic oscillations of waves on the beach at dusk and come slowly to the subtle realization that there is really no need to put on a wristwatch this morning.

It is dramatic country in which we can sense another rhythm, something older and more stable than what controls our normal, hurried lives.
If it is the aesthetic aspects of this landscape that stirs human imagination, it was the economic potential of the Colorado in an arid region that interested developers. In 1935, Hoover Dam was completed at the lower end of Grand Canyon and 28 years later, in 1963, Glen Canyon Dam was completed, and thereafter controlled the river's flow at the head of the canyon.

Both of these projects were to have an impact on river running through the Grand Canyon. Lake Mead, formed by Hoover Dam, extended into the lower section of the canyon, producing slack water that marked the end of the free-flowing Colorado. Glen Canyon Dam's effects have been more dynamic. The amount of sediment and driftwood that was formerly carried naturally along the river's course through the canyon has been significantly reduced. Water releases from Glen Canyon Dam (a primary function of which is to generate hydroelectric power) have created more predictable seasonal water levels but have resulted in extreme daily fluctuations. Canyon beaches, which provide campsites for river runners, no longer receive sediment and are being eroded with erratic daily flows. During periods of low flow, passage at certain rapids has become difficult, creating hazards and delays. Previous heavy spring runoffs no longer scour the Colorado's banks, and a new ecosystem has grown up in the pre-dam flood zone.

There are other influences that could affect river management in the future that are outside the scope of this planning effort. For example, the Bureau of Reclamation is presently studying the possibility of converting Glen Canyon Dam to a peaking power facility. This conversion would result in even greater fluctuations, in daily water flow than now occur. The sharp fluctuations, particularly periods of very low flows, could make river running with large rafts or wooden boats extremely difficult, if not impossible, and accelerate beach erosion and related impacts.

The desire of the American public to experience this unique part of their natural heritage has dramatically increased. In 1967, 2,100 people made the river trip. The number had jumped to 16,500 in 1972. This sudden rise in use was noticeably impacting the vulnerable inner canyon ecosystem. Trash, charcoal, and human waste were accumulating, multiple trails were developing to points of interest, and the numerous prehistoric and historic sites near the river were being damaged.
In 1973, the National Park Service (NPS) initiated a research program and planning process leading to the development of the Colorado River Management Plan in 1979. One major feature of this 1979 plan was the phasing out of motorized craft over a five year period.

Congressional input on this plan was received in 1980 when the Hatch Amendment was passed as an element of the 1981 Department of the Interior Appropriations Bill. The amendment prohibited a reduction of user days or passenger launches for commercial motorized craft below 1978 levels during the summer season.

Based on passage of this amendment, the NPS responded with a decision to modify the Colorado River Management Plan to allow a diversity of river running experiences in Grand Canyon National Park. While some reevaluation of management goals has taken place, the preservation of the Grand Canyon of the Colorado River for future generations remains a primary objective of the plan.

Public comments received during the four public meetings and through over 600 pieces of correspondence reflected a diverse interest. The preponderance of these comments favored some combination of oars and motors while voicing an interest to have a period for oar only use.
THE PLAN
Management Objectives

To accomplish the legislative requirement of the 1916 NPS Organic Act to "... conserve the scenery and natural and historic objects and wildlife therein and to provide for the enjoyment of the same [and] leave them unimpaired ...", the following objectives for management of the river have been established.

(1) Protect the Colorado River and its riparian environment from unacceptable change caused by river running activities.

(2) Provide an opportunity for all visitors to enjoy a high quality, rewarding river running experience consistent with the magnificent setting of the Grand Canyon.
To accomplish the objective of protecting the river environment, maximum visitor use levels will be set. Use levels will be measured in user days, where one user day equals one person on the river for any portion of one day. The total commercial and noncommercial use level will be 150,076 user days for the summer season (May 1 through September 30) and 19,874 user days for the winter season (October 1 to April 30). Future adjustments to these levels may be made upon consideration of information from the monitoring program relative to impacts on beaches, attraction sites, cultural resources, and the quality of the visitor experience.

As each trip leaves Lees Ferry, the number of commercial passengers or noncommercial trip participants and projected trip length will be recorded. With this information, the user days for each trip will be calculated. Each concessioner will receive a monthly report of the number of user days utilized and will have two weeks to report any needed adjustments due to passengers who take partial trips.

Because of the tremendous demand for river trips it is the goal of the NPS to limit visitors to no more than one trip during the calendar season, whether commercial or noncommercial, unless they are traveling on the river in a nonrecreational capacity (e.g., commercial crew or owners, researchers, or park staff). Commercial boatmen may participate in one private trip per year.
A commercial trip is defined as one in which an operator offers services to a visitor for a fee. The total annual commercial use will be 115,500 user days. Of this total, 106,156 user days will be allocated among the commercial operators during the summer season. The remaining 9,344 user days will be available during the winter season. The winter user days will be available on a first come, first serve basis. Requests for these user days will be accepted by the NPS any time.

All companies operating commercial guided trips on the Colorado River in Grand Canyon National Park must have a contract with the NPS. Contracts will be granted for a period not to exceed 10 years. These contracts are managed under the 1965 Concession Policies Act (Public Law 89-249). Under the provisions of this law, the NPS will:

- Grant existing concessioners a preferential right (first right of refusal) in the contract renewal process.
- Provide public notice whenever new concession opportunities are to be offered or existing contracts are to be renewed.
- Utilize the nationwide rate approval program to approve rates charged to the public.
- Periodically evaluate the concessioner's operation to ensure that a satisfactory level of public health and safety standards are met.

The contractual document will have an annual review period, and use will be evaluated based upon acceptable standards of operation as identified in this document.

Further, user days may be adjusted as the need arises based upon conditions identified in ongoing river monitoring.

The approval of rates for each concessioner is a very important element in the concession management program. No new rates or increases will be charged unless they are approved in advance by the NPS.
Transfers and mergers of companies will be allowed if they meet NPS goals and are in the interest of improving concessioner economic viability. Any intent to sell a company must be discussed with the NPS in advance of company-to-company negotiations. In the transferring or merging of companies, there is no guarantee that all user days held by the company selling its assets will be transferred. The NPS will not recognize any monetary value for user days involved in transfers or mergers. NPS will encourage mergers between companies that presently hold contracts.

Standards for guides and trip leaders concerning experience, skill, and knowledge of the resource have been set to assure the safest possible trip.
A noncommercial trip is one where persons involved have the equipment and expertise to run the river on their own (without a hired guide). All of the trip expenses are shared equally by the participants. None of the trip participants acquire any money or financial gain (new equipment, etc.) above actual trip costs. Members of such a trip could range from a few individuals that come together for the purpose of running a river to a group that is organized for running rivers or a group that is organized for other purposes and runs rivers only incidentally. Everyone shares costs and duties. The total annual non-commercial use level will be 54,450 user days. During the summer season, a total of 43,920 user days will be permitted. During the winter season, a total of 10,530 user days will be permitted.

All noncommercial groups must obtain a permit from the NPS to schedule a river trip. Permit applications are accepted any time by the NPS. A person merely contacts the NPS and requests to have their name placed on a waiting list. As permits become available they are assigned to the person at the top of the waiting list. The NPS assigns permits in November of each year for the following summer and winter seasons (i.e., November 1981 for May 1982 through April 1983). The people on the waiting list will be contacted periodically by mail to confirm their continued interest. As a person on the waiting list joins a trip, whether it be their own or another trip higher on the list, their name is removed from the list. After a person has taken a trip they can contact the NPS again and have their name added to the bottom of the list.

Noncommercial trip leaders are required to have experience on comparable whitewater trips and knowledge of the Grand Canyon segment of the Colorado River.

Noncommercial trips must comply with all provisions of the Colorado River Management Plan. Prior to departure, non-commercial users will attend an orientation program at Lees Ferry to familiarize them with provisions of the plan.
Motor/Oar Use

To allow for latitude in public choice, visitors wishing to take a trip on the Colorado River through Grand Canyon will have the option of motor- or oar-powered trips.

Both motor- and oar-powered trips will be allowed from December 16 of one year through September 15 of the next year. No motor trips will be allowed from September 16 through December 15 of each year. The oars only use period will allow a time for the person who desires to take a river trip without the influence of motors to do so. This oars only time from September 16 to December 15 includes the last two weeks of the summer use season as well as the early part of the winter season, when fewer people are on the river for a low density visitor use experience without the influence of motors.
Use of Fire. Use of fires on river trips is limited to protect the canyon and beaches. The need for this restriction arose because of scarce supplies of driftwood and charcoal residue accumulation on beaches. No increased evidence of charcoal, burned wood, firewood collection, or wildfire will be permitted. When fires are allowed, they must be contained in fire pans.

Human Waste/Refuse Disposal. The aesthetic and health problems associated with human waste are a major concern associated with river use. All human waste must be hauled from the canyon.

Refuse and garbage attract insects, rodents, and birds and fouls beaches. To maintain a healthful, quality river running experience, all trash and litter must be carried out of the canyon. Liquid waste such as dishwater, will be strained through a fine screen into the Colorado River.

Removal of human waste and refuse gives river runners the feeling that they are the first ones on the beach, and therefore is a key NPS aim in this plan.

Use of Soap. Protection of the water quality in the Colorado River and sidestreams is a major objective. To the extent that users can prevent it, water quality degradation should not occur.

Soap at relatively low concentrations impairs the breeding of native fish and leads to accelerated growth of aquatic vegetation with associated decreases in stream oxygen content. Use of soap in small sidestreams also detracts from aesthetic quality. For this reason, soap use will be prohibited in any sidestreams or within 100 yards of the confluence of any sidestreams with the Colorado River.

Vegetative Clearing/Erosion. Damage to vegetation in the riparian zone and in the adjacent desert zone is a chief environmental concern. It is a goal of this plan to stop any widening of existing camping areas so that the understory, ground cover and species diversity in the riparian zone are protected.

No damage should occur in the adjacent desert zone except those impacts from the single trails to attraction sites. Human-caused erosion due to vegetative clearing will be minimized.
Aesthetic Considerations. The NPS will minimize placement of any signs, rock walls, or other management intrusions along the river to retain a natural feeling. The only exception to this objective is construction or marking of single trails to eliminate the multiple, haphazard trails. Single trails will be established as unobtrusively as possible.

Wildlife Disturbance. Visitors may not feed or in any way interfere with wildlife. Because they can disturb native wildlife, no domestic animals are allowed on river trips.

Cultural Sites. Vandalism or disturbance at archeological or historical sites is prohibited. Collecting any artifacts is also prohibited.

Restricted Sites. Certain sites in the canyon have been closed to camping, fires, or visitation because they possess sensitive natural or cultural values. Other necessary closings will be posted at Lees Ferry.
Off-river Camping

The permit/reservation system for all backcountry camping in Grand Canyon National Park applies to river running parties. Advance arrangements for any off-river camping should be made through the River Subdistrict. Camping at the Havasupai or Haulapai Reservations requires the permission of the respective tribe.

Information and Education

In the summer, an information and education program will be offered daily at the Lees Ferry Visitor Center. The program will focus on safety procedures, environmental protection measures, and river running rules. The program will also provide interpretation of the history and natural history of the Grand Canyon. All members of noncommercial trips must attend this program. Noncommercial river runners will also receive a minimum impact booklet and a copy of the NPS operational requirements.

The NPS requires concessioners to deliver an orientation talk to all river passengers before a trip departs. These talks are designed to inform passengers of necessary safety procedures, environmental protection measures, and the company and NPS operational requirements. A voluntary training session will be offered each year for guides who wish the most current information on the canyon's geology, history, and natural history. Guides are also invited to attend the Lees Ferry program.

Boating Safety

Past experience indicates that current boating and safety requirements are adequate. Types of craft, load capacities, gear (including life jackets), and proper first aid and emergency provisions, are covered in the Annual Operating Requirements.

Sanitation and Food Preparation

Proper storage and handling of food and dishes is essential to prevent the spread of communicable diseases. Cleanliness of food handlers, proper type and temperature of food storage boxes, clean cooking utensils and other measures need to be observed. Specific methods have proved effective and will continue.
Special Launching and Takeout Procedures

Diamond Creek

A permit, obtained by advance reservation from the NPS, is required for all noncommercial launches from Diamond Creek. In addition, noncommercial groups must obtain permission to use the Diamond Creek Road and pay all required fees to the Hualapai Tribe.

Only the Hualapai Tribe may launch commercial trips from Diamond Creek.

Lees Ferry

An NPS ranger checks out each trip (commercial and noncommercial) prior to departure from Lees Ferry. The checkout includes recording number of passengers, trip length, and checking that all of the required equipment is included on the boat.

To provide for orderly and efficient launching from Lees Ferry, no camping, cooking, boat or equipment repairs, or equipment storage is allowed at the launch ramp.

Mule and Horse Takeout Points

Mule takeouts are permissible on the Bright Angel or Kaibab Trails for passengers departing from the river at Phantom Ranch. Mule and horse takeouts are also permitted on the Whitmore Wash Trail.

Helicopter Evacuation

In the event of an emergency requiring helicopter evacuation and rescue, arrangements will be made for the rescue only by Grand Canyon National Park personnel. The outfitter will be responsible for the cost of the rescue.

Requests for helicopter evacuations of a passenger by someone not on the trip, for family emergency will be made through Grand Canyon National Park. Responsibility for the cost of such evacuation will be with the outfitter and the person requesting the evacuation.
The monitoring program is the primary method for measuring the success of meeting the Colorado River Management Plan objectives. The ongoing monitoring program will be designed to identify degradation of the resource or quality of the visitor experience below existing acceptable levels. The monitoring program will also be capable of scientifically assessing the degree of impact to provide a basis for recommending plan modification.

The majority of impacts occur at attraction sites such as waterfalls, sidestreams, cultural sites, and campsites. Some of these impacts are short term, some are long term and others are permanent. For example, crowding at a campsite would adversely affect the visitor experience for one night, but vandalism of Indian ruins, such as the Nankoweap granaries would be permanent.

Monitoring will focus on assessing impacts on the environment, impacts on the visitor experience, and other aspects of the Colorado River Management Plan. Specific elements of the monitoring program are outlined below:

1. Environmental Analysis
   
   A. Soil and Vegetation Impact

   Aerial photographs of beaches and attraction sites representing various levels of use will be taken before and after the summer use season. From these photographs, the vegetation, bare soil and rock will be mapped, and the proportion of areas impacted by river use (such as hiking and camping) will be computed. The amount of beach erosion associated with altered water flows from Glen Canyon Dam will also be assessed from these photographs.

   Line and quadrant vegetative transects will be surveyed before and after the summer season to measure changes in species composition, density, and ratio of vegetation to bare soil.

   Samples of sand from key camping beaches will be taken to determine the degree to which charcoal and other debris have been introduced.

   Physical profiles of beaches will be correlated with the aerial photographs to determine the degree of erosion that is occurring. If a strong correlation exists, the frequency of survey profiles may be reduced.
B. Wildlife

Representative animal life at beaches and attraction sites will be surveyed annually to determine if any changes are occurring in species density or diversity.

C. Water Quality

Water quality monitoring will include assessments of any impacts river running might have on water quality. The program will center around the potability of cooking and drinking water taken from the Colorado River to determine if any purification beyond bleach is needed. It would also be valuable to see if any river running activities are impairing the water quality of the Colorado River or sidestrems. Of particular interest is the effect of visitor activities on sidestrems used for drinking water or recreation.

D. Cultural Resources

Prehistoric Indian sites, petroglyphs and pictographs, and historic sites in the canyon have already been photographed from fixed, permanent points. Monitoring these sites will consist of rephotographing the sites each year and analyzing the photographs to determine the degree of impact, if any. Visual observation and professional documentation will provide additional information. All monitoring, excavation, and protection will take place according to the Grand Canyon National Park Cultural Resources Management Plan.

2. Visitor Experience

The quality of the visitor experience can obviously be affected by the cleanliness of beaches and crowding along the river corridor. The NPS will monitor visitor perception of these potential problem areas. This will be done by encouraging continued public involvement, maintaining personal contact with river runners and concessioners, and evaluating letters.

3. Commercial vs. Noncommercial Use Ratio

Studies will be done to assess public interest in commercially guided trips compared to noncommercial trips. The allocation of user days between these two segments of the river running public will continue to be an important management concern.
4. Concession Economics

There has been considerable concern over the allocation of user days as they relate to the economic viability of concessioners. Concession economics will continue to be analyzed by the NPS. This information will be especially useful in equitably reallocating user days should total use on the river need to be adjusted. The NPS will seek concessioner cooperation and input in obtaining a better understanding of their economic situations.

The NPS will review and analyze the information from the ongoing monitoring program. Based on this information, the Colorado River Management Plan will be updated or modified as necessary. Updating and/or modification could include adjustments in use levels and reallocation of use between commercial and noncommercial trips. Any adjustment in use levels among concessioners would be made in full cooperation with all companies considering historical use and other factors.

Based on monitoring, other management actions such as regulations establishing new operating procedures to minimize impacts might be implemented. Management actions including temporary closure of attraction sites, prohibiting camping at certain sites, changing launch schedules, and adjusting trip lengths might also be considered.

If these proposed management actions are significant, the Colorado River Management Plan will have to be modified. In this case, monitoring results, along with proposed plan modifications will be provided to the public. After public comments are received and considered, the plan will be modified as necessary and these modifications will be widely distributed.
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III. OPERATING PROCEDURES FOR COMMERCIAL AND NONCOMMERCIAL USERS

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I. COMMERCIAL USE

A. Annual Use Allocation

The annual allocation for commercial operators will be 115,500 user days. Of this total, 106,156 user days will be allocated for the summer season. The remaining 9,344 user days for winter use will be available on a first come, first serve basis. In addition an estimated 25,000 user days will be used annually by commercial crew.

The following chart details the user day allocation to the various operators for 1982. These numbers are subject to modification during subsequent years.

1982 User Day Allocation for Commercial Operators
(Summer Season)

<table>
<thead>
<tr>
<th>Outfitter</th>
<th>Annual User Day Allocation</th>
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<tbody>
<tr>
<td>Western River Expeditions</td>
<td>10,671</td>
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<tr>
<td>Hatch River Expeditions</td>
<td>10,671</td>
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<tr>
<td>Arizona Raft Adventures</td>
<td>9,782</td>
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<tr>
<td>Grand Canyon Expeditions</td>
<td>8,892</td>
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<tr>
<td>Cross Tours &amp; Explorations</td>
<td>7,113</td>
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<td>Sanderson River Expeditions</td>
<td>6,247</td>
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<td>Diamond River Adventures</td>
<td>6,860</td>
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<tr>
<td>Whitewater River Expeditions</td>
<td>4,380</td>
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<tr>
<td>Tour West</td>
<td>4,480</td>
</tr>
<tr>
<td>Canyoneers</td>
<td>4,060</td>
</tr>
<tr>
<td>Grand Canyon Dories</td>
<td>4,225</td>
</tr>
<tr>
<td>Arizona River Runners</td>
<td>3,300</td>
</tr>
<tr>
<td>Wilderness World</td>
<td>3,720</td>
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<tr>
<td>Fort Lee</td>
<td>2,900</td>
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<tr>
<td>Moki Mac Expedition</td>
<td>3,350</td>
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<tr>
<td>Georgie's Royal River Rats</td>
<td>2,600</td>
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<tr>
<td>Colorado River and Trail Expeditions</td>
<td>2,500</td>
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<td>Ken Sleight Expeditions</td>
<td>2,980</td>
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<tr>
<td>O.A.R.S.</td>
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<tr>
<td>Outdoors Unlimited</td>
<td>2,300</td>
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<tr>
<td>Grand Canyon Youth Expeditions</td>
<td>2,325</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>106,156</strong></td>
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B. Commercial Use Limits

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<tr>
<td>Average Maximum Miles/Day</td>
<td>40</td>
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<tr>
<td>Maximum Passenger Group Size</td>
<td>36 passengers</td>
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<tr>
<td>Maximum Passengers/Day (Summer Season)</td>
<td>150 passengers</td>
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<tr>
<td>Maximum Trip Length</td>
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<td>18 days</td>
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<td>Winter Season</td>
<td>21 days</td>
</tr>
<tr>
<td>Winter Season Launch Frequency</td>
<td>1 trip/day</td>
</tr>
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C. Procedure for Allocation of Unused User Days During the Summer Season

A pool for unused user days will be established for concessioners. It will operate through NPS as follows:

• Concessioners will receive a monthly status report on their user days from the NPS. These reports will be prepared and mailed by the end of the following month (for example, September reports will be mailed by October 30).

• Concessioners will review that report and within five days notify the NPS of any unused user days.

• NPS will put out notice of any unused days available.

• Concessioners who desire extra user days will arrange with NPS for the desired number of user days. This will be done on a first come, first serve basis.

• Multiple requests from individual concessioners will be considered, however, all first requests will be fulfilled prior to consideration of additional requests.

D. Concession Evaluation Program

Concessioners must comply with the policies and procedures of the NPS. To insure compliance with these policies as well as the procedures of the Colorado River Management Plan, the concessioners will be evaluated in accordance with the NPS Concession Evaluation Program. The evaluations will cover compliance with contract stipulations relative to insurance, rate approval, franchise fees, equal employment opportunity, financial reports, trip quality, etc., as well as adherence to the plan provisions such as, but not limited to, user day and trip limitations, environmental protection health and safety, visitor enjoyment, etc.
E. Transfer of Interests

The transfer of a concessions contract and all or a portion of the assigned "user days" for river running operations at Grand Canyon National Park will be considered by the Secretary of the Interior (Secretary) under the conditions outlined below. Failure of the concessioner to comply with these requirements or the procedures described below, shall constitute a material breach of the contractual agreements and the contract may be terminated immediately by the Secretary. The Secretary shall not be obliged to recognize any rights, title or interest, of any person or entity to an interest in the contract acquired in violation of this requirement. The following governs all transfers of interest.

1. There shall be no assumption of managerial or financial control by the purchaser or merging organization prior to approval of the transaction by the NPS. The concessioner may not enter into any agreement with any entity or person, except employees of the concessioner, to exercise substantial management responsibilities for the operation authorized under the contract without written approval of the Secretary at least 30 days in advance of such transaction.

2. The concessioner may not assign or otherwise sell or transfer responsibilities under the contract, or any interest therein, without the prior written approval of the Secretary.

3. If a transfer of interests is contemplated, the concessioner shall advise the person(s) or entity proposing to enter into such a transaction that the Secretary will be notified and that the proposed transaction is subject to review and prior approval by the Secretary. The concessioner shall request in writing the Secretary's approval of the proposed transaction, and shall promptly provide the Secretary all relevant documents related to the transaction, the names and qualifications of the person(s) or entity involved in the proposed transaction, and such other information and documentation the Secretary might request.

4. The Secretary shall give primary consideration to the management and financial qualifications of individuals or entities as well as their experience with similar operations, and their ability to conduct the concession operations authorized.

In addition, the Secretary shall take into consideration the possible economic impacts of the proposed transaction, e.g., transfers that would consolidate existing small companies into medium-sized, more economically viable operations are deemed to be in the public interest.

5. Approval by the NPS does not represent a verification of the assets, inventories, or other properties of the concessioner under the existing contract language.

6. It is recognized that the United States may revoke or modify a contract at any time for the convenience of the NPS.
7. Operating rights transferred pursuant to the concession contract do not guarantee any specific number of annual "user days" in the future. The concession contract grants no rights, title, or interest that the concessioner is to be provided a specific number of "user days." The allocation of user days is made solely at the discretion of the NPS and may be adjusted at any time.

8. Approval of a transfer shall not waive any right of the Secretary to terminate a contract for cause in the event of substantial default or continued unsatisfactory performance as provided for in the contract.

9. Pursuant to Public Law 89-249 (79 Stat. 969, 16 U.S.C. 20), rates charged by concessioners shall be based upon the NPS Nationwide Concessioner Rate Approval Program.

10. The buyer shall assume full risk for the economic viability of the operation. In the event the buyer is forced to cease operations, the buyer will lose its "user days" allocation, remove its personal property and vacate the premises.

11. The NPS cannot recognize any portion of any financial consideration as monies paid for "user days," but that the consideration represents only the amount paid for the seller's assets outside the boundaries administered by the NPS.

12. A preferential right to renewal of the transferred contract shall not exist until the acceptor has been deemed a "Satisfactory" concessioner under the NPS Concessions Evaluation Program requirements. In order to receive a "Satisfactory" rating, the acceptor must normally operate one year or, as a minimum, one full summer season.

NOTE: The concession contract provides for revocation for the convenience of the NPS and would require compensation only for certain actual costs incurred by the concessioner incidental to such revocation. It shall be recognized by the parties that there will be no compensation whatsoever for any of the real property acquired by the buyer outside of the lands administered by the NPS incidental to this operation or personal property used in conjunction with the authorized service.

F. Trip Leader and Guide Requirements

The following qualification requirements must be met before guiding or leading a trip on the Colorado River through Grand Canyon.

1. Commercial Guide: To meet the qualifications of a commercial guide, an individual must:
   a. Be 18 years of age or older.
b. Have made at least three river trips through the Grand Canyon on the Colorado River as a trainee or apprentice under a qualified guide, and run every rapid on the river at least twice in the type of craft to be operated on the trip. In changing from one type of craft to another, the boatman must make at least two additional trips as a trainee. Any exceptions to this must be approved by the Superintendent, Grand Canyon National Park (Superintendent).

c. Be able to 'read' the river and operate a boat accordingly.

d. Be able to operate the emergency communications equipment carried by the outfitter and know the evacuation procedures.

e. Have a knowledge of state, U.S. Coast Guard (USCG) and NPS regulations applicable to boats carrying passengers for hire.

f. Have a knowledge of Grand Canyon natural and human history and the points of interest encountered, and the ability and willingness to impart this knowledge to passengers.

g. Have a working knowledge of safety sanitation, and equipment repair for the specific craft operated.

h. Have a first aid certificate equivalent to the American Red Cross Standard First Aid course.

2. Trip Leader: A person whose character, personality, and capabilities qualify him as a responsible leader shall be in charge of each river party. In addition to meeting the guide qualifications, the trip leader must:

a. Have made at least six trips through the Grand Canyon of the Colorado River, all as a guide running the entire trip in the type of craft to be operated as a leader.

b. Hold a current first-aid certificate, indicating the holder has satisfactorily completed the equivalent of an American Red Cross Advanced First Aid course (52 hours) or an equivalent emergency medical technician course.

c. Be knowledgeable and capable of giving a suitable orientation talk to all passengers throughout the trip. This required orientation will cover life preservers, boating safety, swimming, hiking safety, drinking water, sanitation, and cultural and natural history of the Grand Canyon.

3. Training Trips: Trips may be conducted for the purpose of training new boatmen or familiarizing boatmen with new types of equipment, interpretive methods, or operational requirements. These trips must be requested by the outfitter at least two weeks prior to the trip and must be approved by the Superintendent. The outfitter or a designated representative must accompany the trip. A list of participants, and
their positions with the company, must accompany the request. These trips will be conducted for the benefit of company personnel only, not for relatives or friends, etc. Training trips will be inspected before departure at Lees Ferry and must meet conditions set forth in the Annual Operating Requirements. User days are not charged for these trips. However, if persons other than company employees accompany the trip, user days will be counted.

G. Orientation Talks

Orientation talks are a very important aspect of the concessioner responsibilities. They may be given on the bus while traveling to Lees Ferry or at other times or locations, if approved in advance by the River Subdistrict Ranger. To ensure that each company covers the points stressed by the NPS, an outline and description of the items that must be covered is included here:

- Passengers should be informed that they will be traveling throughout their trip in Grand Canyon National Park, and all natural, historical, archeological, and wildlife components are not to be disturbed.
- Purified drinking water will be available for those who desire it.
- Life jackets must be worn at all times while on the river and kept properly fastened and adjusted to fit. A demonstration of how to fasten and adjust the life preserver and what to do if passengers find themselves in the river should also be given.
- Chemical toilets or other means of containerization of human waste will be provided and must be used in camp. The reasons for this will be explained. Passengers should also be informed of the proper means of disposing of human waste while not in camp.
- Passengers should be informed to follow guides and to stay on trails at scenic stops.
- If fires are to be used during winter trips, passengers will be informed of the limitations on the use of natural firewood.

H. Subletting of User Days

User days may not be sublet to another commercial or noncommercial operator. The policy on this situation is outlined below.

1. All monies must go directly to the concessioner. A booking agent may be used but such agents must not advertise, organize, and then operate the trip. A person or organization may not collect fees for a trip, pay a concessioner a franchise fee and then personally run the trip.
2. All trip participants must be under the regular insurance coverage of the concessioner company. Separate insurance provided by charter groups, etc., is permissible but must be in addition to regular insurance provided by the river concessioner.

3. If rental boating equipment is used it must not have any company names on the boats, gear boxes, etc., other than the concessioner company name that is running the trip. Exceptions would be the name of the company that manufactured the equipment and the loan of equipment among Grand Canyon concessioners.

4. All employees must be regularly salaried or paid employees. Freelance boatmen or boatmen for one or two trips may be used provided they are paid in the regular fashion as all other boatmen for the trip.

In summary, it is clearly a sublet where a person or organization advertises, organizes, books, and operates a trip with his/her own equipment, personnel, and insurance, all of which is separate from the river concessioner company and that company is paid a fee for the use of its user days.

I. Commercial Boat Capacities

1. Those types of watercraft listed below are acceptable. Special types of watercraft must be cleared through the Superintendent.

2. Capacities - Specific capacities have been set for each company and the specific boats they operate. All capacities are for the total number of persons on any watercraft, crew included. These capacities are outlined below and can only be modified with the approval of the Superintendent.

<table>
<thead>
<tr>
<th>Boat</th>
<th>Capacity in Number of Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snout boat - 22 ft.</td>
<td>8</td>
</tr>
<tr>
<td>S Rig - 33 or 37 ft.</td>
<td>17</td>
</tr>
<tr>
<td>Havasu - 17 ft.</td>
<td>6</td>
</tr>
<tr>
<td>Spirit - 18 ft.</td>
<td>7</td>
</tr>
<tr>
<td>Dory - 17 ft.</td>
<td>5</td>
</tr>
<tr>
<td>J Rig - 32 to 34 ft.</td>
<td>20</td>
</tr>
<tr>
<td>G Rig</td>
<td>20 - 28</td>
</tr>
<tr>
<td>Triple Green River Rig</td>
<td>16</td>
</tr>
<tr>
<td>10 man</td>
<td>5</td>
</tr>
<tr>
<td>10 man triple rigged</td>
<td>15</td>
</tr>
<tr>
<td>Tandem oar boat</td>
<td>9</td>
</tr>
<tr>
<td>Green River - 17 ft.</td>
<td>6</td>
</tr>
<tr>
<td>Rogue River - 17 ft.</td>
<td>6</td>
</tr>
<tr>
<td>Maravia - 22 ft.</td>
<td>8</td>
</tr>
<tr>
<td>Modified S Rig - 37 ft.</td>
<td>20</td>
</tr>
</tbody>
</table>
II. NONCOMMERCIAL USE

A. Annual Use Allocation

The annual user day allocation for noncommercial operators will be 54,450 user days. Of this total, 43,920 user days will be allocated for the summer season and 10,530 user days will be allocated for the winter season.

B. Use Limits

<table>
<thead>
<tr>
<th></th>
<th>Summer Season</th>
<th>Winter Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch Frequency</td>
<td>1 trip/day</td>
<td>3 trips/week</td>
</tr>
<tr>
<td>Maximum Number of Trips</td>
<td>180</td>
<td>40</td>
</tr>
<tr>
<td>Maximum Group Size</td>
<td>15 people</td>
<td>15 people</td>
</tr>
<tr>
<td>Maximum Trip Length</td>
<td>18 days</td>
<td>21 days</td>
</tr>
</tbody>
</table>

C. Leader and Boatman Experience

Experience on one or more different comparable whitewater rivers is mandatory. The trip leader, or another member of the party, must be familiar with the Grand Canyon portion of the Colorado River.

D. Permit Management

All noncommercial groups must obtain a permit from the NPS in order to schedule a river trip. Permit applications will be received any time and should include the name, address, and telephone number of the trip leader. Send applications to:

River Subdistrict
Grand Canyon National Park
P.O. Box 129
Grand Canyon, Arizona 86023

A permit will be issued when the trip leader's name reaches the top of the waiting list. However, the trip leader's name will be removed from the list if he/she goes on another trip or fails to respond to a semiannual interest mailer.

Substitution of trip participants may occur after a permit application is received to allow for cancellations. However, subletting of user days to a commercial or another noncommercial user is prohibited.

E. Permit Conditions

Each noncommercial trip leader will be required to sign an affidavit stating that the trip is being organized in the spirit and intent of a noncommercial venture, and specifically that no person is receiving compensation for his or her part in the actual trip.

All noncommercial groups must fully comply with all provisions of the Colorado River Management Plan regarding boating safety, environmental protection, and sanitation.
All groups must complete a trip checkout with the Lees Ferry ranger prior to departing. All trip participants must have valid, unaltered identification to present to the ranger at that time. Identification must have the participant's picture. All trip members will complete a one-hour orientation at Lees Ferry prior to their trip departure.

F. Noncommercial Boat Capacities

Maximum capacities for boat sizes are listed below:

1. Dories: 16-18 feet in length - 5 persons

2. Inflatable rafts and pontoons:
   a. 33' and over in length - with outriggers - 15 persons
      - without outriggers - 12 persons
   b. 22' - 27' in length - 9 persons
   c. 22' - Snout - 8 persons
   d. 17' - 18' in length - 6 persons
      Triple operation - 15 persons
   e. 14' - 16' in length - 5 persons
      Triple operation - 15 persons
   f. Less than 14' in length - 3 persons
   g. Less than 12' in length - 2 persons

Changes in capacity limits for special needs can be made with the approval of the Superintendent.
III. OPERATING PROCEDURES FOR COMMERCIAL AND NONCOMMERCIAL USERS

A. Environmental Protection

1. Use of Fires

Gas stoves (propane, white gas, etc.) with sufficient fuel for cooking are required on all trips. Manufactured charcoal briquettes may be used for cooking. Wood fires may be used for warmth or aesthetics, but not for cooking. During the summer season, all wood for fires must be carried into the canyon from an outside source. During the winter season, driftwood from along the river may be used for warming and aesthetic fires. Gathering of wood from standing or on-site fallen trees, dead or alive is prohibited. All fires (wood or charcoal) must be contained in a fire pan that is at least 432 square inches on the bottom and has a 3 inch high lip around its edge. Charcoal briquettes may be contained in fire pans 12 by 12 by 3 inches with approval at the Lees Ferry checkout. All ash and charcoal residue must be carried out of the canyon.

The kindling of open fires using gathered wood, charcoal, or similar fuels is prohibited at any time when away from beaches. Gas stoves are required for overnight trips away from the river when cooking is planned.

2. Human Waste Disposal

Each boat party must carry a toilet system capable of containing and removing solid human waste from the canyon. Upon arrival at camp, these facilities will be set up and remain up until the party breaks camp. Do not burn toilet paper. Toilet paper must be deposited with other human waste. When the toilet is not set up, people should defecate or urinate as far away from use areas as possible.

The cheapest and most effective means of transporting the solid wastes identified to date is by the use of airtight ammo boxes and plastic bags. The items necessary are:

a. Ammo cans (rocket boxes), the big ones commonly 18 by 8 by 14 inches.

b. Toilet seat

c. Large, heavy duty plastic garbage bags

d. Deodorant chemical: such as Aqua Chem (blue goo), chlorine bleach, quick lime

e. Toilet paper, hand washing water dispenser and soap
The system is set up as follows. One of the rocket boxes serves as the actual toilet container. The rocket box is first lined with one of the heavy duty large garbage bags, with excess bag folded around the edge of the can. The deodorant chemical is poured into the open bag and the toilet seat placed on top of the can. The toilet is now ready for use. The hand washing water dispenser and the hand soap can be placed nearby. Used toilet paper and feminine hygiene articles (tampons and sanitary napkins) can be placed directly into the toilet. After each deposit, the toilet should be covered with a large, heavy duty garbage bag to discourage flies. When camp is to be broken, it takes only a few minutes to dismantle the toilet system and store the feces. Squeeze the excess air out of the bag and tie it off. This may be done by placing the lower part of the bag into a bucket and allowing the water to force out excess air. At this point, place the bag containing the feces into another garbage bag and store subsequent bags in it. This is a security measure against leakage. This is then tied off as before. The storage bag is then placed into the rocket box, the lid is sealed and the container ready for storage until the next day’s use. The toilet seat, plastic bags, toilet paper, and deodorant are then stored in another ammo can ready for the next camp’s use. It is necessary to remove only two cans per night from the boat, one for the storage of the equipment, another for actual use as a toilet and the subsequent storage of the fecal wastes.

The amount of chemical used per day depends on the type used and the number of people on the trip. With liquid deodorant, a few ounces at the bottom of the bag is sufficient for several deposits. When using bleach, more is required, approximately double. If used, quick lime should be sprinkled over feces after each deposit. The chemicals reduce bacterial growth in the feces and the production of methane gas. The number of ammo cans needed depends on the number of people and the length of the trip. It is easy to containerize about 70 to 90 person-days of feces in one ammo box. Thus for an 8-day, 10-person trip, only one ammo box for feces and one ammo box for equipment would be required.

After leaving the river, human waste should be disposed of properly. At Pierce Ferry, a collection container will be available to deposit this material. At Diamond Creek, the feces must be disposed of in a sanitary landfill, RV dump station, or incinerated. When taking out someplace else, check on the proper disposal procedures before departure.

The above is a basic system and there will undoubtedly be many innovative improvements on this system. The basic tenet is to safely containerize the feces and prevent it from generating methane gas in the absence of air in the ammo cans.

At camp all paper will be put in the toilet bag, but during the day we suggest putting all toilet paper in a zip-lock bag or other container and depositing it in the toilet bag in the evening. Toilet paper is a major source of litter in the canyon so do not leave any behind.
Trip leaders should plan stops prior to attraction sites to allow people to relieve themselves. This will keep attraction sites cleaner.

3. Refuse (Trash) Disposal

Cans, rubbish, and other refuse may not be discarded in the water or along the shore of the river, side-canyons, or any other portion of the canyon. All refuse material must be carried out. Deposits may not be made at Phantom Ranch, Diamond Creek, Pierce Ferry, or South Cove. The trip leader must ensure that all trip members properly dispose of refuse. Can-smashing must be done in a way which leaves the beach free of liquids, food and paper particles. Liquid waste will be strained through a fine mesh screen into the river.

4. Use of Soap

The use of soap is restricted to the Colorado River only. Use of soap in sidestreams or within 100 yards of any sidestream is prohibited.

5. Wildlife Disturbance

Feeding or in any way interfering with wildlife is prohibited. Because they can disturb and compete with native wildlife, no dogs, cats or other domesticated animals are allowed on river trips.

6. Restricted Sites

Areas along the Colorado River closed to either camping (including no open fires) or visitation include:

a. Red Wall Cavern - no camping.

b. Little Colorado - no camping from Mile 60.5 to Mile 65.0 on southeast side of river.

c. Hopi Salt Mine - no visitation, east side of river from Mile 63 to Mile 64.

d. Phantom Ranch - no camping 1/4 mile upstream from Kaibab Bridge (Black Bridge) to 1/4 mile downstream from Pipe Creek (Garden Creek) except in an emergency. Emergency camping in this area must be approved by the Phantom Ranch ranger in advance. Wood fires will not be allowed at any time in this area. Passengers leaving trips at Phantom Ranch and wishing to camp at either Bright Angel Campground or Indian Gardens must have a backcountry permit (which requires advance reservations).

e. Elves Chasm - no camping within 1 mile of Royal Arch Creek's confluence with river.

f. Deer Creek Falls (north side of river) - No camping within 1/2 mile of the confluence of Deer Creek and the Colorado River.
g. Matkatamiba - day use only, no camping in the canyon.

h. Havasu Creek - no camping from the mouth of the Havasu Creek to a point 1/2 mile downstream. Overnight use is permissible only within the Havasupai campground, no camping is allowed in Havasu Canyon between Beaver Falls and the Colorado River. For reservations at Havasu Campground, telephone the Havasupai Indian Tribe (602)448-2121. For your information a $5 fee is charged for entry or crossing of the Supai reservation, payable at the time of entry (above Beaver Falls); an additional fee of $2 is charged for overnight use.

i. Other areas as listed on bulletin board at Lees Ferry.

B. Boating Requirements/Safety

1. Registration

All watercraft operating on the Colorado River in Grand Canyon will be registered in accordance with the Arizona Boating and Water Sports Law. Rafts/boats operating on Lake Mead at night must comply with USCG running light requirements.

2. Horsepower

No vessel shall have a rated horsepower in excess of 55.

3. Safety Equipment and Procedures

a. Life Preservers: One USCG approved personal flotation device (PFD) Type I or V shall be worn by each passenger. Each passenger's PFD will have an identifying mark and will be fitted for that particular passenger and worn only by that passenger for the entire trip. One extra PFD for every 10 passengers with a minimum of one extra PFD for each boat or raft, excluding kayaks, canoes and sportyaks. Boatmen and crew may use USCG approved type I, II, III, or V PFD's. Each PFD will be inspected at Lees Ferry for serviceability in compliance with USCG standards. Unserviceable jackets will not be used. Each boat over 16 feet in length must carry and have available a USCG approved Type IV PFD. Life jackets must be worn at all times while on the river and kept properly fastened and adjusted to fit.

b. First Aid

A major first aid kit shall be carried on each trip with a smaller kit on each additional boat. The NPS will provide a list of suggested first aid items on request.
c. Communications and Signalling

(1) Emergency signalling equipment will include a signal mirror of the U.S. Air Force type and a set of orange signal panels, 3 by 10 feet.

(2) Additional recommended equipment is a ground-to-air radio transceiver. Recommended frequencies include:

- 121.5 - Emergency
- 122.75 - East of Lava Falls
- 122.8 - Unicon (ground to ground)
- 122.9 - Air to Air (general pilots)
- 123.05 - West of Lava Falls

d. Other Emergency Items

(1) One extra set of oars must be carried on each oar-powered boat or raft. Two extra paddles are acceptable for inflatable paddle craft. It is recommended that kayaks and whitewater canoes have spare paddles, spray skirts, and helmets which can be carried on the support boat or on individual boats.

(2) One extra motor must be carried for each motorized raft used. Also to be carried are spare parts of the types most commonly found to break and require replacement under river-running conditions, such as propellers, water pumps, shafts, etc.

(3) When inflatable rafts or pontoons are used, each river trip will carry an air pump.

(4) Every river trip will carry an adequate boat-patching and repair kit.

(5) All motorized craft are required to carry two B-I or one B-II fire extinguisher.

(6) A supply of ropes and canteens should be carried.

(7) Each trip will carry one or more accurate maps or guides of the Colorado River in Grand Canyon.

e. Incident Reports

Any incidents resulting in personal injury requiring a physician's attention or property damage over $100 must be reported to Grand Canyon National Park. Incident forms must be given to a NPS ranger at the time of evacuation or to the ranger at Phantom Ranch or Lake Mead. Incident forms will be supplied by Grand Canyon National Park and carried on each trip.
f. Upstream Travel

No vessel shall engage in primarily upstream travel above Diamond Creek.

C. Sanitation and Food Preparation

Proper food handling and sanitation techniques are necessary to prevent the spread of communicable diseases among the members of a trip. Gastrointestinal illnesses are of primary concern.

To interrupt the chain of events leading to an outbreak of human illness, personal and environmental cleanliness are vitally important. All perishable food should be appropriately refrigerated or stored and thoroughly cooked. Each group of boatmen is required to have a dial thermometer for checking food temperatures during preparation and serving. Food preparation equipment and utensils should be clean and sanitized. Appropriate public health laws will be enforced.

The most effective means of sanitizing dishes and utensils on a river trip is the three-bucket system. Place the three buckets below the high water mark or in a way that leaves the beach free of soap and food spillage. The system is as follows:

- Use three buckets, large enough to immerse largest utensils, one bucket heated to between 120° and 140°F.

- Add detergent to heated bucket, leaving one clear for rinsing, and to the third add chlorine at the rate of two teaspoons per gallon of water for sanitizing.

- Wash dishes and utensils in the first tub to remove grease and food particles.

- Dip rinse in the second tub.

- Immerse articles in the third tub for 60 seconds, double time if towel-dried. The effectiveness of chlorine for disinfection is directly related to time of exposure. Be sure to allow time for the chlorine to sanitize.

- Rack for air-drying or wipe dry with fresh paper towels.

Store the articles in a clean, dry location and they will be ready for the next meal.

To insure safe drinking water, follow the steps given below:

- Add eight drops of chlorine per gallon of water (add a few more drops if the water is muddy).
- Mix the water and let stand uncovered for 30 minutes. Proper standing time will disinfect, as well as dissipate any objectional chlorine taste.

D. Off-river Camping

Permits and/or reservations are necessary for off-river (backcountry) camping in all areas of Grand Canyon National Park. The maximum number allowed in one group is 15 people, with camping in one spot limited to two nights.

To receive off-river camping permits, mail camping request to the River Subdistrict Ranger including number of people, date, and location of hike. Requests must be received two weeks prior to launch date. Backcountry permits will be mailed to permitee. The written permit must accompany each overnight off-river party.

For camping reservations at Havasu Campground, telephone the Havasupai Indian Tribe, (602)448-2121.

Hualapai Tribal land extends from River Mile 165 to River Mile 273 on the south side of the river. Any overnight use away from the river area requires permission from the Hualapai Tribal Council.

E. Special Launching and Takeout Procedures

1. Launching from Lees Ferry

Certain launching procedures must be carried out to insure maximum efficiency in the rigging and launching of river trips.

a. The launch ramp may not be used to perform maintenance projects on equipment.

b. During the rigging procedures, only river equipment and NPS vehicles may park on the ramp. The loading of passengers and river bags must take place off the ramp.

c. Equipment vehicles must be moved to upper parking lots after equipment is unloaded.

d. Cooking of meals is not permitted on the launch ramp.

e. A maximum of two people per company is allowed to stay with equipment overnight on the ramp. All other trip participants must sleep in the campground.

f. Boats that are rigged 48 hours prior to their launch date should be moved off the ramp to make room for trips with more current launch dates.
2. Launching from Diamond Creek

Only the Hualapai Tribe may operate commercial trips from Diamond Creek. Hualapai Tribal river running operations will comply with all permit conditions including but not limited to:

- Contractual compliance
- Boating safety, first aid, emergency procedures
- Environmental protection
- Health and sanitation

Noncommercial trips may run from Diamond Creek to Pierce Ferry and must:

- Obtain permission to use Diamond Creek Road and pay all required fees to:

  Hualapai Tribe  
  Wildlife and Outdoor Recreation Department  
  Peach Springs, Arizona 86434

- Make advance reservation to insure desired date
- Obtain permit from NPS River Unit
- Comply with same permit conditions previously outlined under the noncommercial section.