

Backcountry Management Plan

September 1988

Grand Canyon National Park
Arizona

National Park Service
U.S. Department of the Interior

(this version of the Backcountry Management Plan was reformatted in April 2000)

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GRAND CANYON NATIONAL PARK
1988 BACKCOUNTRY MANAGEMENT PLAN

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A. INTRODUCTION

The Backcountry Management Plan defines the primary policies which manage visitor use and resource protection for the undeveloped areas of Grand Canyon National Park. The plan is divided into two sections. First are the general concepts and policies that guide backcountry management of Grand Canyon National Park. Second are the appendices that contain specific operational guidelines. The plan applies to lands within all three administrative districts of the park: Canyon, North Rim, and South Rim. Of the 1,215,735 acres contained within the park, approximately 1,179,700 acres are considered backcountry.

The Grand Canyon backcountry environment includes subalpine spruce-fir forests and meadows, ponderosa pine forests, pinyon-juniper woodland, sagebrush scrub, desert scrub, and riparian vegetation along stream and river courses. Elevation varies from over 9,000 feet on the North Rim to approximately 1,000 feet at the upper end of Lake Mead. Extreme variations in topography, temperature, and water availability tend to concentrate backcountry use in certain places during certain times of the year.

Backcountry hiking opportunities are varied and numerous, with three major trails designated as part of the National Trails System, and a variety of other trails and routes to challenge almost every hiking ability and taste. Stock use is allowed on certain trails within the canyon and on most roads on the rims. Backcountry bicycle and motor vehicle use is also allowed on many miles of dirt roads on both rims.

The primary features of the 1988 Backcountry Management Plan are: (1) the use of a permit and reservation system for all overnight use of the park backcountry, (2) the division of backcountry lands into Use Areas, (3) the classification of each Use Area into one of four Management Zones, (4) the establishment of visitor use limits for each Use Area, (5) research and monitoring programs which determine if management objectives of the plan are being met, and (6) mitigation of impacts through actions such as site restoration and rehabilitation, educational programs, interpretation, and law enforcement.

B. GOALS

The long-range goals of backcountry management at Grand Canyon National Park are: (1) to maintain and perpetuate the natural ecosystem processes within the park, (2) to protect and preserve historic and prehistoric cultural resources, and (3) to provide and promote a variety of backcountry recreational opportunities for visitors compatible with resource protection and visitor safety which is consistent with applicable legislation and policies. It is also a goal of this plan to be consistent with other park plans, such as the Colorado River Management Plan, to the maximum extent possible.

Specific goals for backcountry management are also found in the Management Objectives table in Appendix F. These objectives define the differences between the four Management Zones into which all backcountry Use Areas are classified. In addition, they provide measurable means to determine how well the Backcountry Management Plan meets the above long-range goals.

The 1976 Master Plan for Grand Canyon National Park identifies the protection and maintenance of natural conditions and a primitive atmosphere as overall objectives for backcountry lands. In addition, NPS management policies and departmental directives require that lands determined suitable for wilderness designation, or officially proposed as wilderness, be managed so that wilderness values are not adversely affected until a final determination is made by Congress. Because almost all of the backcountry lands in the park have been proposed for wilderness designation, as discussed in Section C, an additional goal of this plan is to insure that the values identified in the proposal are not adversely affected before Congress makes a determination.

C. LEGISLATION AND NPS POLICY

The 1916 National Park Service (NPS) Organic Act and the 1978 Public Law 95-250 require the NPS "to conserve" park resources, and the values and purposes for which the park was established, as well as "to provide for the enjoyment" of those resources and values "in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." To fulfill these mandates, conscientious care is necessary to preserve and protect natural and cultural resources, including the primeval character of the park backcountry, while still providing opportunities for public enjoyment of backcountry lands. The park's backcountry management program must be effective in providing this care to meet both short and long-term objectives.

The Grand Canyon National Park Enlargement Act of January 3, 1975(Public Law 93-620) provided for "... the further protection of the Grand Canyon in keeping with its true significance..." and established the current park boundary. This law incorporated Marble Canyon National Monument, Grand Canyon National Monument, portions of Lake Mead National Recreation Area and the Kaibab National Forest, as well as some Bureau of Land Management lands and other lands, into today's enlarged 1,215,735 acre national park.

Additional legislation and executive orders which influence backcountry management in the park include the National Environmental Policy Act of 1969, the Archeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, the National Historic Preservation Act of 1966 as amended, Executive Order 11593, Executive Order 11987, the Water Pollution Control Act Amendments of 1972, the Endangered Species Act of 1973as amended, the Clean Air Act Amendments of 1977, and Public Law 100-91 of 1987 (regarding aircraft management).

The Wilderness Act of 1964 required all federal land management agencies to reexamine their resources for possible wilderness classification. In 1976, the National Park Service prepared a draft environmental statement (ES) and preliminary wilderness proposal which was reviewed by the public. A recommendation was forwarded to the Department of the Interior in 1980. This recommendation proposed 980,088 acres, or approximately 80 percent of the park, for immediate wilderness designation. 131,814 acres, approximately 11percent of the park, were proposed as potential wilderness additions. Action on this recommendation is still pending.

D. BACKCOUNTRY ZONING AND USE AREAS

Backcountry lands are divided into Use Areas based on established patterns of use and resource management considerations. Use Area boundaries are defined according to identifiable topographic features such as ridge tops and drainages (refer to the Backcountry Management Plan map). Use Area size ranges from several hundred to several thousand acres.

Each Use Area has an overnight camping capacity based upon the size of the area, the number of suitable and available campsites within the area, the ecological sensitivity of the area, and its management zoning and historical use. Data collected from ongoing backcountry research and monitoring programs will also be used to help determine camping capacities. Appendix A lists use limits for each Use Area.

To better guide management actions in the backcountry, and to provide an opportunity for a wide variety of backcountry experiences, each Use Area is classified into one of four Management Zones: Corridor, Threshold, Primitive, or Wild. The zones provide different recreational opportunities and levels of resource protection as described in the Management Objectives table in Appendix F.

One example is the Tanner Use Area, which is in the Primitive Management Zone. The area has no facilities, and camping is at large. Another example is the Hermit Creek Use Area in the Threshold Management Zone, which has a ranger station, designated campsites, and toilet facilities.

E. RESERVATION AND PERMIT SYSTEM

To meet the tremendous demand for Backcountry Use Permits in a fair and timely manner, an automated backcountry reservation and permit system has been implemented. A Backcountry Use Permit is required for all overnight use of the backcountry including overnight hiking, overnight cross-country ski trips, off-river overnight hikes by river trip members, Colorado River beach camping by backpackers, overnight use of private stock in the backcountry, and all overnight caving activity. The Backcountry Use Permit is valid only for the itinerary and dates specified on the permit. Overnight stays in the dormitories or cabins at Phantom Ranch do not require permits.

The permit system is designed to regulate, facilitate, distribute, and measure backcountry use. It is administered by the Backcountry Reservations Office (BRO). Appendix B contains specific guidelines on the permit system. Regulation of backcountry use is essential for the protection of park resources and to insure that a variety of backcountry experiences is available. The permit system also provides information about the extent and intensity of backcountry use, including identification of problem areas. Park ranger patrols will monitor use at a level that encourages compliance with the permit system.

In addition to the regular service provided by the BRO, reservations may be made, and/or permits obtained, in-person from rangers on duty at the Tuweep, Meadview, and Lees Ferry Ranger Stations. However, these rangers have other patrol responsibilities and are not always available to provide assistance. Plan trips in advance through the BRO to be certain

of permit availability. Also, a mailout service is available subject to time restrictions and application procedures. Otherwise, permit pick-ups are limited to regular operating hours at the BRO. The NPS is working with the Bureau of Land Management (BLM) offices in St. George and Kanab, Utah to arrange for these offices to issue permits for a limited number of Use Areas.

F. VISITOR USE LIMITS

Backcountry visitor use limits are regulated through Backcountry Use Permits issued by the Backcountry Reservations Office. Appendix A lists specific limits for each Use Area. Use limits are established for at-large camping in some Use Areas and designated site camping in others. In Use Areas with at-large camping, hikers are only required to identify the Use Area within which they will be camping and are free to choose an area to camp consistent with minimum impact camping techniques. In Use Areas in the Corridor and Threshold Management Zones where designated campsites and campgrounds have been established, hikers must follow the night-by night campsite itinerary as shown on the Backcountry Use Permit. Illness, injury, or other exigent circumstances are the only legitimate reasons for changes in itinerary.

Use limits are described in terms of the number of parties and/or groups allowed in each Use Area or designated campsite/campground per night. A party is defined as 1-8 people traveling together. A group is defined as 9-16 people traveling together.

All Use Areas which have at-large camping, have an overnight stay limit of seven (7) nights per Use Area per trip. The Superintendent may approve an extended stay due to a research or resource monitoring project. The overall trip length, both in number of days and miles, is not limited. In Use Areas having designated campsites or campgrounds, overnight stays in any one designated campsite or campground are limited to two (2) nights per trip. During the off season (November 15 through February 28), and within the Corridor Use Area only, overnight stays up to a total of four (4) nights per campground per trip are allowed.

All but two Use Areas in the Wild Management Zone have a use limit of two parties " or one group per night. Fossil and Vishnu Use Areas are limited to one party or one group. These limits for the Fossil and Vishnu Use Areas assure the opportunity for an experience without contact with another party or group. The Threshold and Primitive Management Zones have use limits which vary from one to three parties per night and/or from one to two groups per night, depending on the area. In the Corridor Management Zone, use limits are based on the total number of campers as well as on the number of parties and groups.

Reservations are held for groups within Use Areas in the Corridor and Threshold Management Zones until 30 days prior to the trip start date. Group reservations not reserved by this deadline are given out to parties or groups on a first-come, first-serve basis. Reservations are not held for groups within the Primitive or Wild Management Zones.

G. USE LIMIT EXPLANATIONS FOR SELECTED USE AREAS

(1) The **Corridor Use Area** includes the areas immediately adjacent to the Bright Angel and Kaibab Trails. It is characterized by permanent structures, trails maintained to safe standards for livestock use, and the potential for constant human contact. Indian Garden (CIG), Bright Angel (CBG), and Cottonwood (CCG) are the designated campgrounds within this Use Area. Camping is not allowed outside of these campgrounds. Each campground has toilets, purified drinking water (seasonally at Cottonwood), picnic tables, emergency telephones, and ranger stations (staffed seasonally at Cottonwood).

Corridor Use Area campground use limits are based upon the number of available sites and sewage disposal limitations at each campground. Campsites are well defined. Reservations for campsites in these campgrounds are made through the BRO based on the number of parties and groups plus the total number of campers. Use limits are determined by the park's ability to provide the above described services and also by information resulting from research and monitoring programs.

(2) The **Clear Creek Use Area** (AK9) includes the Clear Creek drainage as well as the area on the Tonto Plateau to Sumner Wash (two miles east of the North Kaibab Trail). In the Clear Creek drainage, camping is restricted to areas above the first major side canyon north of the river that enters from the east. Camping on the Colorado River beach just to the east of the confluence of Clear Creek and the Colorado River is also allowed.

(3) The **Phantom Creek Use Area** (AP9) includes Utah Flats and the Phantom Creek drainage two miles above its confluence with Bright Angel Creek. The Phantom Creek drainage is only open to camping above the major waterfall near the 3600 foot contour line.

(4) Camping is not allowed in the **Transept** (TRA), **The Basin** (BSN), **Manzanita** (MAN), **Uncle Jim Point** (UNJ), **Long Jim** (LJM), and **Tusayan** (TUS) **Use Areas** due to available camping in the Corridor Use Area and rim campgrounds, the special ecological nature of these areas, and their low physical carrying capacities.

(5) A high demand exists for the **Hermit and Monument Use Areas** because of their accessibility and the presence of water. The potential for environmental and sociological impacts from the use permitted is mitigated by allowing camping in designated sites only and installing toilets at these sites. The designated sites for camping in the Hermit and Monument Use Areas are Hermit Creek (BM7), Hermit Rapids (BM8), Monument Creek (BL7), Granite Rapids (BL8), Cedar Springs (BL6), Salt Creek (BL5), and Horn Creek (BL4). There are toilets at the Hermit Creek, Monument Creek, Salt Creek, and Horn Creek campsites.

(6) The **Horseshoe Mesa Use Area** (BF5) has relatively easy access and high historical use. With the exception of potential impacts to fragile cultural resources, it can withstand continued high use levels. Limiting factors in this area are adequate human waste disposal and the protection of cultural resources. Camping is restricted to designated sites located away from cultural resources. Toilets are provided.

(7) The **Basin Use Area** (BSN) on the North Rim is an ecologically sensitive area restricted to day use only. During springtime, the alpine meadows found in this Use Area are extremely moist from the winter snowmelt and cannot tolerate significant physical impact. During the

winter season, overnight use is permitted according to restrictions which apply specifically to the North Rim.

(8) Although the **Tapeats Use Area** is remote and access from the rim is difficult, it is visited frequently by river trips during the summer season. Camping is restricted to two designated sites, the Upper Tapeats (AW7) and Lower Tapeats (AW8) campsites. A toilet is provided at the Upper Tapeats site.

(9) For the **Walhalla Plateau (NA9)**, **Thompson Canyon (NB9)**, and **Robbers Roost (ND9) Use Areas**, access is from the North Rim Entrance and Point Imperial/Cape Royal Roads. Camping is at-large, and campsites must not be visible from these paved access roads.

H. VISITOR ACTIVITY RESTRICTIONS

(1) Three types of **river beach camping** are allowed on Colorado River beaches: commercial river trips, private river trips, and overnight hikes not associated with river trips. Participants in river trips must comply with the operational requirements set forth in the Colorado River Management Plan. Overnight hikers not associated with river trips must comply with the operational requirements set forth in the Backcountry Management Plan.

(2) **Camping at designated locations** is required when necessary to restrict intensive use to previously disturbed areas and limit the impact. Designated campgrounds (composed of several adjacent sites) are found in the Corridor Management Zone. Separate designated campsites may be located in Use Areas of the Threshold Management Zone with the sites located according to aesthetic, environmental, and sociological criteria. Where designated campsites exist, backcountry users may not select other campsites.

(3) **At-large camping** is defined as camping in the backcountry at sites other than designated campsites. At-large camping is prohibited in the Corridor Management Zone. In Use Areas of the Threshold Management Zone without designated campsites, as well as in Use Areas of the Primitive and Wild Management Zones, parties/groups can camp anywhere in the area in accordance with minimum impact camping techniques

(4) The Superintendent may establish limitations on the use of all or portions of a park based on resource and visitor protection needs(36 CFR 1.5). Temporary or permanent **closure of backcountry areas** to visitors and/or camping may occur for the protection of park resources, for special management activities (such as wildlife management, search and rescue, construction, blasting, etc.), to avoid crowding and congestion at popular attraction sites (as at Havasu Canyon and Thunder River Falls), in scientific study areas, for Native American religious purposes, for human safety and health purposes, and according to Arizona state law (as in wildlife use of water sources). Before permanent closure of an area, alternatives to closure such as modifications of management practices, changes in visitor use patterns, increased visitor education efforts, etc., will be explored. The only area currently closed to all visitation is Furnace Flats.

Areas closed to camping but open to day use include: Dripping Springs, Page Spring, River Mile 47 (Saddle Canyon below the Redwall Formation), portions of Phantom Creek, the

Thunder River drainage from Surprise Valley to its confluence with Tapeats Creek, Havasu Creek within Grand Canyon National Park, Matkatamiba Canyon below the Redwall Formation, Grandview Historic Mining District, the Clear Creek drainage from the Colorado River north to the first major side canyon entering from the east, Deer Creek from the Colorado River to the upper end of the narrows, Elves Chasm, the area within one-half(1/2) mile of the Little Colorado/Colorado River confluence on the east side of the Colorado River, and Redwall Cavern. The Hance Mine south of Hance Rapid and the Bass Mine in Hakatai Canyon and the area immediately surrounding the mine tailings and waste areas are closed to all visitor use. Fishing in the Colorado River is prohibited within 1/2 mile of the confluence with the Little Colorado River and in that portion of the Little Colorado River which is within the park. Also, camping is not allowed in the Transept, The Basin, Manzanita, Uncle Jim Point, Long Jim, and Tusayan Use Areas.

The Hopi Salt Mines along the Colorado River within Grand Canyon National Park are closed to all visitation except by permission from the Hopi Tribe. This closure extends from approximately Colorado River mile 62 to mile 62.5 on the river's southeast side. A Backcountry Use Permit and tribal permission are required.

(5) Open wood or charcoal **fires** are not permitted in the backcountry of Grand Canyon National Park except at certain locations on both rims where permanent fire grates are provided. Wood collecting is not allowed even where fire grates are provided. Backcountry users desiring fires must bring wood from outside the park. During periods of high fire danger, fires may be prohibited.

Beach campfires are not allowed by any backcountry permittee under the Backcountry Management Plan. Beach campfires of participants of commercial or private river trips are regulated by the Colorado River Management Plan.

(6) Backcountry sanitation includes the disposal of both **trash and human waste**. Backcountry visitors are required to carry out all trash. Only human waste and toilet paper are to be deposited in backcountry toilets. Disposal of trash in backcountry toilets is prohibited. Trash prevents such toilets from functioning properly. When toilets are not provided, used toilet paper must be carried out of the canyon in a sanitary manner (such as double-bagging in plastic). Burning of toilet paper is not allowed. Wildfires resulting from this practice have caused significant resource damage. Backpackers should possess a small shovel or trowel for burying feces when toilets are not available.

In the Corridor Management Zone, toilets are provided at each campground and as necessary along trails to prevent negative aesthetic impacts and to protect public health. Acceptable waste disposal systems include sewage treatment plants, septic tanks, and composting/dehydrating toilets. The removal of waste material by helicopter or stock transport is acceptable only until more efficient and less intrusive means are available. Earth pit toilets are not to be used in the Corridor Management Zone due to high visitation.

Threshold Management Zone toilets can be either composting, dehydrating, or earth pit types. If sanitation at camping areas is an aesthetic or health problem, such toilets will be provided. Toilets are to be as unobtrusive as possible. The location and design of pit toilets will follow standards and requirements of the State of Arizona and the Coconino County Department of Environmental Health. Earth pit toilets will only be used when new pits are

not necessary in a two-year period. Toilets may be provided in the Primitive Management Zone only as a last resort to contain localized human waste problems. Toilets are not provided in the Wild Management Zone where use is limited and the volume of waste is not a problem.

Colorado River beaches are used by both river runners and hikers. All users must urinate in the river or in wet sand at the river's edge (not in side streams). Failure to follow this practice quickly causes the beaches to smell of uric acid. The volume of water in the Colorado River provides the best means for urine disposal. Solid human waste (feces) must be deposited beyond the beach in organic soil. Toilet paper must be carried out with other trash. The beach sand is a sterile environment and waste does not decompose.

(7) **Private stock use** in the backcountry must follow the Grand Canyon National Park private stock use guidelines detailed in Appendix D. Private stock are permitted below the rim on the Whitmore Trail and in the Corridor Management Zone with overnight stays allowed only at the private stock use campsites near the Phantom and Cottonwood Ranger Stations. A Backcountry Use Permit is required for overnight use of private stock in both rim and inner canyon areas. Camping is allowed at designated sites only. Day users of the Tonto Trail must register at the Indian Garden Ranger Station; a Backcountry Use Permit is not required. An information sheet on private stock use is available upon request.

(8) **Cave use and management** is guided by the park's Cave Management Plan. All caving activity (day use or overnight), except for access to Cave-of-the-Domes on Horseshoe Mesa, must be approved in advance through the Resources Management and Planning Division. Division staff can be contacted at 602/638-7751. A Backcountry Use Permit is required for an overnight stay. Special campsites may be designated on the caving permit as provided in the Cave Management Plan.

(9) Presently, there is no special permit required for **technical rock climbing**. Most of the rock formations at Grand Canyon are extremely unstable, resulting in hazardous conditions. Many technical climbing areas are remote and only accessible by overnight hiking trips that require a Backcountry Use Permit.

(10) **Recreational fishing** is permitted in the backcountry. All fishing activities must be in accordance with Arizona Game and Fish Department regulations and any special regulations established by the NPS. Fishing in the Colorado River is prohibited within 1/2 mile of the confluence with the Little Colorado River and in that portion of the Little Colorado River which is within the park.

(11) Within backcountry lands, a **commercial operation** is one which conducts guided trips or services for a fee in excess of the actual personal costs of the trip and/or for payment of other than actual personal trip expenses for guides or leaders. All commercial operations must obtain appropriate authorization from the Superintendent prior to offering any services in the park. These commercial authorizations are issued consistent with NPS policies, as well as with the applicable provisions of Public Law 89-249 (the Concessions Policy Act of October 9, 1965). Additionally, all backcountry commercial operations must comply with regulations set forth in the Backcountry Management Plan. The Backcountry Management Plan, and any changes here to, take precedence over any existing or future commercial authorizations providing use of the backcountry. Upon request and as appropriate, the NPS will provide

interpretive and emergency medical care training for the park's guided hiking and stock concessioners.

Commercial operations that have received proper authorization and have verifiable clients may offer guided hikes in all backcountry areas where visitation is allowed on a first-come, first-serve basis according to the guidelines specified herein. Additionally, the park concessioner is allowed to make advance reservations for not more than one (1) guided hike for a total party of up to eight (8) people per week (maximum of fifty-two (52) reservations per year). Verifiable clients are not required to reserve these hikes. When making advance reservations without verifiable clients, special restrictions apply. The specific guidelines for commercial use are detailed in Appendix C.

Commercial stock use is limited to the Whitmore Trail, the Bright Angel Trail, the Plateau Point Trail, the River Trail, the North and South Kaibab Trails, the North and South Rim concession stock trails, and the Long Jim Canyon stock trail from the Moqui Lodge to the hitching rail south of East Rim Drive at Duck-On-A-Rock Overlook. All wranglers must possess a current standard first aid or higher certification. Commercial operators and the NPS share responsibility for cleaning, draining, and maintaining trails. Concessioners are also responsible for the corrals and out-buildings they use to the extent that feces, urine, or food storage do not create a health hazard, wildlife problem, or unacceptable aesthetic impact.

(12) An **extended hike** is one which lasts longer than fifteen (15) consecutive nights. A detailed trip plan including dates, routes, campsites, number of persons, and resupply information is required by the Backcountry Reservations Office (BRO) before a Backcountry Use Permit for an extended hike is issued. Air drops of supplies are prohibited. Food caches may be placed before an extended hike begins, but must be removed within six (6) months after completion of the hike. Hikes for placement of caches or for resupply must meet all backcountry use regulations and policies. Resupply by a commercial (authorized concessioner) river company is allowed.

(13) During the **winter** season (approximately October 15 through May 15, longer if conditions warrant), **overnight use of the North Rim** is by Backcountry Use Permit only. Winter use restrictions apply from the northern boundary of the park to Roaring Springs on the North Kaibab Trail. The access road from the park boundary to the Grand Lodge area (approximately 15 miles) will be closed to all vehicular traffic, including snow machines (except for administrative use), during this time. Backcountry users may cross-country ski, snowshoe, or hike into the park, and are allowed to camp at-large in the area north of the North Kaibab Trailhead to the boundary. Campsites must be located off of the established roadway. All trash must be carried out, and human waste cannot be buried over roads, parking lots, trails, near buildings, or other areas that will be in view of summer users.

(14) At this time, the number of **day hikers and day private stock users** who use backcountry lands is not restricted. Day users are informed of trail distances, hiking and riding difficulties, and safety precautions by interpretive handouts, trailhead signs, and park rangers on patrol. Day use in a given area may be restricted when necessary to fulfill visitor and/or resource protection mandates. Day use of vehicles, stock, and bicycles may be restricted to certain roads and/or trails as provided elsewhere in this plan.

(15) All **motorized vehicles** (includes ATVs, ORVs, and motorcycles) operating in the park must abide by Arizona State licensing requirements for highway travel and NPS rules and regulations. Travel is not allowed on roads posted closed. Vehicular travel must keep to established roads. **Vessels** operating on the Colorado River within Grand Canyon National Park must abide by Arizona Game and Fish Department registration requirements and NPS rules and regulations (including the Colorado River Management Plan). **Mountain bikes (bicycles)** are allowed on all rim roads designated open to vehicles and/or stock use, and on any routes specifically designated open for bicycle use. Lights are required for night operation. Bicycles are not allowed on any rim hiking (foot) trails or on any trail below the rims.

16) **Pets** are not allowed below the rims. Pets must be under physical restraint at all times. In rim developed areas, pets can be taken on trails, roads, and other outdoor areas as long as they are under physical restraint, and there are no posted closures. Kennel facilities are available on the South Rim only. For kennel information contact: Grand Canyon National Park Lodges, Grand Canyon, Arizona 86023, 602/638-2631. There are no kennel services on the North Rim.

(17) **River crossings** by hikers are extremely dangerous and not recommended due to the Colorado River's cold temperatures, swift currents, and large rapids. If a crossing is necessary, it is recommended that a passing river trip be hailed for assistance in crossing safely. River trips may not be able to provide assistance. Arrangements should be made in advance. If assistance is provided by a commercial river trip, hikers may not go downstream more than necessary to complete the crossing. Hikers must then walk along the river to their destination.

(18) **Scientific research and collection**, other than work contracted or conducted by the NPS, is regulated by Grand Canyon National Park policies on scientific research, collecting, and research river trips. Research permit requests are reviewed by the park's Resources Management and Planning Division and approved by the Superintendent. A permit is required for all independent research and collecting. If there is overnight backcountry use, a Backcountry Use Permit is needed in addition to the research permit.

I. INFORMATION, EDUCATION AND ENFORCEMENT

Successful implementation of the Backcountry Management Plan requires information distribution, education programs, enforcement of rules and regulations, and monitoring of visitor activities. The Backcountry Reservations Office (BRO) has primary responsibility for orienting potential backcountry users to the Backcountry Management Plan. Staff will emphasize the following elements: difficulty of access in the Zone and Use Area to be visited by the hiker, potential for human contact, hazards and personal responsibility, compliance with park rules and regulations, and type of facilities in the area. Overnight hikers will receive written information and a presentation on minimum impact camping and safety. Regular backcountry patrols will be scheduled for all Use Areas. Frequency of patrols will depend on visitor use, research objectives, and staffing. Backcountry patrol rangers will give informal educational talks as necessary to promote visitor safety and resource protection.

Formal interpretive programs will be limited to the Corridor Use Area and will be developed by, and presented in cooperation with, the Division of Visitor Services.

Signs may be used to give directions, provide information, mark campsites and toilet facilities, delineate closures/restrictions for resource and visitor protection, and for preventative search and rescue (PSAR) messages. Signs will be used routinely at Corridor Use Area trail junctions to give directions. Directional signs will not be installed on other trails unless specifically justified for visitor safety. Trailhead signs will be installed as needed to identify trail name, Backcountry Use Permit requirements, and where the permit can be obtained. Trailhead signs and/or bulletin boards for the Bright Angel Trail and North and South Kaibab Trails will be in the languages of the most common foreign visitors as well as in English. Sign objectives are included in Appendix F.

J. RESOURCE PROTECTION, MONITORING, AND RESEARCH

Several different research and monitoring programs will be conducted to evaluate the ecological and sociological impacts of this management plan and to determine whether management objectives as outlined in Appendix F are being met. Two research studies were conducted as a result of the 1983 Backcountry Management Plan. One analyzed the ecological impacts of backcountry use and the other focused on the sociological aspects of backcountry use. Follow up studies to both of these research programs will be conducted. An ongoing backcountry campsite monitoring program will evaluate the impacts and location of campsites. The impacts of livestock use on the Tonto Trail between Indian Garden and the South Kaibab Trail will continue to be studied. Actions will be taken as necessary to reduce or eliminate impacts identified by the research and monitoring programs in accordance with the Management Objectives in Appendix F.

Archeological sites, both pre-historic and historic, are located throughout backcountry lands. Many of these sites are subject to heavy visitation and are in danger of disturbance by the inadvertent or deliberate activities of backcountry users. Archaeologic and historic sites will be monitored, evaluated, stabilized, and protected as necessary to comply with the National Historic Preservation Act. Regular site inspections will be conducted by park rangers and/or NPS archaeologists. Emergency preservation or excavation measures will be initiated according to the park's Natural and Cultural Resources Management Plan and NPS-28. The Archeological Resources Protection Act (ARPA) will be strictly enforced.

The park Water Resources Management Plan guides water quality monitoring in the backcountry. The potential exists for localized contamination of water sources from natural causes and human waste disposal. If pollutants from human activity are detected, actions will be taken to reduce contamination so that bacteria levels are below primary contact standards. Toilets may be provided at campsites and along trails in the Corridor and Threshold Management Zones to prevent or mitigate water contamination in areas of high visitation. Contaminated effluent resulting from any human activity or development in any backcountry watershed will be mitigated or eliminated according to regulations of the Arizona Department of Health Services. Information on minimum impact camping techniques will be provided to all backcountry users through the Backcountry Reservations Office.

K. PLAN REVIEW AND UPDATE

The Backcountry Management Plan will be effective for a three-year period. A plan review, directed by the Superintendent through the Divisions of Visitor and Resources Protection and Resources Management and Planning, will occur at the end of each three-year period. The review process will incorporate public meetings and comments, data from monitoring/research projects, visitor use statistics, NPS policy, federal rules and regulations, and legislated mandates with a status report on Grand Canyon National Park backcountry management activities. The purpose of this review will be to consider public concerns and to make changes as needed to protect natural resources and the opportunity for park visitors to have a quality backcountry experience. Interested persons are encouraged to submit comments for consideration to the Superintendent at any time prior to the plan's scheduled review.

GRAND CANYON NATIONAL PARK
1988 BACKCOUNTRY MANAGEMENT PLAN
APPENDIX A

BACKCOUNTRY ZONING AND USE LIMITS

The backcountry of Grand Canyon National Park is divided into seventy-nine Use Areas that are identified by name and map code. The accompanying table contains the zoning and use limits of the Grand Canyon Backcountry Management Plan. The codes used in this table are described below.

Each Use Area is classified into one of four Management Zones: Corridor, Threshold, Primitive, or Wild. Abbreviations for the type of camping are listed under "Camp Type". At-large camping is abbreviated as "A/L"; camping within Designated Campgrounds as "D/G"; camping within Designated Campsites as "D/S"; and Day Use only as "D/U".

The "Map I.D." column contains a three character code that is used in the Automated Backcountry Reservation System. The first character is a letter and designates in what part of Grand Canyon the Use Area is grouped. All Use Areas that begin with the letter "A" belong to the North Rim-Inner Canyon group; Use Areas that begin with the letter "B" belong to the South Rim-Inner Canyon group; Campgrounds that begin with the letter "C" belong to the Corridor Use Area group; Use Areas that begin with the letter "L" belong to the Lower Gorge-Inner Canyon group; Use Areas that begin with the letter "N" belong to the North Rim group; and Use Areas that begin with the letter "S" belong to the South Rim group.

The second character is also a letter and shows the east-west orientation of the Use Area within its particular group. The alphabet begins with the group's eastern most Use Area and finishes with its western most one. For example, Point Sublime (NH9) is further east than Swamp Ridge (NJ9).

The third character can be a number or a letter. It identifies the code as an access (Trail, Route, River, or At-large), campsite, campground, or Use Area. The number one (1) always identifies "At-large" access into the Use Area. The number two (2) always identifies access into the Use Area from the Colorado River. The number three (3) always identifies a trail or route access into the Use Area. The numbers four (4) through eight (8) identify designated campsites except where there are more trail accesses than campsites. The number nine (9) always identifies "At-large" camping within the Use Area. The letter 'G' identifies designated campgrounds. Day use only Use Areas are identified by a three letter code and does not follow the above scheme.

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USE AREA	MAP I.D.	MANAGEMENT ZONE	GROUP LIMIT		PARTY LIMIT	CAMPER LIMIT	CAMP TYPE
Badger	AA9	Primitive	1		1	24	A/L
Blacktail Canyon	AU9	Wild	1	or	2	16	A/L
Boucher	BN9	Primitive	1		2	32	A/L
Boysag	LB9	Wild	1	or	2	16	A/L
Burnt Point	LK9	Wild	1	or	2	16	A/L
Cape Solitude	SA9	Primitive	1		2	32	A/L
Cardenas	BC9	Primitive	1		2	32	A/L
Cedar Mountain	SB9	Threshold	2		2	48	A/L
Cheyava	AJ9	Wild	1	or	2	16	A/L
Chuar	AF9	Wild	1	or	2	16	A/L
Clear Creek	AK9	Threshold	1		3	40	A/L
Corridor -		Corridor					
- Bright Angel	CBG		2		31	90	D/G
- Cottonwood (Summer)	CCG		1		11	40	D/G
- Cottonwood (Winter)	CCG		1		11	16	D/G
- Indian Garden	CIG		1		15	50	D/G
Cottonwood Creek	BG9	Primitive	1		2	32	A/L
Cremation	BJ9	Primitive	1		2	32	A/L
Deer Creek	AX9	Primitive	1		1	24	A/L
Diamond Creek	LG9	Wild	1	or	2	16	A/L
Eminence Break	SF9	Primitive	1		1	32	A/L
Esplanade	AY9	Primitive	1		2	32	A/L
Fishtail	AZ9	Wild	1	or	2	16	A/L
Fossil	BS9	Wild	1	or	1	16	A/L
Garnet	BR9	Primitive	1		2	32	A/L
Grand Wash Cliffs	LM9	Primitive	1	or	2	32	A/L
Grapevine	BH9	Primitive	1		2	32	A/L
Greenland Spring	AL9	Wild	1	or	2	16	A/L
Hance Creek	BE9	Primitive	1		2	32	A/L
Hermit -		Threshold					
- Hermit Creek	BM7		1		3	40	D/S
- Hermit Rapids	BM8		1		1	24	D/S
Horseshoe Mesa	BF5	Threshold	2		3	56	D/S
Jackass	SI9	Primitive	1		1	24	A/L
Kanab Creek	LA9	Primitive	1		2	32	A/L
Kanab Point	NK9	Primitive	1		3	40	A/L
Lava	NN9	Threshold	1		1	24	A/L

USE AREA	MAP I.D.	MANAGEMENT ZONE	GROUP LIMIT	PARTY LIMIT	CAMPER LIMIT	CAMP TYPE
Long Jim	LJM	Threshold	Day Use Only			D/U
Manzanita	MAN	Threshold	Day Use Only			D/U
Monument -		Threshold				
- Horn Creek	BL4		0	1	8	D/S
- Salt Creek	BL5		0	1	8	D/S
- Cedar Spring	BL6		0	1	8	D/S
- Monument Creek	BL7		1	3	40	D/S
- Granite Rapids	BL8		1	2	32	D/S
Nankoweap	AE9	Primitive	1	2	32	A/L
National	BU9	Wild	1	or 2	16	A/L
North Bass	AS9	Primitive	1	1	24	A/L
Olo	BT9	Wild	1	or 2	16	A/L
Outlet	NG9	Primitive	1	2	32	A/L
Palisades	BA9	Primitive	1	2	32	A/L
Parashant	LE9	Wild	1	or 2	16	A/L
Pasture Wash	SE9	Threshold	2	3	56	A/L
Phantom Creek	AP9	Wild	1	or 2	16	A/L
Point Sublime	NH9	Threshold	2	2	48	A/L
Powell Plateau	AT9	Primitive	1	2	32	A/L
Red Canyon	BD9	Primitive	1	2	32	A/L
Rider	AB9	Primitive	1	1	24	A/L
Robbers Roost	ND9	Primitive	1	3	40	A/L
Ruby	BP9	Primitive	1	2	32	A/L
Saddle Canyon	AD9	Primitive	1	1	24	A/L
Saltwater Wash	SH9	Primitive	1	1	24	A/L
Scorpion Ridge	AR9	Wild	1	or 2	16	A/L
Separation	LH9	Wild	1	or 2	16	A/L
Shinumo Wash	SG9	Primitive	1	1	24	A/L
Slate	BO9	Primitive	1	2	32	A/L
Snap Point	LL9	Primitive	1	or 2	32	A/L
South Bass	BQ9	Primitive	1	1	24	A/L
South Canyon	AC9	Primitive	1	1	24	A/L
Surprise	LJ9	Wild	1	or 2	16	A/L
Surprise Valley	AM9	Primitive	1	1	24	A/L
Swamp Ridge	NJ9	Primitive	1	3	40	A/L
Tanner	BB9	Primitive	1	3	40	A/L
Tapeats -		Threshold				
- Upper Tapeats	AW7		1	2	32	D/S
- Lower Tapeats	AW8		1	1	24	D/S
Tapeats Amphitheater	AV9	Wild	1	or 2	16	A/L
The Basin	BSN	Threshold	Day Use Only			D/U
The Dome	LC9	Primitive	1	or 2	16	A/L
Thompson Canyon	NB9	Primitive	1	3	40	A/L
Toroweap Valley	NM9	Threshold	1	2	32	A/L
Trail Canyon	LF9	Wild	1	or 2	16	A/L

USE AREA	MAP I.D.	MANAGEMENT ZONE	GROUP LIMIT	PARTY LIMIT	CAMPER LIMIT	CAMP TYPE
Transept	TRA	Threshold	Day Use Only			D/U
Trinity	AQ9	Wild	1	or 2	16	A/L
Tuckup Point	NL9	Primitive	1	3	40	A/L
Tusayan	TUS	Threshold	Day Use Only			D/U
Uncle Jim Point	UNJ	Threshold	Day Use Only			D/U
Unkar	AG9	Wild	1	or 2	16	A/L
Vishnu	AH9	Wild	1	or 1	16	A/L
Walhalla Plateau	NA9	Primitive	1	3	40	A/L
Whitmore	LI9	Threshold	1	1	24	A/L
Widforss	NF9	Threshold	1	2	32	A/L

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BACKCOUNTRY RESERVATION AND PERMIT SYSTEM

Reservations And Permits

The Backcountry Use Permit is currently free and is required for all overnight use of the backcountry except in the dormitories or cabins at Phantom Ranch. The Backcountry Use Permit is valid only for the itinerary and dates specified. Backcountry travelers must have their permit in their possession while in the backcountry. Once a camp is established, the permit must be attached to pack, tent, or other equipment in plain view to be easily checked by rangers. Permits are not required for day hiking or day riding. However, day users must observe all other backcountry use regulations.

Permits may often be obtained the day a backcountry trip is to begin, but advance reservations are recommended. The demand for permits during the spring and fall months, on holidays, and during the summer vacation period far exceeds the use limits that have been established to protect the resource and the quality of the user's backpacking experience. If reservations are made, the Backcountry Use Permit must be picked up in person no later than 9:00 a.m. Mountain Standard Time on the day the trip begins. **WHEN A PERMIT IS NOT CLAIMED BY THIS DEADLINE, THE ENTIRE TRIP IS AUTOMATICALLY CANCELLED.** Permits can be claimed throughout the year at the South Rim Backcountry Reservations Office and, during the summer season, at the North Rim Backcountry Reservations Office (mid-May through late October).

Reservations and/or permits may sometimes be obtained from rangers on duty at the Tuweep, Meadview, and Lees Ferry Ranger Stations. However, these rangers have other patrol responsibilities and may not be available to provide assistance. Consequently, it is recommended that trips be planned in advance through the Backcountry Reservations Office to be certain of permit availability. Also, the National Park Service is working with Bureau of Land Management offices in St. George and Kanab, Utah, to arrange for these offices to issue permits for a limited number of Use Areas.

Reservation requests for overnight backcountry use are accepted by mail or in person only. Beginning on October 1, reservation requests will be accepted for the following calendar year. For example: beginning on October 1, 1988, reservation requests will be accepted for the period from January 1, 1989 through December 31, 1989. Letters received earlier than October 1 will not be accepted.

Each mail-in reservation request must specify the following: (1) the name, address, and telephone number of the trip leader, (2) the number of people and/or stock in the party/group, (3) campground, campsite, or Use Area for each night of the proposed trip, and (4) preferred trip dates. Reservations cannot be made without this information. The listing of three alternate itineraries with this information is strongly recommended. Every applicant will receive written notification of the outcome of their reservation request. When a confirmation letter is received, that letter should be brought to the Backcountry

Reservations Office when picking up the permit. The permit can be picked up in person no earlier than the day before the trip starts.

To make reservations, visit or write the **BACKCOUNTRY RESERVATIONSOFFICE, GRAND CANYON NATIONAL PARK, P.O. BOX 129, GRAND CANYON, ARIZONA 86023**. The South Rim office is open seven (7) days a week from 7:00 a.m. to 5:00 p.m. in summer, and 8:00 a.m. to 5:00 p.m. in winter. The office is closed from 12:00 noon until 1:00 p.m. Arizona is on Mountain Standard Time all year. The Backcountry Reservations Office rangers answer an information telephone line (**602/638-2474**) from 11:00 a.m. to 5:00 p.m., Monday through Friday (except on Federal holidays). The purpose of the information line is to answer questions on topics such as trip planning, trail and weather conditions, and water sources. Reservation requests are not accepted over the telephone. Reservation holds or cancellations may be conducted over the telephone by calling 602/638-7888.

The Backcountry Reservations Office does not make reservations for campground space on the rims, for river trips, mule trips, Phantom Ranch lodging, or trips into the canyon on the Havasupai Indian Reservation. To obtain additional information or reservations for these activities, please refer to the following list:

1. To make reservations for **South Rim campgrounds**, contact a Ticketron Outlet or write Ticketron, Department R, 401 Hackensack Avenue, Hackensack, New Jersey, 07601.
2. To make reservations for **South Rim or Phantom Ranch lodging and mule rides** (Fred Harvey Transportation Company), call 602/638-2401.
3. To make reservations for **North Rim lodging** (summer only through TW Services, Inc.), call 801/586-7686 or 7687.
4. To make reservations for **North Rim mule rides** (Trail Rides, Inc.), call 601/638-2292.
5. To make reservations for **guided backcountry hikes** (Grand Canyon Trail Guides), write or call 602/526-0924, Grand Canyon Trail Guides, P.O. Box 2997, Flagstaff, Arizona 86003.
6. To make reservations for **trips into Havasu Creek**, write or call 602/448-2731, the Havasupai Tribal Council, P.O. Box 10, Supai, Arizona 86435.
7. For information on **commercial and private rivertrips**, call 602/638-7843.

Organized Groups

A party is defined as 1-8 people traveling together. A group is defined as 9-16 people traveling together. Maximum group size is 16 people. Groups of more than 16 people must divide their group between different campgrounds or Use Areas. No more than 3 groups or 6 parties (not to exceed 48 persons) from the same organization may camp within the backcountry on the same night. **ONLY ONE GROUP OR ONE PARTY FROM THE SAME ORGANIZATION CAN BE IN THE SAME CORRIDOR CAMPGROUND OR NON-CORRIDOR USE AREA ON THE SAME NIGHT.** Only one group per night will be allowed in Use Areas classified in the Wild Management Zone. Group permits not reserved 30 days in advance of a trip start date will be released for use by parties or groups. As with unclaimed party reservations, group reservations not claimed by 9:00 a.m. Mountain Standard Time on the trip start date will be made available to persons on a walk-in basis according to the waiting list procedure described below.

Noncommercial organizations are permitted to make backcountry reservations in advance without a verifiable list of participants. However, in order to assure an equitable use of the

system, all noncommercial organizations must confirm their reservations no later than 30 days prior to their trip start date. Unconfirmed reservations will be made available to the general public desiring reservations.

Any single noncommercial entity (e.g., Boy Scout Troop #30 of Grand Canyon, Arizona) will be permitted to make no more than two (2) advance backcountry reservations in any given calendar year except when a verifiable list of participants (names, telephone numbers, and addresses) is provided for the additional reservations. There is no reservation limit for noncommercial organizations making reservations for hikes when they have a verifiable list of participants.

The Waiting List For Cancellations

Persons without advance reservations may be able to obtain a Backcountry Use Permit by placing their name on the waiting list for cancellations. This must be done in person at the Backcountry Reservations Office on the South Rim (or North Rim when open). Parties/groups with advance reservations have until 9:00 a.m. Mountain Standard Time of the first day of their hike to claim their permit at the Backcountry Reservations Office. Reservations can be held until 12:00 noon by telephoning 602/638-7888. If the reservation is not claimed by that deadline, the entire trip is cancelled, and the previously reserved itinerary is offered to individuals on the waiting list. When overnight space is unavailable, the waiting list will be started when the office opens on the day before the backcountry trip would begin. For example, a person desiring to start a trip on Saturday could place their name on the waiting list anytime between when the office opens on Friday and 9:00 a.m. Saturday.

PERSONS ON THE WAITING LIST MUST BE IN THE BACKCOUNTRY RESERVATIONS OFFICE AT 9:00 A.M. MOUNTAIN STANDARD TIME ON THE DAY THEIR BACKCOUNTRY TRIP WOULD BEGIN TO CHECK ON THE AVAILABILITY OF PERMITS.

If a person on the list is not present when their name is called, their name is removed from the list, and the next waiting person is offered the permit. If the absentee person arrives after their name has been called, their name can be added to the end of the waiting list at that time.

Mailout Permits

This service is provided when travel to the North or South Rim Backcountry Reservations Offices is unreasonable based on trailhead location, the backcountry user's point of origin, and the season of the year. The mailout service is not available for trips starting on South Rim trails from the Hermit Trail through the Grandview Trail or on North Rim trails from the Thunder River Trail accesses through the Old Bright Angel Trail (when the North Rim Backcountry Reservations Office is open).

The mailout service is subject to specific time restrictions and application procedures. THIS SERVICE MUST BE REQUESTED IN WRITING, (FORMS ARE AVAILABLE FROM THE BACKCOUNTRY RESERVATIONS OFFICE) NO LATER THAN 4 WEEKS PRIOR TO THE FIRST DAY OF A CONFIRMED BACKCOUNTRY TRIP. To qualify, a hiker must provide Use Area location/trails, date, and

name or reservation number (under which the hike was authorized) of at least 3 previous overnight hikes taken at Grand Canyon National Park OUTSIDE OF THE CORRIDOR MANAGEMENT ZONE. Hikes in the Threshold, Primitive, or Wild Management Zones which also included nights in the Corridor Management Zone are also acceptable. The forms to be submitted are (1) the Statement of Qualifications and (2) the Backcountry Trip Information Sheet.

For a private stock user to qualify for an inner canyon mailout permit, they must provide Use Area location/trails, date, and name or reservation number (under which the ride was authorized) of at least one previous inner canyon stock trip. No previous Grand Canyon trip is required for mailout permits for overnight rides above the rim. The mailout service can be requested on forms available from the BRO. They are (1) the Statement of Qualifications and (2) the Backcountry Trip Information Sheet.

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BACKCOUNTRY COMMERCIAL USE POLICY

Goal

The goal for commercial use management in the backcountry is to provide quality services for guided hikes, winter use, equipment rental, and other services which, as determined by the National Park Service to be necessary and appropriate, and will enhance the park visitors' enjoyment of the backcountry resources.

The NPS strives to interpret regulations consistently as to the status of organizations vis-a-vis whether they are commercial as defined in 36 CFR 5.3 and therefore must be responsive to commercial authorization requirements or whether they are "educational" in the context of 36 CFR 71.13(d) and exempt from securing commercial authorizations and paying fees.

Some organizations have declared themselves to be non-profit and do not pay taxes while, in fact, they are businesses providing services with a paid staff in return for payment by their clients. These organizations fall under the purview of 36 CFR 5.3 and the Concessions Management Program (NPS-48). They are properly authorized via Commercial Use Licenses.

Organizations providing "field trips" are not viewed as educational institutions in the same sense as elementary, junior, and senior high schools, and colleges and universities, whether public or private. These organizations should secure commercial authorizations and pay applicable entrance and user fees.

Definitions

Verifiable clients: Trip participants whom the commercial operator can identify by name, telephone number, and address. When required, client information is submitted at the time the reservation is made.

Commercial: Guided trips or services which collect a fee in excess of the actual personal costs of the trip and/or for payment of other than actual personal trip expenses for guides or leaders, are considered commercial trips. This includes nonprofit organizations providing a livelihood for people through provision of these services.

Noncommercial: All (non-private) trips not covered under the commercial definition are considered noncommercial trips (including those provided by business organizations where guiding or outfitting services are incidental rather than a primary business activity, or trips conducted by the organizations or organization types listed below). Groups not listed below may submit their qualifications for noncommercial status to the Superintendent for review and consideration.

1. Specific groups which are noncommercial:
 - a. Girl Scouts of America

- b. Boy Scouts of America
- c. Campfire Girls
- d. 4-H Clubs of America
- e. Museum of Northern Arizona
- 2. Other types of groups which are noncommercial:
 - a. Bona fide educational institutions when academic credit is given to enrollees for the in-park activity;
 - b. Certain governmental entities (e.g., city, county, or state recreation districts, etc.)
 - c. Certain civic organizations (e.g., Helping Hands, Big Brothers/Sisters, etc.)
 - d. Certain conservation organizations
 - e. Religious organizations (when participants are official members of record of the religious organization)

Trips may be considered noncommercial when a guide or leader receives a salary, but not directly through fees contributed by members of the guided party. Noncommercial organizations are permitted to make backcountry reservations in advance without a verifiable list of participants. However, in order to assure an equitable use of the system, all noncommercial organizations must confirm their reservations no later than 30 days prior to their trip start date. Unconfirmed reservations will be made available to the general public desiring reservations.

Any single noncommercial entity (e.g., Boy Scout Troop #30 of Grand Canyon, Arizona) will be permitted to make no more than two (2) advance backcountry reservations in any given calendar year except when a verifiable list of participants (names, telephone numbers, and addresses) is provided for the additional reservations. There is no reservation limit for noncommercial organizations making reservations for hikes when they have a verifiable list of participants.

Commercial Use Authorizations: An appropriate commercial authorization will be required for "all• commercial use of the backcountry. The authorization will be initiated by request through the Backcountry Reservations Office, prepared by the Concessions Office, and approved by signature of the Superintendent.

All authorizations issued (other than concession contracts or permits) will be one-time Commercial Use Licenses until such time as demonstrated demand may warrant the establishment of additional concession contracts or permits. Grand Canyon Trail Guides, P.O. Box 2997, Flagstaff, Arizona 86003, is the holder of a concession permit for the purpose of providing guided hiking and hiking/camping equipment rental and repair services.

All applicants for Commercial Use Licenses will be required to meet the following minimum qualifications and conditions prior to issuance of a license.

1. Proof of liability insurance coverage (Certificate of Insurance) naming the United States Government as an additional insured. Minimum acceptable level of insurance is \$300,000 per occurrence and \$500,000 aggregate.
2. Payment of all required fees (minimum of \$100 per license).
3. Certification that all guides/leaders meet the following qualifications:
 - a. Must be 18 years old or older.

- b. Must hold a current Advanced First Aid, First Responder, or higher Emergency Medical Services (EMS) certification.
- 4. All licensees must assume rescue expenses incurred by any member of their group.
- 5. The National Park Service reserves the right to establish commercial user night limitations for time periods and/or Use Areas as future conditions may warrant. This need shall be evaluated as part of the Backcountry Management Plan public review process. Backcountry commercial use (Corridor and non-Corridor), including North Rim winter use, will not be limited at this time except as follows:
 - a. When making advance reservations **without** verifiable clients, the park's guided hiking concessioner will have access to all Use Areas except the Corridor. Beginning on October 1 each year, these reservations may be advertised for the following calendar year. For example: beginning on October 1, 1988, trips during the period from October 1, 1988 through December 31, 1989 may be advertised.
 - b. An exception to the restrictions on overnight Corridor use may be made for commercially guided special populations groups (physically or otherwise handicapped). Commercial use for Corridor hikes for these groups may be granted by the Superintendent on a need basis, after careful review of each request individually on its own merits.
- 6. Qualified commercial operators will be issued one Commercial Use License at a time, with only one trip permitted per license. Commercial operators must compete for Backcountry Use Permits on the same basis as noncommercial groups and parties (see following paragraph for limited exception). No other special consideration or exceptions to reservation policies, campground and/or Use Area limits, etc., will be granted. All commercial operators (including licensees and concession contractors or permittees) may have equal access to the backcountry reservation system in order to book verifiable client reservations. Verifiable clients are trip participants whom the commercial operator can identify by name, telephone number, and address.

Commercial operations (including the park's guided hiking concessioner) that have received proper authorization and have verifiable clients may offer guided hikes in all backcountry areas where visitation is allowed on a first-come, first-serve basis according to the guidelines specified herein. Specific conditions and stipulations permitting GCTG to utilize advance reservations may be found in their current concession permit and numbers 5.a. and 5.b. above.

Additionally, the park's guided hiking concessioner, Grand Canyon Trail Guides (GCTG), is permitted advance reservations for not more than one (1) guided hike for a party (including the guide) of eight (8) people per week (maximum of fifty-two (52) advance reservations per year). Verifiable clients **are not** required to reserve these guided hikes. A list of verifiable clients shall be submitted to the Backcountry Reservations Office when the concessioner's trip leader picks up the permit. When the concessioner has NOT booked clients for these advance reservations prior to 30 days from the trip start date, these reservations will be made available to the general public. Conditions and requirements of future modifications of the Backcountry Management Plan will be reflected through amendments to the GCTG concession permit or upon renewal of the concession permit as appropriate. The Backcountry Management Plan has precedence over the concession permit on all matters affecting the concessioner, and changes to the plan become amendments by immediate and automatic incorporation to the permit.

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PRIVATE STOCK USE

Permits

Both private stock parties/groups and individual riders must obtain a Backcountry Use Permit at the Backcountry Reservations Office. Permits are available by mail to experienced Grand Canyon stock users. The mailout service is subject to the time restrictions and application procedures specified in Appendix B of the Backcountry Management Plan. Application forms can be requested from the Backcountry Reservations Office by telephone or letter. Permits must be obtained by persons who wish to stay overnight on or below the rim. Permits are not required of persons who are day riding only. However, day users of the Tonto Trail must register at the Indian Garden Ranger Station. Each rider, when entering the park, accepts responsibility for his/her personal safety and for the removal of dead or injured stock from the park (36CFR, Sect. 2.16). If something happens to an animal in the park, a park ranger should be contacted as soon as possible for assistance.

There is a 12-animal limit per party of eight people for overnight trips in the canyon. Within this limit, no more than five pack animals per mounted packer are permitted. Pack stock must be led, tied together, and single file. Loose herding or hazing is dangerous. FIREARMS ARE NOT PERMITTED IN GRAND CANYON NATIONAL PARK.

Trails

North and South Rim: There are numerous roads and trails (indicated on the stock use map available at the Backcountry Reservations Office) to ride on the North and South Rim and in the Kaibab National Forest. Within the South Rim Village area, stock may only travel the designated stock trail running from the South Kaibab trailhead to the Bright Angel Trailhead. It is also permissible to ride west along the railroad tracks, from the overflow parking lot north of the mule barns, to gain access to roads and trails outside the South Rim Village. Water must be carried as there is no free-flowing water on either rim.

Trails Below the Canyon Rim: Private stock use below the canyon rim is allowed on the Bright Angel, River, South Kaibab, North Kaibab, Plateau Point, and Whitmore Trails, and the section of Tonto Trail between the Bright Angel and South Kaibab Trails. Stock must stay on the main trails and not use spur trails or foot paths.

Only two inner canyon day rides are recommended. These are the 6 to 8 hour ride down the Bright Angel Trail to Indian Garden, east across the Tonto Trail to the South Kaibab Trail, and up to the South Rim and the 6 to 8 hour ride to Plateau Point and back via the Bright Angel Trail. Stock must be kept on the trails and off the fragile areas along trail borders. There is no water after Indian Garden on these rides.

If a private stock party meets a string of mules, the mule string has the right-of-way. The party should find a place to get as far off the trail as possible. If this happens where there is no room to get off, the party must turn around and backtrack until a safe place is found.

Overnight trips by visitors using private stock on the North and South Rims of Grand Canyon National Park are subject to the same permit regulations as inner canyon overnight trips, and permits must be obtained prior to departure. Camping is allowed in designated private stock use campsites only.

In order to match the flow of other stock traffic on the trails, stock users should plan to travel in the following outlined directions and times:

- Bright Angel Trail: **Downhill** - from early morning until 12:00 noon. **Uphill** - after 12:00 noon (above Indian Gardens).
- South Kaibab Trail: **Downhill** - after 1:00 p.m. **Uphill** - before 8:00 a.m. or after 9:00 a.m.
- North Kaibab Trail: **Downhill** - from early morning until 12:00 noon. **Uphill** - after 12:00 noon (above Roaring Springs).
- Tonto Trail Day Ride: Ride in a **clockwise** direction, **down** the Bright Angel Trail and **up** the South Kaibab Trail.

Parking

North Rim: When riding the North Kaibab Trail, park at the North Kaibab Trailhead parking lot. Due to this lot's steep slope and heavy use, it is recommended that stock hauling equipment be parked at the overnight horse camp on CC Hill where there is more room for oversized vehicles. When riding on the numerous fire roads, vehicles and trailers must be parked completely off the roadway.

South Rim: There are two places for parking stock hauling equipment in the developed area. They are the overflow parking area beside the railroad tracks just north of the Fred Harvey mule barns and the open area just to the west of the government mule corrals at the South Kaibab trailhead (Yaki Point). Vehicles may also be parked at the private stock use campsite located on Rowe Well Road (just south of its intersection with the kennel access road). The feeding and watering of stock must be performed away from public use areas.

Overnight Trips

North Rim: A campsite with a hitching rack and water trough is located near the North Kaibab Trailhead on the North Rim. The North Rim is open from approximately May 15 through November 15. Use limits for this campsite are one party of eight, 12 head of stock, and not more than seven vehicles with trailers. For information on North Rim conditions, contact the North Rim Ranger Station at 602/638-7870.

South Rim: Two private stock campsites are being constructed on the South Rim. One is located on Rowe Well Road, and the other is at the old ranger station site near the Pasture Wash/South Bass trailhead area. Fires are allowed only when contained in the fire grate, and

all trash and ashes must be removed from the park. During periods of high wildfire danger, fires may be prohibited.

Below the Canyon Rim: Bright Angel Campground and Cottonwood Campground are the only areas below the canyon rim which have overnight facilities for private stock. Bright Angel facilities are located across the creek from the main campground and consist of a hitching rail, two saddle racks, a picnic table, and a water trough. A party of riders may stay overnight with their stock near the hitch rack. All other persons should stay in Bright Angel Campground or at Phantom Ranch Lodge. For information on the lodge, contact Grand Canyon National Park Lodges, Reservations Office, Grand Canyon, Arizona 86023, 602/638-2631.

The Cottonwood private stock campsite is located at the north end of the campground near the NPS corral. One stock party per night can stay at either of these inner canyon campsites and may camp 2 consecutive nights if desired.

Feed

Private livestock users must pack their own feed; 20 pounds per day per animal is recommended (hay pellets are best with some grain). No feed is sold in the park, and grazing is not allowed. Feed should be carefully stored while on the trip. Spilled feed must be collected and packed out with all other trash to help prevent rodent problems. Rodent-proof, lightweight containers are recommended for feed storage. Paper and cloth have proven ineffective against a determined squirrel. If feed is not kept in containers, use a long rope and hang feed from pack poles off the ground.

Water

It is important that animals be watered whenever possible. Stock can be watered directly from natural water sources where streams cross maintained trails, such as Pipe Creek on the lower Bright Angel Trail and Wall Creek on the North Kaibab Trail. Stock are not allowed in the stream above or below the trail crossing. Collapsible canvas buckets are recommended to carry water from other sources.

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LAND CLASSIFICATION

Land Classification

The 1976 Grand Canyon National Park Master Plan classifies all land in Grand Canyon National Park into four categories: Development, Natural, Historic, and Special Use. This classification was designed to aid managers in determining operational and management needs. All backcountry lands managed under the master plan are classified as Natural except for 18 acres in the Phantom Ranch area which are classified as Development, the Havasupai Traditional Use Lands which are classified as Special Use, and a portion of the Horseshoe Mesa Use Area which is classified as Historic.

Six Research Study Areas (totaling 8,845 acres) are located in the backcountry. These are designated as primary research areas and contain examples of significant natural ecosystems. These six areas are located at Neal Springs, Mount Emma, Powell Plateau, Swamp Point, Great Thumb, and Wayside. All of these locations are in Use Areas in the Wild Management Zone of the Backcountry Management Plan classification system. If research and monitoring show that use limits established in the plan are causing adverse impacts to these Research Natural Areas, mitigation actions will be implemented.

Two Environmental Study Areas (ESA) are designated on the Colorado River's south side. The Hermit Basin ESA along the Hermit Trail is based on a geological theme. The Grandview ESA on the rim in the Grandview area deals with the theme of man's relationship to the biological world. These study areas, as defined in the Grand Canyon National Park Master Plan, are not to be altered by development or management. Under the Backcountry Management Plan classification system, both the Grandview ESA and the Hermit Basin ESA are in a Threshold Management Zone. With such classifications and because both ESAs are designated for day use only, there are no conflicts with use under the Backcountry Management Plan.

The Grand Canyon National Park Enlargement Act of 1975 added approximately 65,000 acres of park land to the Havasupai Reservation and authorized grazing and other traditional uses on 95,300 acres of park land known as the Havasupai Traditional Use Lands (TUL). In 1982 the National Park Service and the Havasupai Tribe signed a "Memorandum of Understanding" on the tribal use and park management of these joint lands. Central to this memorandum is the establishment of rights-of-way for hikers. Backcountry users hiking on or across the Havasupai Reservation may be charged a permit fee by the tribe. For more information on hikes on Havasupai lands, contact the Havasupai Tribal Council, P.O. Box 10, Supai, Arizona 86435 (602/448-2121 or 2111).

The Grand Canyon National Park boundary on the east side of Marble Canyon borders the Navajo Indian Reservation. At the present time (summer, 1988), backcountry users in this part of Marble Canyon must obtain permits both from Grand Canyon National Park and the Navajo Tribal Parks Office. The NPS is working with the Tribe to resolve jurisdiction

questions in this shared area. Backcountry users hiking on or across the Navajo Reservation may be charged a permit fee by the tribe. For more information on hikes on Navajo lands, contact the Navajo Tribal Parks Office, P.O. Box 308, Window Rock, Arizona 86515 (602/871-4941).

The Grand Canyon National Park boundary south of the Colorado River in the Lower Granite Gorge borders the Hualapai Indian Reservation. At the present time (summer, 1988), backcountry users in this area must obtain permits both from Grand Canyon National Park and the Hualapai Tribe. The NPS is working with the Tribe to resolve jurisdiction questions in this shared area. Backcountry users hiking on or across the Hualapai Indian Reservation may be charged a permit fee by the tribe. For more information on hikes on Hualapai lands, contact the Hualapai Tribal Council, P.O. Box 168, Peach Springs, Arizona 86434 (602/769-2216).

The Hopi Salt Mines along the Colorado River within Grand Canyon National Park are closed to all visitation except by permission from the Hopi Tribe. A Backcountry Use Permit from Grand Canyon National Park is also required. This closure extends from approximately Colorado River mile 62 to mile 62.5 on the river's southeast side. This is a Hopi cultural site and is fragile. For more information contact the Hopi Tribal Council, P.O. Box 123, Kykotsmovi, Arizona 86039 (602/734-2441).

There are approximately 36,989 acres of non-federally owned lands within Grand Canyon National Park. The National Park Service is attempting to acquire adequate interest in these lands to provide full protection of park resources.

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MANAGEMENT OBJECTIVES

One of the principal recommendations which resulted from ecological and sociological research programs conducted from 1984 to 1986 was the recommendation to develop specific management objectives for the Grand Canyon Backcountry Management Plan. Management objectives dictate what kinds of activities can occur without creating impacts beyond a defined level. They detail what the maximum limits of acceptable change may be in any part of the backcountry. They also help to describe differences between the four Grand Canyon backcountry management zones.

The following criteria were considered in developing the management objectives: (1) each objective should clearly reflect a specific social, physical, or administrative condition of the backcountry; (2) each objective should describe a spectrum of conditions that vary continuously from the most developed management zone to the least developed; (3) each objective should be something which can be altered or influenced by changing management practices; (4) each objective should be sensitive to recreational use; and (5) each objective should be measurable so that monitoring programs can accurately assess whether or not the objective is being met.

The accompanying table contains management objectives for the Grand Canyon Backcountry Management Plan. Each management objective category has a specific objective listed for each of the four backcountry management zones (Corridor, Threshold, Primitive, and Wild). Several footnotes are contained in the management objective table. They are explained below:

- ¹ Standard procedures for road maintenance will be developed to implement these objectives. No new roads will be permitted in any Use Areas. All roads will be designated as either open or closed to vehicle and stock use. All vehicles must stay on roads at all times; no off-road travel is allowed in the park.
- ² Standard procedures for trail maintenance are located in Appendix G. Refer to Appendix G for definitions of "Corridor", "Threshold", and "Primitive" trails and "Routes". Standard trail maintenance procedures currently in effect for trails in the Corridor Management Zone will be continued without substantial change. No new trails will be constructed in any Use Area.
- ³ Detailed Backcountry Sign Guidelines will be developed to implement these objectives.
- ⁴ The objectives regarding aircraft use may be modified if necessary to be consistent with new regulations being developed by the Federal Aviation Administration in consultation with the National Park Service. Implementation of these regulations will result in some areas of the backcountry being significantly free from the sight and sound of aircraft. Other areas of the backcountry may have a significant number of aircraft overflights due to the routing of

aircraft around flight-free zones. Detailed information on aircraft management will be available at the Backcountry Reservation Office.

⁵ This management objective measures a very specific factor relating to the quality of the physical or social backcountry environment. The specific values in these management objectives are based upon the best information available to the NPS at this time. These values will be periodically reassessed based upon public comment and an analysis of past and on-going backcountry research and monitoring programs as described in Section J of the Backcountry Management Plan.

⁶ Condition Class (CC) refers to the relative amount of impact that a campsite exhibits as determined through evaluation using the Grand Canyon backcountry campsite monitoring program. Condition Class only applies to campsites in at-large camping areas. Designated sites are not included in this program. Campsite condition varies from Condition Class 1 (CC 1) sites with very low levels of physical impact to CC 5 sites with very high levels of impact. CC 1 campsites are generally barely discernable from the surrounding environment, whereas CC 5 campsites are very large disturbed areas with highly compacted soil. The intent of this particular management objective is to set limits on the number of campsites with high levels of impact. The criteria describe the maximum percentage of campsites that can fall within any particular set of Condition Classes. All of the criteria are to be met concurrently for this management goal to be fulfilled.

MANAGEMENT OBJECTIVE	CORRIDOR MANAGEMENT ZONE	THRESHOLD MANAGEMENT ZONE	PRIMITIVE MANAGEMENT ZONE	WILD MANAGEMENT ZONE
Private stock use (Horses and mules by permit only)	Permitted only on Bright Angel Trail, River Trail, North and South Kaibab Trails, Plateau Point Trail, and Tonto Trail between the South Kaibab and Bright Angel Trails.	Permitted only on the Whitmore Trail, and on designated roads and trails on the rims.	Permitted only on the Ken Patrick Trail to the Uncle Jim Trail on to Uncle Jim Point, and on designated roads on the rims	Not permitted.
Commercial stock use (Horses and mules only)	Permitted only on the Bright Angel Trail, River Trail, South Kaibab Trail, Plateau Point Trail, and North Kaibab Trail between the North Rim and Roaring Springs.	Permitted only on the Whitmore Trail, and on the South Rim from Moqui Lodge to the rim via the Long Jim Canyon road.	Permitted only on the Ken Patrick Trail to the Uncle Jim Trail on to Uncle Jim Point.	Not permitted.
¹ Motorized access to trailheads	Limited to existing paved road network.	Limited to existing paved and designated unpaved roads.	Limited to existing paved and designated unpaved roads.	Limited to existing designated unpaved roads.
¹ Roads within Backcountry Use Areas	No roads are present within this management zone and none will be permitted.	Designated unpaved roads or 4-wheel drive (4WD) trails on rim areas only. Road maintenance will be the minimum necessary for safety and resource protection in a manner that will not preclude wilderness designation at a later date. 4WD trails and roads not designated for use will be restored to natural conditions.	Designated unpaved roads or 4WD trails on rim areas only. Road maintenance will be the minimum necessary for safety and resource protection in a manner that will not preclude wilderness designation at a later date. 4WD trails and roads not designated for use will be restored to natural conditions.	No roads are present within this management zone and none will be permitted.
Camping Restrictions	Camping only in designated campsites within developed campgrounds.	Camping in designated campsites or at-large camping depending upon specific use area. See Appendix A for specifics.	At-large camping. Temporary designated sites possible in localized areas for resource protection.	At-large camping.

MANAGEMENT OBJECTIVE	CORRIDOR MANAGEMENT ZONE	THRESHOLD MANAGEMENT ZONE	PRIMITIVE MANAGEMENT ZONE	WILD MANAGEMENT ZONE
² Trails	Contains a full spectrum of trail types which include "Corridor", "Threshold", "Primitive" trails, and "Routes". Refer to Appendix G for definitions of "Corridor", "Threshold", "Primitive" trails, and "Routes".	Contains only "Threshold", "Primitive" trails and "Routes."	Contains only "Primitive" trails and "Routes" except Thunder River Trail which is a "Threshold" trail.	Primarily "Routes" with minimal development of "Primitive" Trails.
³ Signs (Types permitted)	Trail mileage, trailhead, interpretive, regulatory, directional, resource protection.	Trail mileage, trailhead, regulatory, directional, resource protection, park boundary, and road designation. Interpretive signs only in historic areas of the Hermit and Horseshoe Mesa use areas.	Trailhead and park boundary. Small signs designating roads as open or closed. Special signs only as approved by Superintendent on a case by case basis.	Park boundary. Special signs only as approved by Superintendent on a case by case basis.
³ Sign materials	Etched metal, reflective adhesive lettered, and routed wood.	Routed wood except at trailheads and park boundary. Etched metal interpretive signs in historic areas only as approved by the Superintendent. Small signs designating roads as open or closed on the rims only.	Routed wood except at trailheads and park boundary. Small signs designating roads as open or closed on the rims only.	Routed wood except at park boundary. Special signs only as approved by Superintendent on a case by case basis.
⁴ Administrative aircraft use	Flights for emergency medical services (EMS) or search and rescue (SAR) are automatically approved. Scheduled support flights for maintenance of existing physical facilities, and administrative or scientific research support flights may be approved only by special authorization by the Superintendent.	EMS/SAR flights are automatically approved. Scheduled support flights for maintenance of existing physical facilities, and administrative or scientific research support flights may be approved only by special authorization by the Superintendent.	EMS/SAR flights are automatically approved. Other flights may be approved only by special authorization by the Superintendent, using more restrictive criteria than for Threshold Zone areas.	EMS/SAR flights are automatically approved. Other flights may be approved only by special authorization by the Superintendent, using more restrictive criteria than for Primitive Zone areas.

MANAGEMENT OBJECTIVE	CORRIDOR MANAGEMENT ZONE	THRESHOLD MANAGEMENT ZONE	PRIMITIVE MANAGEMENT ZONE	WILD MANAGEMENT ZONE
Educational programs	Scheduled formal programs, interpretive signs, bulletin boards, and informal contacts.	Informal contacts. Bulletin boards and interpretive signs at trailheads only (except Hermit and Horseshoe Mesa use areas).	Informal contacts.	Informal contacts.
Ranger presence	Rangers stationed year round at Indian Garden and Bright Angel campgrounds, seasonally at Cottonwood campground. Frequent patrols and contacts with visitors. Patrols based upon use and resource monitoring.	Temporary stationing of rangers possible. Frequent patrols based upon use and resource monitoring.	Infrequent patrols based upon use and resource monitoring.	Infrequent patrols based upon use and resource monitoring.
Structures allowed (other than historic structures and other cultural resources which must be protected in all areas)	Utilities (telephones, electricity, water, sewage treatment, water pump stations), ranger stations, bridges, scientific facilities, campground facilities, pack bars, toilets, concessionaire facilities.	Toilets, pack bars, ranger station only at Hermit Creek. Fire grates permitted at designated rim areas only. Temporary scientific structures and emergency communication facilities which are not normally visible and which do not leave permanent impacts.	Toilets only as a last resort to contain localized human waste problems. Temporary scientific structures or emergency communications facilities which are not normally visible and which do not leave permanent impacts.	No structures, including scientific or emergency communication, except under extreme cases as approved by the Superintendent.
Variety of recreational activities	Day hikers, backpackers, livestock, river runners.	Inner canyon use areas: day hikers, backpackers, river runners, and livestock only on Whitmore Wash Trail. River use areas: motor vehicles, bicycles, livestock, day hikers, backpackers.	Inner canyon use areas: day hikers, backpackers, and river runners. Rim use areas: motor vehicles, bicycles, livestock, day hikers, backpackers.	Backpackers, day hikers, and river runners.
⁵ Maximum number of people permitted per night per use area	Up to 180 people or 59 parties and 4 groups.	Up to 3 parties and 2 possible groups (resulting in a possible maximum of 56 people). Except Monument Use Area with up to 8 parties and 2 groups in designated sites (resulting in a possible maximum of 96 people).	Up to 3 parties and 1 group (resulting in a possible maximum of 40 people).	Up to 2 parties or 1 group (resulting in a possible maximum of 16 people).

MANAGEMENT OBJECTIVE	CORRIDOR MANAGEMENT ZONE	THRESHOLD MANAGEMENT ZONE	PRIMITIVE MANAGEMENT ZONE	WILD MANAGEMENT ZONE
5 Number of daytime contacts with other people (these numbers will be encountered at least 80% of the time)	Large numbers.	10 or fewer contacts with other overnight parties or groups per day (except Monument and Hermit, where up to 15 contacts may occur). Potential for contact with many day hikers and river users.	5 or fewer contacts with other overnight parties or groups per day (except rim use areas and Tanner where more contacts may occur). Potential contact with few day hikers and many river users in some areas.	1 or fewer contacts with other overnight parties or groups per day. Probably no contact with day hikers. Potential contact with many river users in some areas.
5 Number of parties or groups camped within sight or sound (these numbers will be encountered at least 80% of the time)	Large numbers.	No more than 5 other parties or groups per night.	No more than 2 other parties or groups per night (except in rim use areas and Tanner where more contacts may occur).	No other parties or groups per night.
5 & 6 Campsite condition	Developed campgrounds with designated sites and regular maintenance. The campsite condition class rating system does not apply to designated sites.	The campsite condition class rating system does not apply to use areas with designated sites. In use areas with at-large camping, all of the following must be true of all campsites within each use area in this zone: 5% or less of campsites may be in Condition Class (CC) 5; 25% or less may be in CC's 4 or 5; 50% or less may be in CC's 3, 4, or 5; <u>and</u> 85% or less may be in CC's 2, 3, 4, or 5.	All of the following must be true of all campsites within each use area in this zone: No campsites may be in CC 5; 5% or less may be in CC 4; 20% or less may be in CC 3 or 4; <u>and</u> 50% or less may be in CC 2, 3, or 4.	No campsites may be CC 3, 4, or 5. 25% or less may be in CC2.
5 Total barren core area of campsites with any 10 acre area per Use Area	Not applicable.	Maximum of 2000 square feet in at-large camping areas. Does not apply to use areas with designated sites.	Maximum of 1000 square feet.	Maximum of 500 square feet.
5 Number of campsites permitted in any square mile (640 acres) area per Use Area	Limited by size of campgrounds and sewage treatment facilities.	Maximum of 20 in use areas allowing at-large camping. Limited by designated sites in other Threshold Zone use areas.	Maximum of 10.	Maximum of 5.

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INNER CANYON TRAIL STANDARDS AND SPECIFICATIONS

Goals - To meet the management objectives of: (1) the 1976 Grand Canyon Master Plan by providing a "wilderness trail system" consistent with the primitive qualities of the canyon; and (2) the Backcountry Management Plan by allowing recreational use of backcountry trails, by meeting the experiential expectations of the backcountry user, and protecting cultural and natural resources. Rehabilitation or maintenance projects are undertaken to mitigate unacceptable resource impacts, not alter the character of any trail or route.

A. Criteria for Establishing Trail Standards and Specifications.

1. Natural Resource Protection
2. Cultural Resource Protection and Stabilization
3. Visitor Safety
4. Recreational Use Levels.
5. Management Zone Classification.

B. Trail Classification (as specified by the NPS Trails Management Handbook). Classification of each trail includes both Type and Level.

1. Types of Trails

Type A - Major Trails(e.g. Bright Angel). Marked routes that are improved and maintained for foot and horseback traffic. Contain bridges, corduroy elements, drainages, and necessary shelters.

Type B - Minor Trails. Marked, improved, and maintained to accommodate foot or horseback traffic, but contain an overall lower construction standard than Type A.

Type C - Wilderness Trails. Marked but are generally unimproved except for clearing and some work on dangerous areas.

2. Maintenance Levels

Level I - Maintained for high use. Traffic is heavy. Maintained at the highest level.

Level II - Traffic is medium to heavy. The tread is maintained at a high standard for user convenience and comfort. Requires high maintenance.

Level III - Maintained for intermediate use. Traffic is medium. Tread is maintained for user convenience.

Level IV - These trails are maintained for semiprimitive use. Traffic is low to medium. The tread is often not smooth, having a dirt and rock surface. Maintained for either foot or horse use. Less maintenance is required than on the previous levels.

Level V - Maintained for primitive use. Traffic is low. These foot trails require custodial care. Minimal maintenance is required.

C. Proposed Trail Standards.

1. Corridor Trails - Type A, Level I. The North Kaibab, South Kaibab, Bright Angel, Plateau Point, and River Trails are designated "Corridor Trails."

2. Threshold Trails - Generally Type C (wilderness), Level IV. These trails are constructed trails with significant historic features within or leading to Threshold Management Zones. Trail maintenance will be performed on previously constructed sections to protect the integrity of historical features including outside retaining walls, rock riprap, log cribbing, and drainage structures. Trail width should be a maximum of 18 inches, except where previously constructed to wider dimensions, or where environmental conditions require wider tread (eg. switchback junctions). Average trail width of 12 to 15 inches on relatively level sections should be preserved. Slough removal to a minimum safe trail width (8" to 12", depending on slide slope angle) will be conducted. A 10% outslope of trail tread (1" drop for every 10" of tread width) will be attempted where possible to facilitate drainage. Outside berm should generally be removed, unless environmental considerations support retention of the feature. Loose rock removal may be conducted. Obstructive tree limbs or brush may be cut or removed to prevent detours and multiple trailing. Drainage structures (waterbars, drainage dips, check dams, sand ladders) may be used as necessary to correct trail erosion. The discriminate placement of essential cairns is permitted. Threshold trails would be Hermit, Clear Creek (North Kaibab Trail to Clear Creek Camp), Thunder River, and Grandview trails.

3. Primitive Trails - Type C (wilderness), Level V. Constructed historic features are absent or much less evident than those present on Threshold Trails. Trail maintenance will consist of resource rehabilitation efforts at impacted sections, including stabilization of historic constructed features. Trail width should be an average maximum of 18 inches, unless environmental considerations require a wider tread. Low key maintenance techniques such as out-sloping and drainage dips may be utilized where necessary. Multiple trail eradication and route delineation may be necessary to mitigate resource damage. In areas of severe or potentially severe resource damage, rock or log checks or waterbars may be utilized. Outside rock retaining lining, buried and no more than two layers high, may be used to control sloughing on traverses. The discriminate placement of essential cairns is permitted. Primitive trails include: Havasu, South Bass, Tonto (Garnet to Hance Rapid), Boucher, Hance, Tanner, Beamer, South Canyon, Nankoweap, North Bass, Deer Creek (Surprise Valley to Deer Creek Falls), Kanab Creek, Tuckup, Lava Falls, and river attraction site trails.

4. Routes/Wild - A non-delineated access with no evident historical trail construction and minimal user-defined path development. Rehabilitation on such routes will be to mitigate unacceptable resource damage only. Once an impacted section is identified and appropriate clearances are conducted, rehabilitation efforts not to exceed Primitive Trail (Type C, Level V) standards may be undertaken for the specified site.

D. Stock Use.

Currently, inner canyon stock use occurs regularly only on the Bright Angel, South Kaibab, Plateau Point, River Trail, and North Kaibab Trails, the only trails in the Park meeting NPS standards regarding stock use. These trails are regularly maintained to accommodate horse and mule traffic, in addition to heavy human foot traffic. Interface between hikers and stock

users has generated conflicts. A major complaint of hikers is the accumulation of stock feces and urine on the Corridor trails. Mitigation of these impacts is a major goal of Grand Canyon Backcountry management. A study will be conducted to examine various alternatives for significantly reducing or eliminating stock feces and urine accumulations on the Corridor trails. The much greater weight of stock concentrated on a smaller area, the tendency for shod hooves to loosen soil, and the general steepness of backcountry trails create the potential for causing impacts much more pronounced than human foot traffic. The trail standard described for Threshold and Primitive fall significantly short of the minimum specified for stock use. Trail widening (24 inches minimum), rerouting and trail construction to reduce grade when possible, and a significantly more aggressive (and expensive) maintenance schedule to protect drainage features and natural resources would be mandatory to accommodate stock on backcountry trails.

E. Action Plans.

All non-Corridor trail maintenance work will be planned within the context of a specific action plan. The purpose of the action plan is to insure compliance with the Park's management objectives for the specific trail and backcountry zones, and to provide a work plan and trail standard guidelines for the trail/resource rehabilitation crew. The intent of any rehabilitation is to mitigate unacceptable resource impacts, not alter the primitive character of any trail or route. "Character" is defined as the unique physical parameters of a particular trail (usually trail width, difficulty, and the presence of constructed historical features) that contribute to the users wildland perception of the trail, the use zone, and the Grand Canyon. For example, the Grandview Trail's extensive stone riprap, log cribbing, and retaining walls evoke a different experience than a less developed trail such as the Nankoweap Trail. Both are considered "wilderness trails" as defined in the 1976 Master Plan, but the extent of constructed features of the Grandview Trail, protected for their historical significance, should not be duplicated on the Nankoweap Trail. Such action would significantly alter the character of the Nankoweap Trail. The action plan will identify problem areas and describe maintenance and rehabilitation measures consistent with the intent of the Backcountry Management Plan, and agreed upon in advance by Resource Management, Maintenance, and Visitor Protection staff.

F. Glossary.

Backslope	The cut bank formed by the excavation extending upward from the tread.
Base	The primary excavate bed of a trail upon which the tread, or finished, surface lies.
Berm	The ridge of dirt or rocks placed on the outside of the trail base.
Cairn	A constructed mound or rock located adjacent to a trail. Used where tread is indistinct.

Check	An erosion control feature placed perpendicular to the flow of water down the trail. Used in steep or severely eroded sections of trail where waterbars are not feasible.
Out-sloping	A method of base grading that leaves the outside edge of the trail lower than the inside.
Switchback	A sharp short radius curve in a trail that is used on hillsides to reverse the direction of travel and to gain elevation.
Tread	The surface portion of a trail.
Waterbar	A device for turning water off the trail, usually made of logs or stones installed at an angle across the trail generally at 30 to 40 degrees to the tread direction.
Wilderness Trail	General trail type specified in the National Park Service Trail Handbook and referred to in the 1976 Grand Canyon Final Master Plan (page 8)

G. The following is a sample action plan on the Grandview Trail:

ACTION PLAN GRANDVIEW TRAIL

Classification: Threshold. The trail contains significant historical features and is within the Horseshoe Mesa (Threshold) use area.

Trail Description and Character:

The Grandview trail follows an ancient route utilized by the Pueblo people to gain access for the blue copper ore used in paints. In 1890, prospector and entrepreneur Pete Berry located the precious copper deposits and established the "Last Chance" claim. In 1992, Berry built the Grandview trail. Subsequent work, including a reroute of the upper section, produced an unique 3.5-mile (16,700-foot) trail from the Grandview Point trailhead to the Horseshoe Mesa cabin.

The trail consists of 1,321 feet of stone riprap in good condition, historic and recent log cribbing, and a substantial amount of historic retaining wall construction. Average width is 24 inches along stone riprap and log cribbing section, and 15 to 18 inches in other non-impacted sections. Tread consists of either stone riprap (eight per cent of total length), dirt, or bedrock. Log cribbing occurs in several critical locations, critical in that collapse of these features would render the trail extremely dangerous, if not impassable to the general hiker.

Description of Resource Impacts:

In spite of the trail's generally good condition, deterioration of historic features and the natural resource is occurring at numerous locations. Of particular concern is a 175-foot section beginning a little over one mile down the trail and immediately above the

Coconino/Supai contact. Destroyed riprap, severe erosion, multiple trailing, and the prospect of imminent collapse of a 10-foot section of stone riprap are the primary concerns.

Other locations, primarily at the base of riprap stretches, needs stabilization and reconstruction. Several outside retaining walls have collapsed resulting in trail destruction, particularly at switchbacks. Approximately 356 feet of riprap and 97 feet of retaining wall requires reconstruction to mitigate existing erosional impacts and restore lost historical features.

Proposed Action:

Work Project One: Rehabilitate the most severely impacted sections with the potential of imminent loss of historic features and continued erosion. Stabilization of historic riprap and retaining walls at the following locations (distance in feet from the trailhead): 2751, 4272, 4300, 4571, 4973, 5043, 5697, 5756-5930, 6020, 7250, 7976, 8111, and 9555. This project includes all mitigating work necessary between 5756 and 5930, including reconstruction of 154 feet of damaged or destroyed riprap and extensive revegetation.

Work Project Two: (Trailhead to 5756). Rebuild 75 feet of retaining wall (4626, 4725, 4990, and 5043) and 44 feet of riprap (4272 and 5697). Revegetate switchback shortcuts. Conduct minor trail rehabilitation, including some waterbar installation and brushing.

Work Project Three: (Supai traverse, 5930 to 15838). Rehabilitation of 170 feet of riprap (6020, 6437, 7976, 8111, 8363, 9555, and 9627), and at least 27 feet of outside retaining wall (7582, 7614, 8577, and 9867). Slough removal is necessary between 6134 and 6221 (87 feet) to prevent collapse of trail section on loose talus. Trenching is a problem at numerous locations (6320, 6473, 8570, 9198, 10870, 11137, 13510, 13600, 13708, 14077, and 14480) and mitigation measures such as outside berm removal, checks, and waterbars may be attempted. The problem is due to neglect of these various trail sections, and since fill is difficult to obtain and waterbars impractical at most locations, checks may be the only effective measure available.

H. The following is a sample trail log on the Grandview Trail:

GRANDVIEW TRAIL LOG

JUNE 28, 1988

Crumbo

0000	Trailhead.
0260	First Waterbar.
0580	Begin log checks.
0691	Rip Rap. Outside wall.
1063	End of Cribbing. Photo taken from side.
1249	Large rock in trail that could be used as waterbar at that location. End of short section of cribbing.
1347	Drainage in trail. Waterbar should be installed.
1779	Switchback cutting problem. Needs revegetation. Photo taken.
2580	Begin riprap.

2649 Short Cut.
 2751 End of intermittent riprap. Needs stabilization.
 2852 Bottom of short cut that begins at 2649.
 3048 Begin large cribbing structure.
 3102 End of cribbing.
 3114 Begin riprap.
 3170 End riprap.
 3400 Approximate location of photo site of large cribbing structure.
 3837 Long traverse. Spur trail off to left to view location.
 4210 Riprap.
 4272 End riprap. Begin damaged section: 30 feet of riprap needs restoration.
 4300 Intermittent riprap. Some work needed.
 4428 End riprap.
 4500 Begin intermittent riprap. Switchback damage.
 4571 Riprap damage. Needs re-pinning.
 4602 Damaged section continues from 4571. Gully coming in from top.
 4626 End damaged section. Rebuilt 30-ft. section of wall. Begin Riprap.
 4725 End riprap with step. Two large iron pins. Replace rotting logs with outside wall to protect trail. Photo taken.
 4763 Begin riprap.
 4824 Begin rough section with steep switchbacks. Need to find original route. Photo taken of wall and photo taken of log.
 4973 End riprap. Bottom needs stabilization. Some work need between here and 4824.
 4990 Washed out retaining wall. A suspended log is all that remains. Need to rebuild.
 5020 Begin Riprap.
 5043 Outside retaining wall collapsed and needs rebuilding.
 5120 End riprap.
 5163 Begin riprap.
 5231 End riprap.
 5309 Begin riprap.
 5417 End riprap.
 5459 Begin riprap.
 5530 End riprap. Begin rough section.
 5576 End rough section. Begin riprap.
 5678 End riprap.
 5697 Washed out riprap. Replace.
 5718 Large moss-covered rock. Could be base of riprap.
 5756 Bad multiple trail takes off downslope.
 5770 Begin riprap.
 5788 End riprap. Trail washed out and existing riprap is undermined. Some of old trail may be covered with slide debris. Photo.
 5846 Multiple (5756) joins trail. Severe erosion. Suggest rebuilding approximately 60 feet of riprap from 5788. Ample material on hand. Photo.
 5871 Fire pit. Area should be revegetated.
 5930 Coconino/Supai contact. End bad section. Suggest extending riprap from 5846 to here (96 feet).
 5976 Begin riprap.
 6020 End riprap. Short section (20 feet) needs rebuilding.
 6134 Red sluff area. Suggest widening to maximum of 18 inches.

6221 End narrow section.
 6296 Bench mark, 6190 elevation, 1216 below rim.
 6320 Narrow rough section. Some minor trenching.
 6391 Begin riprap.
 6437 End riprap. 5-ft. section at base needs rebuilding.
 6473 Minor trenching. Needs waterbar.
 6949 Begin riprap.
 7250 Short section of riprap is undermined.
 7582 Short section of riprap undermined. Drains down slope. May need 15-ft. outside retaining wall. Photo (note gouge in dark soil.)
 7614 Damaged switchback with collapsed wall. Suggest rebuilding 3-foot high by 12 foot long wall. Photo.
 7976 End riprap. Washed out at bottom. Needs 10-foot restoration. Photo taken of undermined riprap.
 8095 Begin short section of riprap.
 8111 End riprap. Bottom washed out. 15 feet of riprap needs rebuilding.
 8256 Begin riprap. Two large boulders in trail 15 feet above this section.
 8290 Small rock slide covers riprap.
 8363 End riprap. Rebuild 20-foot section at base.
 8460 Wide section.
 8570 Wash out section.
 8577 Begin riprap. Outside wall replacement?
 8601 End riprap.
 8842 Major wash.
 9060 Steep rough section.
 9198 Rough section. Could use some work.
 9490 Large wash.
 9541 Begin riprap.
 9555 End riprap. Riprap washed out to 9627. Photo.
 9627 Large wash. Destroyed riprap and multiple. Photo. Suggest extending riprap from 9555 to here (70 feet).
 9749 Riprap begins.
 9762 End riprap.
 9820 Wash.
 9867 Short outside wall in wash. Stabilize.
 9900 Approximate location of benchmark 5,478.
 10460 Multiple caused by rock slide. Move rock and block multiple.
 10680 Short, steep section.
 10732 End steep section. Note large, exposed root 30 feet up trail.
 10870 Rough, steep section.
 10904 Wash.
 10936 End rough section. Photo taken of 10870-10936 area.
 11045 Wash.
 11137 Wash. Needs work.
 11580 Rough section begins.
 11647 Rough section ends.
 11720 Wash.
 13510 Trench, 45 feet.
 13600 Trench, 80 feet.

13708	Trench, 30 feet.
14077	Short trench.
14480	Trail running water on bedrock.
14480	Trenching on bedrock. Suggest narrowing trail and attempt to run water off.
15036	Barb wire
15140	Foundation under juniper on right.
15564	Adit.
15718	Adit.
15838	Page Spring Trail junction.
16563	Cottonwood Canyon Trail junction.
16657	Cabin.

GRAND CANYON NATIONAL PARK
1988 BACKCOUNTRY MANAGEMENT PLAN
APPENDIX H

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