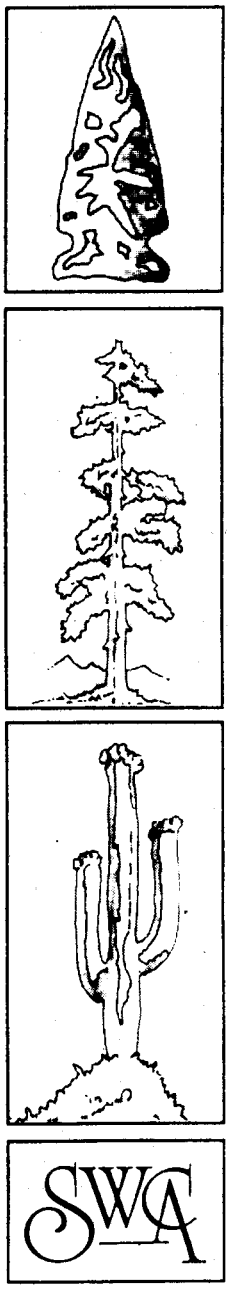
CULTURAL RESOURCES DATA SYNTHESIS WITHIN THE COLORADO RIVER CORRIDOR, GRAND CANYON NATIONAL PARK AND GLEN CANYON NATIONAL RECREATION AREA, ARIZONA

APPENDIXES



Prepared for

BUREAU OF RECLAMATION AND GRAND CANYON MONITORING AND RESEARCH CENTER

Prepared by

SWCA, INC.
Environmental Consultants

October 6, 1998

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APPENDIXES

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APPENDIX A

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1994 Appendix A, Bibliography of Annotated References for Hopi Research. November 29. To be submitted as part of Progress Report dated November 7.

Unpaginated but circa 1,000 pages in loose-leaf notebook.

1992a Ethnoarchaeology: A Hopi Interpretation of the Archaeological Record. Paper presented at the 91st Annual Meeting of the American Anthropological Association, San Francisco.

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"The Grand Canyon is a pivotal point in the history and cultural landscape of the Navajo people. It is one element of a much larger sacred geography at some temporal and spatial scales, and has many individual cultural landscape elements within it a other scales. Recent archaeological and ethnographic research conducted by the Navajo Nation revealed traditional narratives that span across the Grand Canyon region incorporating archaeological sites, trails, sacred places, and plant gathering areas that provide a complex web of storylines. This paper examines the layered histories and their physical manifestations that make up the Grand Canyon cultural landscape."

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1994 *Piapaxa 'uipi (Big River Canyon): Southern Paiute Ethnographic Resource Inventory and Assessment for Colorado River Corridor, Glen Canyon National Recreation Area, Utah and Arizona, and Grand Canyon National Park, Arizona*. Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

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Burchett, T. W., C. M. Coder, and D. C. Hubbard

**1996 Monitoring of Archaeological Sites below Glen Canyon Dam along the Colorado River in Response to the Experimental Habitat Building Flow of 1996. In *Mitigation and Monitoring of Cultural Resources in Response to the Experimental Habitat Building Flow in Glen and Grand Canyons,* edited by J. R. Balsom and Signa Larralde, pp. 26-92. Grand Canyon National Park, Arizona, and Bureau of Reclamation, Upper Colorado Region, Salt Lake City.

Burkham, D. E.

n.d. *Trends in Selected Hydraulic Variables for the Colorado River at Lees Ferry and near Grand Canyon for the Period 1922-1984.* Glen Canyon Environmental Studies. NTIS No. PB88-216098/AS. 63 pp.

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1991 Relation of Sediment Load and Flood-plain Formation to Climatic Variability, Paria River Drainage Basin, Utah and Arizona. *Geologic Society of America Bulletin*, 103: 1405-1415.

The parameters of suspended sediment load, flow volume, and flood characteristics of the Paria River were analyzed to determine the relation to floodplain alluviation between the years 1923 and 1986. Alluviation was found to have begun about 1940 at a time of decreasing flood activity. No floodplain alluviation has occurred until the present. This appears to have resulted from the decrease in frequency of large storms, but not from a decrease in annual precipitation.

Griffiths, P. G., R. H. Webb, and T. S. Melis.

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This report pertains to debris-flow occurrences in 600 tributaries of the Colorado River in Grand Canyon. Initiation was seen to result from intense precipitation and slope failure of bedrock or colluvium. Slurries of sand and boulders were characterized, along with analysis of their association to rock type and source locations. Repeat photography was employed to determine if debris flows occurred in 164 tributaries during the last century. Frequency of flows was determined using methods of logistic regression. Probability of flow occurrences was determined to be highest in eastern Grand Canyon and in drainages oriented south-southwest, owing to exposure to southwest-originating summer storms.

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**1996b Map showing surficial geology and geomorphology of the Palisades Creek archeologic area, Grand Canyon National Park, Arizona. U.S. Geological Survey Miscellaneous Investigations Map I-2449.

Hereford, R., K. J. Burke, and K. S. Thompson
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Hereford, R., H. C. Fairley, K. S. Thompson, and J. R Balsom
**1991 *The Effect of Regulated Flows on Erosion of Archaeologic Sites at Four Areas in Eastern Grand Canyon National Park, Arizona: A Preliminary Analysis, 1991.* Prepared in cooperation with the Bureau of Reclamation, Glen Canyon Environmental Studies, Flagstaff.

**1993 Surficial Geology, Geomorphology, and Erosion ofArcheologic Sites along the Colorado River, Eastern Grand Canyon, Grand Canyon National Park, Arizona. U.S. Geological Survey Open-File Report 93-517.

Archaeological sites along the Colorado River in eastern Grand Canyon are found to be most densely clustered between miles 62 and 75. These sites are mostly of Anasazi affiliation, dating from A.D. 800 to 1200 in age. The sites occur mostly in terraced, ancient alluvial deposits of the Colorado River. These deposits and their associated archaeological sites have been extensively damaged or destroyed by erosion, which has accelerated since 1965-73. This study recognizes the indirect effect of erosion caused by the presence of the dam. Generally, sites are eroded by the action of short, ephemeral streams that drain the terraces to the river. Excessive rainfall drives the action of arroyo cutting and the expansion of the channel system. Lowered river stages in pre-dam times have effectively lowered the base level of river-based streams draining beach fronts. Terrace-based streams generally end on or above the pre-dam depositional level, but during large runoffs, these channels are able to extend upslope, and downslope toward the river. The lowered effective base level of the river will allow arroyo cutting to be intensified until channel gradient adjusts to the post-dam base level.

Hereford, R. and K. S. Thompson
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1994 Topographic map of the Nankoweap Rapids Area, Marble Canyon, Arizona. U.S. Geological Survey Open-File Report 94-563.

Hereford, R., K. S. Thompson, and K. J. Burke.

1994a Topographic map of the Granite Park area, Grand Canyon, Arizona. U.S. Geological Survey Open-File Report 94-563.

Map includes information about the geologic setting and geomorphology of the river corridor, purpose of mapping, stratigraphy, and pertinent archaeological information.

1994b Topographic map of the Nankoweap Rapids Area, Grand Canyon, Arizona. U.S. Geological Survey Open-File Report 94-564.

Map includes information about the geologic setting, geomorphology of the river corridor, purpose of mapping, stratigraphy, and pertinent archaeological information.

1997 *Dating Prehistoric Tributary Debris Fans, Colorado River, Grand Canyon National Park, Arizona, with Implications for Channel Evolution and River Navigability.* U.S. Geological Survey Open-File Report 97-167.

The ages of prehistoric debris fan surfaces are relevant to long-term channel management of the Colorado River in Grand Canyon National Park. This study utilized a technique developed by the authors to date prehistoric debris fans based on the time-calibrated dissolution of carbonate boulders, which are abundant in the debris flow sediments. Studies were conducted on 617 boulders on 71 fan surfaces at the 26 largest debris fans in Grand Canyon Ages of fan surfaces were found to range from 500 to 7000 years B.P. and clustered at 790, 1460, 2360, 2950, and 3820 B.P. At any particular tributary, fan-forming debris flows tend to occur every 850 years on average.

Hereford, R., K. S. Thompson, K. J. Burke, and H. C. Fairley

1995 *Late Holocene Debris Fans and Alluvial Chronology of the Colorado River, Eastern Grand Canyon, Arizona.* U.S. Geological Survey Open-File Report 95-57.

1996 Tributary Debris Fans and the Late Holocene Alluvial Chronology of the Colorado River, Eastern Grand Canyon, Arizona. *Geological Society of America Bulletin* 108(1):3-19.

Bouldery debris fans and sandy alluvial terraces make up the late Holocene depositional chronology of nine major tributaries in eastern Grand Canyon. The ages, timing, and frequency of fan deposition are discussed, as are elements that define their geomorphology. Debris-flow deposits of various ages are described as interbedded units with three terrace-forming alluvial deposits from the Colorado River: the Striped Alluvium (<770 BC-AD 300), Pueblo-aged alluvium (A.D. 700-1200), and the Upper Mesquite Terrace (A.D. 1400-1880). Repeat photography analysis was combined with radiocarbon and archaeological dating techniques to constrain the ages of the terrace alluvium.

Howard, A., and R. Dolan

1981 Geomorphology of the Colorado River in the Grand Canyon. *Journal of Geology* 89:259-298.

This is a fundamental discussion of distinct sediment deposits of the Colorado River in Grand Canyon. They are organized into three grain-size ranges: rapid-forming boulder deposits from side canyon tributaries, cobble and gravel deposits occurring at pre-dam levels as bars and riffles, and terrace-forming alluvium of fine- and coarse-grained sand. Erosion and reworking of the terrace alluvium at river level is discussed, as are general trend differences of pre- to post-dam conditions for Colorado River sedimentation. Source-rock types are cited as a significant influence in overall channel morphology.

Kaplinski, M. A., J. E. Hazel, S. S. Beus, L. E. Stevens, and H. B. Mayes

1993 The Effects of Interim Flow Operations from Glen Canyon Dam on Colorado River Sand Bars in the Grand Canyon, Arizona. Abstract in GSA Cordilleran and Rocky Mountain Section annual meeting abstracts with programs. *Geological Society of America* 25(5):60.

This study of Grand Canyon sand bars and the interim flow regime focuses on the viability of resource maintenance and the effectiveness of the interim flows from Glen Canyon Dam in minimizing sand bar erosion. Various erosive and rebuilding river-related mechanisms are explained, and measurements indicate that exposed areas of sand bars had significantly eroded during interim flows. These occurrences were shown to be due mostly to shoreward migration of cutbanks at maximum flow levels, but seepage-driven erosion was minimized by the action of reduced down-ramp rates of flow releases. Deposition of sand was shown to occur below the interim flow level, but more sand was removed from recirculating zones than was deposited. River-stage height of the interim flows and levels indicated by the operation of the dam have resulted in the infilling of return channels with sand, silt, and vegetation. These effects have limited native fish habitat because backwaters are not viable at interim flow stage elevations. Flood deposition from the Little Colorado River in the winter of 1993 was studied, and the dynamics of beach building vs. subsequent erosion were observed and documented. High erosive rates following the floods eroded 84% of studied beaches back to pre-flood levels within six months. The study findings support the need for cyclic rebuilding of sand bars with annual bar-building maintenance flows, as this stored sand becomes available for riparian habitat development and recreational camping areas. The study concluded that continued monitoring and research are needed to determine the effects of future dam management strategies.

Kearsley, L., and K. Warren

n.d. *Effects of the Operation of Glen Canyon Dam on Campsite Size in the Grand Canyon, Arizona.* Glen Canyon Environmental Studies. REC0100. National Park Service, Grand Canyon National Park, Arizona.

Kieffer, S. W.

1987 *The Rapids and Waves of the Colorado River, Grand Canyon, Arizona.* U.S. Geological Survey Open-File Report 87-096.

Kincaid, C., and T. W. Burchett

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1995 *Site Preservation Methods Palisades Delta along the Colorado River Corridor, Grand Canyon National Park.* Two-part paper presented at the 61st Annual Meeting of the Society for American Archaeology, New Orleans.

Initial implementation of checkdam construction in river-based and terrace-based drainages.

Lucchitta, I.

1991 Quaternary Geology, Geomorphology, and Erosional Processes, Eastern Grand Canyon, Arizona. Administrative Report. U.S. Geological Survey, Flagstaff.

This report depicts the geochronology, geomorphology, and soil formation of sites in eastern Grand Canyon, including the Nankoweap area (Nankoweap ridge and wetlands), Nankoweap creek west of Butte Fault, the Palisades-Unkar area, and Granite Park. The study characterizes morphostratigraphic units of each area and describes events leading to their deposition. Composition of units was described, and absolute dating techniques were employed to determine age relationships in geomorphic assemblages.

Lucchitta, I., G. Curtis, M. E. Davis, and S. W. Davis

1995 Quaternary geological map of the Palisades Creek-Comanche Creek area, eastern Grand Canyon, Arizona. U.S. Geological Survey Open-File Report 95-832.

Map includes information about the geologic setting and geomorphology of the river corridor, purpose of mapping, stratigraphy, and pertinent archaeological information.

Lucchitta, I., G. Curtis, M. E. Davis, S. W. Davis , and T. Turrin

1995 Quaternary Geology of the Granite Park Area, Grand Canyon: Downcutting-Aggradation Cycles, Calibration of Soil Stages, and Response of Fluvial System to Volcanic Activity. U.S. Geological Survey Open-File Report 95 (preliminary).

This report outlines the geological and geomorphological findings resulting from the creation of five detailed cross sections in the Granite Park area, river miles 207.5 to 209 in western Grand Canyon. The sections show four downcutting-backfilling cycles that involve the erosion of older deposits of the Colorado River and the new river channels in which new deposits were laid down. The four cycles represent a sequence of lava flow deposition dating back 600ka, a complex progression of carbonate soil formation, cobble and sand deposition, and evidence of downcutting that began about 700 years ago and continues to the present. The study includes a chronology depicting the formation and erosion of Puebloan age archaeological units and discusses the dynamic of Colorado River overload as a result of

volcanic activity originating from the Toroweap-Whitmore area thirty miles upstream. The sequence of deposition and downcutting was analyzed with respect to driving forces of volcanic activity and climatically driven destabilization of ice-age colluvial aprons related to monsoonal weather systems.

Melis, T. S., W. M. Phillips, R. H. Webb, and D. J. Bills.

1996 *When the Blue-green Waters Turn Red: Historic Flooding in Havasu Creek, Arizona.* U.S. Geological Survey Water Resources Investigations Report 96-4059.

The frequency and size of 20th century flooding of Havasu Creek was studied using historical records and repeat photography analysis. The pattern of these floods was analyzed and correlated with trends in the frequency of regional precipitation. These trends were found to closely follow the record of flood events. In general, records show that large floods were frequent around the turn of the century, in both winter and summer months. Following the largest event in 1910, smaller floods occurred, mainly in the summer months, until 1990. The 1990 flood caused major damage to the village of Supai and altered many pools and waterfalls in Havasu Canyon. The study concludes that the pattern of recent flooding may reflect the more dynamic flood regime of the first third of the 20th century.

Melis, T. S., and R. H. Webb

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n.d. *Movement and Deposition of Sediments from the Main Channel to the Eddies of the Colorado River in the Grand Canyon.* Glen Canyon Environmental Studies PHY0800. Eddy Deposition Study, U.S. Geological Survey Arizona District Office, Flagstaff.

O'Connor, J. E., L. L. Ely, E. E. Wohl, L. E. Stevens, T. S. Melis, V. S. Kale, and V. R Baker

1994 A 4500-Year Record of Large Floods on the Colorado River in the Grand Canyon, Arizona. *Journal of Geology* 102:1-9.

The sequence of stratigraphy in Colorado River flood deposits has produced evidence of the largest flood events during the last 4500 years. Discharges from these large floods were shown to range between 5500 m3/sec-1 and 14,000 m3/sec-1. Fifteen separate events exceeding 5500 m3/sec-1 were identified and

analyzed along with gauge records of 20th century floods. These data provided a history of large floods that have affected Colorado River geomorphology. Chronology of flood events was determined using radiocarbon analysis of charcoal accumulation from human occupation and organic matter within strata exposed along the canyon margin. Discharge estimation was based on calculated water surface profiles tailored to the various study sites. Flood frequency was determined using the geologic record of flooding combined with the gauged record at Lees Ferry to provide probability estimates of large-flood frequency within the data set.

Orvis, C. J., and T. J. Randle

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1968 *Report of the Water Management Subcommittee, October 1968.* U.S. Department of Agriculture, Natural Resource Conservation Service, Phoenix.

Pemberton, E. L.

n.d. *Sediment Data Collection and Analysis for Five Stations on the Colorado River from Lees Ferry to Diamond Creek.* Glen Canyon Environmental Studies. NTIS No. PB88-183397/AS. 156 pp.

Potochnik, A. R., and S. J. Reynolds

1990 Side Canyons of the Colorado River, Grand Canyon. In *Grand Canyon Geology*, pp. 461-481. Oxford University Press, New York.

This chapter describes, on a site-by-site basis, the characteristics of a number of side canyons within the Colorado River corridor in Grand Canyon National Park. It is mainly descriptive, and adds information related to the controls of the morphology of the side canyons, regional geologic history, and stratigraphic descriptions. Structural geology is discussed, along with climatic variation and physiographic characteristics of the region, giving a composite view of side-canyon development within the corridor.

Randle, T. J., and E. L. Pemberton

n.d. *Results and Analysis of STARS Modeling Efforts of the Colorado River in Grand Canyon.* Glen Canyon Environmental Studies. NTIS No. PB88-183421/AS. 190 pp.

Rubin, D. M., J. C. Schmidt, and J. N. Moore

1990 Origin, Structure, and Evolution of a Reattachment Bar, Colorado River, Grand Canyon, Arizona. *Journal of Sedimentary Petrology* 60(6):982-991.

This report provides useful information on how a reattachment bar evolves at the mouths of tributaries on the Colorado River in Grand Canyon. The idealized evolution of these bar formations is discussed and contrasted with the added effect of morphological changes brought about by the operation of Glen Canyon Dam.

Rubin, D., R. A. Anima, and R. Sanders

n.d. *Measurements of Sand Thickness in Grand Canyon and a Conceptual Model for Characterizing Changes in Sand-Bar Volume Through Time and Space.* Glen Canyon Environmental Studies PHY0808. U.S. Geological Survey, Arizona District Office, Flagstaff.

Rubin, D., (Schmidt, Anima, Hunter, Ikeda, Jaffe, MacDonald, Nelson, Reiss, Sanders)

n.d. *Internal Structure of Bars in Grand Canyon and Evaluation of Proposed Alternatives for Glen Canyon Dam.* Glen Canyon Environmental Studies PHY0804. U.S. Geological Survey, Arizona District Office, Flagstaff.

Rutherford, J. D., I. P. Prosser, and J. Davis

1997 Simple Approaches to Predicting Rates and Extent of Gully Development. In *Proceedings of the Conference on Management of Landscapes Disturbed by Channel Incision*, edited by S.S.Y. Wang, E.J. Langendoen, and F.D. Shields.

Schmidt, J. C.

n.d. *Development of a Monitoring Program of Sediment Storage Changes in Alluvial Banks and Bars, Colorado River, Grand Canyon, Arizona.* Glen Canyon Environmental Studies PHY0401. Sediment Storage Study, Utah State University.

1990 Recirculating Flow and Sedimentation in the Colorado River in Grand Canyon, Arizona. *Journal of Geology* 98:709-724.

The relationships among debris-fan formation, rapid formation, and patterns of sedimentation adjacent to tributary mouths are discussed in this report. Zones of recirculation along channel margins give rise to the creation of features such as primary and secondary eddies and reattachment and separation bars. Sediment size distribution and factors of channel width and discharge velocity are noted as significant contributors in overall bedrock channel sedimentation.

Schmidt, J. C., and J. B. Graf

1990 *Aggradation and Degradation of Alluvial Sand Deposits, 1965 to 1986, Colorado River, Grand Canyon National Park, Arizona.* U.S. Geological Survey Professional Paper No. 1493 and Open-File Report 87-555.

This report characterizes the components of alluvial sand deposits along the Colorado River in the Grand Canyon. Zones of circulating current generally contain most of these features, downstream from areas of channel constriction by debris flows at tributary mouths. The classification of these features is by location and form, and includes separation and reattachment deposits, upper-pool deposits, and channel-margin deposits. Reattachment and channel margin deposits occur in wide reaches of the canyon, and separation deposits occur uniformly throughout the canyon. Dynamics of scour and redeposition of these deposits are discussed with respect to downstream transport of sediments and flow fluctuations. Aerial photography was employed to analyze deposition of sand following high flows in 1983 and 1984. The results showed that sand was eroded from recirculating zones in narrow reaches but aggraded in wide

reaches. Further study of high flows in 1985 and 1986 showed that erosion was significant throughout Grand Canyon.

Smith, J., et. al.

n.d. *Linkage of the Main Channel and Eddy Dynamics of the Flow of the Colorado River in the Grand Canyon, Arizona.* Glen Canyon Environmental Studies PHY0802. U.S. Geological Survey, Arizona District Office, Flagstaff.

n.d. Simulation of the Velocity Fields of the Colorado River in the Grand Canyon, Arizona. (preliminary title). Glen Canyon Environmental Studies PHY0801. U.S. Geological Survey, Arizona District Office, Flagstaff.

Smith, J., and S. Wiele

n.d. *Flow and Sediment Transport in the Colorado River Between Lake Powell and Lake Mead.* Glen Canyon Environmental Studies PHY0805. Sediment Transport Study, U.S. Geological Survey, Arizona District Office, Flagstaff.

Thompson, K. S., K. J. Burke, and R. Hereford

1996 Topographic Map Showing Drainage Basins Associated with Pre-dam Terraces in the Granite Park Area, Grand Canyon, Arizona. U.S. Geological Survey Open-File Report 96-298.

Map includes information about the geologic setting and geomorphology of the river corridor, purpose of mapping, stratigraphy, and pertinent archaeological information.

Thompson, K. S., K. J. Burke, and A. Potochnik

1997 Effects of the Beach-Habitat Building Flows from Glen Canyon Dam on Grand Canyon Camping Beaches, 1996: A Repeat Photography Study by Grand Canyon River Guides (Adopt-a-Beach Program). Administrative report submitted to the GCMRC by GCRG Adopt-a-Beach Program, Flagstaff.

The Adopt-a-Beach program was initiated by Grand Canyon River Guides as a repeat photography study of the changes to Colorado River sand bars resulting from the March 1996 test flood. During the commercial boating season of 1996 (April through October), commercial river guides took photographs of 44 selected beaches and answered questions about them, prior to and following the flood for the entire season. The immediate effect of the flood showed the following results: 82% of beaches gained sand, 11% stayed about the same, and 7% lost sand. Four processes that erode beaches were also documented: fluctuating flows, visitation, wind, and side-canyon flash floods. General conclusions of the report are that most beaches maintained the increase in sand and that foot traffic over steep beach fronts throughout the season aided in stabilizing the slopes. These findings were weighed against the loss of sand into eddies resulting from the downslope movement of sand due to foot traffic. River-guide comments reflected the feeling that steep fronts left by the flood did not render beaches inaccessible to camping, and that the added sand reflected natural conditions along undammed rivers.

Thompson, K. S., R. Hereford, and K. J. Burke

**1995 Topographic map Showing Historic Features of the Lees Ferry Area, Marble Canyon, Arizona. U.S. Geological Survey Open-File Report 95-592.

Map includes information about the geologic setting and geomorphology of the river corridor, purpose of mapping, stratigraphy, and pertinent archaeological information.

Webb, R. H.

n.d. *A Century of Environmental Changes in Grand Canyon: Repeat Photography of the 1889-90 Stanton Expedition on the Colorado River.* Glen Canyon Environmental Studies PHY0809. U.S. Geological Survey, Arizona District Office, Flagstaff.

Webb, R. H., T. S. Melis, P. G. Griffiths, and J. G. Elliott

1997 *Reworking of Aggraded Debris Fans by the 1996 Controlled Flood on the Colorado River in Grand Canyon National Park, Arizona.* U.S. Geological Survey Open-File Report 97-16.

This report provides observations of debris-flow activity at the mouths of 25 tributary canyons in Grand Canyon National Park. Pre-dam interactions of tributary debris flows and mainstem floods are explained and compared to post-dam flow conditions, which are lower in stage than historic floods and generally constant. Between the years 1987 and 1995, debris flows were found to have constricted the river at all 25 sites, forming two new rapids and narrowing nine others. The 1996 seven-day flood release was studied with respect to 18 recently aggraded debris fans. The effects of this flood were found to be greatest at Badger Creek and Lava Falls rapids, and changes in channel geometry were documented and quantified. Contributing factors of the flood are discussed, and the design of future flow releases is recommended from the findings of the report.

Webb, R. H., T. S. Melis, T. W. Wise, and J. G. Elliott

1996 *The Great Cataract: Effects of Late Holocene Debris Flows on Lava Falls Rapid, Grand Canyon National Park and Hualapai Indian Reservation, Arizona.* U.S. Geological Survey Open-File Report 96-460.

This study characterized the timing of Holocene debris flows that have affected the morphology of Lava Falls Rapid on the Colorado River in Grand Canyon. It states the rapids in bedrock canyons such as Prospect Creek were found to be aggradational features that reflect the interaction between tributary alluvial deposition and mainstream flow action. Frequent Holocene debris flows from Prospect Creek were recognized to have created Lava Falls. Historic photographs were replicated and combined with results of absolute dating methods to reconstruct the timing of the debris flows. The highest of these was dated to 950 B.C., and the most recent at 500 years B.P. Documentation of debris flow events and removal of fan deposits by periodic flood events indicate that the river's erosive energy is mostly expended in abrading and removing boulders and not in eroding bedrock. Aggradation of debris fans at the mouths of tributary canyons was shown to have accelerated since the operation of Glen Canyon Dam.

Webb, R. H., P. T. Pringle, and G. R Rink

1989 Debris Flows from Tributaries of the Colorado River, Grand Canyon National Park, Arizona. U.S. Geological Survey Professional Paper No. 1492 and Open-File Report 87-118.

Findings of this report of the reconnaissance of 36 tributaries of the Colorado River to study debris flows indicated that debris flows are the major process of sediment transport to the river. Debris flows, common in arid regions, consist of sediment and a water concentration of less than 40% by volume. These flows were studied in detail at three locations in Grand Canyon: Lava Chuar Canyon, mile 65.5; Monument Creek, mile 93.5; and Crystal Creek, mile 98.2. Frequency of debris flows is discussed, as well as driving factors such as slope failure and source geology. Discharge volumes were estimated for several events. Composition, character, and effect on mainstream conditions were quantified. Observation of formation of hydraulic controls (rapids) and reworking of debris fans indicated that they constrain eddy systems and form secondary rapids and riffles below tributary mouths.

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Note: Many of the non-corridor-specific background documents generally related to the cultural resources within the Grand Canyon National Park Colorado River Corridor can be found in Fairley et al. 1994 (the Corridor Survey report)

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APPENDIX B

TRIBAL RESPONSE LETTERS (with attachments) AND RECORDS OF TELEPHONE CONVERSATIONS

SWCA INC. ENVIRONMENTAL CONSULTANTS
114 N. San Francisco Street, Suite 100 • Flagstaff, Arizona 86001
(520) 774-5500 • FAX (520) 779-2709

February 12, 1998

Mr. Lester Crooke, Chairman
HAVASUPAI TRIBAL COUNCIL
Post Office Box 10
Supai, Arizona 86435

Dear Mr. Crooke:

SWCA, Inc., Environmental Consultants has received a contract from the Grand Canyon Monitoring and Research Center (GCMRC) to summarize, analyze, and evaluate their cultural resource data. GCMRC is a program in the U.S. Department of the Interior, Bureau of Reclamation (BOR), which operates Glen Canyon Dam. GCMRC was established in 1982 (as Glen Canyon Environmental Studies [GCES]) to study the effects of the operation of Glen Canyon Dam on the environment of the Colorado River corridor below the dam. GCES and GCMRC involved seven Native American groups (the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the San Juan Paiute Tribe, the Southern Paiute Consortium [composed of the Kaibab Paiute Band and the Shivwitz Band of the Paiute Indians of Utah], and Zuni Pueblo) in studies to identify places significant to these groups. GCMRC now needs to synthesize and evaluate the data produced by these studies.

We are writing to confirm our understanding of the role of the Havasupai Tribe in the GCES/GCMRC studies. As far as we can determine, the Havasupai Tribe did not participate in any studies for GCES and GCMRC. If you know of any studies that should be included in our summary and analysis, please let us know. I will telephone you in about one week to discuss this with you.

Sincerely,

Dennis Gilpin
Principal Investigator

RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

February 18, 1998

On the morning of February 18, 1998, Mr. Roland Manakaja of the Havasupai Indian Tribe called me in response to my letter of February 12, 1998. Mr. Manakaja first noted that the current tribal chairman is Mr. Lincoln Manakaja. Second, he informed me that the Havasupai Tribe never signed the Programatic Agreement (PA) with the Bureau of Reclamation (BOR) for two reasons, one pragmatic, the other spiritual or philosophical.

Pragmatically the Havasupai note that even in the absence of a Programatic Agreement, the BOR has to consult with the Havasupai Tribe on a government-to-government basis as well as under the federal government's trust responsibilities for Indian tribes. Currently the BOR provides the Havasupai with the same documents (including reports, minutes of meetings, and records of decisions) that they provide to PA signitories, and the Havasupai can comment on these documents. The Havasupai also attend meetings when they decide it is necessary. The Havasupai sometimes prefer to consult with other tribes rather than with the BOR and to make their concerns known in concert with and through the other tribes. The Havasupai are satisfied with the current arrangement, but Mr. R. Manakaja emphasized that the BOR has always left the door open for the Havasupai to sign the PA at any time and to withdraw from the PA as well.

On a more spiritual or philosophical level, the Havasupai believe that everything on the earth has a purpose, and it is not possible to distinguish certain things as sacred and other things as not sacred. Furthermore, no one except the medicine people (shamans, song makers, drum keepers, and others) who use various sites or items has the authority to provide information on the sites or items or to decide how these sites or items should be used. The Havasupai prefer that sacred sites and items (as they might be described by non-Havasupai bureaucrats) not be recorded. The Havasupai receive numerous requests from a variety of federal and private agencies (he specifically mentioned the BOR, the Bureau of Land Management, and the Grand Canyon Trust) for information on sacred sites. If the Havasupai were to provide this information to everyone who requested it, the people who have the authority to make decisions about the use of the sites would lose control over the sites because agencies would be able to make decisions about the sites without consulting the proper authorities (the medicine people). Furthermore, agency personnel change with transfers, promotions, and so forth, and therefore--over the long term--the Havasupai have no way of knowing who would be getting the information recorded.

I asked Mr. R. Manakaja whether the Havasupai Tribe had ever put the above principles and explanations in writing to the BOR, and he said that they had gone on record in a meeting and that Signa Larralde might have minutes of that meeting. The Havasupai Tribe has also submitted statements to the United States Forest Service (USFS), specifically Larry Lesko, John Hanson, and Renee Takolai (sp?), expressing these same principles. The Havasupai Tribe has also provided Jan

Balsom (Grand Canyon National Park) with ethnohistoric and oral history on the establishment of the park.

I told Mr. R. Manakaja that I would write a summary of his statement of principles, try to document these principles with some of the references he suggested, then send a copy of the proposed text to Mr. Lincoln Manakaja, Havasupai Tribal Chairman, for review.

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February 13, 1998

Mr. Lee Kuwanwisiwma, Director
Hopi Cultural Preservation Office
HOPI TRIBE
Post Office Box 123
Kykotsmovi, Arizona 86039

Dear Mr. Kuwanwisiwma:

SWCA, Inc., Environmental Consultants has received a contract from the Grand Canyon Monitoring and Research Center (GCMRC) to summarize, analyze, and evaluate their cultural resource data. GCMRC is a program in the U.S. Department of the Interior, Bureau of Reclamation (BOR), which operates Glen Canyon Dam. GCMRC was established in 1982 (as Glen Canyon Environmental Studies [GCES]) to study the effects of the operation of Glen Canyon Dam on the environment of the Colorado River corridor below the dam. GCES and GCMRC involved seven Native American groups (the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the San Juan Paiute Tribe, the Southern Paiute Consortium [composed of the Kaibab Paiute Band and the Shivwitz Band of the Paiute Indians of Utah], and Zuni Pueblo) in studies to identify places significant to these groups. GCMRC now needs to synthesize and evaluate the data produced by these studies.

SWCA has two requests:

First, we would like you to review our bibliography (enclosed) and let us know (a) which references *should* be cited, (b) which references should *not* be cited, and (c) which references should be *added*.

Second, we are requesting written permission to read whatever confidential reports you think we should cite. It appears to us that the Hopi Tribe's final report ("Öönga, Öngtupka, Niqw, Pisisvavu [Salt, Salt Canyon, and the Colorado River]: The Hopi People and the Grand Canyon," by T. J. Ferguson, 1995, Final Ethnohistoric Report for the Hopi Glen Canyon Environmental Studies Project [Draft, October 31, 1995], Institute of the NorthAmerican West, Tucson) is the most important. We realize that this is in draft form and is therefore confidential. If you will send us written permission to view the report (and any others you think should be reviewed), we will show your letter to Ms. Ruth Lambert, GCMRC Cultural Resources Program Manager, who will instruct the GCMRC librarian to give us access to the report(s). We plan to summarize the Hopi Tribe's final report in our draft final report. Before submitting our draft final report to GCMRC, though, we will submit our summary of the Hopi Tribe's final report to you for approval.

I will telephone you in about one week to discuss this with you.

Sincerely,

Dennis Gilpin
Principal Investigator

GCMRC BIBLIOGRAPHY, HOPI TRIBE

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n.d. Hopi Tribe Interpretation and Use of Cultural Sites in the Grand Canyon, Draft Report.

n.d. Hopi Tribe Interpretation and Use of Cultural Sites in the Grand Canyon, Final Report.

n.d. Progress Report on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement.

1992 Ethnoarchaeology: A Hopi Interpretation of the Archaeological Record. Paper presented at the 91st Annual Meeting of the American Anthropological Association, San Francisco.

1992 Progress Report Number 6 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. January 19, 1992.

1993 Progress Report Number 8 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. July 16, 1993.

1993 Progress Report Number 9 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. November 10, 1993.

1994 Appendix A. Bibliography of Annotated References for Hopi Research. Nov. 29, 1994. To be submitted as part of Progress Report November 7, 1994.

1994 Progress Report Number 10 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. January 25, 1994.

1994 Progress Report Number 11 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. May 5, 1994.

1994 Progress Report Number 12 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. July 7, 1994.

1995 Progress Report Number 14 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. January 31, 1995.

1995 Progress Report Number 15 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. April 7, 1995.

1995 Progress Report Number 16 on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. August 18, 1995.

1996 Progress Report on the Hopi Tribe's Involvement as a Cooperating Agency in the Glen Canyon Dam Environmental Impact Statement. July 30, 1996.

Ferguson, T. J.

n.d. Pisis'vavu: An Ethnohistory of Hopi Use of the Grand Canyon, Draft Report.

n.d. Pisis'vavu: An Ethnohistory of Hopi Use of the Grand Canyon, Final Report.

1994 Öngtupka: The Grand Canyon and the Hopi People. Draft Report. Part 1: Preliminary Summary of Ethnohistory Information from GCES Interviews and Field Notes. **Confidential.** September 21, 1994. Institute of the NorthAmerican West, Tucson.

1995 Öönga, Öngtupka, Niqw, Pisisvavu (Salt, Salt Canyon, and the Colorado River): The Hopi People and the Grand Canyon. Final Ethnohistoric Report for the Hopi Glen Canyon Environmental Studies Project. (Draft, October 31, 1995) Institute of the NorthAmerican West, Tucson.

Ferguson, T. J., and Gail Lotenberg

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Institute of the NorthAmerican West

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Jenkins, L.

n.d. Appendix A, Bibliography of Annotated References for Hopi Research.

Yeatts, Michael

1995 A Cultural Resource Inventory of the Lower Little Colorado River, Coconino County, Arizona (HCPO 91-009[a]). Public Version. Draft and Final Reports on file, GCES Library, Flagstaff, Arizona.

Yeatts, Michael

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RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

March 5, 1998

Kurt Dongoske called at 9:30 A.M. to discuss my letter to Leigh. He would like to see a copy of our proposal before responding to our letter (particularly with regard to looking at T. J. Ferguson's report). They are concerned about whether our proposal states that we will evaluate the GCMRC program. The PA requires a five-year review of the GCMRC program, and Kurt views our summary/synthesis as a component of this review, although he felt that the RFP was unclear about how much and what type of summarization and synthesis GCMRC expected.

Kurt will write me a letter documenting our conversation and requesting a copy of our proposal. He and Mike Yeatts would also like to meet with me and Lynn to discuss their views on the GCMRC program.

Kurt says that the reports labeled n.d. (no date) in our bibliography do not exist. They were probably proposed reports that were never actually prepared. One n.d. report attributed to Leigh, four attributed to Kurt, and one attributed to T. J. (Pisis'vavu) do not exist. T. J.'s proposed Pisis'vavu report became the Öngtupka report (which does exist), which became the 1995 report (Öönga, Öngtupka, Niqw, Pisisvavu). Our bibliography also has a report by the Institute of the NorthAmerican West summarizing Hopi involvement in the process that Kurt says the Institute would not have written. Instead, he says his Final Progress Report (No. 16, August 18, 1995) would have covered this information.

Mike Yeatts' Little Colorado River survey report exists in confidential and public versions, and the only difference between them is that the public version does not have site locations. Kurt wanted to know if we needed site locations, and I said not at this time. We have no intention of providing site locations in the public version of our document. We are working on centralizing data bases, though. Each tribe needs to decide if they want the sites they recorded to be in data bases controlled by the federal government.

Kurt has copies of all the progress reports, but wonders how useful they will be to us. Because they are public documents, though, he would be happy to supply them to us. He thinks their greatest value would be to document the early years of the tribes' relationship with GCES and the tribes' attempts to be recognized by GCES.

Kurt's perspective is that the initial involvement of the tribes--and the activities that are described in the tribes' "final" reports--had two goals: (1) to back up claims in the EIS and (2) to document TCPs. Hopi feels that there are still some data gaps, particularly in ethnobotany. Hopi research on ethnobotany gathered some anecdotal data about plants in the Grand Canyon, and Kurt believes that no plant-gathering areas that qualify as TCPs were overlooked. Still, Hopi has some concern about

plants important to the Hopi that may be in the Grand Canyon. He would like to know more about whether Hopi use of plants in the Grand Canyon was sustained or opportunistic. He noted that female practitioners of Hopi medicine cannot go into the Grand Canyon, so one whole set of Grand Canyon plants that are important to the Hopi may not be represented in the data previously collected. And even though these plants may not have to come from the Grand Canyon (i.e. they may be available at Hopi), the Hopi may still have concerns about these significant plants within the Grand Canyon. One way of documenting these plants would be to collect samples in plant presses and take them back to Hopi for identification.

I told Kurt that my impression--and I was willing to be corrected--was that the tribes' active participation with GCMRC had ended with the preparation of the "final" reports and that their participation now was that of interested parties who receive and comment on reports and proposed actions.

Kurt said that cooperating agencies meet, but the most frequent meetings are among subgroups or working groups. The Technical Work Group meets once a month for two days.

Kurt feels that both Navajo and Zuni have sort of dropped out of the process. Al Downer used to attend meetings through about 1996. Kurt says that the tribes need to stay involved for several reasons: (1) they had to fight too hard for recognition to not stay involved; (2) the agencies are likely to say that the tribes said that the Grand Canyon was really important to them, but now they won't show up at meetings; (3) GCMRC is an important source of funding; (4) the tribes do have important concerns; (5) the tribes can act as a watchdog on GCMRC.

For example, Kurt is concerned that the Park Service has been minimally reactive to the need to protect archaeological sites. GCMRC has neglected data analysis, publication of results, and dissemination of results to the public. GCMRC lacks a comprehensive research design. Mike Yeatts and Kurt are working on a discussion paper on these issues for the next meeting of the Technical Work Group, and he will send me a copy.

I mentioned Havasupai having declined to sign the Programmatic Agreement because of their not wanting to reveal sensitive information, and how I was wondering if there was any written documentation of their argument. Kurt suggested that Burec in Salt Lake City may have minutes of meetings leading up to the writing of the Programmatic Agreement. He said that the Havasupai Tribal Chairman attended a meeting of cooperating agencies about 1992 or 1993 and that minutes from this meeting might have a summary of his comments.

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March 17, 1998

Mr. Leigh J. Kuwanwisiwma, Director
Cultural Preservation Office
HOPI TRIBE
Post Office Box 123
Kykotsmovi, Arizona 86039

Dear Mr. Kuwanwisiwma:

Enclosed please find a copy of SWCA's revised research proposal, which was funded by the Grand Canyon Monitoring and Research Center, and which you requested in your letter of March 5, 1998. We look forward to your comments and input about this project.

Sincerely,

Dennis Gilpin, Principal Investigator

RECORD OF TELEPHONE CONVERSATION

Lynn Neal

June 2, 1998

Phone Conversation with Kurt Dongoske on Tuesday, June 2, 1998:

He was responding to Dennis' request. He felt that our research design does meet the goals of the Hopi Tribe, after looking over our proposal.

The Hopi perspective: what is identified as confidential will remain so, i.e., T.J.'s original report. We can refer to the public version of this report. *Kurt will send us a copy along with a letter from Lee Jenkins, which will reiterate what Kurt stated above.

Other confidential materials that exist and are kept at and under control of the Hopi CPO: audio tapes and transcribed tapes of conversations with Hopi individuals from T.J.'s work. These are not available to review. **Kurt said we would have to confirm with Lee whether or not we can at least mention that these types of resource materials exist. The Hopi CPO is in the process of cataloging all of T.J's data and all GCES-related data from 1990-present. They plan to give GCMRC a list of the types of data for different categories of information that they have in their possession. In the future, this list and maybe some samples of documents will be accesssible on CD Rom, at least that is their plan.

Basically, Kurt said to look at T.J's report and Mike Y.'s lower Canyon survey report for Hopi-related information. He felt that Mike only changed the locational info./specifics from the confidential original version to the public version. We may, if we felt it necessary, be able to get access to the original; we would need to ask Mike.

Kurt's interest related to what is happening in the GCMRC cultural resources monitoring program: He said that artifact control units were established for some corridor sites, (according to Lisa Leap, probably started them in 1992 and stopped monitoring the control units in 1996). These units were set up to address the distribution of artifacts by monitoring how various erosional processes on the surface changed the artifact density and make-up of the artifacts in a given unit. The monitoring program archaeologists felt it was a waste of time. Kurt did not feel the same way -- maybe the methodology was wrong or they were asking the wrong research questions. Did not feel the units should have been abandoned as a way of monitoring erosional effects on the distribution of artifacts, but probably just re-evaluated.

RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

September 28, 1998

Mr. Kurt Dongoske of the Hopi Cultural Preservation Office called and said that although he had reveiwed SWCA's proposal and written a letter for Mr. Leigh Kuwanwisiwma to sign transmitting the report to SWCA, Mr. Kuwanwisiwma still had some reservations about releasing the report. Mr. Dongoske recommended trying to set up a meeting with Mr. Kuwanwisiwma to see about acquiring the report.

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February 13, 1998

Mr. Monza Honga, Director, Tribal SHPO
Office of Cultural Resources
HUALAPAI TRIBE
Post Office Box 310
Peach Springs, Arizona 86434

Dear Mr. Honga:

SWCA, Inc., Environmental Consultants has received a contract from the Grand Canyon Monitoring and Research Center (GCMRC) to summarize, analyze, and evaluate their cultural resource data. GCMRC is a program in the U.S. Department of the Interior, Bureau of Reclamation (BOR), which operates Glen Canyon Dam. GCMRC was established in 1982 (as Glen Canyon Environmental Studies [GCES]) to study the effects of the operation of Glen Canyon Dam on the environment of the Colorado River corridor below the dam. GCES and GCMRC involved seven Native American groups (the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the San Juan Paiute Tribe, the Southern Paiute Consortium [composed of the Kaibab Paiute Band and the Shivwitz Band of the Paiute Indians of Utah], and Zuni Pueblo) in studies to identify places significant to these groups. GCMRC now needs to synthesize and evaluate the data produced by these studies.

SWCA has two requests:

First, we are requesting written permission to read the Hualapai Tribe's final report ("Hualapai Tribe's Traditional Cultural Properties on and along the Colorado River through the Grand Canyon: A Hualapai Tribe Research Report to the United States Department of Interior Bureau of Reclamation, for Glen Canyon Environmental Studies and Glen Canyon Dam Environmental Impact Statement," by Robert Henry Stevens, 1996, Draft Report, Natural Resources Department, Hualapai Cultural Resources Division, Peach Springs, Arizona), which is confidential. If you will send us written permission to view the report, we will show your letter to Ms. Ruth Lambert, GCMRC Cultural Resources Program Manager, who will instruct the GCMRC librarian to give us access to the report. We plan to summarize the Hualapai Tribe's final report in our draft final report. Before submitting our draft final report to GCMRC, though, we will submit our summary of the Hualapai Tribe's final report to you for approval.

Second, we would like you to review our bibliography (enclosed) and let us know (a) which references *should* be cited, (b) which references should *not* be cited, and (c) which references should be *added*.

I will telephone you in about one week to discuss this with you.

Sincerely,

Dennis Gilpin
Principal Investigator

GCMRC BIBLIOGRAPHY, HUALAPAI TRIBE

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1995 Ethnobotanical Information, Colorado River Corridor, Cultural Assessment Study. Ms. on file, Office of Cultural Resources, Hualapai Tribe, Peach Springs, Arizona.

Hualapai Tribe, Natural Resources Department, Hualapai Cultural Resources Division

1994a Hualapai Cultural Resources Studies First Quarterly Report Oct, Nov, Dec, FY94.

1994b Hualapai Cultural Resources Studies Second Quarterly Report, Jan, Feb, Mar, FY94

1994c Hualapai Cultural Resources Studies Third Quarterly Report Apr, May, Jun, FY94

1994d Hualapai Cultural Resources Studies Fourth Quarterly Report Jul, Aug, Sep, 1993. (2 pp.)

1995a Hualapai Tribe - Glen Canyon Environmental Studies FY95 First Quarterly Report: October-December 1994, Hualapai Cultural Resources Studies.

1995b Hualapai Tribe - Glen Canyon Environmental Studies FY95 Second Quarterly Report: January-March 1995, Hualapai Cultural Resources Studies.

Hualapai Tribe, Natural Resources Department, Hualapai Cultural Resources Program

1995 Hualapai Tribe's Cultural Inventory of the Grand Canyon, Colorado River Corridor from Separation Canyon (Rivermile 239.7) to Pearce Ferry (Rivermile 276), Mohave County.

Jackson, Loretta

n.d.a Hualapai Tribe Ethnographic and Oral Historical Survey for Glen Canyon Environmental Studies and the Glen Canyon Dam Environmental Impact Statement, Draft Final Report.

n.d.b Trip Report of the Hualapai Tribe Glen Canyon Environmental Studies FY 1995 Draft Annual Report.

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1996 Hualapai Tribe's Cultural Inventory of the Grand Canyon, Colorado River Corridor from Separation Canyon (Rivermile 239.7) to Pearce Ferry (Rivermile 276), Mohave County. Revised Draft Report. Hualapai Tribe's Office of Cultural Resources, Peach Springs, Arizona.

Jackson, Loretta, and Robert Henry Stevens

1994 Hualapai Tribe Cultural Resources Program River Trip Report, GCES--1993, Colorado River Trip, July 30 to August 6, 1993: A Hualapai Tribe Research Report to the United States Department of Interior Bureau of Reclamation, for Glen Canyon Environmental Studies and Glen Canyon Dam Environmental Impact Statement. Draft Report. Natural Resources Department, Hualapai Cultural Resources Division, Peach Springs, Arizona. (20 pp. plus appendixes)

Phillips, Arthur M., III

1994a Hualapai Ethnobotanical Native Species Plant Study, Initial Reconnaissance River Trip, Trip Report, June 12-15, 1994. Arthur M. Phillips, III, Ph.D., Botanical and Environmental Consulting, Flagstaff, Arizona.

1994b Hualapai Ethnobotanical Native Species Plant Study, Peach Springs Wash Survey, Trip Report, September 4, 1994. Arthur M. Phillips, III, Ph.D., Botanical and Environmental Consulting, Flagstaff, Arizona.

1994c Hualapai Ethnobotanical Native Species Plant Study, Second Reconnaissance River Trip, Trip Report, September 10-14, 1994. Arthur M. Phillips, III, Ph.D., Botanical and Environmental Consulting, Flagstaff, Arizona.

1995 Hualapai Ethnobotanical Native Species Plant Study, Third Reconnaissance River Trip, Trip Report, April 10-17, 1995. Arthur M. Phillips, III, Ph.D., Botanical and Environmental Consulting, Flagstaff, Arizona.

Stevens, Robert Henry

1996 Hualapai Tribe's Traditional Cultural Properties on and along the Colorado River through the Grand Canyon: A Hualapai Tribe Research Report to the United States Department of Interior Bureau of Reclamation, for Glen Canyon Environmental Studies and Glen Canyon Dam Environmental Impact Statement. Draft Report. Natural Resources Department, Hualapai Cultural Resources Division, Peach Springs, Arizona. (43 pages)

RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

September 18, 1998

On September 18, 1998, I spoke with Mr. Monza Honga of the Hualapai Tribe Cultural Resources department. He said that Loretta Jackson would know more about the Hualapai Tribes's GCMRC work, and that he would have her call me. He said that the Hualapai Tribe did have some video and audio tapes, as well as notes, and that it would be good to computerize these.

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February 17, 1998

Mr. Carlos Mayo
KAIBAB PAIUTE INDIAN TRIBE
Tribal Affairs Building
Fredonia, Arizona 86022

Dear Mr. Mayo:

SWCA, Inc., Environmental Consultants has received a contract from the Grand Canyon Monitoring and Research Center (GCMRC) to summarize, analyze, and evaluate their cultural resource data. GCMRC is a program in the U.S. Department of the Interior, Bureau of Reclamation (BOR), which operates Glen Canyon Dam. GCMRC was established in 1982 (as Glen Canyon Environmental Studies [GCES]) to study the effects of the operation of Glen Canyon Dam on the environment of the Colorado River corridor below the dam. GCES and GCMRC involved six Native American groups (the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the Southern Paiute Consortium [composed of the Kaibab Paiute Band and the Shivwitz Band of the Paiute Indians of Utah and the San Juan Southern Paiute Tribe], and Zuni Pueblo) in studies to identify places significant to these groups. GCMRC now needs to synthesize and evaluate the data produced by these studies.

We believe that three public reports by the Southern Paiute Consortium contain virtually all of the information we need for our summary. These reports are:

Stoffle, Richard W., Diane E. Austin, Brian K. Fulfrost, Arthur M. Phillips, III, and Tricia F. Drye
1995 *Itus, Auv, Te'ek (Past, Present, Future): Managing Southern Paiute Resources in the Colorado River Corridor*. Southern Paiute Consortium, Pipe Spring, Arizona, and Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

Stoffle, Richard W., David B. Halmo, Michael J. Evans, and Diane E. Austin
1994 *Piapaxa 'uipi (Big River Canyon): Southern Paiute Ethnographic Resource Inventory and Assessment for Colorado River Corridor, Glen Canyon National Recreation Area, Utah and Arizona, and Grand Canyon National Park, Arizona.* Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

Stoffle, Richard W., Lawrence L. Loendorf, Diane E. Austin, David B. Halmo, Angelita S. Bulletts, and Brian K. Fulfrost
1995 *Tumpituxwinap (Storied Rocks): Southern Paiute Rock Art in the Colorado River Corridor*, Version 2 (for public distribution). Southern Paiute Consortium, Pipe Spring, Arizona, and Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

We would, however, like to give the Southern Paiute Consortium the opportunity to review our bibliography (enclosed) and let us know (a) which references *should* be cited, (b) which references should *not* be cited, and (c) which references should be *added.*

I will telephone you in about one week to discuss the project.

Sincerely,

Dennis Gilpin
Principal Investigator

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1994 Quarterly Progress Report (Ending July, 1994). Southern Paiute Consortium, Fredonia, Arizona.

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Stoffle, Richard W.
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Stoffle, Richard W., Diane E. Austin, Brian K. Fulfrost, Arthur M. Phillips, III, and Tricia F. Drye
1995 *Itus, Auv, Te'ek (Past, Present,. Future): Managing Southern Paiute Resources in the Colorado River Corridor*. Southern Paiute Consortium, Pipe Spring, Arizona, and Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

Stoffle, Richard W., David B. Halmo, Michael J. Evans, and Diane E. Austin
1993 Piapaxa 'uipi (Big River Canyon): Southern Paiute Ethnographic Resource Inventory and Assessment for Colorado River Corridor, Glen Canyon National Recreation Area, Utah and Arizona, and Grand Canyon National Park, Arizona. Draft Final Report. **Confidential.** Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

Stoffle, Richard W., David B. Halmo, Michael J. Evans, and Diane E. Austin
1994 *Piapaxa 'uipi (Big River Canyon): Southern Paiute Ethnographic Resource Inventory and Assessment for Colorado River Corridor, Glen Canyon National*

Recreation Area, Utah and Arizona, and Grand Canyon National Park, Arizona. Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

Stoffle, Richard W., Lawrence L. Loendorf, Diane E. Austin, David B. Halmo, Angelita S. Bulletts, and Brian K. Fulfrost

1995 *Tumpituxwinap (Storied Rocks): Southern Paiute Rock Art in the Colorado River Corridor*. Preliminary Draft, Not For Formal Review, Not For Public Distribution). Southern Paiute Consortium, Fredonia, Arizona, and Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

Stoffle, Richard W., Lawrence L. Loendorf, Diane E. Austin, David B. Halmo, Angelita S. Bulletts, and Brian K. Fulfrost

1995 *Tumpituxwinap (Storied Rocks): Southern Paiute Rock Art in the Colorado River Corridor*, Version 2 (for public distribution). Southern Paiute Consortium, Pipe Spring, Arizona, and Bureau of Applied Research in Anthropology, University of Arizona, Tucson.

RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

March 5, 1998

Called Mr. Carlos Mayo, Kaibab Paiute Indian Tribe, Fredonia (520-643-7245 is the tribal office, Mr. Mayo is at 520-643-6014, cultural resources). Mr. Mayo remembered my letter, but could not find it at the moment. He said he would look for it, review it, and write me a letter. I said I would call him again in a week or so if he has not responded.

I also asked Mr. Mayo about current work and planned work that the Southern Paiute Consortium may have. He said that they hope to do additional research on ancestral sites in the Grand Canyon and continued monitoring of sites that are significant to them, but the major direction of future work will be in the area of public education and outreach. He said that the Southern Paiute Consortium has at least one proposal pending with GCMRC and specifically with Ruth Lambert.

SWCA INC. ENVIRONMENTAL CONSULTANTS
114 N. San Francisco Street, Suite 100 • Flagstaff, Arizona 86001
(520) 774-5500 • FAX (520) 779-2709

February 13, 1998

Dr. Alan Downer, Director
Historic Preservation Department
NAVAJO NATION
Post Office Box 4950
Window Rock, Arizona 86515

Dear Al:

SWCA, Inc., Environmental Consultants has received a contract from the Grand Canyon Monitoring and Research Center (GCMRC) to summarize, analyze, and evaluate their cultural resource data. GCMRC is a program in the U.S. Department of the Interior, Bureau of Reclamation (BOR), which operates Glen Canyon Dam. GCMRC was established in 1982 (as Glen Canyon Environmental Studies [GCES]) to study the effects of the operation of Glen Canyon Dam on the environment of the Colorado River corridor below the dam. GCES and GCMRC involved seven Native American groups (the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the San Juan Paiute Tribe, the Southern Paiute Consortium [composed of the Kaibab Paiute Band and the Shivwitz Band of the Paiute Indians of Utah], and Zuni Pueblo) in studies to identify places significant to these groups. GCMRC now needs to synthesize and evaluate the data produced by these studies.

We believe that the Navajo Nation's final report (*Bitsiis Ninéézi [The River of Neverending Life]: Navajo History and Cultural Resources of the Grand Canyon and the Colorado River*, by Alexa Roberts, Richard M. Begay, and Klara B. Kelley [1995], Navajo Nation Historic Preservation Department, Window Rock, Arizona) contains virtually all of the information we need for our summary. We would, however, like to give NNHPD the opportunity to review our bibliography (enclosed) and let us know (a) which references *should* be cited, (b) which references should *not* be cited, and (c) which references should be *added*.

If you have any questions about this project, please give me a call at (520) 774-5500. I will follow up with a telephone call to you in about one week to discuss the project.

Sincerely,

Dennis Gilpin
Principal Investigator

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RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

September 18, 1998

On the morning of September 18. 1998. Mr. Richard Begay. manager of the Navajo Nation Historic Preservation Department (NNHPD). Traditional Cultural Properties Program (TCPP) (520-871-7146) called in response to my telephone message of the day before.

The TCPP is one of nine programs within NNHPD. In addition to GCMRC work, TCPP is responsible for:
(1) repatriation of sacred objects;
(2) repatriation of human remains;
(3) disposition of human remains in collections belonging to the Navajo Nation;
(4) consulting with other agencies about Navajo Nation concerns about NAGPRA and TCPs that are not on Navajo Nation lands;
(5) commenting on legislation relating to TCPs;
(6) data entry and management;
(7) providing support staff for the TCPP advisory council;
(8) public education (Richard talks at schools).

TCPP has a staff of five, including the manager, three cultural specialists, and one support staff.

In the past couple of years, repatriation has consumed most of TCPP's time, and Richard feels like GCMRC work has sort of fallen by the wayside, and he now needs to get the GCMRC work back on track.

Archives relating to GCMRC research include a box of photographs, a couple of audio recordings, and notes. Richard said he does not know precisely where the notes are. One of the things he wants to do is inventory and organize the material.

Publications include the chapter by Richard and Alexa in Ron Towner's book, the final report, and the paper in the George Wright Symposium volume. They made 150 copies of the final report and distributed it to schools, public libraries, and university libraries.

Papers presented at professional meetings include: (1) a paper by Alexa Roberts and Richard presented at the SAAs in St. Louis (which was revised and published as the chapter in Ron Towner's book), (2) a paper written by Richard and presented by Alexa at the George Wright Symposium, and (3) a paper by Alexa and Richard presented at the 1998 SAAs in Seattle.

In 1993, TCPP had a workshop on plants of the Grand Canyon for NNHPD and Navajo Nation Archaeology Department staff. In 1994 they took NNHPD staff and families on a river trip

from Glen Canyon Dam to Lees Ferry.

Currently TCPP's involvement with GCMRC includes: (1) PA activity, (2) meetings with GCMRC, (3) work with the Adaptive Management Work Group. TCPP also needs to monitor 15 miles of river and conduct some data recovery. TCPP is requesting funding from BOR and the Center.

SWCA INC. ENVIRONMENTAL CONSULTANTS
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February 13, 1998

Mr. Joe Dishta, Cultural Preservation Coordinator
Heritage and Historic Preservation Office
PUEBLO OF ZUNI
Post Office Box 339
Zuni, New Mexico 87327

Dear Mr. Dishta:

SWCA, Inc., Environmental Consultants has received a contract from the Grand Canyon Monitoring and Research Center (GCMRC) to summarize, analyze, and evaluate their cultural resource data. GCMRC is a program in the U.S. Department of the Interior, Bureau of Reclamation (BOR), which operates Glen Canyon Dam. GCMRC was established in 1982 (as Glen Canyon Environmental Studies [GCES]) to study the effects of the operation of Glen Canyon Dam on the environment of the Colorado River corridor below the dam. GCES and GCMRC involved seven Native American groups (the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Navajo Nation, the San Juan Paiute Tribe, the Southern Paiute Consortium [composed of the Kaibab Paiute Band and the Shivwitz Band of the Paiute Indians of Utah], and Zuni Pueblo) in studies to identify places significant to these groups. GCMRC now needs to synthesize and evaluate the data produced by these studies.

We believe that Zuni Pueblo's final report (*Zuni and the Grand Canyon: A Glen Canyon Environmental Studies Report*, by Richard E. Hart [1995], Zuni GCES Ethnohistorical Report, Institute of the NorthAmerican West, Seattle) contains virtually all of the information we need for our summary. We would, however, like to give ZHHPO the opportunity to review our bibliography (enclosed) and let us know (a) which references *should* be cited, (b) which references should *not* be cited, and (c) which references should be *added*.

If you have any questions about this project, please give me a call at (520) 774-5500. I will follow up with a telephone call to you in about one week to discuss the project.

Sincerely,

Dennis Gilpin
Principal Investigator

RECORD OF TELEPHONE CONVERSATION

Dennis Gilpin

February 20, 1998

Mr. Joe Dishta of the Zuni Heritage and Historic Preservation Office called at 3:00 P.M. They received the letter. He will review it with his staff and respond next week.

APPENDIX C

GEOMORPHIC MODEL PROJECT - PER CATCHMENT DATA SHEET

Gr. Cyn. Trip #2: Assess All Study Catchments

Date: _____ Time:_____ Weather:_____

Workers: _____

Catchment location_____

RM/side:_____ Catchment#_____ Arch Site #_____

Geologic fm. (s):_____

River-based? Terrace-based on _____terrace.

Catchment area (est.): S M L (sketch thalweg and area boundary) on map provided

Map base: air ph. arch. GIS Herf. Ivo L.

Hdwter geomrph: Fan: dfl dfm dfs Talus: to ty Eol.: eo ey Bedrck

Slope aspect:_____

Rock material at mouth: sand gravel bedrck other _____

Terraces present	cum. hght from 45k	width (m.)	grain size	arroyo (m) dpth/wdth	nicks (cm)	sand (m) depth	human sl/md/sv
45k							
83k							
pda							
lmt							
umt							
ap							
sa							

Height (45k-top terr.):_____ Distnce (45k-top terr.) _____ Slope:_____

Notes:

Vegetation - Point-intercept method.

Location: **Date:**

Terrace

	Woody	Herb	Crypto	Rock	Bare
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Sum					

Terrace

	Woody	Herb	Crypto	Rock	Bare
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Sum					

Terrace

	Woody	Herb	Crypto	Rock	Bare
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Sum					

Terrace

	Woody	Herb	Crypto	Rock	Bare
1					
2					
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7					
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9					
10					
Sum					

APPENDIX D

GRAND CANYON RIVER CORRIDOR SURVEY (1990-1991) - TABLE OF ISOLATED FINDS

Jan Balsom and Christopher Coder

Isolated Finds

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
1	IF-C-3-1	2-1	-14.8	L	1	B6 2-15-91	modern wooden platform w/assoc. charcoal & recent trash	talus slope
2	IF-C-3-2	1-3	-14.8	R	1	D6 2-15-91	iron rod in boulder	talus slope
3	IF-C-3-3	2-3	-14.5	L	1	B6 2-15-91	extensive dam related(?) historic 'site'	on fluvial terrace/talus slope
4	IF-C-3-4	2-3	-14.5	L	1	B6 2-15-91	newly cut arroyo with 3+ charcoal lenses some up to 20 m below ground surface, also expose remnants of an historic feature & recent graffiti	talus/dune slope
5	IF-C-3-5	2-4	-14.5	R	1	D6 2-15-91	Modern inscriptions & anchored cable (Geib etc.)	in Navajo sandstone cliff face
6	IF-C-3-6	2-3	-14.4	L	1	B6 2-15-91	benchmark & painted no. "6405" "5798" "R18"	at base of Navajo sandstone cliff face
7	IF-C-3-7	2-5	-13.8	L	1	B6 2-15-91	painted "R17"	on talus boulder
8	IF-C-3-8	2-5	-13.8	L	1	B6 2-15-91	scraper	under boulder overhang
9	IF-C-3-9	3-3	-13.25	L	1	B6 2-16-91	carved steps (10+). Appear to have been chiselled out with a metal tool. It is possible that these modern-historic steps were re-carveed over prehistoric steps.	in crack in Navajo sandstone cliff face
10	IF-C-3-10	3-3	-12.9	L	1	B6 2-16-91	upright manuport stick: 1-1/2in x 3ft.	between cliff and talus boulder
11	IF-C-2-1	4-2	-12.3	L	2	B6 2-14-91	benchmark	cemented on Navajo sandstone cliff face
12	IF-C-2-2	4-2	-12.3	L	2	B6 2-14-91	upright post	on talus/aeolian slope
13	IF-C-2-3	4-1	-12.3	R	2	A6 2-14-91	painted "Z 15"	on Navajo sandstone cliff face
14	IF-C-2-4	4-3	-11.9	R	2	A6 2-14-91	single flake	on talus slope
15	IF-C-2-5	4-3	-11.8	R	2	A6 2-15-91	surficial charcoal stain: small, localized deposit	on talus slope
16	IF-C-2-6*	5-2	-11.1	L	2	C6 2-14-91	2 sherds, one is Tusayan Corrugated	on talus/aeolian slope
17	IF-C-2-7	5-2	-11.0	L	2	C6 2-14-91	2 charcoal lenses, .5-.75cm long	in arroyo cut, ca. 2.5m bgs
18	IF-C-2-8	5-2	-10.9	L	2	C6 2-14-91	6 flakes, four of fine-grain river cobble basalt, two of green river cobble quartzite	on talus slope
19	IF-C-2-9	5-2	-10.8	L	2	C6 2-15-91	modern inscriptions: "Donald R Edwards/ Pig Pen Comstock Nebr/ Feb. 28/ 1958", "Craig Pack/ 1958", "G,J,J,J,&M-87"	at base of Navajo sandstone cliff face
20	IF-C-2-10	5-4	-10.3	L	2	C6 2-17-91	painted "R13" "0+64LT"	on Navajo sandstone cliff face
21	IF-C-2-11	6-2	-10.2	L	2	B6 2-17-91	historic? modern? inscription: "R W Olson USCG"	at base of Navajo sandstone cliff face
22	IF-C-2-12	6-1	-10.2	R	2	A6 2-16-91	charcoal stain	in slumped alluvial slope, 30cm bgs
23	IF-C-2-13	6-3	-9.6	L	2	D6 2-17-91	1 Tusayan GW sherd (Geib etc.)	on talus slope

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
24	IF-C-2-14	7-4	-7.7	R	2	D6 2-16-91	"R-10" painted in white	on Navajo sandstone cliff face
25	IF-C-2-15	8-2	-6.4	R	2	A7 3-16-91	painted "R85+47"	on Navajo sandstone cliff face
26	IF-C-2-16	9-4	-4.9	L	3	C7 3-14-91	U-shaped iron 'anchor'	in Navajo sandstone cliff wall
27	IF-C-2-17	9-5	-4.9	R	3	A7 3-14-91	2in rectilinear U-shaped rebar	cemented in Navajo ss cliff wall
28	IF-C-2-18	9-4	-4.6	L	3	C7 3-14-91	U-shaped iron 'anchor'	lying on talus slope
29	IF-C-2-19	9-4	-4.5	L	3	C7 3-14-91	5ft rock cairn, wrapped with 1in cable	adjacent to talus boulder
30	IF-C-2-20	9-6	-4.4	L	3	C7 3-14-91	sandstone bounder with "Ray Smith loved to Fish" inscribed on horizontal face	
31	IF-C-2-21	9-6	-3.8	L	3	C7 3-14-91	remains of a cairn, 8+ cylindrical batteries, cut lumber, and a bench mark reading: "US Coast Guard and Geodisic Survey Azimuth Mark-Glen 1947"--all clustered together	on a talus slope
32	IF-C-2-22	10-2	-3.5	L	3	B7 3-14-91	Wooden stake wrapped with baling wire	lying on a sandy slope
33	IF-C-2-23	10-2	-3.5	L	3	B7 3-14-91	A short wet-laid or mudded wall ca. 1m long x .25m high and .25m wide. Might be a prehistoric granary remnant. No artifacts or charcoal (Geib etc.)	
34	IF-C-2-24	10-3	-3.2	R	3	D7 3-15-91	Charcoal stain (GCRCS Photos: Roll 7D1)	in river bank
35	IF-C-2-25	10-3	-3.1	R	3	D7 3-15-91	3 flakes and hammerstone	on gravel-covered bench
36	IF-C-2-26	10-3	-2.9	R	3	D7 3-15-91	2 flakes	on gravel-covered bench
37	IF-C-2-27	10-3	-2.7	R	3	D7 3-15-91	4 flakes	on gravel-covered bench
38	IF-C-2-28	10-3	-2.7	R	3	D7 3-15-91	Historic? Modern? inscription: "JAME H" (Geib etc.)	etched into vertical exposure of Navajo sandstone
39	IF-C-2-29	10-3	-2.7	R	3	D7 3-15-91	3 flakes	on gravel bench
40	IF-C-2-30	10-5	-2.6	R	3	D7 3-16-91	Cairn	on bedrock ledge
41	IF-C-2-31	10-4	-2.5	L	3	B7 3-15-91	Moenkopi Corrugated pot drop & several flakes--possibly Geib's IF C-2-37	on talus slope
42	IF-C-2-32	10-4	-2.4	L	3	B7 3-15-91	Tusayan Corrugated sherd	on talus slope
43	IF-C-2-33	10-5	-2.0	R	3	D7 3-16-91	2 modern fire rings with one modern lead sinker in assoc. (GCRCS Photos: Roll 7D1)	
44	IF-C-2-34	11-1	-1.8	R	3	D7 3-16-91	single biface fragment under overhang, heavy deposition (ceiling spalls)	in shelter
45	IF-C-2-35	11-1	-1.8	R	3	D7 3-16-91	cairn	on bedrock ledge
46	IF-C-2-36	11-2	-1.7	L	3	B8 4-12-91	benchmark reading: "LT 4+04"	adjacent to drainage bank
47	IF-C-2-37	11-5	-1.1	R	3	D7 3-16-91	grinding facet, repatinated, high degree of polish (GCRCS Photos: Roll 7D1)--(Geib etc.)	on Navajo sandstone talus boulder

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
48	IF-C-2-38	11-6	-0.6	L	3	C8 4-12-91	ring in bolt, possibly assoc. w/Fea. 3 of C:2:11 (main ferry crossing, left bank locus, Lees Ferry Historic District)	in talus boulder
49	IF-C-2-39	12-2	-0.3	L	3	C7 3-16-91	old metal fragments	on alluvial terrace across from Lees Ferry
50	IF-C-2-40	12-2	-0.1	L	3	C7 3-16-91	cairn marking foot trail up through Moenkopi exposure to Lees Backbone Road, AZ C:2:48	
51	IF-C-2-41	12-2	-0.1	L	3	C7 3-16-91	cairn marking foot trail up Moenkopi exposure to Lees Backbone Road, AZ C:2:48--possibly (Geib etc.)	
52	IF-C-2-42	12-2	-0.1	L	3	C7 3-16-91	historic sherds	on alluvial terrace across river from Lees Ferry
53	IF-C-2-43	12-2	-0.1	L	3	C7 3-16-91	cairn and benchmark--possibly Chesher's X5	in wide drainage area
54	IF-C-2-44	12-2	-0.1	L	3	C7 3-16-91	spoon	on alluvial terrace across from Lees Ferry
55	IF-C-2-45	12-2	0.0	L	3	C7 3-16-91	single flake of Utah obsidian	on alluvial terrace across from Lees Ferry
56	IF-C-2-46	12-2	0.0	L	3	C7 3-16-91	single corrugated sherd	on alluvial terrace across from Lees Ferry
57	IF-C-2-47	12-2	0.0	L	3	C7 3-16-91	collapsed rock work (bridge remnants?)	in gully/arroyo cutting through alluvial terrace across river from Lees Ferry
58	IF-C-2-48	12-2	0.0	L	3	C7 3-16-91	cairn and boulder inscriptions ("E" on one boulder and "Martha Curtis" on another) on Lees Backbone Road, AZ C:2:48 (Geib etc.)	
59	IF-C-2-49	12-4	0.5	R	3	A9 5-8-91	Historic trash spilling down slope into the Paria river: solder top tin can, fiesta ware, transfer shamrock pattern on porcelain, wire nails	on the Paria's right bank ca. 10-20m southwest of Paria bridge
60	IF-C-2-50	12-5	1.4	R	3	A8 4-12-91	Tin can beneath overhang	
61	IF-C-2-51	12-5	1.4	R	3	A8 4-12-91	Single flake	on bedrock ledge
62	IF-C-2-52	12-7	1.6	R	3	A8 4-12-91	Flakes--cobble testing area	on bedrock ledge
63	IF-C-2-53	13-3	2.9	R	3	A8 4-12-91	Stacked rocks agains cliff face--human? no charcoal, no artifacts	

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
64	IF-C-2-54	13-3	3.1	R	3	A8 4-12-91	Domesticated sheep longbones, ribs and skulls. Livestock tag/clip found among the bones reads "Grace Bros., Nephi, Ut"	on talus slope and along cliff face
65	IF-C-3-55	13-5	3.5	R	3	A8 4-12-91	bench mark	on talus slope
66	IF-C-2-56	13-6	3.9	L	4	D8 4-13-91	Two buried hearths (possibly worthy of site designation)	in slumped slope cut
67	IF-C-2-57	13-7	4.2	R	4	B8 4-13-91	Iron stake & ring, Navajo Bridge related?	in large talus boulder
68	IF-C-2-58	13-8	4.2	L	4	C8 4-13-91	eye bolts at river level, Navajo Bridge related?	cemented in bedrock
69	IF-C-2-59	13-7	4.25	R	4	B8 4-13-91	cable spool, Navajo Bridge related?	on talus slope
70	IF-C-2-60	13-8	4.25	L	4	C8 4-13-91	iron rod, Navajo Bridge related?	cemented in bedrock at river level
71	IF-C-2-61	13-8	4.25	L	4	C8 4-13-91	charcoal	in sand bank
72	IF-C-2-62	13-15	6.8	L	4	A3 11-29-90	4x4 with square & wire nails	in driftwood pile
73	IF-C-2-63	13-15	7.1	L	4	A3 11-29-90	charcoal, no artifacts	in terrace
74	IF-C-2-64	14-1	9.2	R	4	D2 9-29-90	slab wall, 20 cm high, 150 cm long; est. 10-15 yrs old, new sandstone	talus slope, open
75	IF-C-6-1*	14-4	10.25	L	5	A2 9-29-90	Tusayan B/R sherd	talus slope
76	IF-C-6-2	15-3	11.95	L	5	A2 9-29-90	recent camp; stone circles; clearings	rocky slope, drainage at Brown's Riffle (upper delta)
77	IF-C-6-3	15-3	12.3	L	5	A2 9-29-90	carved rocks in overhang; recent	upper delta, drainage, rocky
78	IF-C-6-4	15-5	12.85	L	5	A2 9-30-90	white chert projectile point	1st Hermit ledge above Supai contact
79	IF-C-6-5	15-6	12.9	R	5	B2 9-30-90	Gypsum projectile point	open talus slope just downstream from small delta/drain area
80	IF-C-6-6	15-6	12.95	R	5	B2 9-30-90	miners' ? tools including metal crank and crank part and 4 stopper-top bottles with embossed words: Federal law prohibits reuse of this bottle	on large boulder and in shallow ledge
81	IF-C-6-7	15-7	13.25	L	5	A2 9-30-90	4 green chert flakes	open ledge on talus slope
82	IF-C-6-8	15-7	13.45	L	5	A2 9-30-90	6 flakes and broken biface; all white chert	open ledge on talus slope
83	IF-C-6-9	15-7	13.55	L	5	A2 9-30-90	1 red chert flake	open ledge on talus slope
84	IF-C-6-10	17-6	17.75	L	5	C2 10-1-90	1 corn cob	in boulder shelter on talus
85	IF-C-5-1	18-3	18.8	R	6	D2 10-1-90	dry-laid ss wall 1.5 x .25 m; no artifacts	open talus slope
86	IF-C-5-2	19-1	19.05	R	6	D2 10-1-90	single interior flake of greenish chert	dune on small delta
87	IF-C-5-3	19-2	19.25	R	6	B2 10-1-90	crude, sloping dry-laid wall, 2.2 m long max 90 cm high, med-large ss rocks (modern windbreak?)	under shallow Supai overhang
88	IF-C-5-4*	19-6	20.7	R	6	B2 10-1-90	bottle	open talus
89	IF-C-5-5	20-8	23.8	L	7	A2 10-2-90	2 gray chert flakes	open talus slope in boulders

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
90	IF-C-5-6	20-9	24.15	R	7	B2 10-2-90	single Surprise Valley Formation chert flake, 50% cortex	open talus slope in boulders
91	IF-C-5-7	20-14	25.85	R	7	D2 10-2-90	Redwall chert flake	talus slope/slight col. fan
92	IF-C-5-8	21-5	30.4	R	7	D2 10-3-90	steel cable	in dune on delta/drain
93	IF-C-9-1	22-4	32.45	L	8	B2 10-4-90	miner's stakes	sheer cliff exposure
94	IF-C-9-2	24-7	36.1A	L	8	A4 12-1-90	pink chert projectile point tip	overhang at base of Redwall
95	IF-C-9-3	24-7	36.1B	L	8	A4 12-1-90	2 large stick frags in a crack (possible prehistoric bridge 'remnant'???)	ledges at base of Redwall in sheer-walled drainage
96	IF-C-9-4	29-1	39.9	L	8	A4 12-2-90	Marble Canyon Dam site, ferry debris from top of Redwall(?)	talus/dune, slight delta (open)
97	IF-C-9-5	29-4	40.75	R	9	B4 12-2-90	BM 4(?) *	open talus slope
98	IF-C-9-6	30-2	41.5	R	9	D1 12-2-90	purple glass bottle	drift pile, open talus slope
99	IF-C-9-7*	30-2	41.7	R	9	D1 12-2-90	small square bottle, clear	open talus slope
100	IF-C-9-8*	33-1	46.75	R	10	A2 10-5-90	Hershey's Cocoa can in high driftwood line	open talus slope
101	IF-C-9-9	33-2	47.15	R	10	A2 10-5-90	Moenkopi Corrugated sherd	overhanging boulder on south side of Saddle Canyon mouth
102	IF-C-9-10*	33-12	50.0	R	11	B1 9-1-90	Deadman's B/R sherd	talus/crypto. at upper delta/drain area (large delta)
103	IF-C-9-11	34-1	50.75	R	11	B2 10-6-90	iron stake and GS-2W painted on wall	sheer wall above talus slope (open)
104	IF-C-9-12	34-3	51.2	L	11	A4 12-3-90	wood burned under boulder	open talus slope
105	IF-C-9-13	34-5	51.75	R	11	D1 12-3-90	large Redwall chert flake	talus slope (upper L. Nanko. delta)
106	IF-C-9-14*	34-5	51.8	R	11	D1 12-3-90	3 sherds: Deadman's Gray bowl rim Tusayan GW; Shinarump GW jar rim	talus slope (upper Nanko. delta)
107	IF-C-9-15	34-6	51.8	L	11	D2 10-6-90	stake and board with wood	in talus/slight drainage
108	IF-C-9-16	35-1	51.95	R	11	B1 9-2-90	corrugated sherd (local?)	lower L. Nanko. delta, edge of alluvial terrace
109	IF-C-9-17	35-1	52.0	R	11	B1 9-2-90	Redwall chert flake	terrace between L. Nankoweap and Nankoweap deltas
110	IF-C-9-18	35-1	52.15	R	11	C1 9-2-90	Olivella shell bead	terrace between L. Nanko. and Nanko. deltas
111	IF-C-9-19	35-2	52.2	R	11	A2 10-7-90	fragments of burned bone *	Nankoweap delta, eroding from dune below acacia
112	IF-C-9-20	35-3	52.3	R	11	A2 10-7-90	3 cobble/boulder check dams	Nanko. delta, dune/mesquite
113	IF-C-9-21	35-4	52.4	R	11	B2 10-7-90	2 Tus. Grayware sherds with igneous cobble battering tool	Nankoweep, dune/mesquite
114	IF-C-9-22	35-4	52.5	R	11	D2 10-6-90	1930-50 condiment jar	talus, debris flow (small)
115	IF-C-9-23*	35-4	52.6A	R	11	D2 10-6-90	purple glass 1 pt. whiskey bottle (1905-18)	talus

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
116	IF-C-9-24	35-4	52.6B	R	11	D2 10-6-90	1 pt. Old Quaker whiskey bottle	talus
117	IF-C-9-25	35-4	52.7	R	11	B2 10-7-90	mano	dune, Pleisto. ridge/slope, Nanko.
118	IF-C-9-26	35-4	52.75	R	11	B2 10-7-90	core	Pleistocene ridge/slope, Nanko.
119	IF-C-9-27	35-4	52.75A	R	11	D2 10-6-90	1, 25-watt light bulb, old	talus
120	IF-C-9-28*	35-4	52.75B	R	11	D2 10-6-90	K&C Baking Powder tin (1940-60)	talus
121	IF-C-9-29	35-4	52.75C	R	11	D2 10-6-90	Cathode ray tube (complete)	talus
122	IF-C-9-30	35-4	53.0C	R	11	B2 10-7-90	2 bifaces and 1 sherd	talus slope/Lower Nankoweep
123	IF-C-9-31	35-4	53.05	R	11	B2 10-7-90	ash lens	dune, delta downstrm Nanko.
124	IF-C-9-32	35-12	55.45	L	11	D4 12-4-90	charcoal	under talus boulder overlooking drainage
125	IF-C-9-33	35-13	56.0	R	11	A4 12-4-90	shaped ss griding slab and one-hand mano	south bank of Kwagunt drainage
126	IF-C-9-34	35-14	56.25	R	11	D4 12-5-90	3 sherds: Tsegi Orange, Tusayan B/R, 1 Middleton	dune, lower Kwagunt delta
127	IF-C-9-35	35-14	56.3B	R	11	D4 12-5-90	Shinarump corrugated sherd	dune, lower Kwagunt delta
128	IF-C-9-36	35-14	56.3A	R	11	D4 12-5-90	Tusayan Gray sherd	dune, lower Kwagunt delta
129	IF-C-9-37	35-16	56.45	R	11	B2 10-5-90	flakes	talus/dune slope Kwag. (lower)
130	IF-C-9-38	35-16	56.85	L	11	C2 10-11-90	charcoal	talus slope/cliff base overhang
* 131	IF-C-13-1	35-23	58.8	R	12	B1 9-3-90	large Redwall flake	open talus slope
132	IF-C-13-2	35-26	60.35	R	12	D1 9-3-90	Tusayan Corrugated body sherd	open talus slope
133	IF-C-13-3	35-26	60.4	R	12	D1 9-3-90	Tusayan B/R bowl rim	open talus slope
134	IF-C-13-4	35-28	60.8	R	12	D1 9-3-90	single coarse rock align.; no artifacts	in an overhang
135	IF-C-13-5	36-2	61.45	R	12	A1 10-12-90	Kana-a Grey sherd	open talus slope
136	IF-C-13-6*	36-2	61.5	R	12	A2 10-12-90	4 sherds: 2 unclass. B/G, 2 Shinarump B/W	open talus slope
137	IF-C-13-7	36-2	61.9	R	12	A2 10-12-90	40-50 sherds from 2 pots; Tusayan GW & Deadmans Fug. Red	open talus slope
138	IF-C-13-8	36-3	61.7	L	12	B2 10-12-90	core	talus slope/slight drainage
139	IF-C-13-9	36-4	61.95	R	12	A2 10-12-90	2 sherds: North Creek B/G bowl rim	open talus slope/slight drainage
140	IF-C-13-10	36-4	62.0	R	12	A2 10-12-90	4 sherds, unclassified	open talus slope/slight drainage
141	IF-C-13-11	37-1	62.55	R	12	A4 12-7-90	6 sherds (3 vessels) of Flagstaff B/W	entrenched/steep drain/talus slope
142	IF-C-13-12	37-4	63.5	R	12	D2 10-12-90	corn cob	in crevice in cliff face
143	IF-C-13-13	37-4	63.55	R	12	D2 10-12-90	single North Creek sherd	talus slope
144	IF-C-13-14	37-8	65.2A	L	12	D1 9-5-90	4 Tusayan Corrugated sherds & 3 white chert flakes	upper delta debris flow
145	IF-C-13-15	37-10	65.2B	L	12	D1 9-4-90	5 Kaibab & 1 Chinle chert flake	lower delta alluvium
146	IF-C-13-16	37-10	65.3	L	12	D1 9-4-90	2 flakes, 1 Kaibab, 1 Redwall	base of talus slope
147	IF-C-13-17	37-11	65.4	L	12	B1 9-5-90	3 Redwall chert flakes	debris flow from Palisades drain.
148	IF-C-13-18*	37-11	65.65	L	12	B1 9-5-90	1 sherd, Jeddito Utility Ware	dune, Palisades delta area
149	IF-C-13-19	37-10	65.7	R	12	D1 9-4-90	mano, rectangular, ss conglomerate, bifacial uses	river's edge

* IF-C-9-39

LARGE TUSAYAN POT BUST CORRUGATED

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
150	IF-C-13-20	37-12	66.15A	R	12	D1 9-4-90	2 San Juan Redware body sherds	talus slope/drainage
151	IF-C-13-21	37-12	66.15B	R	12	D1 9-4-90	3 large soldered/welded seam food cans	dune area/small delta
152	IF-C-13-22	37-13	66.2	L	12	H	eroding hearth in gully (historic?)	on terrace at mouth of drainage
153	IF-C-13-23	37-12	66.3	R	12	D1 9-4-90	10 sherds from single Tusayan Corr. jar (neck banded?)	open talus slope
154	IF-C-13-24	37-13	66.35	L	12	A1 9-4-90	charcoal in cut bank	in drainage cut
155	IF-C-13-25	37-13	66.85A	L	13	A1 9-4-90	charcoal lens in cut bank	dune/delta arroyo cut
156	IF-C-13-26	37-13	66.85B	L	13	A1 9-4-90	burned soil & charcoal layers in cuts	dune/delta arroyo cuts
157	IF-C-13-27	37-13	66.9	L	13	A1 9-4-90	recent L-shaped rock alignment	dune/delta
158	IF-C-13-28	37-15	67	L	13	A1 9-5-90	burned soil & charcoal lenses in drain cuts	dune/delta arroyo cuts
159	IF-C-13-29	37-15	67.2A	L	13	A1 9-5-90	sherd scatter (pot drop?)	base of open Dox talus slope
160	IF-C-13-30	37-15	67.2B	L	13	A1 9-5-90	3-4 chert flakes	debris fan north of Comanche Creek
161	IF-C-13-31	37-15	67.25	L	13	A1 9-5-90	soil stain & charcoal (on trail)	Comanche Creek adjacent to drainage cut through delta/dune
162	IF-C-13-32	37-17	68.3A	L	13	A1 9-7-90	rock shelter w/recent use (Harrington's mt. goat bones below conglomerate downstream of shelter)	under boulders on upper Tanner delta
163	IF-C-13-33	38-1	68.3B	L	13	A1 9-7-90	light scatter of 4 flakes and 1 quartzite cobble	on debris flow ridge
164	IF-C-13-34	38-1	68.3C	L	13	A1 9-7-90	groundstone metate	dune area adjacent to Tanner drainage
165	IF-C-13-35	38-1	68.3D	L	13	A1 9-7-90	light scatter of 7 Redwall chert flakes	talus adjacent to Tanner Wash
166	IF-C-13-36	38-2	68.7	L	13	B1 9-7-90	2 lg. Redwall flakes & 1 Tus. Corr. sherd	dune/talus slope at Tanner delta
167	IF-C-13-37	38-3	69.5	R	13	D7 9-7-90	wall with cairn, 4x10 m area, modern?	dune/beach on basalt delta
168	IF-C-13-38	38-4	69.25	L	13	B1 9-8-90	several flakes from local gravels	Pleistocene terrace along Escalante trail
169	IF-C-13-39	38-4	69.6	L	13	B1 9-8-90	sawed logs, upright posts	sand dune/drift area, delta
170	IF-C-13-40*	38-4	69.8	L	13	B1 9-8-90	4 sherds from 2 vessels (Walhalla B/W bowl and Moenkopi Corrugated jar) and 2 Redwall flakes	sand/mesquite area on alluvial fan
171	IF-C-13-41	38-6	69.85	L	13	B1 9-9-90	complete Parawan basal-notched point	on alluvial fan
172	IF-C-13-42	38-5	70.3	L	13	A1 9-9-90	3 sherds: Moenkopi Corr., Flagstaff B/W, Shinarump B/W	alluvial fan/drainage floodplain
173	IF-C-13-43	38-7	70.35	L	13	A1 9-9-90	basal fragment of Parowan-like point	on alluvial fan adjacent to 2m basalt boulder
174	IF-C-13-44	38-7	70.75A	L	13	A1 9-9-90	5-10 flakes of Redwall chert	on colluvial fan overlain w/basalt cobble
175	IF-C-13-45	38-7	70.75B	L	13	A1 9-9-90	Shinarump B/W sherd	on colluvial finger ridge
176	IF-C-13-46	38-8	70.95A	L	13	D1 9-9-90	3 Moenkopi sherds, 1 flake, battered cobble	colluvial fan
177	IF-C-13-47	38-8	70.95B	L	13	D1 9-9-90	Tsegi Orangeware sherd	colluvial fan

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
178	IF-C-13-48	38-8	70.95C	L	13	D1 9-9-90	Kaibab chert interior flake	talus slope
179	IF-C-13-49	38-8	70.95D	L	13	D1 9-9-90	modern fire pit; verticle slabs in box config.	dune/mesquite thicket
180	IF-C-13-50	38-9	71.15	R	13	C2 10-13-90	rock cairn	colluvial slope (OPA)
181	IF-C-13-51	38-9	71.25A	R	13	C2 10-13-90	lithics (unrecorded site)	colluvial slope (OPA)
182	IF-C-13-52	38-9	71.25B	R	13	C2 10-13-90	6 sherds: various PII types	talus/sand/river flood zone
183	IF-C-13-53	38-10	71.6	L	13	D2 10-13-90	8 flakes	atop Dox 'knoll' (OPA)
184	IF-C-13-54	38-10	71.7	L	13	D2 10-13-90	lithic scatter (unrecorded site)	atop Dox 'knoll' (OPA)
185	IF-C-13-55	38-11	71.6	R	13	C2 10-13-90	Moenkopi jar sherd	base of Dox talus slope
186	IF-C-13-56	38-11	72.0	R	14	C2 10-13-90	oval ss slab metate	adjacent to arroyo bank
187	IF-C-13-57	39-3	73.25	R	14	D7 3-18-91	collection pile on rock: 4 Tus. Gray (3 corr., 1 plain) and 1 Redwall flake	talus slope (open)
188	IF-C-13-58	39-4	73.55	R	14	D7 3-18-91	limestone cobble hand axe (sketched)	talus/ledge slope
189	IF-C-13-59	39-4	73.65	L	14	C7 3-19-91	cairn	ledge/talus open
190	IF-C-13-60	39-5	73.65	R	14	D7 3-19-91	small pile of rock (photo 7D-2-])	ledge
191	IF-C-13-61	39-5	73.7	R	14	D7 3-19-91	1 Tsegi OW jar and upright slab	slight overhang/pouroff on talus sl.
192	IF-C-13-62	39-5	73.75	R	14	D7 3-19-91	enigmatic small rock pile	ledge/talus overlooking drain. cut
193	IF-C-13-63	39-5	73.8	R	14	D7 3-19-91	3 stacked slabs	open talus slope/ledge
194	IF-C-13-64	39-5	73.9	R	14	D7 3-19-91	3 stacked slabs	open talus slope/ledge
195	IF-C-13-65	40-3	74.95	L	14	A7 3-19-91	charcoal fragments	under small overhang
196	IF-C-13-66	40-3	75.0	L	14	A7 3-19-91	stacked rocks?	at cliff base/top of talus slope
197	IF-C-13-67	40-5	75.5	L	14	A7 3-19-91	charcoal fragments	75-mile Beach; overhang in cliff
198	IF-C-13-68	40-5	75.6A	L	14	A7 3-19-91	multicoursed rock walls on ledge with wood; recent river runner construction?	75-mile Beach; pre-dam drift
199	IF-C-13-69	40-5	75.6B	L	14	A7 3-19-91	12x12x16" milled plank (probably 1950s pre-dam flood)	75-mile Beach; pre-dam drift
200	IF-C-13-70	40-5	75.6C	L	14	A7 3-19-91	3/4" rebar, 12" long (probably 1950s pre-dam flood)	75-mile Beach; pre-dam drift
201	IF-C-13-71	41-1	75.8	L	14	A7 3-19-91	wooden bridge lumber? (6"x14"x30' long)	75-mile Beach; pre-dam drift
202	IF-C-13-72	41-1	75.9	L	14	A7 3-19-91	aligned rocks on ledge (recent?)	
203	IF-C-13-73	41-15	79.6	L	14	C7 3-20-91	historic camp grass bed/wall/campfire ring	under slight overhang
204	IF-B-16-1	42-9	82.5A	L	15	C7 3-21-91	overhang with stacked rocks	schist overhang (OPA)
205	IF-B-16-2	42-9	82.5B	L	15	C7 3-21-91	Hershey's can w/soldered lid	
206	IF-B-16-3	43-8	86.5	L	15	A7 3-21-91	pre-dam driftwood w/tin can & gin bottle	
207	IF-B-16-4	44-2	87.3A	R	15	B6 2-18-91	inscription "BG 67,68,69"	
208	IF-B-16-5	44-2	87.3B	R	15	B6 2-18-91	4 roughcut 2x6, 2 angle irons, 7 3/8" rebar, 2 1/2" rebar, 2 1" rebar, 1 3/4" iron bar, 1 metal ladder, 1 metal v-brace (under aerial tram)	assoc. w/B:16:262A? (USGS guaging station)

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
209	IF-B-16-6	44-2	87.4A	R	15	B6 2-18-91	corr. drain pipe, angle irons, pulleys, metal braces, compressor made by "McDonald & Dubuque, Iowa 87," hose	associ. w/B:16:262B (USGS guaging station)
210	IF-B-16-7	44-2	87.4B	R	15	B6 2-18-91	braided steel wire cable anchor in rock, 20 m+ long, steps quarried into rock	
211	IF-B-16-8	44-2	87.5	R	15	B6 2-18-91	low, dry-laid wall at mouth of deep, narrow cave under huge boulder; historic artifacts: pocket knife w/plastic handle, piece of rope	upstream of black bridge below rail
212	IF-B-16-9	44-3	87.7	R	15	B6 2-18-91	schist slab wall, 2.6m long, 4m high with cleared interior space	Bright Angel delta; upslope of trails
213	IF-B-16-10	44-3	87.7	R	15	B6 2-18-91	tent platform	Bright Angel delta; upslope of trails
214	IF-B-16-11	44-4	88.0	R	15	D6 2-18-91	modern wall with wire, rubber, charcoal	
215	IF-B-16-12	44-5	88.5	L	15	A6 2-18-91	rock walls beneath overhang near pipeline; recent trash (no artifacts)	
216	IF-B-16-13	44-6	89.0	R	15	B6 2-19-91	charcoal flecks in schist shelter; no artifacts	opposite mouth of Pipe Creek
217	IF-B-16-14	44-7	89.4	L	15	A6 2-19-91	recent rock wall beneath overhang, pipeline related? four 1-1/2" iron rods cut off	
218	IF-B-16-15	45-2	89.8	L	16	C6 2-19-91	rock cairn—1.2 m high	high on schist slope
219	IF-B-16-16	45-2	90.0	R	16	C6 2-19-91	old cairn at seep	red rocks, below high water
220	IF-B-16-17	45-3	90.0	R	16	D6 2-16-91	cairn	
221	IF-B-16-18	45-3	90.0	R	16	D6 2-16-91	post	
222	IF-B-16-19	46-2	91.1	R	16	A3 10-26-90	flake of white, granular chert	flat, sandy area east of Trinity Creek
223	IF-B-16-20*	46-7	92.9	R	16	D3 10-26-90	reclosable cylindrical tin: Ghirardelli's chocolate	drift line, ca. 27ft above current high water line
224	IF-B-16-21	46-8	93.5	L	16	C6 2-20-91	Redwall flake	sand over schist below mouth of Monument Creek
225	IF-B-16-22	46-10	93.7	L	16	C6 2-20-91	wall under big boulder	in unnamed drainage
226	IF-B-16-23	46-11	94.3	R	16	D6 2-20-91	3 sherds: 1 Tus. Gray Corr., 1 Deadman's Gray, 1 Shinarump brown (var.)	on terrace at mouth of 94-mile Creek
227	IF-B-16-24	46-13	94.8	L	16	D6 2-20-91	1 white chalcedony flake	upstream end of Hermit beach
228	IF-B-16-25	47-4	95.1	L	16	B6 2-20-91	rhyolite tertiary flake w/proximal hinge fracture	
229	IF-B-16-26	48-5	97.3	L	17	B5 1-19-91	Gypsum point	on schist ledge
230	IF-B-16-27	48-8	98.0	R	17	A6 2-21-91	3 corrugated sherds	upstream end of Crystal delta (high terrace)
231	IF-B-15-1	49-5	99.1	L	18	B6 2-21-91	charcoal (probably modern)	
232	IF-B-15-2	51-8	104.2	R	18	A3 10-27-90	boulder overhang with cleared area; no artifacts	debris flow in side drainage

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
233	IF-B-15-3	52-12	107.3A	R	18	D3 10-28-90	1 chert flake , mustard yellow (Dakota? river cobble source?)	talus
234	IF-B-15-4	52-12	107.3B	R	18	D3 10-28-90	bifacial tool (knife) Redwall chert (4.2x 1.2x.4 cm)	talus
235	IF-B-15-5	52-12	107.3C	R	18	D3 10-29-90	5 flakes	
236	IF-B-15-6	53-1	107.6	R	18	D3 10-29-90	Redwall interior flake 15 mm	
237	IF-B-15-7	52-13	107.8	L	18	C3 10-29-90	flake	on schist bench adjacent to steep gully
238	IF-B-15-8	53-1	107.8	R	18	D3 10-29-90	Redwall interior flake 39 mm	
239	IF-B-15-9	52-13	107.9	L	18	C3 10-29-90	RR spike	at river's edge
240	IF-B-15-10	52-15	108.0	R	18	D3 10-28-90	2 interior flakes, redwall	on schist bench
241	IF-B-15-11	52-13	108.4	R	18	D4 12-11-90	Tsegi Orangeware sherd	talus slope
242	IF-B-15-12	53-2	108.8	L	18	C4 12-11-90	Tapeats metate & mano: metate is 42x37 x13cm; w/oval use area in center; mano is irreg. cobble 12x8.5x7 cm, one use surface pecked & ground (assoc. w/B:15:132?)	schist bench
243	IF-B-15-13	55-6	114.5	R	19	A5 1-21-90	charcoal	base of Tapeats (OPA)
244	IF-B-15-14	55-6	114.55	R	19	A5 1-21-90	alcove w/flakes & charcoal	base of Tapeats (OPA)
245	IF-B-15-15	55-6	114.6	R	19	A5 1-21-90	2 flakes	base of Tapeats (OPA)
246	IF-B-15-16	55-7	114.7	L	19	C5 1-21-91	pick head on rock	
247	IF-B-15-17	55-7	114.7	L	19	C5 1-21-91	scattered charcoal, stacked Tapeats boulders (prob. site at one time)	on granite bench (OPA)
248	IF-B-15-18	55-7	115.1	L	19	C5 1-21-91	charcoal	in travertine overhang
249	IF-B-15-19	56-1	115.2	R	19	A5 1-21-91	chalcedony biface and charcoal	Tapeats boulder overhang/ shelter on granite bench (OPA)
250	IF-B-15-20	56-4	115.7	L	19	B3 10-30-90	red chert flake	on Royal Arch trail
251	IF-B-15-21	56-4	115.9	L	19	B3 10-30-90	overhang w/stack rocks; no artifacts	in travertine deposit
252	IF-B-15-22	57-2	116.55	L	19	B-3 10-30-90	flake	
253	IF-B-15-23	57-3	117.2	R	19	A3 10-30-90	(site?) 8-10 flakes of Redwall chert & chalcedony	Tapeats ledges
254	IF-B-15-24	57-5	118.3	R	19	D3 10-30-90	Redwall chert flake, 45 mm, 3 scars	
255	IF-B-15-25	59-5	121.0	L	19	C3 10-31-90	shelter with sparse lithics	Tapeats bench adjacent to drainage (OPA)
256	IF-B-14-1	59-6	121.6	R	20	B3 10-31-90	core & flake	Tapeats talus slope
257	IF-B-14-2	59-8	122.0	R	20	B1 10-31-90	wall (recent?)	base of Tapeats ledges above 122-mile Camp
258	IF-B-14-3	59-8	122.6	R	20	B1 9-12-90	quartzite cobble w/2 flakes removed	Tapeats talus slope
259	IF-B-14-4	59-9	122.6	L	20	A1 9-12-90	log (13'3"x9.5") notched at both ends w/3 nails & 12" spike	driftwood line in tamarisk
260	IF-B-14-5	59-9	123.0	L	20	A1 9-12-90	shelter with 1 flake	Tapeats overhang

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
261	IF-B-10-1	60-2	123.3	L	21	A1 9-12-90	1 flake	
262	IF-B-10-2	60-3	123.9	L	21	B1 9-12-90	cairn	talus ridge
263	IF-B-10-3	60-5	124.7	L	21	D1 0-12-90	barbed wire	
264	IF-B-11-1	62-6	128.1	L	22	D6 2-23-91	charcoal (no features, no artifacts)	schist bench/base of Tapeats slope
265	IF-B-11-2	62-6	128.1	L	22	D6 2-23-91	charcoal	schist bench/base of Tapeats slope
266	IF-B-11-3	62-6	128.2	L	22	D6 2-23-91	mano/basher	schist bench/base of Tapeats slope
267	IF-B-11-4	62-6	128.4	L	22	D6 2-23-91	cobble basher	schist bench/base of Tapeats slope
268	IF-B-11-5	62-7	128.3	R	22	A5 1-22-91	rock wall, 4-5courses, 130cm long x 100cm high, no artifacts	200ft rise above river at base of Tapeats
269	IF-B-11-6	62-7	128.5	R	22	A5 1-22-91	stacked rocks, 1 charcoal frag., no artifacts	Tapeats ledges
270	IF-B-11-7	62-10	129.4	L	22	B5 1-22-91	wood gate, modern, 1957 flood?	wedged in schist ledges by river
271	IF-B-11-8	62-13	130.9	L	22	D5 1-22-91	cobble hammerstone (7x5 cm)	colluvial fan (near B:11:282)
272	IF-B-11-9	62-15	131.7	L	22	C6 2-23-91	old tobacco tin— "improved top" embossed on lid	colluvial fan below Dubendorf Rapid
273	IF-B-11-10	63-2	132.2	L	22	B4 12-12-90	Clorox bottle	
274	IF-B-11-11*	63-4	132.3	L	22	B4 12-12-90	5 sherds North Creek Corrug., 1 sherd Medicine B/R, and 1 uni-edge flake tool of light orange baked siltstone	amongst boulders on diabase (?) bench
275	IF-B-11-12	64-3	133.9	L	22	D4 12-12-90	hippie shrine with 9 corr. sherds	
276	IF-B-11-13	64-6	134.9	L	23	A5 1-23-91	1 Walhalla Corrugated sherd & 3 flakes	overhang in side drainage
277	IF-B-11-14	64-7	135.4	L	23	A5 1-23-91	4-5 stacked rocks, no artifacts	shallow overhang 40m SW of Helicopter Eddy
278	IF-B-10-4*	64-11	136.3	L	24	B5 1-23-91	4 sherds (3 from Paiute vessel) and 5 chunky Redwall flakes	across from Deer Creek Falls
279	IF-B-10-5	64-11	136.4	L	24	B5 1-23-91	room below boulder overhang	
280	IF-B-10-6	64-11	136.5	L	24	B5 1-23-91	charcoal pieces, no artifacts	in soft eroding sediment at base of Tapeats
281	IF-B-10-7	64-15	138.0	R	24	C3 11-2-90	2 granitic river cobble manos	on Tapeats ledges under overhang
282	IF-B-10-8	64-16	138.2	L	24	D3 11-2-90	rock alignment - 1.2 m, 7 rocks	
283	IF-B-10-9	64-17	138.6	R	24	C3 11-2-90	rock alignment	in tiny granite overhang
284	IF-B-10-10	64-17	138.6	R	24	C3 11-2-90	charcoal scatter (recent?)	under 15m long Tapeats overhang
285	IF-B-10-11	65-4	139.4	R	24	C1 9-14-90	poss. site (monitor)	
286	IF-B-10-12	65-10	141.5	R	24	B1 9-14-90	wall remant	
287	IF-B-10-13	65-12	142.0	R	24	B1 9-14-90	crude primary blank biface of Redwall chert	
288	IF-B-10-14	65-14	143.3	R	24	B1 9-14-90	Redwall chert core	
289	IF-B-10-15	65-15	143.6	R	25	A1 9-14-90	rock alignment—poss. modern	

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
290	IF-B-10-16	65-17	143.9	R	25	C3 11-3-90	3 cairns, one 1.25m high, the others 45-65cm high (marking river runner's cache?)	base of first cliff above river
291	IF-B-10-17	65-18	143.9	L	25	D3 11-3-90	blk rhyolite flake, 19 mm, whole flake*	
292	IF-B-10-18	68-8	151.5	R	26	D7 3-24-91	cairn (modern?)	
293	IF-B-10-19	69-6	153.0	R	26	D7 3-25-91	milled board, 4"x12"x6', 8" spikes, one end notched	in extensive driftwood pile
294	IF-B-10-20	70-3	154.0	R	26	D7 3-25-91	alcove with 50+ chunks of charcoal on sandy floor, no artifacts	
295	IF-B-10-21	70-6	154.9	L	26	C7 3-25-91	cairn on boulder	Muav slope
296	IF-B-9-1	70-7	155.5	R	27	A7 3-25-91	plaque in memory of Robert Benson Eshka 1856-1895, "He hiked to this place and called it a paradise"	mouth of Paradise Canyon
297	IF-B-9-2	71-2	155.7	L	27	C7 3-25-91	dry-laid wall (modern)	under Muav ledge
298	IF-B-9-3	71-4	156.1	L	27	C7 3-25-91	cairn	talus cone below Muav cliff
299	IF-B-9-4	72-2	156.9	L	27	C7 3-25-91	4 cairns	adjacent to drainage end of ledges below Havasu
300	IF-B-9-5	72-5	158.	R	27	A7 3-26-91	2 cleared spaces, stacked rocks (recent)	under overhang
301	IF-B-9-6	75-3	162.1	R	27	D6 2-26-91	saw cut log at cliff base	~?90,000? cfs level???
302	IF-B-9-7	76-1	162.6	L	27	C6 2-26-91	huge timber, 10'	
303	IF-B-9-8	76-2	163.0	L	27	C6 2-26-91	Kaibab chert flake	at cliffbase
304	IF-B-9-9	76-5	163.5	R	27	B6 2-26-91	small rock wall, 10-12 elements, 1.5 m long, appears modern	at base of Muav
305	IF-B-9-10	76-5	163.8	R	27	B6 2-26-91	reddish chert core fragment	
306	IF-B-9-11	76-6	163.8	L	27	A6 2-26-91	2 cairns	
307	IF-B-9-12	77-1	164.3	L	27	A6 2-26-91	stacked rocks, recent?	
308	IF-B-9-13	77-1	164.4	L	27	A6 2-26-91	stacked rocks, 2 cairns	
309	IF-B-9-14	76-7	164.A	R	27	B6 2-26-91	1 flake, some surface charcoal	on Muav ledge upstream from mouth of Tuckup Creek
310	IF-B-9-15	76-7	164.4B	R	27	B6 2-26-91	1 m high Muav slab cairn	on Muav ledge upstream from mouth of Tuckup Creek
311	IF-B-9-16	76-7	164.4C	R	27	B6 2-26-91	leaning Muav slabs, forming .5m high pyramid (poss. overturned cairn?)	on Muav ledge upstream from mouth of Tuckup Creek
312	IF-B-9-17	77-2	164.8	R	28	B6 2-26-91	driftwood board: "RAY/27 FEB/A 'GOOD DOG'"	found under rock
313	IF-B-9-18	78-3	166.5	R	28	B6 2-26-91	charcoal (hearth?)	on top of talus cone opposite National Creek
314	IF-B-9-19	78-3	166.5	L	28	B6 2-26-91	charcoal pile	in talus/under overhang upstream from mouth of National Canyon
315	IF-B-9-20	78-3	166.55	L	28	B6 2-26-91	cairn (ca. 0.5 m high)	downstream from mouth of National

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
316	IF-B-9-21	79-4	167.9	L	28	A3 11-5-90	motor propellor commemorating wreck in 1965	in ledges behind old beach camp
317	IF-B-9-22	80-1	168.0	R	28	D1 9-16-90	charcoal scatter (modern???)	behind large leaning boulder downstream of Fern Glen
318	IF-B-13-1	81-9	170.8	R	29	D1 9-16-90	2-course wall, 1.2m long, no artifacts	on ledge at top of talus, above Stairway Canyon
319	IF-B-13-2	81-9	171.0	R	29	D1 9-16-90	remains of saw-cut timber (bridge?), 3.4" x 10" bolts from St. Louis	in boulders/colluvial fan upstream side of Stairway Canyon
320	IF-B-13-3	81-9	171.0	R	29	D1 9-16-90	Redwall chert flake and scattered fire-cracked rocks	upstream eroded bench at mouth of Stairway Canyon
321	IF-A-16-1	81-17	173.7	R	30	A1 9-16-90	alcove w/charcoal frag. & poss. masonry outline	unnamed tributary canyon mouth
322	IF-A-16-2	81-19	174.0	L	30	A3 11-6-90	stacked rocks	beneath boulder overhang, downstream from Cove Canyon mouth near base of talus slope
323	IF-A-16-3	82-1	174.4	R	30	B3 11-6-90	square outline defined by rocks, logs & 12" square beam (tent site?)	
324	IF-A-16-4	82-6	175.5	L	30	A3 11-6-90	two 8x8"-6' long, connected with bolts	in driftwood
325	IF-A-16-5	82-10	176.7	L	30	D3 11-6-90	2 banded chalcedony interior flakes	base of cliffs
326	IF-A-16-6	82-12	177.6	L	30	D3 11-6-90	charcoal	sand terrace below mesquites
327	IF-A-16-7	82-19	179.3	L	30	B8 4-_-91	6 flakes of chert (local material) probably sampled for suitability	open bench/talus
328	IF-A-16-8	82-19	179.85	R	30	A4 12-16-90	soil stain w/charcoal; natural burn?	talus slope/mesquite contact
329	IF-A-16-9	82-23	180.8	R	30	A4 12-16-90	brown bottle w/side seams	in driftwood logs on sandy delta
330	IF-A-16-10	82-27	181.5	R	30	C4 12-16-90	cairn; 1960s film can nearby	basalt talus near tamarisk zone
331	IF-A-16-11	82-30	183.1	L	31	D4 12-16-90	ash stain and flakes	in cut bank near base of mesquite-covered terrace
332	IF-A-16-12	83-2	183.1	R	31	C6 2-27-91	Muav chert flake	on steep slope near base of mesquite-covered terrace
333	IF-A-16-13	83-3	183.8	L	31	B5 1-26-91	used Redwall or chert cobble flake, 39+mm cortex platform, scraping wear on both lateral margins	talus slope
334	IF-A-16-14	83-4	183.8	R	31	C3 11-7-90	2 white chert interior flakes	directly above beach
335	IF-A-16-15	84-5	185.3	R	31	B3 11-7-90	60cm rock ring (hearth?)	below large overhanging limestone block
336	IF-A-16-16	84-5	185.8	R	31	B3 11-7-90	white chert core fragment	talus slope above mesquites
337	IF-A-16-17	84-10	186.9	R	31	B3 11-8-90	ss boulder w/pecked oval depression	in boulders, flush w/ground surface
338	IF-A-16-18	85-2	187.9	R	31	C3 11-8-90	poss. wall alignment	under Bright Angel overhang

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess.	Date	Description	Setting
339	IF-A-16-19	85-2	188.0	R	31	C3	11-8-90	FCR/hearths (recent? historic?)	base of steep talus on alluvial fan
340	IF-A-16-20	85-3	188.6	L	31	D5	1-27-91	pillar of stacked rock	
341	IF-A-16-21	85-6	189.0	R	31	C5	1-27-91	Prince Albert can, "improved top"	in driftwood line
342	IF-A-16-22	86-1	189.7	R	32	B5	1-27-91	mining claim cairn	top of granite/base of Tapeats
343	IF-A-16-23	86-2	190.1	L	32	D5	1-27-91	dredge & timbers	old drift pile on granite outcrop
344	IF-A-16-24	86-3	190.7	R	32	B5	1-28-91	limestone chunk with a few flakes removed for battering & a basalt cobble, also old packrat midden	downriver end of shelter
345	IF-A-16-25	85-8	189.8	L	32	A5	1-27-91	charcoal & Presley Wash obsidian flake	in overhang above 300000 cfs level
346	IF-A-16-26	85-8	189.8	L	32	A5	1-27-91	stacked rocks (deadfall?)	in overhang
347	IF-A-16-27	86-4	190.5	L	32	A5	1-28-91	1.5m long rock alignment, no artifacts	in Tapeats ledges overhang
348	IF-A-16-28	86-5	190.8	R	32	B5	1-28-91	old branch stuck upright	at base of Tapeats against cliff
349	IF-A-16-29	86-5	191.2	R	32	B5	1-28-91	irreg. large ss cobble w/3 small shallow circular grinding surfaces	
350	IF-A-16-30	86-6	191.5	L	32	A5	1-28-91	projectile point tip of white chert	talus slope adjacent to drainage
351	IF-A-16-31	86-6	191.4	L	32	A5	1-28-91	charcoal frags	beneath pourover/overhang
352	IF-A-16-32	86-7	191.6	R	32	B5	1-28-91	small white Redwall chert flake	at base of Muav cliff
353	IF-A-16-33	87-3	193.3	L	32	D5	1-28-91	two old metal bolts	
354	IF-A-16-34	87-4	193.2	R	32	C5	1-28-91	1935-45 milk can	on sandy terrace adjacent to talus slope
355	IF-A-16-35	87-4	193.2	R	32	C5	1-28-91	historic Anglo campfire, no trash	downstream of Boulder Wash near center of alluvial fan
356	IF-A-16-36	87-4	193.3	R	32	C5	1-28-91	old hive in Muav crack w/burned upright log	in narrow crack in Muav cliff
357	IF-A-16-37	87-4	193.5	R	32	C5	1-28-91	historic mining claim (?): plank, paint can, aluminum milk can, collapsed cairn	in Muav overhang
358	IF-A-16-38	88-2	193.5	L	32	D5	1-28-91	three 50-gallon drums	
359	IF-A-16-39	87-5	193.8	R	32	C5	1-28-91	11 Muav slabs, 3-4 leaning against cliff	on Muav ledge
360	IF-A-15-1	89-3	195.0	R	33	C5	1-29-91	Chinle pet wood biface thinning flake w/use wear; 2 other white chert (Kaibab?) flakes	on Muav bench
361	IF-A-15-2	89-5	195.6	R	33	C5	1-29-91	collapsed cairn	on Muav ledge
362	IF-A-15-3	90-1	195.9	R	33	D3	11-9-90	Elko Corner-notched knife w/reworked edge, Kaibab chert	
363	IF-A-15-4	90-1	195.9	R	33	D3	11-9-90	1 flake	in rock shelter
364	IF-A-15-5	90-1	195.9	R	33	D3	11-9-90	biface base; exotic chert, highly fractured	
365	IF-A-15-6	90-3	196.5	L	33	B5	1-29-91	poss. terrace alignment parallel to drainage & 3 lithics	at base of Muav cliff

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
366	IF-A-15-7	90-5	197.1	R	33	A3 11-8-90	Elko corner-nothced point	steep talus slope above acacia thickets
367	IF-A-15-8	90-5	197.2	R	33	A3 11-8-90	Prince Albert tobacco can	beneath large talus block near base of Muav
368	IF-A-15-9	90-6	197.8	L	33	B3 11-9-90	6 thinning flakes; river cobble & Redwall chert	under pour-off overhang
369	IF-A-15-10	91-3	198.5	L	33	B3 11-10-90	cairns and rebar	on steep talus slope
370	IF-A-15-11	91-4	198.8	R	33	A3 11-10-90	stacked rocks	on trail (talus slope)
371	IF-A-15-12	91-5	199.1	L	33	B3 11-10-90	ss cobble mano	talus slope above mesquite/acacias
372	IF-A-15-13	91-5	199.6	L	33	B3 11-10-90	rock shelter w/crude rock alignment & cobble	base of Muav
373	IF-A-15-14	91-7	199.9	L	33	C5 1-30-91	ss block (60 x 36 x 15cm) w/pecked/ground center	in boulder field in high water zone
374	IF-A-15-15	91-6	200.0	R	33	D3 11-10-90	ss slab (36 x 18 x 6cm) w/pecked/ground oval center	talus slope
375	IF-A-15-16	91-8	200.5	R	33	A5 1-30-91	upright slab, charcoal, grinding slick	downslope side of drainage at cliff base
376	IF-A-15-17	91-8	200.55	R	33	A5 1-30-91	basalt mano	open talus slope
377	IF-A-15-18	91-9	200.75	L	33	C5 1-30-91	scattered charcoal & FCR scatter in clearing (natural burn?)	mesquite thicket area on sand terrace
378	IF-A-15-19	91-10	200.85	R	33	A5 1-30-91	charcoal & pecked(?) ss slab	in shelter at base of Muav
379	IF-A-15-20	91-10	201.05	R	33	A5 1-30-91	charcoal; no artifacts	in shelter at base of Muav
380	IF-A-15-21	91-10	201.25	R	33	A5 1-30-91	charcoal; no artifacts	in shelter at base of Muav
381	IF-A-15-22	91-11	201.5	L	33	C5 1-30-91	Muav FCR next to depression, no artifcts	talus/dune slope in thick mesquite
382	IF-A-15-23	91-12	201.8	R	33	D5 1-30-91	charcoal on surface	talus slope/base of cliff
383	IF-A-15-24	91-12	201.85	R	33	D5 1-30-91	1 Redwall flake	talus slope
384	IF-A-15-25	91-13	202.1	L	33	B5 1-30-91	prob. walls w/charcoal scatter	talus slope at cliffbase (above 300K)
385	IF-A-15-26	92-1	202.1	R	33	D5 1-30-91	mano	talus/cliff base
386	IF-A-15-27	92-3	202.65	R	33	D5 1-30-91	FCR?	talus above mesquite thickets
387	IF-A-15-28	92-5	203.35	L	33	B6 2-20-91	shelter in travertine, 2.5x2x1 m high, indurated packrat midden, vertical slab (natural?) wood pieces, mesquite log bark; no artifacts	in talus slope
388	IF-A-15-29	92-6	203.55A	R	33	A6 2-28-91	charcoal	at cliff/talus contact
389	IF-A-15-30	92-6	203.55	R	33	A6 2-28-91	cairn	at cliff/talus contact
390	IF-A-15-31	92-6	203.9	R	33	A6 2-28-91	stacked rocks, charcoal; cairn nearby	at cliff/talus contact at drainage mouth
391	IF-A-15-32	92-9	204.4	R	33	A7 3-28-91	FCR & recent trash	dune/mesquite thicket on delta at Spring Creek

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
392	IF-A-15-33	92-10	204.7	L	33	B6 3-1-91	Kaibab chert arrow pt. w/concave base (sketch on aerial)	basalt bench
393	IF-A-15-34	92-10	204.7	L	33	B6 3-1-91	travertine cave w/Partridge Creek obsidian flake below entrance	basalt bench
394	IF-A-15-35	92-12	205.45	L	33	C6 3-1-91	Tapeats ss one-hand oval mano	open talus slope
395	IF-G-3-1	93-2	206.65A	R	34	D6 3-2-91	FCR	talus/sandy bench overlooking Indian Canyon delta
396	IF-G-3-2	93-2	206.65B	R	34	D6 3-2-91	2 interior flakes	talus/sandy beach overlooking Indian Canyon delta
397	IF-G-3-3	93-2	206.7	R	34	D6 3-2-91	3 Tizon Brown sherds	Tapeats ledges below Indian Creek
398	IF-G-3-4	93-3	207.2	L	34	C6 3-2-91	poss. deadfall trap in crack big packrat nest around it	in basalt cliff
399	IF-G-3-5	93-3	207.25	L	34	C6 3-2-91	poss. circular feature 1.5x1.8 m, single course local cobbles (basalt, ls) open to SW, incomplete on E. side, no artifacts	open talus slope
400	IF-G-3-6	93-5	207.45	R	34	A6 3-2-91	Prince Albert tobacco tin	open talus slope
401	IF-G-3-7	93-4	207.7	L	34	B6 3-2-91	sparse lithic scatter	open talus slope
402	IF-G-3-8	93-4	207.75	L	34	B6 3-2-91	FCR	open talus slope
403	IF-G-3-9	93-5	207.7	R	34	A6 3-2-91	shatter (flakes?)	open talus slope
404	IF-G-3-10	94-3	209.45	R	34	D5 2-2-91	3 flakes Redwall on sandy bench, no carbon	talus and cliff contact
405	IF-G-3-11	94-4	209.8	R	34	A5 2-2-91	Moapa Corrugated sherd	dune slope on upstream side of delta
406	IF-G-3-12	94-4	209.85	R	34	A5 2-2-91	Paiute sherd	dune slope on upstream side of delta
407	IF-G-3-13	95-5	211.8	R	34	A5 2-3-91	slight overhang w/3 charcoal frags.; no artifacts	talus slope
408	IF-G-3-14	95-6	212.15	L	34	B5 2-3-91	2 unknown brown/gray ware sherds & 2 charcoal chunks	in mesquite clearing on dune slope by drainage
409	IF-G-3-15	96-4	213.85	R	34	C5 2-3-91	isolated Tapeats grinding slab	in crack in basalt outcrop above Tapeats bench
410	IF-G-3-16	96-4	214.1	R	34	C5 2-3-91	flake	on Tapeats bench
411	IF-G-3-17	96-5	214.35	R	34	B7 3-30-91	cairn & barrel hoops	edge of Tapeats bench
412	IF-G-3-18	96-7	214.8	R	34	B7 3-30-91	cairn	below talus slope on Tapeats ledge
413	IF-G-3-19	97-3	215.75	R	34	C8 4-28-91	chopper-basher	in low rockshelter at basalt cliff/ talus contact
414	IF-G-3-20	97-6	216.55	R	35	C6 3-4-91	old cairn and charcoal scatter	talus/cliff contact
415	IF-G-3-21	97-7	216.95	L	35	B6 3-4-91	large redwall chert, tertiary flake	on boulder slope
416	IF-G-3-22	97-7	217.15	L	35	B6 3-4-91	three 1x6, three 2x4, part of driftwood fence?	in tamarisk at sand/talus contact

Item No.	I.O. #	Aerial Photo #	River Mile	Bank	Map No.	Crew/Sess. Date	Description	Setting
417	IF-G-3-23	98-1	217.0	R	35	C6 3-4-91	charcoal	under overhang at talus/cliff contact
418	IF-G-3-24	98-1	217.25	R	35	C6 3-4-91	poss. collapsed wall	ledge in schist cliff above 217-mile Rapid
419	IF-G-3-25	98-3	217.5B	L	35	C8 3-4-91	charcoal	cliff/talus contact above 217-mile Delta
420	IF-G-3-26	98-7	219.2	R	35	A6 3-4-91	rock alignment (recent?)	talus/sand contact at delta/drainage
421	IF-G-3-27	99-6	220.6	R	35	A7 33-30-91	cold steel chisel, 3/4 x 3/4, 5-6 m long both ends mushroomed	talus slope
422	IF-G-3-28	99-9	222.1	L	35	D5 1-22-91	2 interior Redwall flakes	sand-covered schist bench
423	IF-G-3-29	100-8	224.75	R	35	D7 3-31-91	limestone mano	talus slope
424	IF-G-3-30	101-22	233.55	R	36	D7 4-1-91	1x4" shiplap board, 80 cm long w/strip of 3" galvanized tin flashing nailed to one side, nail holes down both edges of flash.	talus slope adjacent to drainage, among predam drift in trees
425	IF-G-2-1	101-23	233.6	L	37	C7 4-1-91	charcoal; no artifacts	in schist overhang, downstream of 234-mile Canyon
426	IF-G-2-2	102-10	236.4A	L	37	C7 4-2-91	shellaced wooden plaque (24 x 18cm) w/metal plate "in memory of George Lewis Ortmyer may his soul soar forever free."	cemented on red schist boulder 9ft above most prominent lake terrace on beach at drainage mouth
427	IF-G-2-3	102-10	236.4B	L	37	C7 4-2-91	schist boulder w/abraded inscription: "Fairfield aerial survey camp" (35x95x70cm)	beach/drainage
428	IF-G-2-4	102-10	236.7	L	37	C7 4-2-91	old mine shaft	drainage cut
429	IF-G-2-5	102-12	236.9	L	37	C7 4-2-91	antenna or survey paint?	schist ledges
430	IF-G-2-6	102-12	237.3	L	37	C7 4-2-91	tailings	talus/schist ledges
431	IF-G-2-7	102-12	237.35	L	37	C7 4-2-91	nail w/wire	schist ledges
432	IF-G-2-8	102-12	237.4	L	37	C7 4-2-91	2x2 dowel w/wire	schist ledges
433	IF-G-2-9	102-14	237.5	L	37	D7 4-2-91	2x2 wood pole 1.5 m long w/2 pieces of cedar lath nailed near 1 end extending 80cm beyond end of 2x2, 3 strands of bailing wire attached near tip, 1 anchored to rock, 1 anchored to small iron RR spike, other wire loose, 16 penny nails in bottom center of 2x2, poss. survey/photo marker?	schist ledges
434	IF-G-2-10	103-2	239.15	R	37	B7 4-2-91	stick w/wire attached	talu s slope
435	IF-G-2-11	103-2	239.25	R	37	B7 4-2-91	iron ring and spike	talus slope
436	IF-G-2-	103-3	239.5	L	37	D7 4-2-91	pipe anchored in rock	schist ledge

APPENDIX E

RCMP MONITORING FORMS (1992-1998)

ARCHAEOLOGICAL SITE RIVER MONITORING FORM - 1992

MANAGEMENT INFORMATION

1. Site # AZ : : 2. Monitor session #

3. Monitor(s)_____

4. Date __/__/_____

5. USGS Quad map 7.5'_____ 6. Use Area Name_____

7. Date of first visit / /

8. UTM location (Zone 12)_____East_____North

9. General location description

10. Does this site have any visible structures? 0 = no, 1 = yes ___

11. River mile ____ River bank (L=left, R=right, B=both) ___

12. Is this site located in or on Colorado River fluvial deposits? ___
0=no, 1=yes
If yes, describe the setting specifically:

13. Distance/direction from and height above current high water (approx. 30,000 cfs) to lowest boundary of site area:
Distance ____ mtrs Direction ____ degrees Height ____ mtrs Slope ____ degrees

14. Distance/direction from and height above current high water to a central site datum
Distance ____ mtrs Direction ____ degrees Height ____ mtrs Slope ____ degrees

ENVIRONMENTAL SITUATION

15. PRIMARY physiographic setting: 1. Riverside beach/dunes 2. Alluvial terrace 3. Talus slope 4. Base of cliff 5. Bedrock Ledges 6. Non-riverside dunes 7. Other _____ ___

16. Degree of shelter: 1. Open 2. Overhang/cave 3. Combination ___

17. DOMINANT soil type: 1. Alluvium/Aeolian 2. Colluvium 3. Bedrock 4. Residual ___

18. DOMINANT soil texture: 0. Not sandy or gravelly 1. Gravelly 2. Sandy 3. Gravelly and Sandy ___

NATURAL IMPACTS (use the following scores: 0=none, 1=minor (<10% of site area affected), 2=moderate (>10% but less than 50% of site area affected), 3=extensive (50% of site area affected)

19. Evidence of surficial sheet washing? ___

20. Evidence of gullying (cuts 10-100 cm deep)? ___

21. Active arroyo cutting (cuts >100cm)? ___

22. Evidence of animal-caused erosion? (Sum of items below) ___
    (a) general trampling ___
    (b) trailing through site ___
    (c) burrowing ___
    (d) Other ___

23. Evidence of other erosion? (Sum of items below) ___
    (a) wind deflation ___
    (b) bank slumpage ___
    (c) dune migration ___
    (d) Other ___

TOTAL NATURAL IMPACT

24. First method: if score for items 18-23 is greater than zero, item # = 1. (Sum total - maximum total = 5). First Method Total _____

25. Second method: sum actual scores for all items. Maximum score for items 19-21 equals 3 each; maximum score for items 22 and 23 equals 12 each. (Maximum possible for all items combined is 33.) Second Method Total _____

26. Characterize the stability of the site: 0=stable (no active erosion) 1=incipient erosion, 2=active erosion ___

27. Do any of the above impacts appear to be related to river/dam operation? 0=no, 1=yes ___

    Indicate with a '1' any that apply:
    (a) direct inundation within past 30 years (post-dam) ___
    (b) bank slumpage/steepening adjacent to current highwater zone ___
    (c) headward migration of arroyos due to lowered base level ___
    (d) Other _____ ___

28. If arroyos or gullies are present, do they drain all the way to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0=no, 1=yes, 2=N/A ___

29. Comments: (Explain/describe river-related impacts in more detail; any new features or structures exposed by erosion; changes in types or degree of erosion; imminent threats; what to look at on next visit, etc.):

HUMAN IMPACTS EVALUATION

30. Collection Piles: 0= None 1= 1 pile 2= > 1 pile ___
If more than one pile, list total number: 0

31. Trails: 0 = No distinct trails 2 = 1-2 distinct trails
4 = >2 distinct trails ___

32. Trails eroded >5 cm below ground level? 0=no, 1=Yes ___
(Show all distinct trails on site map.)

33. Evidence of on site camping? 0=None; 2=minimal (1 of the below);
4=Considerable (2 or more of the below) ___

Indicate with a "1" what kinds of evidence are present?
a. Fire scars, fire pits, recent charcoal: ___
b. Rearrangement/clearing of rocks: ___
c. Recent camper trash: ___
d. Obvious concentrated soil compaction (tent site): ___
e. Other:_____

Does this evidence appear to be recent (< 5 years old)? ___

Did evidence appear since last visit? ___

34. Evidence of deliberate vandalism? ___
0= None
1= Surficial disturbance only (e.g., grafitti)
2= Slight amount of subsurface disturbance(<1 m2 excavated)
3= Substantial subsurface disturbance (>1 m2 area excavated)

Does this evidence appear to be recent (<5 years old)? ___

Did evidence appear since last visit? ___

35. Any other evidence of visitation other than above (e.g. obvious erosion/compaction from human trampling, scattered surface trash, etc)
0=no, 1=yes ___
If yes, describe:

TOTAL HUMAN IMPACT RATING ____

36. Human Impact Condition Class (see rating system below) ___
Condition Class 1: No human impacts (Impact rating = 0)
Condition Class 2: Minimal impact (Impact rating 1-3)
Condition Class 3: Moderate impact (Impact rating 4-6)
Condition Class 4: High impact (Impact rating 7-9)
Condition Class 5: Very high impact (Impact rating 10-12)
Condition Class 6: Extreme impact (Impact rating 13-15)

37. Describe changes/new human impacts since last visit:

RIVER-RELATED HUMAN IMPACTS

38. How close is the nearest rivercamp to this site?
1=>1 km; 2=<1 km but >500 m; 3=<500 m but >100 m; 4=<100 m ___

39. Are any of the human impacts directly related to river fluctuations and/or dam operations? 0=no, 1=yes ___
If yes, indicate with a '1' any that apply)
(a) development of new trailing to avoid highwater ___
(b) availability of new beaches in proximity to site ___
(c) other: ___
_____

40. Any human impacts directly related to recent recording/monitoring activities? 0=no, 1=yes ___

If yes, indicate with a '1' any that apply
(a) development of new trails ___
(b) damage to cryptogamic crust ___
(c) other: ___
_____

MANAGEMENT ASSESSMENT AND RECOMMENDATION

41. What types of impacts threaten this site? (i.e. what to watch out for)
Rank each threat according to the criteria listed below:

0: Not a threat now or in the foreseeable future
1: Possible threat
3: Definite threat
5: Actively occurring at the present time

a) bank slumpage from river/dam related processes ___
b) development of new gullies and/or headward migration of arroyos due to river/dam related base level lowering ___
c) bank slumpage from non-river related processes ___
d) deepening/widening of arroyos from non-river related natural processes (i.e. side canyon flooding) ___
e) exposure/destabilization of features due to a or b ___
f) exposure/destabilization of features due to c, d, or weathering ___
g) exposure/destabilization of features due to visitation ___
h) impacts from human visitation (other than g) ___
i) burial or exposure of features due to dune migration ___
j) other _____ ___

42. Recommended Actions: 0=never/not necessary or applicable; 1=eventually (>3 years from 2=soon (within 1-3 years); 3=immediately (within 1 year/less if possible); 4=action currently in progress

Discontinue monitoring	___
Monitor visitation with remote sensing devices	___
Monitor erosion with stationary cameras	___
Retrail or define existing trails	___
Obliterate trails	___
Install check dams	___
Plant vegetation to stabilize site surface	___
Stabilize banks with rock armor or similar technique	___
Stabilize structures	___
Surface collect entire site	___
Test for presence/depth of subsurface cultural deposits	___
Map as a form of data recovery (excavation not warranted)	___
Full data recovery (excavation)	___
Close site to all public visitation	___
Develop for public interpretation	___

43. Justify your recommendation:

44. Ranking - See MONITORING PRIORITY RANKING CRITERIA

Stability	___
Accessibility	___
Visibility	___
Natural Impacts	___
Human Visitation	___

45. What is the monitoring priority rank of this site. ___

46. Has this value changed from previous visit? 0=no, 1=yes ___
If yes, explain below.

47. Additional comments/continuations

Monitoring Priority Scores

Circle one value within each category:

Stability

1 Stable—no exposed fragile features such as rock art, standing masonry, middens, etc.

2 Moderately stable—fragile features present but not deteriorating (protected by overhang, etc.)

3 Moderately unstable—fragile features present with definite potential for deterioration

4 Unstable—fragile features exposed and deteriorating

Accessibility

1 Protected—located more than 1 km from road/trail/camp or difficult access (technical climbing)

2 Moderately protected—located 1 to 1/2 km from road/trail/camp with moderate to difficult access (exposure)

3 Moderately unprotected—located 1 to 1/2 km from road/trail/camp with easy access, or 500-100 m with moderately difficult access (exposure but no technical climbing)

4 Unprotected—located less than 100 m from road/trail/camp with easy access

Visibility

1 Low profile—site difficult to recognize, few or no artifacts, subtle features

2 Moderately low profile—site not readily apparent, sparse scattered artifacts, features not obvious

3 Moderately high profile—site is easily recognized from close proximity, abundant surface artifacts, features obvious

4 High profile—site sticks out, attracts attention from a distance, lots of artifacts, well-defined features

Natural Impacts

1 None—natural impact score (Method 1) equals 0

2 Slight—natural impact score equals 1

3 Moderate—natural impact score equals 2-3

4 High—natural impact score > 4

Human Impacts/Visitation

1 None—human impact condition class equals 1 (no impact)

2 Slight—human impact condition class equals 2 (minimal)

3 Moderate—human impact condition class equals 3

4 High—human impact condition class equals 4 or more

Rank	Total Score	
1	20-17	Sites with these scores require monitoring biannually or quarterly; high priority
2	16-13	Sites with these scores require at least annual monitoring; second-highest priority
3	12-9	Sites with these scores require a longer monitoring cycle, perhaps every 2 to 3 years
4	8-5	Sites with these scores should be monitored every 3-5 years; lowest priority
5	-	Site discontinued

ARCHAEOLOGICAL SITE RIVER MONITORING FORM - 1993

MANAGEMENT INFORMATION

1. Site # AZ : : 2. Monitor session #

3. Monitor(s)_____

4. Date __/__/_____

5. USGS Quad map 7.5'_____ 6. Use Area Name_____

7. Date of first visit / /

8. UTM location (Zone 12)_____East_____North

9. General location description

10. Does this site have any visible structures? 0 = no, 1 = yes ___

11. River mile ____ River bank (L=left, R=right, B=both) ___

12. Is this site located in or on Colorado River fluvial deposits?
0=no, 1=yes ___
If yes, describe the setting specifically:

13. Distance/direction from and height above current high water (approx. 30,000 cfs) to lowest boundary of site area:
Distance ____ mtrs Direction ____ degrees Height ____ mtrs Slope ____ degrees

14. Distance/direction from and height above current high water to a central site datum
Distance ____ mtrs Direction ____ degrees Height ____ mtrs Slope ____ degrees

ENVIRONMENTAL SITUATION

15. PRIMARY physiographic setting: 1. Riverside beach/dunes 2. Alluvial terrace 3. Talus slope 4. Base of cliff 5. Bedrock Ledges 6. Non-riverside dunes 7. Other _____ ___

16. Degree of shelter: 1. Open 2. Overhang/cave 3. Combination ___

17. DOMINANT soil type: 1. Alluvium/Aeolian 2. Colluvium 3. Bedrock 4. Residual ___

18. DOMINANT soil texture: 0. Not sandy or gravelly 1. Gravelly 2. Sandy 3. Gravelly and Sandy ___

NATURAL IMPACTS (use the following scores: 0=none, 1=minor (<10% of site area affected), 2=moderate (>10% but less than 50% of site area affected), 3=extensive (50% of site area affected)

19. Evidence of surficial sheet washing? ___

20. Evidence of gullying (cuts 10-100 cm deep)? ___

21. Active arroyo cutting (cuts >100cm)? ___

22. Evidence of animal-caused erosion? (Sum of items below) ___
    (a) general trampling ___
    (b) trailing through site ___
    (c) burrowing ___
    (d) Other ___

23. Evidence of other erosion? (Sum of items below) ___
    (a) wind deflation ___
    (b) bank slumpage ___
    (c) dune migration ___
    (d) Other ___

TOTAL NATURAL IMPACT

24. First method: if score for items 18-23 is greater than zero, item # = 1. (Sum total - maximum total = 5). First Method Total _____

25. Second method: sum actual scores for all items. Maximum score for items 19-21 equals 3 each; maximum score for items 22 and 23 equals 12 each. (Maximum possible for all items combined is 33.) Second Method Total _____

26. Characterize the stability of the site: 0=stable (no active erosion) 1=incipient erosion, 2=active erosion ___

27. Do any of the above impacts appear to be related to river/dam operation? 0=no, 1=yes ___

    Indicate with a '1' any that apply:
    (a) direct inundation within past 30 years (post-dam) ___
    (b) bank slumpage/steepening adjacent to current highwater zone ___
    (c) headward migration of arroyos due to lowered base level ___
    (d) Other _____ ___

28. If arroyos or gullies are present, do they drain all the way to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0=no, 1=yes, 2=N/A

29. Comments: (Explain/describe river-related impacts in more detail; any new features or structures exposed by erosion; changes in types or degree of erosion; imminent threats; what to look at on next visit, etc.):

HUMAN IMPACTS EVALUATION

30. Collection Piles: 0= None 1= 1 pile 2= > 1 pile
If more than one pile, list total number: 0

31. Trails: 0 = No distinct trails 2 = 1-2 distinct trails
4 = >2 distinct trails ___

32. Trails eroded >5 cm below ground level? 0=no, 1=Yes ___
(Show all distinct trails on site map.)

33. Evidence of on site camping? 0=None; 2=minimal (1 of the below);
4=Considerable (2 or more of the below) ___

Indicate with a "1" what kinds of evidence are present?
a. Fire scars, fire pits, recent charcoal: ___
b. Rearrangement/clearing of rocks: ___
c. Recent camper trash: ___
d. Obvious concentrated soil compaction (tent site): ___
e. Other:_____

Does this evidence appear to be recent (< 5 years old)? ___

Did evidence appear since last visit? ___

34. Evidence of deliberate vandalism? ___
0= None
1= Surficial disturbance only (e.g., grafitti)
2= Slight amount of subsurface disturbance(<1 m2 excavated)
3= Substantial subsurface disturbance (>1 m2 area excavated)

Does this evidence appear to be recent (<5 years old)? ___

Did evidence appear since last visit? ___

35. Any other evidence of visitation other than above (e.g. obvious erosion/compaction from human trampling, scattered surface trash, etc)
0=no, 1=yes ___
If yes, describe:

TOTAL HUMAN IMPACT RATING _____

36. Human Impact Condition Class (see rating system below) ___
Condition Class 1: No human impacts (Impact rating = 0)
Condition Class 2: Minimal impact (Impact rating 1-3)
Condition Class 3: Moderate impact (Impact rating 4-6)
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Condition Class 5: Very high impact (Impact rating 10-12)
Condition Class 6: Extreme impact (Impact rating 13-15)

37. Describe changes/new human impacts since last visit:

RIVER-RELATED HUMAN IMPACTS

38. How close is the nearest rivercamp to this site?
1=>1 km; 2=<1 km but >500 m; 3=<500 m but >100 m; 4=<100 m

39. Are any of the human impacts directly related to river fluctuations and/or dam operations? 0=no, 1=yes ___
If yes, indicate with a '1' any that apply)
(a) development of new trailing to avoid highwater ___
(b) availability of new beaches in proximity to site ___
(c) other: ___
_____

40. Any human impacts directly related to recent recording/monitoring activities? 0=no, 1=yes ___

If yes, indicate with a '1' any that apply
(a) development of new trails ___
(b) damage to cryptogamic crust ___
(c) other: ___
_____

MANAGEMENT ASSESSMENT AND RECOMMENDATION

41. What types of impacts threaten this site? (i.e. what to watch out for)
Rank each threat according to the criteria listed below:

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a) bank slumpage from river/dam related processes ___
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d) deepening/widening of arroyos from non-river related natural processes (i.e. side canyon flooding) ___
e) exposure/destabilization of features due to a or b ___
f) exposure/destabilization of features due to c, d, or weathering ___
g) exposure/destabilization of features due to visitation ___
h) impacts from human visitation (other than g) ___
i) burial or exposure of features due to dune migration ___
j) other _____ ___

42. Recommended Actions: 0=never/not necessary or applicable; 1=eventually (>3 years from 2=soon (within 1-3 years); 3=immediately (within 1 year/less if possible); 4=action currently in progress

Discontinue monitoring	___
Monitor visitation with remote sensing devices	___
Monitor erosion with stationary cameras	___
Retrail or define existing trails	___
Obliterate trails	___
Install check dams	___
Plant vegetation to stabilize site surface	___
Stabilize banks with rock armor or similar technique	___
Stabilize structures	___
Surface collect entire site	___
Test for presence/depth of subsurface cultural deposits	___
Map as a form of data recovery (excavation not warranted)	___
Full data recovery (excavation)	___
Close site to all public visitation	___
Develop for public interpretation	___

43. Justify your recommendation:

44. Ranking - See MONITORING PRIORITY RANKING CRITERIA

Stability	___
Accessibility	___
Visibility	___
Natural Impacts	___
Human Visitation	___

45. What is the monitoring priority rank of this site. ___

46. Has this value changed from previous visit? 0=no, 1=yes ___
If yes, explain below.

47. Additional comments/continuations

Monitoring Priority Scores

Circle one value within each category:

Stability

1 Stable—no exposed fragile features such as rock art, standing masonry, middens, etc.

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2 Moderately protected—located 1 to 1/2 km from road/trail/camp with moderate to difficult access (exposure)

3 Moderately unprotected—located 1 to 1/2 km from road/trail/camp with easy access, or 500-100 m with moderately difficult access (exposure but no technical climbing)

4 Unprotected—located less than 100 m from road/trail/camp with easy access

Visibility

1 Low profile—site difficult to recognize, few or no artifacts, subtle features

2 Moderately low profile—site not readily apparent, sparse scattered artifacts, features not obvious

3 Moderately high profile—site is easily recognized from close proximity, abundant surface artifacts, features obvious

4 High profile—site sticks out, attracts attention from a distance, lots of artifacts, well-defined features

Natural Impacts

1 None—natural impact score (Method 1) equals 0

2 Slight—natural impact score equals 1

3 Moderate—natural impact score equals 2-3

4 High—natural impact score > 4

Human Impacts/Visitation

1 None—human impact condition class equals 1 (no impact)

2 Slight—human impact condition class equals 2 (minimal)

3 Moderate—human impact condition class equals 3

4 High—human impact condition class equals 4 or more

Rank	Total Score	
1	20-17	Sites with these scores require monitoring biannually or quarterly; high priority
2	16-13	Sites with these scores require at least annual monitoring; second-highest priority
3	12-9	Sites with these scores require a longer monitoring cycle, perhaps every 2 to 3 years
4	8-5	Sites with these scores should be monitored every 3-5 years; lowest priority
5	-	Site discontinued

3/94

Grand Canyon National Park

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

1994

MANAGEMENT

1. Site Number AZ: _____
2. Monitor Session _____
3. River Mile/Bank _____
4. Date _____
5. Monitor (s) _____
6. Site Type _____

NATURAL IMPACTS

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 7 - 14)

		Structures/ Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
7.	Surface Erosion (0-10cm)						
8.	Gullying (10-100cm)						
9.	Arroyo Cutting (>1m)						
10.	Bank Slumpage						
11.	Eolian/Alluvial Erosion/Deposition						
12.	Side Canyon Erosion						
13.	Animal-Caused Erosion (trailing,burrowing)						
14.	Other Natural Impacts (spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0 = no; 1 = yes; 2 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0=no; 1=yes
If yes, explain in 17. _____

17. Comments:

HUMAN IMPACTS

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 18 - 24)

18.

	Structures/ Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
Visitor Impacts						

19. Collection Piles: If present, explain in 26. _____

20 . Trails: If present, explain in 26. _____

21. On-site Camping: If present, explain in 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in 26. _____

23. Other: If present, explain in 26. _____

24. Human impacts since last monitoring: _____

25. Are any human impacts directly related to river fluctuations and/or dam operations? 0 = no; 1 = yes
If yes, explain in 26 (i.e., development of new trails to avoid high water, availablity of new beaches in proximity of site).

_____

26. Comments:

MANAGEMENT ASSESSMENT AND RECOMMENDATION

27. Monitor Schedule: 1) discontinue 2) biannually 3) annually
4) every-other-year 5) every three to five years

_____

28. Monitor with a stationary camera: 0 = no; 1 = yes

_____

29. Recommended measures to reduce site impacts: 0 = no; 1 = yes

Retrail _____ Plant vegetation _____ Stabilize _____
Obliterate trail(s) _____ Install check dams _____ Close site to visitors _____

30. Recommended measures to protect the site's integrity: 0 = no; 1 = yes

Surface collect entire site _____ Test for depth of subsurface cultural deposits _____
Map as a form of data recovery _____ Excavate entire site _____

31. Comments: (i.e., surface sample unit)

10/94

Grand Canyon National Park

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

1994

MANAGEMENT

1. Site Number AZ: _____ 2. Monitor Session _____

3. River Mile _____ Bank (L/R/B): _____ 4. Date _____

5. Monitor (s) _____

6. Site Type _____

NATURAL IMPACTS

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 7 - 14)

		Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
7.	Surface Erosion (0-10cm)						
8.	Gullying (10-100cm)						
9.	Arroyo Cutting (>1m)						
10.	Bank Slumpage						
11.	Eolian/Alluvial Erosion/Deposition						
12.	Side Canyon Erosion						
13.	Animal-Caused Erosion (trailing,burrowing)						
14.	Other Natural Impacts (spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0 = no; 1 = yes; 2 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0=no; 1=yes
If yes, explain in 17. _____

17. Comments:

HUMAN IMPACTS

Site Number :

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 18 - 24)

Monitor Session :

18.

	Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
Visitor Impacts						

19. Collection Piles: If present, explain in 26. _____

20. Trails: If present, explain in 26. _____

21. On-site Camping: If present, explain in 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in 26. _____

23. Other: If present, explain in 26. _____

24. Human impacts since last monitoring: _____

25. Are any human impacts directly related to river fluctuations and/or dam operations? 0 = no; 1 =yes
If yes, explain in 26 (i.e., development of new trails to avoid high water, availability of new beaches in proximity of site). _____

26. Comments:

MANAGEMENT ASSESSMENT AND RECOMMENDATION

27. Monitor Schedule: 1) discontinue 2) semiannually 3) annually _____
4) every-other-year 5) every three to five years

28. Monitor with a stationary camera: 0 = no; 1 = yes _____

29. Recommended measures to reduce site impacts: 0 = no; 1 = yes

Retrail _____ Plant vegetation _____ Stabilize _____

Obliterate trail(s) _____ Install check dams _____ Close site to visitors _____

30. Recommended measures to protect the site's integrity: 0 = no; 1 = yes

Surface collect entire site _____ Test for depth of subsurface cultural deposits _____

Map as a form of data recovery _____ Excavate entire site _____

31. Comments: (i.e., surface sample unit)

11/95

Grand Canyon National Park

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

1995

MANAGEMENT

1. Site Number AZ: _____ 2. Monitor Session _____

3. River Mile _____ Bank (L/R/B): _____ 4. Date _____

5. Monitor (s) _____

6. Site Type _____

PHYSICAL IMPACTS

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 7 - 14)

		Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
7.	Surface Erosion (0-10cm)						
8.	Gullying (10-100cm)						
9.	Arroyo Cutting (>1m)						
10.	Bank Slumpage						
11.	Eolian/Alluvial Erosion/Deposition						
12.	Side Canyon Erosion						
13.	Animal-Caused Erosion (trailing,burrowing)						
14.	Other Natural Impacts (spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0 = no; 1 = yes; 2 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0=no; 1=yes
If yes, explain in 17. _____

17. Comments:

VISITOR-RELATED IMPACTS

Site Number :

Monitor Session :

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 18 - 24)

18.

	Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
Visitor Impacts						

19. Collection Piles: If present, explain in 26. _____

20. Trails: If present, explain in 26. _____

21. On-site Camping: If present, explain in 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in 26. _____

23. Other: If present, explain in 26. _____

24. Visitor-related impacts since last monitoring: _____

25. Are any visitor-related impacts directly related to river fluctuations and/or dam operations? 0 = no; 1 =yes If yes, explain in 26 (i.e., development of new trails to avoid high water, availability of new beaches in proximity of site). _____

26. Comments:

MANAGEMENT ASSESSMENT AND RECOMMENDATION

27. Monitor Schedule: 1) discontinue 2) semiannual 3) annual 4) every-other-year (biennial) 5) every three to five years _____

28. Monitor with a stationary camera: 0 = no; 1 = yes _____

29. Recommended measures to reduce site impacts: 0 = no; 1 = yes

Retrail _____ Plant vegetation _____ Stabilize _____

Obliterate trail(s) _____ Install check dams _____ Close site to visitors _____

30. Recommended measures to protect the site's integrity: 0 = no; 1 = yes

Surface collect entire site _____ Test for depth of subsurface cultural deposits _____

Map as a form of data recovery _____ Excavate entire site _____

31. Comments: (i.e., surface sample unit)

7/96

Grand Canyon National Park

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

1996

MANAGEMENT

1. Site Number AZ: _____ 2. Monitor Session _____

3. River Mile _____ Bank (L/R/B): _____ 4. Date _____

5. Monitor (s) _____

6. Site Type _____

PHYSICAL IMPACTS

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 7 - 14)

		Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
7.	Surface Erosion (0-10cm)						
8.	Gullying (10-100cm)						
9.	Arroyo Cutting (>1m)						
10.	Bank Slumpage						
11.	Eolian/Alluvial Erosion/Deposition						
12.	Side Canyon Erosion						
13.	Animal-Caused Erosion (trailing,burrowing)						
14.	Other Natural Impacts (spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0 = no; 1 = yes; 2 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0=no; 1=yes
If yes, explain in 17. _____

17. Comments:

VISITOR-RELATED IMPACTS

Site Number :
Monitor Session :

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 18 - 24)

18.

	Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
Visitor Impacts						

19. Collection Piles: If present, explain in 26. _____
20. Trails: If present, explain in 26. _____
21. On-site Camping: If present, explain in 26. _____
22. Criminal vandalism/ARPA violations: If present, explain in 26. _____
23. Other: If present, explain in 26. _____
24. Visitor-related impacts since last monitoring: _____
25. Are any visitor-related impacts directly related to river fluctuations and/or dam operations? 0 = no; 1 =yes If yes, explain in 26 (i.e., development of new trails to avoid high water, availability of new beaches in proximity of site). _____
26. Comments:

MANAGEMENT ASSESSMENT AND RECOMMENDATION

27. Monitor Schedule: 1) discontinue 2) semiannual 3) annual 4)biennial 5) every three to five years 6) inactive _____
28. Recommended measures to reduce site impacts: 0 = no; 1 = yes

Retrail	_____	Plant vegetation	_____	Stabilize	_____
Obliterate trail(s)	_____	Install checkdams	_____	Close site to visitors	_____

29. Recommended measures to protect the site's integrity: 0 = no; 1 = yes

Surface collect entire site	_____	Test for depth of subsurface cultural deposits	_____
Map as a form of data recovery	_____	Data recovery	_____

30. Comments: (i.e., surface sample unit)

VISITOR-RELATED IMPACTS

Site Number :

Monitor Session :

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 18 - 24)

18.

	Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
Visitor Impacts						

19. Collection Piles: If present, explain in 26. _____

20. Trails: If present, explain in 26. _____

21. On-site Camping: If present, explain in 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in 26. _____

23. Other: If present, explain in 26. _____

24. Visitor-related impacts since last monitoring: _____

25. Are any visitor-related impacts directly related to river fluctuations and/or dam operations? 0 = no; 1 =yes If yes, explain in 26 (i.e., development of new trails to avoid high water, availability of new beaches in proximity of site). _____

26. Comments:

MANAGEMENT ASSESSMENT AND RECOMMENDATION

27. Monitor Schedule: 1) discontinue 2) semiannual 3) annual 4)biennial 5) every three to five years 6) inactive _____

28. Recommended measures to reduce site impacts: 0 = no; 1 = yes

Retrail _____ Plant vegetation _____ Other _____

Obliterate trail(s) _____ Install checkdams _____ Close site to visitors _____

29. Recommended measures to protect the site's integrity: 0 = no; 1 = yes

Surface collect entire site _____ Test for depth of subsurface cultural deposits _____

Map as a form of data recovery _____ Data recovery _____

30. Comments: (i.e., surface sample unit)

2/97

Grand Canyon National Park
RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

1997

MANAGEMENT

1. Site Number AZ _____
2. Monitor Session _____
3. River Mile _____ Bank (L/R/B) _____
4. Date _____
5. Site Type _____
6a. Monitor (s) _____
6b. PA Signatories _____

PHYSICAL IMPACTS

0 = Absent; 1 = Present; 2 = Increase; 3 = Decrease; 4 = NA (for items 7 - 14)

		Structures / Storage	Artifacts	Roasters/ Hearths	Perishables/ Midden	Rock Art	Other
7.	Surface Erosion (0-10cm)						
8.	Gullying (10-100cm)						
9.	Arroyo Cutting (>1m)						
10.	Bank Slumpage						
11.	Eolian/Alluvial Erosion/Deposition						
12.	Side Canyon Erosion						
13.	Animal-Caused Erosion (trailing,burrowing)						
14.	Other Natural Impacts (spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dune fields or on terraces before reaching the river.) 0 = no; 1 = yes; 2 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0=no; 1=yes
If yes, explain in 17. _____

17. Comments:

3/98

Grand Canyon National Park

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

MANAGEMENT

1998

1. Site Number AZ: _____ 2. Monitor Session _____
3. River Mile _____ Bank (L/R/B) _____ 4. Date _____
5. Site Type _____
6. Monitor(s) _____
7. PA Signatories _____

PHYSICAL IMPACTS

Coding: 0 = Absent, 1 = Active, 2 = Inactive, 3 = NA (for items 8 - 14)

		Structures / Storage	Artifacts	Roasters / Hearths	Perishables / Midden	Rock Images	Other
8.	Surface Erosion (0 - 10 cm)						
9.	Gullying (10 - 100 cm)						
10.	Arroyo Cutting (> 1 m)						
11.	Bank Slump						
12.	Eolian/Alluvial Erosion/Deposition						
13.	Side Canyon Erosion						
14.	Other Physical Impacts (animals, spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dunes or terraces before reaching the river.) 0 = No, 1 = Yes, 2 = Side Canyon Based, and 3 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0 = No, 1 = Yes. If yes, explain in Question # 17. _____

17. Comments:

Grand Canyon National Park

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

VISITOR-RELATED IMPACTS

Site Number:

Monitor Session:

Coding: 0 = Absent, 1 = Present, 3 = NA (for items 18 - 24)

		Structures / Storage	Artifacts	Roasters / Hearths	Perishables / Midden	Rock Images	Other
18.	Visitor Impacts						

19. Collection Piles: If present, explain in Question # 26. _____

20. Trails On-Site: If present, explain in Question # 26. Explain any off-site trails also. _____

21. Camping On-Site: If present, explain in Question # 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in Question # 26. _____

23. Other visitor impacts: If present, explain in Question # 26 _____

24. Visitor-related impacts since last monitoring: _____

25. Are any visitor-related impacts directly related to river fluctuations and/or dam operations, i.e development of new trails to avoid high water, availability of new beaches in proximity of site. 0 = No, 1 = Yes. If yes, explain in Question # 26. _____

26. Comments:

RECOMMENDATIONS

27. Monitor Schedule: 1) Discontinue 2) Semiannual 3) Annual 4) Biennial 5) Every three to five years 6) Inactive _____

28. Preservation Options: 0 = No, 1 = Yes

Retrail _____ Plant vegetation _____ Other Preservation Options _____

Obliterate trail(s) _____ Install checkdams _____

29. Recovery Options: 0 = No, 1 = Yes

Test _____ Data Recovery _____ Other Recovery Options _____

30. Comments:

7/98 **Grand Canyon National Park and Glen Canyon National Recreation Area**

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

1998

MANAGEMENT

1. Site Number AZ: _____ 2. Monitor Session _____
3. River Mile _____ Bank (L/R/B) _____ 4. Date _____
5. Site Type _____
6. Monitor(s) _____
7. PA Signatories _____

PHYSICAL IMPACTS

Coding: 0 = Absent, 1 = Active, 2 = Inactive, 3 = NA (for items 8 - 14)

		Structures / Storage	Artifacts	Roasters / Hearths	Perishables / Midden	Rock Images	Other
8.	Surface Erosion (0 - 10 cm)						
9.	Gullying (10 - 100 cm)						
10.	Arroyo Cutting (> 1 m)						
11.	Bank Slump						
12.	Eolian/Alluvial Erosion/Deposition						
13.	Side Canyon Erosion						
14.	Other Physical Impacts (animals, spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dunes or terraces before reaching the river.) 0 = No, 1 = Yes, 2 = Side Canyon Based, and 3 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0 = No, 1 = Yes. If yes, explain in Question # 17. _____

17. Comments:

7/98 **Grand Canyon National Park and Glen Canyon National Recreation Area**

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

VISITOR-RELATED IMPACTS

Site Number:
Monitor Session:

Coding: 0 = Absent, 1 = Present, 3 = NA (for items 18 - 24)

		Structures / Storage	Artifacts	Roasters / Hearths	Perishables / Midden	Rock Images	Other
18.	Visitor Impacts						

19. Collection Piles: If present, explain in Question # 26. _____

20. Trails On-Site: If present, explain in Question # 26. Explain any off-site trails also. _____

21. Camping On-Site: If present, explain in Question # 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in Question # 26. _____

23. Other visitor impacts: If present, explain in Question # 26 _____

24. Visitor-related impacts since last monitoring: _____

25. Are any visitor-related impacts directly related to river fluctuations and/or dam operations, i.e development of new trails to avoid high water, availability of new beaches in proximity of site. 0 = No, 1 = Yes. If yes, explain in Question # 26. _____

26. Comments:

RECOMMENDATIONS

27. Monitor Schedule: 1) Discontinue 2) Semiannual 3) Annual 4) Biennial 5) Every three to five years 6) Inactive _____

28. Preservation Options: 0 = No, 1 = Yes

Retrail _____ Plant vegetation _____ Other Preservation Options _____

Obliterate trail(s) _____ Install checkdams _____

29. Recovery Options: 0 = No, 1 = Yes

Test _____ Data Recovery _____ Other Recovery Options _____

30. Comments:

9/98 **Grand Canyon National Park and Glen Canyon National Recreation Area**

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

MANAGEMENT

1998

1. Site Number AZ: _____ _____ 2. Monitor Session _____
3. River Mile _____ Bank (L/R/B) __ _____ 4. Date _____
5. Site Type _____
6. Monitor(s) _____
7. PA Signatories _____

PHYSICAL IMPACTS

Coding: 0 = Absent, 1 = Active, 2 = Inactive, 3 = NA (for items 8 - 14)

		Structures / Storage	Artifacts	Roasters / Hearths	Perishables / Midden	Rock Images	Other
8.	Surface Erosion (0 - 10 cm)						
9.	Gullying (10 - 100 cm)						
10.	Arroyo Cutting (> 1 m)						
11.	Bank Slump						
12.	Eolian/Alluvial Erosion/Deposition						
13.	Side Canyon Erosion						
14.	Other Physical Impacts (animals, spalling, roots)						

15. If arroyos or gullies are present, do they drain to the river? (Note: Some drainages die out in dunes or terraces before reaching the river.) 0 = No, 1 = Yes, 2 = Side Canyon Based, and 3 = NA _____

16. Do any of the above impacts appear to have occurred since the last monitoring episode? 0 = No, 1 = Yes. If yes, explain in Question # 17. _____

17. Comments:

9/98 **Grand Canyon National Park and Glen Canyon National Recreation Area**

RIVER CORRIDOR ARCHAEOLOGICAL SITE MONITORING FORM

VISITOR-RELATED IMPACTS

Site Number:

Monitor Session:

Coding: 0 = Absent, 1 = Present, 3 = NA (for items 18 - 24)

		Structures / Storage	Artifacts	Roasters / Hearths	Perishables / Midden	Rock Images	Other
18.	Visitor Impacts						

19. Collection Piles: If present, explain in Question # 26. _____

20. Trails On-Site: If present, explain in Question # 26. Explain any off-site trails also. _____

21. Camping On-Site: If present, explain in Question # 26. _____

22. Criminal vandalism/ARPA violations: If present, explain in Question # 26. _____

23. Other visitor impacts: If present, explain in Question # 26 _____

24. Visitor-related impacts since last monitoring: _____

25. Are any visitor-related impacts directly related to river fluctuations and/or dam operations, i.e development of new trails to avoid high water, availability of new beaches in proximity of site. 0 = No, 1 = Yes. If yes, explain in Question # 26. _____

26. Comments:

RECOMMENDATIONS

27. Monitor Schedule: 1) Discontinue 2) Semiannual 3) Annual 4) Biennial 5) Every three to five years 6) Inactive 7) Control Group _____

28. Preservation Options: 0 = No, 1 = Yes

Retrail	_____	Plant vegetation	_____	Other Preservation Options	_____
Obliterate trail(s)	_____	Install checkdams	_____		

29. Recovery Options: 0 = No, 1 = Yes

Test	_____	Data Recovery	_____	Other Recovery Options	_____

30. Comments:

APPENDIX F

GRCA MONITORING SCHEDULES (1992-1998)

GRCA Monitoring Schedules (1992-1998)

Site #	Sess.	Sched.	Comments
A:13:100			
	92-H		This site will be discontinued from the monitoring program.
A:13:101			
	92-H		THE BRIGHT ANGEL SITE WILL CONTINUE TO BE VISITED BY THE PUBLIC. THIS i SITE HAS BEEN FULLY EXCAVATED. SOME STABILIZATION MAY BE APPROPRIATE. i Note: per L. Leap in 2/96, this site will be discontinued from river i corridor monitoring and turned over to the backcountry program.
A:13:103			
	92-H		
A:15:001			
	93-5	1	This site will be discontinued from the monitoring program.
	98-3	1	
A:15:003			
	93-2	3	THIS SITE AT PARASHANT IS AN EXCELLENT EXAMPLE OF A LARGE ROASTER i COMPLEX. IT IS ADJACENT TO A REGUARLY USED RIVER CAMP.
	94-2	4	Feature 14 has two gullies that may have future impact. One gully is exposing charcoal fragments, the other is working its way upward into the roaster region. Monitor this feature in a year to see if the gully erosion has increased then decide on future monitoring. Features 11 and 12 are both located in dune ares without cryptogamic soil. They have seen eolian deposition as stabilization. These three features should be monitored for changes. All other features are very stable due to the extensive cryptogamic soil and vegetation growth. Trails made by the survey crew are starting to have cryptogamic growth.
	96-2	4	This site may be above the high water mark. It is located at the creosote/mesquite line. The previous monitor form is wrong, check with original. Feature 3B is probably not a feature.
	98-2	4	
A:15:004			
	93-4	4	A MORE COMPREHENSIVE MAP OF THIS SITE SHOWING THE RELATIONSHIP i BETWEEN LOCUS A AND B NEEDS TO BE DRAFTED. WE NEED MORE AND i BETTER PICTURES OF THE ROASTING FEATURES AND GRINDING SLABS AT i LOCUS A. MONITORING AND PHOTOGRAPHY SHOULD BE DONE IN THE WINTER i WHEN VEGETATION IS LEAST LIKELY TO OBSCURE VEGETATION AND WHEN i VISITORS ARE LEAST LIKELY TO BE PRESENT IN THE CANYON.
	94-2	5	
	98-2	6	
A:15:005			
	93-5	2	ROCK ART AT LOCUS A IMPACTED BY RECENT MASS WASTING. LOCUS B IS i FAIRLY STABLE, A DIGGING STICK IS LOCATED ON THIS SLOPE WITHIN A i BOULDER FIELD. LOCUS C IS IN MOST IMMEDIATE DANGER OF FURTHER i EROSION.

Site #	Sess.	Sched.	Comments
	95-4	3	Recommended measure is to obliterate the trail that leads out of 202 mile drainage to feature 1 in locus C. This may have an immediate change to human impact on the feature. I don't think you can stop the visitation to the site because people know about the rock art panel, but we can relieve impacts at locus B and C. After trail obliteration, monitor in a year and reassess monitoring schedule.
	96-3	3	Two trails are present between features 1 to feature 2. New trailing is present through and around the site. Some trails could erode into gullies. Site surface appears more compacted. 202 Mile is a very popular camp for boaters. Consider this site for interpretation since boaters are aware of the rock art panel and 202 Mile is a heavily used camp. Obliterate trails from the drainage through features 1 and 2. Assess for retrailing to an overview area of the features. Educate boating community on their impacts concerning fragile features.
	97-1	3	The main impact to the site is visitor-related trailing. Trail work is recommended for early spring. Locus B was not monitored this session and is completely out of the designated river corridor project area. A brief observation was made at the rock art. The panel looks good but cairns should be placed there because several trails leading to the panel currently exist.
	98-1	3	
A:15:017			
	95-3	5	The site is very stable but further human impact may occur and it is recommended that the manos be collected to prevent further loss of site integrity. Also, an Elko corner-notched base was newly recorded.
	96-1	5	The base of the point mentioned in the Imacs form was not relocated. This is an "N" control group site to be monitored annually. Note: per the 96-1 Trip Report, this site will be deleted from the "no impact" control group because it is above 300,000 cfs. The site is above or on a Pleistocene terrace. Note: per L. Leap in 9/96, this site will be monitored every 3 years and returned to the "no impact" control group.
A:15:018			
	96-3	5	Monitor every 5 years. The site is stable. No evidence of human or natural impacts.
A:15:020			
	93-4	3	THIS SITE SHOULD NOT BE MONITORED EVERY YEAR, AND THEN ONLY IN i THE WINTER MONTHS AFTER THE RIVER SEASON IS OVER AND VEGETATION i HAS DIED BACK. * NOTE SITE MAP ADDITIONS.
	94-4	5	The site should not be monitored annually. Monitor every 3-5 years unless there is obvious change noted in the dune formations.
	98-3	5	
A:15:021			
	94-3	3	This site should be monitored yearly due to camping. A Carbon 14 sample should be taken from the feature.
	95-4	5	This site needs to be mapped and more information added. (Mapped 95-5) The potbreak, fire-cracked rock and cans need to be plotted. A larger scale map would be helpful and save time if monitoring ever occurs again. Photos were taken of the new feature. We did find several other associated features not plotted or mentioned on the Imacs form. This area may need to be looked at closer. A few cans, scattered upstream and northeast of the datum were located. The deflated fire feature 40 meters northwest of the datum looked stable. No earlier photos were available for comparison. Monitor every three years.
A:15:022			
	96-2	5	This site is very stable with heavy vegetation. Monitor every 5 years in the fall or early winter when there is not as much vegetation. Note: per C. Coder in 6/96, this site will be discontinued. Note: the schedule was changed back to every 5 years by C. Coder in 7/96, after discussions with J. Balsom and L. Leap.

Site #	Sess.	Sched.	Comments
A:15:025			
	93-3	3	
	94-3	3	This site should be monitored once a year. The site should have a spot check each time Native American trips request to stop.
	95-5	1	Discontinue monitoring but recommend that the backcountry archaeologists stop here on the annual October trip. This site is out of the official river corridor (300K cfs) mark.
A:15:026			
	92-1	4	
	93-3	5	THIS SITE IS STABLE AND PROTECTED BY THICK GRASS AND DENSE i VEGETATION. THE GREATEST THREAT TO THIS SITE IS FROM REPEATED i VISITS BY ARCHAEOLOGISTS. DISCONTINUE MONITORING.
	93-5	4	
	94-2	5	Leave this site as is. Consult a Hualapai cultural representative.
	98-2	5	
A:15:027			
	92-1	3	
	93-1	4	
	93-2	3	93-2 MONITORING - HOPI SITKIAKE POLYCHROME SHERD
	94-3	3	Loretta Jackson would like to have this site monitored once a year. There is an excellent assemblage of cobble and hand tools.
	95-1	4	Because this site is moderately visible, we should monitor every other year to prevent trailing by archaeologists. This is a very nice, stable site and we should not bring attention to it by monitoring every year. The site tag could not be located. A new mano was found and its location plotted on the site map.
	95-3	5	Monitor every 3 to 5 years because this site is not visited by river runners. The monitoring staff may create a visible trail in fragile soils by frequent monitoring.
A:15:028			
	96-2	5	Check feature 5 next session for gullying. No photos were available this time for comparison. Soils are so fragile that monitoring is an impact itself to this area.
A:15:029			
	96-2	5	Monitor this site every five years. This site has not been visited since the survey and appears very stable.
A:15:030			
	95-1	4	The charcoal should be dated prior to the total destruction of this site. After dating, this may be a really good site to study rates of erosion.
	97-2	1	We added more brush to the trail obliteration effort. The site appears stable with the exception of ongoing erosion at the center gully and multiple trailing. We recommend additional trail work at this location. Per L. Leap in 5/97, the monitor schedule will be changed from biennial to discontinue. The site (a single fire feature) was excavated by Mike Yeatts (employed by the Hopi Tribe) during the 97-3 river trip which ran from Feb. 19 through March 6, 1997.
A:15:031			
	93-1	4	Note: per L. Leap in FY95, this site will be discontinued from the river i corridor monitoring program. It will be monitored by backcountry i archaeologists.

Site #	Sess.	Sched.	Comments
	95-3	6	The previous photos and map were changed on this trip. The areas did not match up and this was corrected. Discontinuing monitoring due to the stability of this site. Recovery of charcoal samples is recommended to date this site. This site is an excellent processing area and could be used for education and information about this particular culture. The site location and area locations, relative to each other, are a good example of the different stages of processing. This site showed almost no change since 1991 and 1992. Note: per L. Leap in 2/96, this site will be monitored annually as a control group site. Note: per L. Leap in 9/96, this site will be placed on the "inactive" list.
A:15:032			
	94-5	6	Discontinue monitoring. Not many people visit the area. The grasses cover up the feature. Note: per L. Leap in 2/96, this site will be monitored annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
A:15:033			
	96-2	5	Feature 5 is a questionable structure though fire-cracked rock is abundant below the feature. The pot break is 1 meter from the main gully below feature 3. There is the potential for this artifact scatter to erode away. Monitor every 4 years.
A:15:035			
	93-1	5	THIS SITE SHOULD BE REMONITORED IN THE FALL OR WINTER WHEN VEGETATION i HAS DIED BACK. Note: in 2/96 L. Leap assigned a monitor schedule of i every 3-5 years.
	97-2	3	The site is fairly stable, yet has been actively eroding in the past. Monitoring is recommended every five years. Note: per J. Balsom in 12/96, this site will be monitored annually.
	98-1	5	
A:15:036			
	96-3	6	The only impact is from monitoring activities disturbing cryptogamic soils. The site is very stable. Stability has increased since the survey. Discontinue monitoring. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
A:15:037			
	96-3	6	Diagnostic artifacts were relocated. The features appear very stable. Monitor again in 5 years and if stable, discontinue after that. Note: per L. Leap in 7/96, the site will be placed on the "inactive" monitoring list.
A:15:038			
	96-3	5	This site is very high but sits on an alluvial terrace. Monitor in 5 years to compare the photos for increases in erosion. Surface runoff feeds into gullies, then into arroyos that are terrace based.
A:15:039			
	92-1	3	
	93-3	4	REDUCE THE MONITORING FREQUENCY OF THIS SITE. THE SITE SHOWS NO i SIGN OF VISITATION OTHER THAN BY PREVIOUS ARCHAEOLOGISTS. i INCREASED VEGETATION HAS STABILIZED THE SITE TO SOME DEGREE AND i THERE IS NO EVIDENCE OF NATURAL VEGETATION SINCE LAST VISIT. THE i GREATEST THREAT SEEMS TO BE FROM TOO MUCH MONITORING.
	94-3	3	We should possibly take a C14 sample from this site. Loretta Jackson recommends annual monitoring.
	95-2	5	Recommend discontinuing the monitoring at this site because it is very stable. Vegetation is good and there are no human impacts. Continue monitoring only if research work is proposed, like pollen samples or excavation. Note: upon further assessment by L. Leap in 7/95, this site will be monitored every 3 to 5 years.
A:15:040			

Site #	Sess.	Sched.	Comments
	92-3	4	
	93-5	4	
	95-5	5	Discontinue monitoring. The site is not visible from the river and is obscured by dense mesquite. There could be subsurface cultural material. Note: upon further assessment by L. Leap in 7/95, this site will be monitored every 3 to 5 years.
A:15:042			
	92-2	4	
	93-3	3	F1: ONE MANO AND TWO OF THE BASALT COBBLES HAVE MOVED DUE TO i SPALLING. F2: THERE HAS BEEN EXTENSIVE REARRANGEMENT OF ROCKS AND ARTIFACTS i AT FEATURE TWO. SOME OF THIS WAS DOCUMENTED ON 4/8/92 BUT THERE i HAS BEEN MORE MOVEMENT SINCE THEN. F3: NO NOTICABLE CHANGES F4: DID NOT MONITOR DUE TO THICKNESS OF VEGETATION. THE MONITORING PRIORITY OF THIS SITE HAS CHANGED DUE TO INCREASED i EVIDENCE OF VISITATION. THIS SITE SHOULD BE MONITORED IN THE LATE i FALL OR WINTER.
	94-3	4	We should work on fixing the trail through the hearth in the Spring or the Fall.
	95-2	5	Sherds from feature 2 could not be located. Although a trail leads to all of the features, there appears to be little noticeable impact. Monitoring every other year is sufficient. The major impact is human. Note: in 2/96, L. Leap changed the monitor schedule to every 3-5 years.
A:15:043			
	96-3	6	This site is well protected by mesquite groves. The research flow has positively affected this site. Monitor every 5 years or discontinue. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
A:15:044			
	94-4	5	Monitoring should not occur more often than every 5 years. The site is stable, with erosion being limited to one small gully that almost looks like a trail. There is no disturbance except the monitoring activities.
	98-3	1	
A:15:047			
	96-3	5	The site remains stable and unchanged. The only impact to this site is the possibility of cobble fall from the overhang. Monitor in 5 years.
A:15:048			
	94-5	5	On the next monitor trip, pay particular attention to Feature 1 and the gullys on the steep dune.
	98-2	5	
A:15:051			
	93-4	4	THIS SITE APPEARS TO BE STABLE AND SHOWS NO SIGN OF RECENT i VISITATION. * NOTE SITE MAP ADDITIONS.
	94-2	5	
A:16:002			
	93-1		
	95-5	1	Discontinue monitoring. This is a waste of time and money.

Site #	Sess.	Sched.	Comments
A:16:003			
	93-1	3	
	94-1	3	This site does not appear to be threatened by visitors or natural impacts.
	94-3	1	This site should be monitored twice a year (Spring and Fall) because of heavy visitation. Note: upon further consideration, this site will be discontinued from the river corridor monitoring program per L. Leap on 7/95. The site is already being monitored annually as part of the backcountry program.
A:16:004			
	92-1	3	
	93-3	3	THIS SITE SHOULD PROBABLY BE MONITORED IN THE FALL, AFTER THE i TOURIST SEASON, TO OBSERVE THE EXTENT OF VISITOR IMPACT.
	94-1	4	This site is in great condition and appears to have minimal impacts. Monitoring should continue because of potential impacts from drainage erosion and the fact that an available campsite for river runners exists on the downstream side of the mouth of 190-Mile Canyon.
	94-4	4	Total station mapping completed 5/7/94. When monitoring, pay close attention to Features 3 and 10.
	96-3	4	Features 1-6 were not monitored except to note the presence of middens, trails, and collection piles. These features are located above the 300,000 cfs level. Discontinue monitoring features 1-6, continue monitoring features 7-10 on a biennial basis. Note: per L. Leap in 7/96, features 1-6 will be on the "inactive" list.
	98-2	4	
A:16:148			
	94-1	4	
	96-1	4	This site appears to be in stable condition with the exception of animal trailing. Trailing is currently nonthreatening.
	98-3	5	
A:16:149			
	96-3	5	The site is experiencing minor natural erosion. Monitor every 3 to 5 years during winter when vegetation is low. Features 1 & 2 have the most potential for impact if the adjacent drainage continues to entrench. New fire-cracked rock and charcoal were discovered 2 meters south/southwest of the depression near feature 3. This was plotted on the map. Monitor the drainage between loci A & B to determine if it has returned to a river-based stream. Note: per L. Leap in 7/96, check dams are recommended.
A:16:150			
	96-2	6	The site is above 300,000 cfs, and is situated in a creosote, acacia setting. Note: per L. Leap in 7/96, put this site on the "inactive" list, and stabilize the holes.
A:16:151			
	93-1	5	LOCUS A - NEW PHOTO POINT OF F1 FROM BOULDER WITH DATUM TAG. LOCUS B - OVERVIEW DUPLICATION OF PREVIOUS. *NOTE: THE ENTIRE SECOND PAGE OF THIS MONITORING FORM WAS NOT i COMPLETED. NO BASELINE MONITORING INFORMATION EXISTS FOR THIS i SITE.
	93-4	3	NOTE SITE MAP CHANGES. THIS SITE IS PROBABLY THE CAMP OF HONGA WHO HAS LIVING i DESCENDANTS AT PEACH SPRINGS TODAY.
	94-3	3	Loretta Jackson would like to see this site monitored in the Spring and the Fall.

Site #	Sess.	Sched.	Comments
	94-5	3	Monitor this site annually but be leary of sheet grass which is heavy now. The brass piece and soldered lid were not found.
	95-3	5	Overall, this site is in good condition. The site should be monitored every five years due to the close proximity of the side canyon to the roaster, and due to visitation.
	98-3	5	
A:16:153			
	96-3	6	This site is extremely stable yet fragile to the foot-weight. Monitor every five years. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
A:16:154			
	96-2	5	This site is very stable with no increasing impacts. Monitor every 5 years or longer. There has been no increase in impacts during the last five years. Discontinue may also be an option due to site stability.
A:16:155			
	94-5	5	Monitor every five years.
	98-3	6	
A:16:156			
	95-2	3	This is a control site for "N" category. Although there appears to be substantial soil depth within the features, it is possible that additional materials could be exposed. However, this site is way out of the river corridor. Monitoring should be continued by back-country archaeologists for newly exposed artifacts.
	96-1	5	This site is located in a basalt overhang. It is fairly stable and well-protected. Continue annual monitoring as a "N" control group site. Note: per the 96-1 Trip Report, monitoring will continue with the backcountry monitoring program. This site will no longer be a "no impact" control site because it is above 300,000 cfs. The site is above or on a Pleistocene terrace, and beyond the impact of the dam. Note: per L. Leap in 9/96 this site will be returned to the "N" control group and monitored every 3 years.
A:16:157			
	96-3	6	The rockshelter (feature 3) is the most impacted feature due to animal impacts. The roasting features 1 & 2 are stable with no increases observed. The shelter should be monitored in 3 to 5 years by a backcountry archaeologist due to the animal digging and overall disturbance that may uncover new artifacts. Feature 3 is above the high water zone. Features 1 and 2 are closer to the 300,000 cfs level but also appear high. Discontinue monitoring. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
A:16:158			
	92-3	5	
	93-4	5	NOTE SITE MAP ADDITIONS.
	94-3	3	This site is close to the river. It should be checked after the 1995 research flow.
	95-5	5	Monitor the site every 4 years for human disturbance.
A:16:159			
	92-2	3	
	93-2	3	SPINDLE WHORL STILL MISSING. SAND BAR IMMEDIATELY ADJACENT AND i UPSTREAM IS RAPIDLY DISINTEGRATING.

Site #	Sess.	Sched.	Comments
	94-1	2	It is recommended to stop casual visitation. Monitor the site twice a year, in the spring and the fall after the peak visitation season. Allow river patrols to monitor the site. A permanent datum was established at this site on 10/15/93 (see map). The ground surfaces on the boulder below the site are in the high water zone from 1983-84.
	94-2	4	
	95-1	3	None
	95-4	3	Monitor annually because of potential visitation. Also, the photos taken this session will determine if natural spalling has increased.
	96-3	3	This site appears stable. Continue annual monitoring.
	97-1	3	The site is in stable condition but susceptible to some physical erosion through spalling. There is potential for human impact, as noted in previous monitoring visits.
	98-1	5	
A:16:160			
	94-4	5	There is another trail close to the wash leading into Cove Canyon. The trail to the site could be easily cut off from general traffic.
A:16:161			
	96-3	6	The site is extremely stable. Monitor in 5 years and then discontinue if stable. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
A:16:162			
	92-3	5	
	93-3	5	THE ORIGINAL PHOTOS NEED TO BE LOCATED.
	97-2	6	Since there has been no change to this site since 12/90, we recommend that the site be put on the inactive monitoring schedule.
A:16:163			
	94-5	5	Note: L. Leap changed the monitor schedule from annual to every 3-5 years in 2/96.
	98-2	5	
A:16:167			
	93-5	4	IT IS SENSELESS AND A WASTE OF TIME AND MONEY TO MONITOR THESE i LARGE ROASTER SITES IN DUNE FIELDS BETWEEN LATE MARCH AND MID i OCTOBER BECAUSE OF THE THICK GROUND COVER OF GRASS. EXCEPTIONS TO i THIS WOULD BE ANY SITES THAT HAVE INCURRED DAMAGE FROM SIDE i CANYON FLOODING, WHICH IS OF COURSE NOT DAM RELATED.
	94-1	4	There is heavy vegetation at this site from mid-March through November. Late fall or winter monitoring is recommended. Two pennies were found on the boat beach (1974, 1989). This site is not a good camp, probably just a lunch stop.
	96-2	4	Overall, the site appears very stable. An increase in vegetation hides most of the features.
	98-2	4	
A:16:171			
	94-5	5	Monitor every five years. This site is fairly stable.
	98-2	6	
A:16:172			

Site #	Sess.	Sched.	Comments
	96-3	5	Monitor every 5 years. The site is stable from natural impacts. Human visitation is occurring but has not affected the integrity of the site. If the site continues to be stable in five years, discontinue monitoring.
A:16:173			
	94-5	5	Dune sand and downslope movement will eventually cover the features and protect them. There are no signs of humans other than the 1991 survey crew. Let's not monitor very often. We are causing the most damage. Monitor every five years.
	98-2	1	
A:16:174			
	93-4	4	VISITATION IMPACTS WILL MAINLY BE DUE TO MONITORING ACTIVITIES; i THEREFORE MONITORING SHOULD BE INFREQUENT. NOTE SITE MAP ADDITIONS.
	94-1	4	There is not a good chance for data recovery at this site. No visitors come here. The site should be monitored every other year to protect the site from archaeologist impacts.
	96-2	4	Previous monitoring episodes have categorized the rock shelter as part of artifact concentration A. Note the change on the most recent episode which differentiates the shelter from the artifact concentration. See comments below Q. 26 for Q. 31.
	98-2	4	
A:16:175			
	92-1	4	
	93-2	4	
	93-4	4	NOTE SITE MAP ADDITIONS. SHEEP HAVE BEEN TRAILING THROUGH THE AREA BELOW THE SITE BUT ARE i NOT IMPACTING THE SITE DIRECTLY. THERE IS NO SIGN OF NEW EROSION i OR RECENT VISITATION.
	94-2	6	This site should be monitored after flows in excess of 60,000 CFS at the discretion of the Hualapai cultural representative, otherwise discontinue. Note: per L Leap in 2/96, this site will be monitored annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
A:16:176			
	94-4	6	Because of the pristine quality of this site, I suggest monitoring should occur once every 10 years unless river fluctuations occur at high cfs levels. The site is close enough to the river to receive impacts from high flood levels. If the flood levels remain in their present form then the site is extremely stable and needs monitoring less frequently. Note: per L. Leap in 2/96, monitor this site annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
A:16:179			
	96-3	1	The backcountry archaeologist should take over the monitoring of this site. The site is situated on the old mesquite line, above the 300,000 cfs level, and is beyond the impact capabilities of the dam.
A:16:180			
	96-3	4	Feature 1 should be assessed by K. Crumbo and is a good candidate for check dams. Checks in the river based stream could prevent the connection with the terrace based stream. Assess and then recommend a monitoring schedule. A charcoal sample could be taken for a date from feature 1. This should be done soon before it erodes out.
	98-2	4	
A:16:184			

Site #	Sess.	Sched.	Comments
	96-3	6	The site is located up above the mesquite and within the creosote. Recommend discontinuing monitoring due to the site location above the 300,000 cfs level. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
A:16:185			
	93-2	4	THIS SMALL BUT SENSITIVE SITE IS TO BE TAKEN FROM THE MONITORING i AGENDA AT THE REQUEST OF THE HUALAPAI TRIBE DUE TO THE PRESENCE i OF HUMAN BONE.
	95-3	5	Suggested monitor schedule is every 3 to 5 years. The site is stable now but because this site may possibly be a burial, any new exposure of artifacts would be of great concern.
A:16;160			
	98-2	6	
B:09:314			
	98-1	5	
B:09:315			
	96-3	1	No natural or human impacts are occurring at this site. The site is stable and should be discontinued from the monitoring schedule.
B:09:316			
	92-2	5	
	93-3	5	
	94-2	5	
	98-1	5	
B:09:317			
	93-4	3	THIS SITE IS SIGNIFICANT TO THE HUALAPAI AS IT IS ASSOCIATED WITH i INDIVIDUALS WHO HAVE LIVING DESCENDANTS AT PEACH SPRINGS TODAY. i ANY MANAGEMENT ACTIVITIES SHOULD BE UNDERTAKEN ONLY AFTER i CONSULTATION WITH THE HUALAPAI ELDERS. NOTE SITE MAP CHANGES.
	94-1	2	
	94-2	2	The tong material should be identified. If it is tamarisk, the site can be dated to after the 1800s.
	95-1	3	Obliterate the trail and visitation may discontinue. Another route should be located and used by archaeologists.
	95-4	3	Because the site is close to a camp it is used often. Due to the possibility of more artifacts being exposed we will continue to monitor semiannually. After trail obliteration, it is possible that monitoring can be changed to annually. Note: in 2/96, L. Leap changed the monitor schedule from semiannual to annual.
	96-2	4	The opinion is to obliterate the trail leading to the overhang and have one person visit the site every other year. If no new trail appears or the obliterated trail does not re-appear, then don't go up to the site to monitor it. Just check on it every other year.
	98-1	4	
B:09:319			
	96-3	1	The site is in excellent condition. Natural impacts are extremely minimal and there is no evidence of human impacts. Discontinue monitoring.
B:10:111			

Site #	Sess.	Sched.	Comments
	93-5		
	94-2	4	Leave the site be. Monitor every 2 - 3 years. There are no artifacts observable on the surface.
	96-2	5	Overall, this site is in good condition considering the fragile sediment the features are on. Natural and visitor-related impacts have potential to increase due to feature 1 vicinity to the river and the fragile, steep slope/side canyon drainage's proximity. Note: per L. Leap in 7/96, recommendations are to perform both stabilization and data recovery at this site. Per L. Leap in 5/97, no stabilization of the shallow, terrace-based gully was performed on the 97-4 trip, because the gully appears inactive, with vegetation and cryptogamic soils growing in it. The former biennial monitoring schedule will be changed to every 3 to 5 years due to the site's stability.
B:10:121			
	95-1	3	This site is stable. We should obliterate the trail leading from the beach due to its location next to the site. The obliteration of this trail will preserve the stability of the structure. This is a control site for the "N" category.
	96-1	5	After one year, this site shows no evidence of visitation. Previous recommendation to obliterate trail should be reconsidered as unnecessary. Continue annual monitoring as a "N" control group site. Note: per L. Leap in 7/96, this site will remain a "control" group site, but will be monitored every 3 years to reduce foot traffic on the site.
B:10:224			
	92-2	3	
	93-2	3	
	94-1	3	
	94-2	2	Monitor this site once or twice a year to check the eroding cist.
	95-3	5	Monitor every three years due to side canyon erosion. The slab-lined roasting pit is near potential impact. After early photo comparison, only one slab has changed positon in 1993. A large flood could increase the cutbank slope causing more impact. Observe in three years and make recommended measures to preserve the feature.
B:10:225			
	93-4	3	NOTE SITE MAP CHANGES.
	93-5	4	IN REFERENCE TO QUESTION 41, COMMENTS OF ARCHAEOLOGIST CHRIS ì CODER: "NO MATTER HOW MANY TIMES I'VE SUGGESTED CHANGING THIS BULLSHIT ì FRAMEWORK, IT STILL REMAINS INTACT. WHY IS IT? POOR SEMANTICS ì MAKES FOR POOR SCIENCE. NOBODY TAKES POORLY DONE SCIENCE ì SERIOUSLY. THIS IS WHY NO ONE TAKES US SERIOUSLY. ALL THESE ì NUMBERS ARE THE SAME DESIGNATION. IT'S LIKE SAYING 1- PARTLY ì CLOUDY TO PARTLY SUNNY, 2- POSSIBLY CLOUDY, 3- POSSIBLY SUNNY."
	94-4	5	The site is relatively stable. Changes that will potentially occur deal primarily with dune migration. When site is monitored, check for any changes in dunes or creation of erosion. Human impacts are tied directly to monitoring activities. Any change in dune formation should be visible from the river and can trigger on-site monitoring. Otherwise, monitor every 3 to 5 years.
	98-1	5	
B:10:227			
	92-1	3	
	94-1	2	This site is historically documented and is attributed to the prospectors Riley and Stewart in 1872. They were packers for Major Powell in Kanab.
	94-3	1	This site is in good shape. Note: upon further consideration, this site will be discontinued from the river corridor monitoring program per L. Leap on 7/95. The site is already monitored annually by the backcountry program.

Site #	Sess.	Sched.	Comments
B:10:229			
	93-5	4	THIS SITE IS CURRENTLY BEING MONITORED BY A STATIONARY CAMERA i WHICH TAKES A SINGLE PHOTOGRAPH DAILY. THIS CAMERA WOULD BE OF i BETTER USE IF PLACED AT ANOTHER SITE WHICH IS EXPERIENCING RIVER i IMPACTS.
	95-2	1	This site should be removed from the "No Impact" category. The water control areas are extremely questionable. Per N. Andrews (11/95) this site is not a "no impact" category site. It has both indirect and potential impact, per the 1990 survey data.
B:10:230			
	95-3	3	The sandal should be drawn with great detail because of its priceless information. This should be done as soon as possible. I recommend monitoring the site every 3 to 5 years to watch for other important cultural remains that might appear through erosional processes. This site is well protected and unknown to humans. The sandal should be completely documented and then left in the canyon. Note: this site is in the "N" (no impact) control group, so the monitoring schedule will be annual per L. Leap on 7/95.
	96-1	5	Continue monitoring as a "N" control group site. After one years time, rodents have totally rearranged the area. The sandal could not be relocated. It is recommended that the sandal be collected if GRCA NP does not have a lot of sandal examples. If curation is unnecesary, rebury the sandal on the site in a secure location. Note: per the 96-1 Trip Report, this is a "no impact" site that will be deleted from the project and turned over to the backcountry archaeology program because it is above 300,000 cfs. The site is above or on a Pleistocene terrace. Note: per L. Leap in 9/96 this site will be.returned to the "no impact" control group and monitored every 3 years.
B:10:231			
	96-2	6	Discontinue monitoring due to the site's stability and the lack of impacts. We have many other sites that should take priority over this one. Note: per L. Leap in 7/96, this site will be put on the "inactive" monitoring list because it is stable.
B:10:236			
	95-2	3	This site is very stable. Visitation is unlikely because it is not visible from the river. This is a control site from the "N" category.
	96-1	5	This site appears to be fairly stable. Continue annual monitoring as a "N" control group site. Note: per the 96-1 Trip Report, this site is above the 300,000 cfs mark, therefore it will be deleted from the GCES monitoring program and turned over to the park backcountry monitoring. The site is above or on a Pleistocene terrace. Note: per L. Leap in 9/96 this site will be returned to the "no impact" control group and monitored every 3 years.
B:10:237			
	96-2	5	Overall, this site is very stable. There are faint game traills above the site. Monitor the site every 5 years. Note: per L. Leap in 7/96, recommendations are to either stabilize and/or perform data recovery at this site.
B:10:248			
	96-1	1	Discontinue monitoring at this site. Testing in spring of 1994 determined that this site is ineligible for National Register listing.
B:10:249			
	97-2	5	Although the site appears to be in a fairly stable condition, monitoring will take place every five years due to the potential for visitor-related impacts.
B:10:260			
	95-2	1	This is a "No Impact" site and it is very marginal. It took a lot of creativity to call it an actual site. Discontinue monitoring.
B:10:261			

Site #	Sess.	Sched.	Comments
	92-1	3	
	93-2	3	
	94-4	4	No signs of human impct except for those silly archeo-dogs!
	96-2	4	This site is located on a very stable dune. The features are in washes but do not appear impacted by erosion. It has been an extremely dry year however. Vegetation is good and cryptogamic soils have increased. A new photo was taken below feature 1, looking upslope. Fire-cracked rock is present and eroding off a large redwall rock blocking the drainage.
	98-1	5	
B:10:262			
	95-4	1	This site is heavily impacted by humans to the point where site integrity is no longer an issue...there is none left. Buried deposits are possible yet doubtful. We probably exhausted all information upon initial recording of this site. No artifacts were found. The site tag was also not found.
B:11:271			
	95-4	5	Monitor every 3 to 5 years due to sheep trails and the packrat midden. There were only 3 survey photos taken and we need more to discern if change is present due to the sheep trail and packrat midden. Monitor one more time and if no change is present, test inside the shelter and discontinue monitoring.
B:11:272			
	92-1	3	
	93-3	4	LANITA FOUND AN ADDITIONAL FEATURE CA. 12 M. NORTH OF THE ROASTER CENTER ì - A CLUSTER OF LIMESTONE AND OTHER ANGULAR ROCKS WITH A FEW TERTIARY ì FLAKES AND SOME BURNED BONE. D. CHRISTIANSON (NPS RIVER GUIDE) FOUND A ì WALL AND SHERDS AND A SUPAI GRINDING SLAB ON THE DOWNSTREAM SIDE OF A ì PROMINENT UPRIGHT TAPEATS BOULDER ABOUT 30 M. UPSLOPE TO THE NORTHEAST ì OF THE ROASTER. THESE FEATURES NEED TO BE ADDED TO THE SITE FORM AND ì MAPPED AS LOCUS B. THE EVIDENCE OF NATURAL AND HUMAN IMPACTS HAS ì DECREASED. Note: per L. Leap in 5/96, these features are part of site ì B:11:276 upslope.
	94-1	2	Monitor the site for new gullying and because of the trailing.
	94-2	4	
	95-1	3	Annual monitoring of this site is recommended because the gully (although working upslope) is moving slowly and is non-threatening to the roaster. The trail should be moved to avoid further impact.
	95-4	3	GRCA obliterated the trail west of the roaster in February, 1995. Due to present conditions and trail obliteration the monitoring schedule will be annually till fiscal year 1996. If the site's condition is still stable the monitoring schedule will change to every two years. Close attention should be paid to the gully on the south side of the roaster.
	96-3	4	The site looks stable. Consider decreasing the frequency of monitoring. K. Thompson says there is evidence of flood deposits (of approximately 1/2 million cfs) rather than dune deposits. If this is true, discontinue monitoring.
	98-2	4	
B:11:275			
	95-1	5	A site tag was found at this site. No visitation here since 1/91. Near the drainage, a gully is beginning to form, traveling towards the upstream wall. Monitor every three years.
	98-2	6	
B:11:277			
	95-5	5	Monitor every 5 years. The dunes where the sites are located are very stable, with good cryptogamic soil and grass cover. There are a couple of gullies that may venture toward the roasters.

Site #	Sess.	Sched.	Comments
B:11:278			
	96-3	5	This site is very stable and no changes have occurred since the last monitoring session. In the photos the upper rockshelter is feature 2. This site is located on bedrock and it is unlikely that river flows effect site conditions. Monitor every 5 years or discontinue.
B:11:279			
	93-5	3	
	94-1	3	
	95-3	1	This site is stable and monitoring should be discontinued. Even though boaters scout the rapid and are perhaps 20 to 30 meters from the site, they have made absolutely no impact. Erosional impacts are at a stand-still and seem to have no effect on the site. Vegetation, cryptogamic soil, and mosses almost completely cover this site.
B:11:280			
	95-4	6	This site appears to be stable since its last monitoring visit in February 1991. Unless an extremely high flood occurs, we should discontinue monitoring. Note: per L. Leap in 2/96, monitor annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
B:11:281			
	95-1	5	The gully should be watched. No site tag was found at this site. Monitor every five years.
B:11:282			
	92-1	3	
	93-2	3	
	94-1	3	This site should be mapped with a total station.
	94-2	5	This site is in very good condition. We should note any new side canyon flooding while we boat by, but only monitor the site every three years.
	95-3	4	Monitor this area once every two years for human impact and possible side canyon flooding.
	97-2	4	Generally, this site is in good condition. There is not much to be done regarding the ever-present threat from the side canyon.
B:11:283			
	94-5	1	Considering the priorities for all 475 sites, this would be very low. There is no visitation and very slow, minimal natural impacts. We should discontinue monitoring.
B:11:284			
	93-4	4	THIS SITE SHOULD BE TESTED TO DETERMINE IT'S SIGNIFICANCE.
B:13:001			
	97-2	5	The established portion of the trail has a healthy amount of vegetation growing in the trail so to obliterate it at this time would take minimal effort and time. Obliteration at both ends of the site would deter visitors from impacting the area and keep them in the main drainage. Generally, the features are stable.
B:13:002			
	92-2	3	
	93-2	3	ARTIFACTS REMOVED BY EULER IN 1960'S. REPATRIATION OF ARTIFACTS i TO WALAPAI PEOPLE IS WARRANTED AND REQUIRED BY NAGPRA.

Site #	Sess.	Sched.	Comments
	94-3	2	L. Jackson would like to see this site monitored in the Spring and in the Fall. It would be a good idea to interview B. Euler to incorporate into the site files his information concerning the occupation of Mohawk Canyon.
	94-5	4	
	95-3	1	Monitor every other year due to the minor human impacts observed. Previous monitoring has proven continued visitation to this site. No measures are currently recommended, this site is stable. Collecting charcoal samples may increase the knowledge of a time depth at this site. This site was photo replicated using early photographs (1972, 1981...). Note: upon further assessment by L. Leap in 7/95, this site will be discontinued from the monitoring schedule because it has remained stable, with few impacts, over the last several years.
B:14:093			
	92-1	3	
	93-2	3	
	94-2	5	
	98-1	4	
B:14:095			
	93-3	4	F2, LOCUS B: B:14:094.001 (12/11/90) PHOTO BOARD WRONG? IMPACTS:ANIMAL TRAMPLING LOCUS A, AREA 2:COLLECTION PILE NO LONGER PRESENT LOCUS A, AREA 1:MORE VEGETATION WHEN COMPARED WITH 12/90 PHOTO LOCUS A, AREA 3:UNCHANGED FROM 12/90 PHOTO
	95-3	5	Overall, this site is in good, stable condition. Sherds were identified that were not noted previously on the IMACS site form.
B:14:105			
	92-2	3	
	93-2	3	FEATURE 5 STABLE AND UNCHANGED; NO PHOTO TAKEN ON 93-2 TRIP. i CORRUGATED GRAYWARE SHERD NOTED ON 93-2 TRIP BETWEEN FEATURES 1 i AND 2 (SEE SITE MAP FOR LOCATION).
	94-2	4	
	96-3	4	Human impacts have increased tremendously since the last monitoring session. There are trails everywhere and on-site camping is present adjacent to feature 3. Monitor semiannually and obliterate the trails. Consider retrailing to direct hikers into 122 Mile Canyon without walking through the site. Note: per L. Leap in 7/96, the monitor schedule is changed to every other year (biennial). Also, researchers camped here during the spike flood in Spring and trashed the place.
	98-1	4	
B:14:107			
	95-4	3	Although the site has seen eroisonal impacts through gullying, it appears that this process may have occurred awhile ago. It is stable at present. A decision on monitoring cannot be recommended until there has been photo comparisons with survey photos. If it is found that the gullies existed from the time of survey then I would recommend a monitoring schedule of once every 3 to 5 years. Compare this trips photos with those from next year, then determine a schedule.
	96-3	4	The mano and Tusayan corrugated sherd were located near the large slab in front of the rockshelter. Quartzite and chert flakes were also identified. This site is fairly stable and does not appear to have been visited by humans in a long time. Consider less frequent monitoring. Note: per L. Leap in 7/96, check dams and stabilization were added as recommendations.
	98-1	5	

Site #	Sess.	Sched.	Comments
B:14:108			
	92-2	5	
	93-2	5	
	97-2	5	These artifacts are well-protected but spalling and human visitation are potential threats. Continue monitoring every 3 to 5 years.
B:15:001			
	92-2	3	
	93-1		
	93-3	3	THIS IS A "EULER SITE". HELEN SAYS THAT JAN MIGHT WANT TO MONITOR i IT IN THE FUTURE. LOCUS A: F1 - INCREASED VEGETATION, ROCKS APPEAR TO BE UNMOVED. F2 - INCREASED VEGETATION ESPECIALLY AROUND THE CACTUS IN THE CENTER OF THED i DEPRESSION. F3 - INCREASED VEGETATION, A HANKERCHIEF WAS JAMMED IN TO THE ROCKS SOUTH OF i F3, INDICATING HUMAN VISITATION. NO COLLECTION PILES WERE i SEEN. i F4 - INCREASED VEGETATION AND GULLYING AROUND WEST AND SOUTHWEST SIDES OF i FEATURE. F5 - INCREASED VEGETATION AND A SLIGHT REARRANGMENT OF ROCKS. LOCUS B: THERE IS SLIGHTLY MORE VEGETATION, PACKRAT DUNG IN THE i FEATURE AND UNDERNEATH THE OVERHANG. LOCUS C: A BIG INCREASE IN VEGETATION.
	94-1	1	The artifacts that were here are almost entirely gone. Therre are a few small sherds remaining. One hammerstone was found under a bush about 10 m. from F4. This site is out of the impact zone and should be discontinued from the river monitoring program. It will continue to be monitored by the backcountry archaeologists.
B:15:091			
	93-1	4	THIS SITE CONTINUES TO RECEIVE OCCASIONAL VISITATION FROM RIVER i RUNNERS BUT IMPACTS APPEAR MINIMAL. THE SITE IS STABLE AT THE i PRESENT TIME.
	95-3	5	Monitor every other year due to human visitation. Trail obliteration through the structures is recommended. Obliteration may not be possible due to the structures' location on a ledge. A judgement may be made by a trail crew on the practical effect of trail obliteration. Note: upon further assessment, this site will be discontinued from the river corridor monitoring program because it is above the historic highwater mark. It is recommended that backcountry monitors visit this site because of the problem with trails and visitors (per L. Leap 7/95). Note: per L. Leap in 9/96 this site will be added to the control group and monitored every 3 years.
B:15:096			
	92-2	4	
	93-1	4	
	93-3	4	
	94-1	2	The site is in good, stable condition.
	94-4	3	
	95-3	1	Monitor only after major flood but observe from the boats during subsequent monitoring trips.
B:15:097			

Site #	Sess.	Sched.	Comments
	97-2	4	We recommend annual monitoring due to the probable high level of visitation by campers. Once the artifacts appear to be stable, switch to a 3 to 5 year schedule. The site is really very stable as it is surrounded by rocks. It is unclear whether or not this site is above the 300,000 cfs level. Note: per L. Leap in 8/97, this site will be monitored on a biennial schedule.
B:15:118			
	94-1	3	
	95-2	1	This site is part of the random sample under the "No Impact" category. The site was removed from the sample and another one substituted (Per C. Downum). No photos were taken because no changes were observed.
B:15:119			
	94-5	5	The site is stable and appears unvisited by humans. It needs only infrequent monitoring.
	98-2	5	
B:15:120			
	92-1	5	THIS SITE DOES NOT NEED TO BE MONITORED.
	93-3	5	ACCORDING TO FAIRLEY, RICH HEREFORD THINKS THE SURFACE OF THIS ì SITE IS HISTORIC OR PERHAPS OLDER DUE TO VARNISH ON THE ROCKS ì AND THE SOIL DEVELOPMENT. WE SHOULD CONTINUE MONITORING, BUT AT A ì LOWER PRIORITY.
	97-2	5	The monitoring schedule was difficult to determine but due to the trail and the presence of the golf ball, monitoring should continue no more than every five years with a possible change to inactive monitoring. Otherwise, the feature is stable. Note: per J. Balsom in 12/96, the monitor schedule will be every 3 years.
B:15:121			
	95-2	3	This is a control site for the no impact "N" category. Monitoring should continue yearly.
	96-1	5	This site is highly impacted by natural forces. It is also out of the project area. Continue annual monitoring as a "N" control group site. Only three flakes were observed, the Imacs states 40-50 flakes are present. Note: per the 96-1 Trip Report, monitoring will be turned over to the Park because the site is above the 300,000 cfs level and beyond the impact of the dam. Note: per L. Leap in 9/96 this site will be returned to the control group and monitored every 3 years.
B:15:122			
	97-2	5	The sawed bone could not be located. Monitor every five years for additional changes. Impacts are most likely visitor-related because of the proximity of the Bass Camp to this site. New photos were taken of the west and south walls. Note: per J. Balsom in 12/96, the monitor schedule will be every 3 years.
B:15:123			
	92-1	5	
	93-3	5	DESPITE THE INDICATION OF THE LOW PRIORITY RANK, THIS SITE SHOULD ì BE MONITORED AGAIN NEXT YEAR BECAUSE OF THE HUMAN IMPACT.
	97-2	5	The site should be monitored every three years because although no change was noted since 1993, the pot is located in a precarious talus slope near a drainage.
B:15:124			
	92-2	3	
	93-3	4	
	94-1	3	
	94-3	2	

Site #	Sess.	Sched.	Comments
	95-3	1	Discontinue monitoring this site unless a large flood above 50,000 cfs occurs.
B:15:126			
	95-3	5	The site is borderline on the 300,000 cfs level and has not been monitored since the survey. In the last four years it has seen some change with granary materials shifting. There is minimal animal trailing adjacent to the site. Monitor in 5 years and if stable, discontinue. May look into stabilizing the granaries.
	96-1	5	Previously, stabilization was suggested. The site does not appear to be visited by humans and natural deterioration is only slight. Stabilization is probably unnecessary. Less frequent monitoring would be appropriate. The site is stable and monitoring may be detrimental (niche rock re-aligned and the potential for increased trailing). Because the site is in the "N" control group, it will be monitored annually. Note: per L. Leap in 9/96 this site will be placed in the control group and monitored every 3 years.
B:15:127			
	95-1	5	Since the recording of this site in 1990, some minimal downslope movement of the granary has occurred. Monitoring, every 3 years. Get the charcoal date from R. Hereford.
B:15:128			
	97-2	5	We were unable to find the spike, drill bit, or the projectile points. We are unsure if they were "collected" by a visitor or not. Since the site is stable and impacts are not related to dam fluctuations this site should be monitored every five years.
B:15:131			
	92-3	4	Per L. Leap in 2/96, the monitor schedule will be changed from 3-5 years ì to biennial.
	96-3	1	This should have never been recorded as a site with significance or integrity. This area tells archaeologists nothing. Discontinue monitoring due to a lack of cultural material. The site is above the 300,000 cfs line and located on bedrock.
B:15:132			
	95-3	1	This site is above the monitoring corridor and appears extremely stable with the exception of the cans being moved.
	96-1	5	The site appears to be a hunting blind due to the nature of the rock alignments (rooms not suitable for habitation or sleeping) and due to the bighorn sheep population in this part of the canyon. Note: per the 96-1 Trip Report, this was a "no impact" control site, but because it is located high above the 300,000 cfs level, it will be discontinued from the river corridor monitoring program. The site is above the potential impact level of the dam and has no sediment. Monitoring will continue under the backcountry monitoring program. Note: per L. Leap in 9/96 this site will be returned to the control group and monitored every 3 years.
B:15:134			
	97-2	6	The site is in good, stable condition with no threat of physical or visitor-related impacts that could damage the site's integrity. It is recommended that this site be placed on the inactive monitoring schedule.
B:15:135			
	93-4	3	THIS SITE IS THREATENED MORE BY VISITATION TO THE SO-CALLED ì "POWELL STEPS" THAN FROM VISITATION TO THE SITE SPECIFICALLY. ì THERE IS ALSO NATURAL DETERIORATION AND SHEEP USE WHICH IS ì GREATER THAN THE HUMAN IMPACT.
	94-4	4	
	95-5	5	Lets give this site a rest. It is in good shape and protected. Monitor every 5 years.
	96-2	5	The structure is extremely visible from the river but visitation does not seem to be a problem. Monitor the site every five years.

Site #	Sess.	Sched.	Comments
B:15:138			
	97-4	3	Retrailing and trail obliteration was completed today by 12 people in less than 30 minutes. This site was newly recorded today. Monitor annually due to visitor impacts and the active river-based gully.
	98-1	3	
B:15:139			
	97-2	5	The site is in good condition with minor animal disturbances present. Continue monitoring every 3 to 5 years due to the chance that new artifacts may be exposed from rodent burrowing. No management actions are recommened due to the sites location and relative stability.
B:15:143			
	95-2	3	Monitor again in one year to compare photos taken during this trip then reassess monitoring schedule. This site does not appear to be in a sensitive area. It appears fairly protected.
	95-3	1	Recommend discontinuing monitoring at this site. The site is stable and this site has been monitored several times since the survey with no changes observed. Test charcoal sample for date references before monitoring is discontinued.
	96-1	5	Reassessed for testing. Because the site is relatively stable, there is no need to test. Lithics are very scarce, if at this site at all. Continue annual monitoring as a "N" control group site. Note: per L. Leap in 9/96 this site will be returned to the control group and monitored every 3 years.
B:16:001			
	93-5	1	THE BRIGHT ANGEL SITE WILL CONTINUE TO BE VISITED BY THE PUBLIC. THIS i SITE HAS BEEN FULLY EXCAVATED. SOME STABILIZATION MAY BE APPROPRIATE. i Note: per L. Leap in 2/96, this site will be discontinued from river i corridor monitoring and turned over to the backcountry program.
B:16:003			
	93-1	4	
	95-5	4	The site is stable, but close to the scout point for Crystal rapid and this site is clearly visible from the river. Many people know about the site, so obliterating the trail is futile. It would just reform. Furthermore, the current trail to the site is the only way to get to it.
	97-2	4	Human impact is the biggest threat to this site but it is not altering the integrity of the site. No trail work is currently recommended. The trail is the only access to the site.
B:16:257			
	93-5	4	MONITORING IS RECOMMENDED EVERY TWO YEARS. PERHAPS THE RANGERS AT i PHANTOM RANCH CAN CHECK IT OCCASIONALLY.
	94-4	1	The site looks great!
B:16:258			
	97-4	6	This site is part of the entire Bright Angel visitor/developed/revegetation area. The area is maintained by the Bright Angel maintenance area. There is no need to monitor this site.
B:16:259			
	92-1	3	
	93-3	3	THERE IS CONTINUED EROSION OF FCR DOWNSLOPE, BUT THE IMPACT HAS i BEEN MINIMAL SINCE MONITORING SESSION OF 4/92. THE INCREASE IN i VEGETATION APPEARS TO HAVE STABILIZED THE SOIL ALTHOUGH THE SITE i IS CONTINUING TO ERODE.
	94-1	3	This site appears to be stable since the 1992 monitoring so no recommendations are necessary.

Site #	Sess.	Sched.	Comments
	95-3	5	Monitor this site every five years because of its stability. Hikers could pose as a future impact due to this site's location adjacent to a trail. The roaster is located on a moderately steep dune which also poses a threat to the site.
B:16:261			
	93-5	3	THIS SITE SHOULD BE MONITORED BY THE RESOURCE MANAGEMENT DIVISION ì STAFF AND NOT THE RIVER CORRIDOR PROJECT.
	94-4	1	Rethink monitoring this site. It does not appear to be threatened by river flow activity.
B:16:262			
	92-2	3	THE NATURAL IMPACT SCORE REFLECTS THE POTENTIAL EFFECT OF HIGH ì WATER LEVEL FLOODS.
	92-3	4	
	94-3	1	This site is stable and unlikely to be impacted by either nature or people.
B:16:364			
	93-5	5	DISCONTINUE MONITORING OF THIS SITE UNTIL A FLOOD IN EXCESS OF ì 80,000 CFS.
	97-4	6	The entire area has been revegetated since at least the late 1980s. The site is in good condition and no human disturbances were noted. There are several revegetation signs in and around the area.
B:16:365			
	92-2	3	
	93-2	1	Per L. Leap in 2/96, this is an Anglo burial that Phantom Ranch ì personnel maintain. It will be discontinued from river corridor ì monitoring.
C:02:050			
	93-1	1	Per L. Leap in 2/96, this site will be discontinued from the river ì corridor monitoring program because it is monitored by Glen Canyon NRA ì archaeologists.
C:02:085			
	93-4	3	THIS SITE SHOULD BE TESTED TO DETERMINE IF ANY SIGNIFICANT ì CULTURAL DEPOSITS REMAIN IN THE ORIGINAL LOCATION OR ADJACENT TO ì THE CLIFF.
	95-2	4	Check this site after the spike flow to determine impact. The charcoal lens is not present. There is nothing we can do to preserve this site. After the spike flow, discontinue monitoring but make sure C14 dates are on file. Dates were taken and discussed by O'Connor, et al. 1994. in the Journal of Geology.
	97-2	6	The spike flow did not impact this site because the feature is no longer present. We recommend removing this site from the active monitoring schedule.
C:02:089			
	94-5	5	The site is very subtle. It doesn't look like anything has disturbed the site. Monitor every 5 years.
	98-2	1	
C:02:092			
	92-3	4	THIS SITE NEEDS TO BE MAPPED IN MORE DETAIL TO SHOW LOCATION OF ì ARTIFACTS, ETC.
	93-3	4	
	95-5	5	We could use a better map at this site. This does not have to be a total station map but a more detailed site map. Monitor every 3 years due to human visitation and natural impacts. We need to see if more human visitation occurs.

Site #	Sess.	Sched.	Comments
C:02:094			
	92-3	3	THIS WAS THE FIRST MONITORING OF THE SITE.
	93-3	4	Per L. Leap in 2/96, this site will be monitored biennially instead of i annually.
	96-3	3	Document the graffiti with better photography. There is always lots of trash at this location. Some of the names and initials done in 1993 and 1994 with charcoal show some fading, "K.C. and Candi". Annual monitoring due to human impact. Note: per L. Leap in 7/96, the graffiti should be removed and the site stabilized.
	97-1	3	It is inevitable that this place will continue seeing visitor use. It is recommended that the inscriptions be photographed with a medium format camera and that the new abrasive graffiti be removed in the spring.
	98-1	3	
C:02:096			
	95-4	3	This site is in very stable condition. Note: upon further assessment, this site will be monitored annually per L. Leap on 7/95. The monitors were unaware of an additional locus located on fluvial sand which is not plotted on the site map.
	96-3	3	This is one of the last and largest sediment terraces in this reach of the river. The buried hearths are an added distinction. Locus B is severly cut to a depth of 5 meters by local flooding in 1991-1992 off the cliff face. Locus B is a prime candidate for checkdam work. It looks like some further slump at this arroyo was caused by the 45,000 cfs research flow in March, 1996. Continue annual monitoring and review for remediation.
	97-1	3	A worked stick was discovered during monitoring activities. The stick was left in the shelter area and it's exact location was plotted on the site map. There is no conceivable way that checkdams could slow down the active erosion on-site. Arroyos are already 5 m deep in some locations. Data recovery of the newly exposed charcoal features is recommended to supplement previous work at this site.
	98-1	3	
C:02:097			
	95-4	3	This site has little research potential. The 1983 flood blew away a lot of stuff. Retrailing is recommended at this site. The close proximity of this site to the water has resulted in heavy use of the shelters as a cover from the sun. Newly exposed materials may appear to improve our understanding of the site. Monitor next year for newly exposed artifacts.
	97-1	3	There was trail work completed last spring (11-95) at this site, but one trail still exists. We may want to create and stabilize a trail since fishermen will continue to use the old trails.
	98-1	4	
C:02:098			
	95-4	3	Continued from question #17...Movement of rocks is occurring at the drip line on the edge of the shelter. A small gully is forming 1/2 meter above the cutbank. Previous photos were too over exposed to show if this gully was present before. Charcoal could give us a possible date if that action is of interest. Slight animal burrowing is also occurring at this site. Question #31: Recommendations are to monitor annually because of the active erosion and the possibility of more artifacts appearing on the surface. A surface analysis could be done if site erosion has accelerated to the point that cultural information is being rapidly lost. No collection is necessary if monitoring is annual.
	97-1	3	This is another site where trailing is inevitable. Some of the obliterated trails below the site have turned into gullies. No one is currently using these old trails leading to the site but there is a potential for impact from them now that they are gullies. Data recovery is scheduled on-site for Spring, 1997. No further recommendations should be necessary after data recovery is completed.
	98-1	3	
C:02:101			

Site #	Sess.	Sched.	Comments
	92-3	4	
	93-3	4	
	94-4	4	The first impression of the Hopi elders was a burial. If this is true it would be very important to install check dams. Note: per L. Leap in 2/96, the monitor schedule was changed from every 3-5 years to every other year (biennial).
	97-2	3	Installation of checkdams is recommended and will occur in the spring of 1997. Note: per J. Balsom in 12/96, the monitor schedule is changed from 3-5 years to annual.
	98-2	4	
C:02:109			
	93-1		
C:05:004			
	92-2	3	
	93-3	3	
	94-4	5	All artifacts are still intact at the site, but have been moved by human visitation. Also, there is a small plank of wood that has carvings of a flower. It is placed on a small rock ledge within the cave approximately two meters from ground level. Perhaps it is a New Age "shrine".
	98-1	6	
C:05:007			
	95-5	1	Discontinue monitoring due to the fact that there has been no change at this site since the survey. Check this site in the event of a large flood, over 150,000 cfs. This site is stable and doesn't appear to be in any danger, unless the tree dies or boaters disturb the site.
C:05:009			
	95-3	1	This site does not appear human or naturally impacted.
C:05:031			
	92-3	3	
	93-4	3	THERE IS SOME DOWNSLOPE MOVEMENT OF ROCKS AT F5, LOCUS B. THE i ARROYO NEXT TO LOCUS A HAS DOWNCUT SINCE 9/5/92 (COMPARE PHOTOS). i THE TUSAYAN WHITEWARE SHERD IS STILL PRESENT AT F4. *NOTE MAP ADDITIONS. *CORRECT THE PHOTO DATABASE - THE DIRECTION OF PHOTO #7 IS TEN i DEGREES, NOT SEVENTY DEGREES.
	94-1	3	
	94-2	3	
	95-2	4	Monitor this site every other year because of good accessibility and the proximity of an upriver camp (24-1/2 mile camp). Generally, the site is in good, stable condition. The only gully that is active is very slow moving and does not threaten any of the features. When monitored in two years, watch for this gully.
	97-2	4	Feature 2 was not monitored because it is not a cultural manifestation, but rather a natural phenomenon. Continue monitoring biennially due to the presence of the gully between Feature 4 and Feature 3.
C:05:035			
	94-2	1	

Site #	Sess.	Sched.	Comments
C:05:037			
	92-2	3	
	93-2	3	
	94-2	3	The March 1993 photos for F1 are wrong. It is F2 based on the June 1992 photos. The datum could not be located.
	95-3	5	Monitoring of this site every 3 to 5 years is recommended. The area is not heavily used by hikers, but if it was, the gullies could become distinct trails and impact the site.
C:05:039			
	97-2	3	Monitors erased footprints observed in the dune upstream of the site and in the dune directly below the site. Monitor the site annually to determine if visitation is regular. The site may be at risk for visitor impacts.
	98-1	6	
C:06:002			
	92-2	3	THIS SITE DOES HAVE A HIGH PROFILE (SEE "VISIBILITY" RATING OF i MONITORING PRIORITY SCORE). EVERY GUIDE ON THE RIVER KNOWS IT'S i LOCATION.
	93-1	4	THIS SITE HAS BEEN ON AN ANNUAL SCHEDULE DUE TO VISITATION AND i POTENTIAL VANDALISM. THE RECOMMENDATION IS TO CONTINUE WITH i ANNUAL PHOTOGRAPHY.
	93-3	3	
	94-1	3	
	95-5	5	Monitor this site every 5 years to gauge the potential for natural spalling or human disturbances. Check the inscription also after any high water or flood. This is a popular inscription to visit during commercial trips according to Dave Christiansen, the boatman.
C:06:003			
	94-1	2	Locus A has increased gully cutting, especially along the foot trail. Remedial action should be taken because artifacts are being exposed. Locus B appears fairly stable. The foot trail is on the south boundary of the site but foot traffic is not as apparent as at Locus A. There are also very few gullys possibly due to the fact it is on relatively level ground.
	94-2	3	
	95-1	2	Locus A is of more concern than locus B. The main concern is the trail. Gullies that are present are of no threat to the site. Locus B is in very stable condition and is rarely visited. The monitoring of this locus should be every other year.
	95-3	3	K. Crumbo will reroute the trail low on the talus and obliterate the other trails. After retrailing, monitor annually and perhaps even less often if retrailing is successful.
	96-3	3	Kim Crumbo and the trails crew were here in 1995. The trail bisecting the site was obliterated with rocks and jute matting. A lower trail was established across the delta. Continue annual monitoring and watch for further development of the new trail forming on the slope. Note: per L. Leap in 7/96, check dams are recommended.
	97-1	3	In February, 1996, the NPS trail crew re-routed the trail previously running through the site. The main trail now runs below the site leading directly to the side canyon. The old trail was the major impact to the site and this is currently no longer an impact. The site is in fair to good condition. The gully near the hearth feature should be the only matter of concern next year. Trailing will always be evident here because of the boat beach and access from the river to the north rim.
	98-1	1	
C:06:004			
	92-2	4	

Site #	Sess.	Sched.	Comments
	93-4	4	
	94-5	3	Monitor this site annually because it is a well-known site and people could vandalize it (i.e. graffiti).
	95-3	1	This site should not be monitored until a CFS of ~45,000 is experienced. An occasional visit to the area is okay but documentation would not be necessary.
C:06:005			
	94-2	3	
	95-2	3	Monitor annually (one person) due to the popularity and easy access of this site. The potential for graffiti is moderate.
	96-3	3	Monitor annually due to the popularity and easy access to this site. Human impacts have the potential to increase though the site is in great shape. The 45,000 cfs level is apparent in the algae debris caught in the tamarisk and barracus plants. The 45,000 cfs flood in March, 1996 did not impact the site. The flood level appears to have come in close range of the site and would impact the site with slightly higher water levels. Per L. Leap in 7/96, stabilization is recommended as well as removal of the graffiti.
	97-1	3	Graffiti removal of the "X" observed in FY96 is scheduled for the Spring of 1997. The removal of the graffiti is a form of stabilization.
	98-1	6	
C:06:006			
	92-3	4	
	93-4	4	THERE ARE NEW SIGNS OF VISITATION AND RECENT TRAMPLING BY SHEEP. ALSO, ì ARROYO CUTTING IS MOVING HEADWARD; BRANCHES OF THE ARROYO ARE MIGRATING ì NORTHEAST TOWARD THE SITE AREA. NOTE SITE MAP ADDITIONS. Note: per L. Leap in 2/26, the monitor schedule will change from annual ì to biennial.
	97-2	5	The site is above Soap Creek camp. Previous trail work has successfully decreased foot traffic on the site. There has been no change since the last monitoring episode.
C:06:008			
	92-3	4	Note: per L. Leap in 2/96, the monitor schedule will change from every ì 3-5 years to biennial monitoring.
	96-2	5	Leave feature 1 as it is. No artifacts were observed. It is proto to late historic and there is no sediment. Feature 2 is a natural event, not cultural. Discontinue monitoring. Note: per L. Leap in 3/96, the monitoring schedule is changed to every 5 years and the feature should be tested.
C:06:010			
	95-4	5	Monitor every five years due to the rock movement. No measures are recommended due to the stability of the site. Check in five years for more movement and if none, discontinue monitoring. Two nice pieces of juniper wood (1 burned) may be examined for more site information. They appear old, but no other pieces of charcoal were associated in the shelter or below. Testing may uncover charcoal that could be used for a carbon date.
C:09:001			
	92-1	3	
	93-4	1	Note: per L. Leap in FY95, this site will be discontinued from the river ì corridor monitoring program. It will be monitored by backcountry ì archaeologists.
C:09:004			

Site #	Sess.	Sched.	Comments
	95-5	1	Watch for human impact. Overall, the site is well-protected by the natural elements. Discontinue monitoring due to its location.
C:09:005			
	97-2	6	This site is virtually free of impacts. Recommend removing from the active monitoring schedule. Note: there is missing data for this site because it could not be reached by the monitors.
C:09:030			
	93-1	5	THIS MONITORING FORM WAS NOT COMPLETE, DATA ENTERED WAS THE ONLY i INFORMATION AVAILABLE. Note: L. Leap assigned a monitor schedule of i every 3 to 5 years in 2/96.
	97-2	5	The trails are monitored annually by the revegetation crew and are therefore maintained. Changes in both graves have occurred in the last four years but the changes are moderate in character. A possible trail leading along the cliff wall SE and NW of Hansbrough's grave is present. Monitor the site every three years with emphasis on trail maintenance to deter the formation of new trails.
C:09:031			
	95-3	5	No evident impacts were observed in a five year timespan (since the survey). This site appears very stable and should be monitored every five years, eventually discontinuing monitoring completely. Retrailing to establish one main trail to the grave is recommended. Total obliteration will not be sufficient due to the number of river guides familiar with this burial.
C:09:032			
	93-1		CHECK PREVIOUS MONITORING FORM FOR COLLECTION PILE AT STRUCTURE i B. C:02:032 WAS MISLABELED; CHECK LABELS.
	94-2	1	
C:09:034			
	95-3	4	The boat appears stable and only impacted by minor board movement. Nothing appears missing since the last monitoring visit. Trail obliteration will decrease visitor impacts. Monitor every other year due to minor, but present, site visitation.
	97-2	4	The trail and visitors are the main impacts to the site. Currently, no physical impacts are threatening the boat. Monitoring will continue biennially. The human impact will continue but it will not change the integrity of the site until boat parts begin to disappear.
C:09:050			
	92-2	3	
	93-1	4	
	93-2	3	
	94-1	2	
	94-2	3	
	95-1	3	No action necessary, only monitoring of this site.
	95-4	2	The monitoring schedule should remain semiannual because of the high likelihood that new artifacts may appear. Besides, our monitoring of this site does not involve us walking on the site and further impacting it.
	96-1	2	Overall, the site looks stable except for a recent debris flow from Little Nankoweap Creek. This did not directly impact the site but it has resulted in redirecting the creek course.
	96-3	2	Continue semiannual monitoring. The pot removal area is stable but the gully has potential to increase erosion. No cultural artifacts are being exposed at this time. Stabilization is not currently recommended. Note: per L. Leap in 7/96, check dams are recommended.

Site #	Sess.	Sched.	Comments
	97-1	2	Continue monitoring semiannually due to the potential for other artifacts to erode out of the sediment. If Little Nankoweap Creek were to flood, it would highly impact the possible wall. In the event of major impacts on-site, stabilization will be a joint effort between the RCMP and NPS.
	97-4	2	A retaining wall and water diversion checkdams were installed today. There were not based on human impacts, but on natural impacts that may compromise the site's integrity.
	98-1	2	
	98-4	2	
C:09:051			
	92-2	2	
	93-2	2	
	94-1	2	The site is in no immediate danger, however, trailing and obliterating current trails made by visitors is recommended within a year.
	94-3	2	There are two test units at F1 and F3.
	95-1	3	Surface unit 1 shows minor movement of artifacts; no polish stone was seen. Surface unit 2 could not be relocated. We will observe after the photo is found. A total station site map should be completed in conjunction with R. Hereford's map. The trail leading to the site should be covered.
	95-4	3	The site looks stable except for the impacts to feature 3. There is slight movement of artifacts downslope. Monitor every other year and try to locate photos of the test unit in feature 3 for future comparisons. Install check dams at feature 3. If we are going to continue measuring surface artifact movement we need to standardize our methods. There is too much flexibility in the current method and the information we are getting appears to be the same as what we get from monitoring.
	96-2	3	The site is currently in a stable condition. Locus D has been stable since the last monitoring episode. Some minor movement of smaller fraction rock on the drainage was observed. Note: per L. Leap in 7/96, stabilization was added as a recommendation.
	97-1	3	There were no previous photos available to compare Loci B and C. Photos were taken and these loci appear stable. Stabilization recommendations can be found in the remediation proposal, February, 1997. Management and data recovery on-site should be a shared responsibility between the RCMP and NPS for the features adjacent to Nankoweap Creek. Data recovery should occur at Feature 4 due to its high susceptibility to bank slump. Several artifacts from Feature 4 are located in the creek channel.
	98-1	3	
C:09:052			
	92-1	3	
	93-1	3	VISITATION APPEARS TO HAVE DECREASED DUE TO NPS RETRAILING ì EFFORT.
	93-2	3	
	94-1	2	The main impact so far seems to be caused by human visitation.
	94-3	2	There is one test unit at this site. See the map.
	95-1	3	Overall, this site is stable. Currently no natural or human impacts have disturbed the site since it was las monitored. The site looks good. Within the surface unit, every artifact has been moved. Sherds have been removed from the unit but everything is present and accounted for. Perhpas a new area is needed. Total station mapping is recommended in conjunction with R. Hereford's maps.
	95-4	3	Monitor every other year due to animal trampling, digging, and burrowing. The site has many artifacts that could be potentially impacted by visitors or animals. Several sheep trails indicate this is a highly traveled path to the river. Monitor and recommend measures if more impacts begin to be observed. The surface analysis unit was monitored by L. Leap and L. Whisnant on this trip. Their findings are written on the surface analysis unit form. Note: in 2/96 L. Leap changed the monitor schedule from biennial to annual.

Site #	Sess.	Sched.	Comments
	96-2	4	The site is in good condition. Animal caused erosion is probably the most prevalent impact. Deer and coyote move through the site on a daily basis and are probably the cause of most of the current artifact movement.
	98-2	4	
C:09:053			
	93-1	3	
	93-5	3	
	95-1	4	No action is warranted. Continue monitoring. Note: in 2/96, L. Leap changed the monitor schedule from annual to biennial.
	97-2	5	Obliteration of the "new" deer trial will probably only result in yet another new trail, compounding the potential for increased erosion of the southeast side of the dune. In addition, monitoring the site has the most potential for impact by trailing and trampling. Monitoring the site every five years, instead of annually, is recommended to curtail further impacts from monitors.
C:09:054			
	96-2	1	Tusayan plainware sherds were located at feature 4 and Tusayan corrugated sherds were located downstream of feature 6. A basalt primary flake was identified at feature 6. This site is not located on an alluvial base, mostly all debris flow. Discontinue monitoring.
C:09:056			
	97-2	6	The site is in excellent condition and should be placed on the inactive monitoring schedule. Previous photos from 1990 were poorly documented the site's location and new locational photos were taken.
C:09:058			
	96-3	1	Discontinue monitoring and turn over to the backcountry archaeologists. This site is located above the 300,000 cfs line and lacks integrity. Note: per L. Leap in 7/96, the site should be tested and stabilized by the backcountry archaeologists.
C:09:059			
	96-3	1	This site is above the 300,000 cfs line. Discontinue monitoring and turn over to the backcountry monitoring project. The site is located on debris flow.
C:09:061			
	96-3	6	This site is in excellent condition. This is the first monitoring since the survey and erosion effects are minimal. Monitor every 5 years. If this site continues to be stable, consider discontinuing monitoring activities. Note: per L. Leap in 7/96, the site will be placed on the "inactive" monitoring list.
C:09:062			
	96-1	5	This site is stable and not in an area used by visitors. Monitor every five years.
C:09:065			
	97-2	5	This site is extremely stable. Most of the features are cemented into rock and boulders and therefore are not at risk for visitor impacts. Many photos were not available for comparison. Now that the photos and maps have been corrected, monitoring of this site will be much more efficient. Continue monitoring the site every five years.
C:09:067			
	96-3	6	Monitor every 3-5 years due to the absence of direct human visitation and lack of erosion. This site is difficult to find. Looking up canyon, the main drainage is northwest of the site. Note: per L. Leap in 7/96, this site will be placed on the "inactive" monitoring list.
C:09:068			

Site #	Sess.	Sched.	Comments
	93-4	5	THIS SITE SHOULD BE REMONITORED IN THE FALL OR WINTER WHEN VEGETATION i HAS DIED BACK. Note: in 2/96 L. Leap assigned a monitor schedule of i every 3-5 years.
	97-2	6	Increased vegetation growth on the site has created a very stable environment. Monitors recommend placing this site on the inactive monitoring list due to the absence of erosional impacts.
C:09:069			
	92-1	5	
	93-1		
	93-2	5	
	97-2	4	Testing of the "circular feature" is recommended to determine if it is a cultural manifestation or not. A detailed map of the entire site is needed. The sketch map from the survey is not accurate enough for current monitoring needs. Locus C is a Paiute activity area.
C:09:071			
	96-3	1	The site is above the 300,000 cfs line and located on debris flow. It is in no danger of human disturbance. Discontinue monitoring activities. Recommend site monitoring by backcountry archaeologists to reassess a monitoring schedule.
C:09:072			
	94-5	5	Overall, the site is not disturbed and should only be monitored every five years, if that, just due to its location.
	98-2	5	
C:09:073			
	96-2	1	The site lies on a stabilized debris flow and some alluvium. It is out of harms way and monitoring should be discontinued. There are no visible artifacts so hikers wouldn't even recognize this as a site.
C:09:080			
	95-2	3	This site is located high on a talus slope and is in no danger of catastrophic impact. Furthermore, site significance is low. Monitor because it is an "N" control group site.
	96-1	5	Observe the trail below the site to monitor any possible increase in use. If signs of human visitation increase, the trail may require obliteration. Continue annual monitoring as a "N" control group site. Note: per the 96-1 Trip Report, monitoring will be turned over to the Park because the site is above 300,000 cfs and is located on a Pleistocene terrace/talus. It was monitored as a "no impact" control site but will be replaced by a site that is the responsibility of the Bureau of Reclamation. Note: per L. Leap in 9/96 this site will be returned to the control group and monitored every 3 years.
C:09:082			
	92-2	3	
	93-2	3	
	94-1	2	This site is in very good condition because there is very little natural or human impact.
	94-3	2	Monitoring should be semiannually because of the surface unit at Feature 1. Monitoring should be in the late winter/early spring and in the late summer/fall.
	95-1	3	The potential for human impact at this site is much greater compared to other areas along the river due to the fact that it is a large camp area. Surface Analysis Unit: Total station mapping is recommended but should be used in conjunction with R. Hereford's maps.
	95-4	3	Monitor every 3-5 years due to sheep trailing and deflation occurring on the dune. If no change is present in 3-5 years, consider discontinuing. Dune deflation has the potential to expose more artifacts. Note: in 2/96 L. Leap changed the monitor schedule from every 3-5 years to annual.
	96-2	5	The site is in stable condition. Monitor every three years.

Site #	Sess.	Sched.	Comments
C:09:083			
	94-5	5	As soon as the trail is obliterated the site should be monitored once. If there is no change, then monitoring should discontinue.
	98-1	1	
C:09:084			
	96-3	4	There is minor sheet washing of artifacts downslope. The dripline may be causing the gully to form at the northwest boundary of the site. The gully could eventually cut its way into the site but the impacts are minimal at this time. Monitor in 2 years then reassess schedule. Note: per L. Leap in 7/96, check dams are recommended.
	98-2	5	
C:09:088			
	92-3	3	
	93-5	3	
	94-2	3	
	95-3	4	This site should not be monitored often. It appears very stable. Borhole C should be photographed biennially. The remainder of the site monitored every 3-5 years.
	97-2	4	Continue monitoring the site biennially.
C:13:005			
	95-5	3	Should obliterate the undesignated trails by planting vegetation. Because the area is highly used, monitoring should continue annually. This area is being trampled by hikers. There is little evidence of a Hance site.
	96-3	3	The backcountry permit office should tell hikers not to move branches and debris put on the terrace above the river in order to camp. Hikers should be directed to camp closer to the river. Installation of a vault toilet is recommended. Toilet paper is everwhere. Continue annual monitoring.
	97-2	3	The trail obliteration seems to be working here. The scouting trail needs to be monitored and improved because a few boulders have come loose in the area near Features 2 and 3. This work may have been completed by the rehab crew trip that was working a few days behind our schedule.
	98-1	1	
C:13:006			
	92-1	3	
	93-2	3	
	94-1	3	A possible rock alignment is becoming exposed in the west gully. Also, about 10 m east of the western arroyo is a newly exposed roaster (3 m in length). Mesquite has fallen into the feature.
	94-3	3	A surface analysis unit was placed and should be checked twice a year. We should place a camera on the Tapeats ledges opposite to capture the erosion occurring on the slope.
	95-2	3	Continued from question #17: and 10m from the roaster. There is potential for future impact on this feature. The test unit is stable for the time being but the eroding dune above may have future impact on the unit. This is the same eroding dune area that may affect he roaster. There is very minor erosion occurring in the gullies and arroyos. The biggest erosional impacts seem to be associated with eolian deflation and sheetwashing of the dune areas above and adjacent to the roasting features and artifact concentration areas. If dune erosion continues at a speedy pace, it could wipe out the prominent features at this site.

Site #	Sess.	Sched.	Comments
	95-5	3	This site needs to be mapped with a total station in FY 96. Feature numbers need to be assigned to professionalize monitoring efforts. Native vegetation should be planted in the bank "slumpage" area to decrease dune erosion. A stationary camera will be placed opposite the site to monitor daily. The monitoring schedule should be changed from semiannual to annual because no major or moderate change has occurred since November monitoring.
	96-3	3	The trail crew assessed the erosion along the steep slope and determined that there was little that could be done. Jute matting may be helpful and/or some revegetation. Twelve checkdams were put in arroyos in February 1996 by the Zuni and NPS. This work may have led to increased bank slumpage in other parts of the site from foot traffic on sensitive dunes. Continue annual monitoring.
	97-1	3	After at least one heavy rain, the checkdams remain unchanged. Minor sediment deposition was noted at the top of several of the checkdams. Also noted were young cacti growing within and around the checkdams. L. Jalbert thought the slump problem could be solved by adding more sediment to the area. Currently there is not enough sediment to support vegetation growth, and revegetation would likely be unsuccessful. K. Thompson suggested rain gauges in the area to monitor whether or not water percolates through or runs across the gullies. Guages would also tell us the rate of gully formation via runoff. Continue annual monitoring and watch the faint trail for growth or disappearance.
	98-1	3	
C:13:007			
	93-4	3	THE PARK SERVICE NEEDS TO ACTIVELY CONTINUE TO BLOCK ACCESS TO i THE SITE AREA BY MONITORING AND ADDING ADDITIONAL BRUSH BARRIERS i AS NEEDED. CORRECT PHOTO DATABASE: PHOTO #13 DIRECTION IS MISLABLED - SHOULD BE NORTHEAST, NOT NORTHWEST. PHOTO #12 DIRECTION IS MISLABLED - SHOULD BE EAST, NOT WEST *NOTE CHANGES TO SITE MAP
	94-3	3	All the measures recommended in question 29 were done in 1992. This site should be spot-checked more than once a year to make sure that the wall in the arroyo is intact. Contact with K. Crumbo is recommended.
	95-2	4	We do not recommend any additional work to this site. The revegetation is working to decrease impacts. Minor impacts have occurred during the revegetation work. Some feature rocks were used as vegetation net weights and some structural rocks have been moved. Pay particular attention to feature 5 (pithouse).
	97-2	3	The wash in front of Feature 5 appears to be actively transporting localized rains into Lava Chuar Creek. Feature 5 should be checked as it is located at the edge of the wash and could be impacted by flooding. With increasing rains, the revegetation work will probably change the appearance of the site. Monitor the site biennially. Note: per J. Balsom in 12/96 the monitor schedule is changed to annual monitoring.
	98-2	4	
C:13:008			
	92-3	3	
	93-3	3	
	95-5	1	Continue monitoring due to natural and human impacts. Stabilization would be useless due to the age of the arroyo. Watch features 1 and 5 closely after heavy rains. They are substantially impacted by gullying and arroyo cutting. Next monitoring episode, replicate gully photos to establish a rate of change (moderate, etc). Testing is appropriate at feature 1 due to its location next to a gully and trail. Charcoal is eroding from feature 1. It should be tested before more is lost. Question 29, retrail near feature 1. Question 30, test at feature 1. Note: per L. Leap on 7/95, this site will be discontinued from river corridor monitoring and assigned to backcountry. It is above the historic highwater mark.
C:13:009			

Site #	Sess.	Sched.	Comments
	93-1	2	THIS SITE WAS PREVIOUSLY ON A TWO YEAR CYCLE; ACTIVE EROSION i WARRANTS INCREASED MONITORING FREQUENCY. STABILIZATION OF ARROYOS i SHOULD BE DONE WITHIN THE NEXT YEAR IF POSSIBLE. CONTINUATION OF RIVER RELATED IMPACTS: BASALT STRUCTURE 1 - THE CHANNEL RUNNING THROUGH THE MAIN WALL HAS i DEEPENED AND WIDENED RECENTLY. TYPE II STREAM STRUCTURE 2 - THE WASH HAS DEEPENED EXPOSING ABOUT 7 CM. MORE OF i ROCKS IN THE ARROYO. THERE IS NO MOVEMENT OTHER THAN IN THE i ARROYO. THE OTHER FEATURE AREA IS UNCHANGED. TYPE II STREAM STURCTURE 3 - NO CHANGE STRUCTURE 4 - THE GULLY HAS DEEPENED AND WIDENED. THERE ARE ABOUT i 10 CM. GONE, IN SOME PLACES, SINCE 1989, UPWARDS OF ONE METER IN i OTHER LOCATIONS. THERE IS A POSSIBILITY OF CHECKS TO HELP i STABILIZE, OTHERWISE THE FEATURES WILL BE LOST. TYPE II STREAM LOCALITY A FEATURE 16, STRUCTURE D - TWO INCIPIENT CHANNELS ARE FORMING; ONE i THROUGH THE ROOM AND ONE AT THE EAST CORNER. BOTH LOCATIONS HAVE i WOOD POSTS ERODING. TYPE II STREAM STRUCTURE C - THIS STRUCTURE IS DEFLATED BUT THERE IS LITTLE CHANGE. STRUCTURE B - A NEW GULLY STARTING 10/92 HAS CUT 5 CM. DEEP i THROUGH THE ROOM. A GULLY IS ACTIVELY ERODING ON THE OUTSIDE OF i THE WEST WALL. THESE GULLIES COALESCE IN TO ONE WASH WHICH DRAINS i TO A MESQUITE TERRACE LEVEL. TYPE II STREAM FEATURE 17, STRUCTURE A - THERE IS THE BEGINNING OF A COMPACTED i TRAIL/GULLY ON THE SOUTH AND WEST SIDE OF THE ROOM. THERE IS i CURRENTLY NO EROSION, BUT THIS SHOULD BE WATCHED. TYPE II i STREAM FEATURE 12, STRUCTURE E - THERE IS INCIPIENT EROSION APPARENT, i BUT NO SIGNIFICANT CHANGE. FEATURE 13 - NO CHANGE. FEATURE 7, STRUCTURE 7 - THERE IS NO CHANGE. AN EROSION CHANNEL i IS WITHIN 1.5 M. OF THE WALL. FEATURE 1-3 AND 20 - ALL RECOGNIZABLE FEATURES ARE GONE. THE BANK i HAS ERODED AND TAKEN FEATURES WITH IT. THERE IS BANK SLUMPAGE DIRECTLY i IN TO THE RIVER.
	94-2	4	
	97-2	4	This impressive village scale site would be a good candidate for full excavation though the expense and logistical considerations would preclude any such project. The most practical benefit to the site and the profession would be to complete an instrument map and a detailed ceramic analysis. The artifact assemblage on the surface is dense and displays high variability. It is recommended that monitoring at Locus B be discontinued.
C:13:010			
	95-3	3	Monitor annually until a complete map has been drawn. New features have been discovered but not added to previous maps. After a map is completed of the entire site, reasses monitoring schedule.
	96-3	3	The dune terrace on the NE/SE side of the main arroyo is experiencing slumpage . The features on top of the terrace are showing signs of increased eolian deposition, enhancing the stability of the features. The Dox sandstone terrace on the NW side of the arroyo is subject to major erosional forces. Headcutting, slumpage, and gullying are all impacting the site. Continue annual monitoring. Note: the site is already closed to visitors. Per L. Leap in 7/96, stabilization and data recovery are recommended.
	97-2	3	A map has been completed by R. Hereford with supplemental plotting of features and structures by K. Thompson. However, it is recommended that a total station map be completed this fiscal year. Checkdam installation and some form of ruins stabilization are also recommended for the features on the downstream site of the large arroyo.

Site #	Sess.	Sched.	Comments
	98-3	3	
C:13:033			
	96-1	5	Monitor every 3-5 years. Note: per C. Coder in 6/96, this site will be discontinued. Note: the schedule was changed back to every 3-5 years by C. Coder, after discussions with J. Balsom and L. Leap.
C:13:069			
	93-4	2	THIS SITE SHOULD BE EXCAVATED BEFORE IT IS TOTALLY DESTROYED BY i VISITATION IMPACTS AND NATURAL EROSION. *NOTE SITE MAP CHANGES
	95-1	3	Annual monitoring is recommended because the revegetation project appears to be successful.
	96-3	3	Feature 4 was not photographed because it was not recognizable. Continue annual monitoring. Per L. Leap in 7/96, check dams are recommended.
	97-1	3	After heavy rains on 10/02/96 this site appears fairly stable. No management actions are recommended and monitoring should continue annually.
C:13:070			
	93-2	2	
	94-2	2	Quite a bit of erosion has occurred at this site since last monitoring. The gullies and arroyos are deepening and cutting into the sites. Because of the concentration of artifacts on the edge of the dune terraces and potential increasing erosional impacts, this site should be monitored twice a year. An artifact sample unit was placed at Locus B.
	94-4	2	Total station mapping completed 5/1/94. Site should be monitored once in the spring and once in the fall.
	95-1	2	The metate and its associated mano at locus A are ready to begin movement down the slope. Stabilization at this site should be considered.
	95-4	3	Monitor annually because of the constant active movement of artifacts in locus B. This area is consistently eroding since it was recorded. At this time, erosion is occurring at a steady pace, moving only small artifacts. The large dox slabs are still in place.
	96-1	3	On the last monitoring form, there is a discrepancy: under "structure" , 4 or NA is used, but the Imacs form calls the site a small structure (Locus B). Small mammal bones are present in the northeast edge of Locus A and not mentioned on the Imacs form. New photos of Locus A were taken. Obliterate trail leading to the river from Locus A and B. New photo was taken of the historic charcoal area at Locus C. No previous photos were available for Locus D and new photos were taken. Human and natural impacts are apparent. Annual monitoring should continue. Charred logs at Locus D are categorized here as "perishable" as opposed to a "structure".
	96-3	3	The site should be visited by 2 monitors. The site is suffering cummulative damage to the surface by over-visitation. Install check dams and continue annual monitoring. Note: per L. Leap in 7/96, data recovery is recommended.
	97-1	3	The Zuni team monitored this site in May, 1996. We should also incorporate their comments into our site file. The trend of the conservation team is to install checkdams. Checkdams at this site would be extremely labor-intensive, with much preparation needed. It is recommended that C14 samples be collected from the charred logs for dating.
	98-1	3	
C:13:092			
	93-1	2	THIS SITE HAS BEEN ON CYCLE FOR MONITORING EVERY THREE OR MORE i YEARS. THERE HAS BEEN A CHANGE IN THIS VALUE DUE TO VISITATION i AND DUNE MIGRATION. IF THE AREA IS SHOWN TO BE STABLE, THE i RANKING SHOULD INCREASE TO REFLECT THE STABILITY.

Site #	Sess.	Sched.	Comments
	93-5	2	THIS SITE HAS BEEN ON A THREE YEAR MONITORING CYCLE. IF THE AREA i IS SHOWN TO BE STABLE, THE RANKING SHOULD INCREASE TO REFLECT THE i STABILITY.
	94-2	3	
	95-5	3	The real threat to this site is human impact. Continue monitoring annually for artifact movement and/or disappearance.
	96-3	3	The site is in stable condition. The real threat to this site is human impact as seen from movement of artifacts. Continue to monitor annually to document human impacts.
	97-1	4	The main impact to this site is human visitation. The human disturbance is minimal and only observed as artifact movement with no artifacts being collected. The 1978 and 1981 photographs support the observation that artifacts are not being collected only displaced. These photographs were replicated on this trip. Note: per L. Leap in 8/97, this site will be monitored biennially.
C:13:098			
	93-1	2	THIS SITE REQUIRES ANNUAL OR EVERY TWO YEARS MONITORING WITH i EROSION POTENTIAL.
	93-2	3	THERE IS A NEED TO DEVELOP A SYSTEM FOR MONITORING THE i MOVEMENT/ATTRITION OF ARTIFACTS MORE PRECISELY. PERHAPS THIS i COULD BE ACCOMPLISHED BY A REPEATED INVENTORY OF THE ARTIFACTS ON i THE STUMP AND INSIDE THE CABIN.
	94-1	2	We need to place checks to halt further development of gully into the site. This should be done while the gully is small and has not reached Type I arroyo.
	94-4	3	Total station mapping completed 4/29/94.
	95-1	2	This area is frequently visited by hikers and boaters. This is also an active drainage area.
	95-4	2	Monitor semiannually due to increasing natural and human impacts. Installing a check dam may prevent the gully from impacting the cabin. Plant vegetation to conceal and naturally anchor the cabin walls. Vegetation may also discourage artifact movement and collection. Establish an artifact inventory to track artifact collection. This site is heavily impacted and should be a priority site for measures to reduce site impacts. After measures are taken, monitor semiannually to record the success of remedial actions.
	96-1	2	VIsitor impact is occurring at this site. Planting vegetation for erosion control near the cabin could help stabilize the site and prevent further gullying.
	96-3	2	Q.26 Major trailing exists between the stump and the check damed gully nearby. Artifacts on the stump have all been rearranged. Camping isn't on-site but within close proximity. It is assumed that these impacts are dam related. All human impacts have increased since last fall. Winter and spring are not usually a peak tourist season but it is likely that the research flow attracted a large number of river-runners and campers to this area. Continue monitoring semiannually and watch trailing. Note: per L. Leap in 7/96, check dams are recommended.
	97-1	2	
	97-4	2	Checkdams should continue to be monitored. Rills appear to be stabilizing and should also be monitored. There is minor movement of artifacts from human visitation on-site.
	98-1	4	
	98-4	3	
C:13:099			
	93-1	2	
	93-2	2	THE PLAN MAP WAS NOT INCLUDED WITH THE MONITORING SITE PACKET SO i PHOTO POINTS COULD NOT BE COORELATED OR PLOTTED. SOME PHOTOS WERE i NOT LABLED. THERE IS CONFUSION IN THE NUMBERING OF THE PHOTOS. i SOME PHOTOS WERE NUMBERED AS C:13:99 AND SOME AS C:13:99B, BUT i MANY OF THE C:13:99 SEQUENCE ARE VIEWS OF LOCUS B. THEY SHOULD BE i NUMBERED SEQUENTIALLY AS C:13:99, DISREGARDING A'S AND B'S FOR i NUMBERING.

Site #	Sess.	Sched.	Comments
	94-1	2	
	94-4	3	Total station mapping completed 4/30/94.
	95-1	2	The mapping has not been completed. Trails should be obliterated and a form of erosion control established using check dams and plants is highly recommended. This site is definitely threatened by natural causes.
	95-4	2	Question #17: In feature 2 there is evidence of heavy foot trailing and rock movement. Feature 1 shows bank slumpage allowing artifacts to fall into the drainage. At feature 8 alluvial deposition was observed but it is minor. An arroyo upstream of feature 8 has changed course, running through feature 8. Question #31: Retrail the Beamer trail to make it more obvious for hikers, reducing impacts. Obliterate multiple trails near features 2, 6, and 7. Plant vegetation and use check dams of available resources to reduce site impact in the main arroyo.
	96-1	2	Noticeable changes are apparent throughout the arroyo with significant slumpage, undercutting, and erosion occurring through the site area. The Palisades erosion control project was implemented in September, 1995 just less than a month since this visit.
	96-3	2	This site topography though not the features has been extensively mapped. Continue monitoring semiannually. Watch for trails bisecting the stabilized arroyos.
	97-1	2	Heavy rains on October 2, 1996 showed that drainage RB1 is extremely active and all the checkdams withstood the force of water flow. There were some instances where portions of the runoff went around the checkdams but this was not the norm at this site. Some maintenance of the checkdams will be required. No previous photos of Feature 6 were available for comparison. Continue semiannual monitoring.
	97-4	2	Three checkdams have been breached and need maintenance. The crew worked on some major maintenance on 4/15/97. Continue monitoring and maintenance of the checkdams. Note: per L. Leap in 5/97, data recovery is recommended where previously recorded charcoal lenses and artifacts are becoming more exposed.
	98-1	2	
	98-4	2	
C:13:100			
	92-1	3	
	93-1	3	
	93-2	2	ARROYO CUTTING, WHEN ADDED AS A NATURAL IMPACT, PUTS THIS SITE UP ì TO 17 POINTS - PRIORITY ONE.
	94-1	2	Erosion control measures are needed to halt the development of arroyos. Some excavation may be needed in order place checks, etc. Trail blockage needs to be enhanced to truly block the trail.
	94-2	3	A 1 x 1 m test unit was placed near features 5 and 6. (See site map for location) The four nails are still in the ground to better locate it next time and to achieve a degree of consistency.
	95-1	2	This is a heavy traffic area with an active arroyo near feature 4. Biennial monitoring is recommended.
	95-4	2	The trail should be blocked off by planting vegetation. The area can be heavily impacted by visitors, therefore, although the site is doing good, visitors may destroy the site.
	96-1	2	Recommend obliterating the trail running through Feature 2. Generally this site appears stable, however there are signs of minor surface eroison and gullying.
	96-3	2	The site should be maintained by repairing check dams and impacts they create. Continue semiannual monitoring.
	97-1	2	We had a good opportunity to observe problem areas at this site, mainly drainages RB2 & RB3. Recent rains showed us that drainage RB2 is not a very active drainage. The raindrop imprints were still visible inside the drainage and Features 4 & 8 were stable. Drainage RB3 illustrated moderate channeling mainly at Features 5 & 6. We now know where to concentrate our monitoring efforts. Continue semiannual monitoring.
	97-4	2	Continue monitoring remedial work.

Site #	Sess.	Sched.	Comments
	98-1	3	
	98-4	2	
C:13:101			
	93-1	3	
	93-2	4	RETRAILING APPEARS TO BE WORKING; HOWEVER THE MAIN SPRING i BACKPACKING SEASON HAS NOT YET STARTED. IT MAY BE WORTHWHILE TO i CHECK THIS SITE AGAIN LATER THIS YEAR, EVEN THOUGH IT'S i MONITORING RANK HAS DECREASED.
	94-2	4	
	95-5	5	It is not necessary to monitor the site more than every 5 years due to the potential for human impacts and newly exposed cultural material. Due to the ineffective recording of the surface artifact unit, it was not found and thus, not recorded.
	96-1	5	The old Beamer Trail is recovering nicely. Old replications were taken. Monitor this site every five years.
C:13:131			
	92-2	2	
	93-2	2	
	95-1	1	Until a decision can be made about controlling erosion from people at this site, semiannual monitoring is recommended. Is this a site we want to sacrifice? Note: upon further assessment, this site will be discontinued from the river corridor monitoring program because site integrity has been lost due to heavy visitation (per L. Leap on 7/95).
C:13:132			
	94-1	4	
	96-2	1	This site is out of the survey zone and should be discontinued and turned over to the Park Service backcountry monitoring program. The site does appear vulnerable to further erosion by an adjacent gully.
C:13:272			
	92-1	3	
	93-1	3	
	93-2	3	ONLY ONE OF THE DRAINAGES AT LOCUS A, ON THE SOUTH SIDE OF i FEATURE ONE, MAKES IT ALL THE WAY TO THE RIVER. THE DEEPER GULLY i NORTH OF FEATURE ONE DEBOUCHES ON THE TERRACE. IT IS NATURALLY i CHECKED WITH DRIFTWOOD LOGS. THE NEW BEAMER TRAIL NOW PASSES i ABOUT 15 M. WEST OF FEATURE ONE. HOWEVER, THERE IS NO SIGN OF i INCREASED VISITATION DUE TO IT'S NEW LOCATION.
	94-1	2	This site is not threatened by any major impact, human or natural. However, because it is an active delta and many people (hikers and boaters) visit the area, it should be monitored on a regular basis.
	94-2	4	One test unit was placed in F2. (See map for details) The corner nails were left in order to relocate the area next time.
	95-1	3	The mapping of this site will be completed this spring. The site receives less visitation and less active erosion. Annual monitoring is sufficient for this site.
	95-4	5	Monitor every 3-5 years due to the close proximity of this site to the Beamer trail. Vegetation around features 4 and 5 might prevent potential impacts. A surface analysis unit was checked by L. Leap and L. Whisnant. Features 1, 2, and 3 are 13 feet above the 28,000 cfs level and should be examined after any large flood event.
	96-1	4	Generally the site appears stable. Monitor this site every three years due to its stability. Keep a close watch out for the terrace-based stream near Feature 3. Note: in 2/96 L. Leap changed the monitor schedule from every 3-5 years to biennial.

Site #	Sess.	Sched.	Comments
C:13:273			
	93-4	2	*NOTE SITE MAP ADDITIONS REROUTING THE BEAMER TRAIL OFF OF THE SITE, TO ALONG THE RIVER, ì WOULD SIGNIFICANTLY REDUCE VISITATION AND LOWER HUMAN IMPACTS. FEATURES ì FOUR AND FIVE CANNOT BE STABILIZED SO SOME FORM OF DATA RECOVERY ì IS CALLED FOR.
	95-1	3	Stabilization of feature 4 is recommended to slow the rate of erosion. The site was mapped for testing in November for trail work. Annual monitoring is recommended because of erosion at feature 4. All other features appear stable. In Feb 95, the trail by feature 1 should be moved.
	96-1	3	Feature 3 should be assessed for stabilization. Although it is currently stable, it could go at any time. Feature 5 is not on the map. We could not locate it. Double check photos.
	97-1	3	The site appears fairly stable with the exception of Features 3 & 5. The drainage arroyo does not appear as active as it looks. No major water movement in the arroyo was observed. The absence of water movement may present clues to the nature of the headcuts present. It may not be rain water causing impacts but the lack of sediment in the system and base-level lowering toward the river causing site impacts.
	98-2	3	
C:13:274			
	95-2	3	The roaster is shallow and any trace of charcoal is absent. Site significance is low but it is an "N" group site so monitor every year as a control site.
	96-1	6	Alignments are very questionable. Overall, this is a good "no impact" site because it is located on an alluvial terrace. Continue annual monitoring as a "N" control group site, but change the schedule to every 3 years to minimize impacts. Note: per L. Leap in 9/96 this site will be placed in the "inactive" group.
C:13:291			
	92-1	3	
	93-1	3	CONTINUING EXPOSURE OF FEATURES IS OCCURING DUE TO ARROYO ì WIDENING.
	93-2	3	
	94-1	3	We may want to install a check dam above Features 1 and 4.
	94-2	3	
	95-2	3	Monitor once a year after rainy season. We think one big wet storm may result in major erosion of this site. If the season is dry, maybe monitoring isn't necessary because monitoring itself is creating lots of impact. The slopes are steep, the soil fragile. After a big rainy season you may get info from the site due to exposure. We think this site should be left alone, minimal monitoring. Stabilize features 1 and 4 and then monitor to see how the site responds to stabilization.
	96-2	3	Stabilize the trail. Four spikes were placed 15.5 meters below (at 80 degrees) feature 5. These spikes are 2.5 meters apart and were set and photographed in preparation of the 45,000 cfs research flow scheduled for March 1996. Kim Crumbo previously assessed this area and noted that it was beyond repair.
	97-1	3	Management actions are difficult to determine due to the fragility of the site. It is recommended that this site be discussed as a candidate for stabilization at the next PA meeting. Small stairsteps in the gully and a basketweave checkdam in the arroyo could be beneficial. Taking a sample from the post also has the potential to reveal more information about this site.
	98-1	3	
C:13:321			

Site #	Sess.	Sched.	Comments
	93-1	3	THE SITE DESCRIPTION NEEDS TO BE MODIFIED TO REFLECT THE ORIGINAL i DESCRIPTION. THIS SITE DOES NOT APPEAR TO BE ASSOCIATED WITH i C:13:92. THE CERAMICS AND GROUNDSTONE WERE IN ASSOCIATION AT THE i TIME OF ORIGINAL RECORDING.
	93-4	3	F2 AND F4 ARE PROBABLY DEBRIS FLOW MATERIAL POKING UP THROUGH THE i DUNES RATHER THAN CULTURAL FEATURES (ROASTERS). F1 APPEARS TO BE i ASSOCIATED WITH THE NEARBY HISTORIC SITE (C:13:92). *NOTE SITE MAP CHANGES *NOTE IMACS A-FORM CHANGE *PHOTOS WERE MISLABLED IN THE FIELD AS PART OF ANOTHER SITE
	94-2	3	There was a test unit installed at Feature 5. See the site map for the location.
	95-2	3	C14 samples should be collected from feature 5. A test unit should be considered on the upper dune.
	95-5	3	The test unit shows definite downslope movement of artifacts and cobbles. Only one sherd was located and three were initially plotted. A new feature was noted, feature 7, a dispersed rectangular shaped fire-cracked rock debris pile 8 by 2 meters. Human disturbance may be the biggest concern at this site. The deposition noted, as I see it, just preserved the site. Continue annual monitoring.
	96-2	3	Data collection established at lowest site boundary near river (see excavation forms). This collection was part of activity in preparation for the 45,000 cfs research flow release from Glen Canyon Dam scheduled for March 1996. Continue annual monitoring.
	97-1	3	Watch basal erosion occurring at Feature 5. If this erosion continues, the upright slabs outlining the feature will collapse. This feature is also at risk from visitors because it is an obvious feature and nice looking. Watch the dune behind Features 5 & 6 due to its unstable appearance. Overall, the site is experiencing minor but noticable increases in natural impacts.
	98-2	3	
C:13:322			
	94-5	4	We need to document this site with photographs.
	96-2	4	None, this site is very stable.
	98-2	6	
C:13:323			
	94-5	5	Monitor every three years.
	98-2	5	
C:13:324			
	96-2	1	The area has been entirely altered from the trail work. This site could not be located and is probably under a big wad of jute matting. If this site is under the matting, it will likely never again be disturbed.
C:13:325			
	94-5	5	A .30 cal shell is noted near one of the upright posts. (See the drawing on the original of this form).
	98-2	5	
C:13:326			
	94-5	1	Discontinue monitoring this site. The revegetation project helps to protect the site.
C:13:327			
	96-2	4	Retrailing is currently underway. Trail obliteration is scheduled for November, 1996. Monitor this site every other year.
	98-2	4	

Site #	Sess.	Sched.	Comments
C:13:329			
	92-2	4	
	93-2	4	
	95-3	4	Feature 1 should no longer be monitored. Features 2 and 3 should be monitored biennially. Especially because of the new artifacts exposed in feature 2.
	97-2	4	Eolian deposits are filling in the gullies at Feature 2. There are no detrimental impacts to this site overall. It is very stable. M. Schroeder drew a new map incorporating Feature 2 and Feature 3 into the site boundary.
C:13:333			
	92-3	4	SITE WAS NOT PREVIOUSLY RANKED.
	93-5	4	
	95-5	5	Monitor every 4 years due to increasing eolian and alluvial activity. New charcoal was discovered on this visit and more features may erode out of this area. Watch this site after a very large rain or flood event. The drainage appears to have flowed recently. Testing and recovery of charcoal samples may establish this site at a specific date. Overall, the site looks good. We should monitor this site again due to active dune movement and drainage flow.
C:13:334			
	93-2	4	REPEATED MONITORING HAS THE GREATEST POTENTIAL FOR DAMAGING THIS ì SITE IN THE NEAR FUTURE. HEADWARD MIGRATION HAS THE GREATEST LONG ì TERM THREAT. STATIONARY CAMERA MONITORING MAY BE THE BEST OPTION ì HERE, OR INFREQUENT MONITORING EVERY TWO TO THREE YEARS AT THE ì MAXIMUM.
	95-2	5	This site is in stable condition. There is only minor movement and that was probably caused by people meandering around. Monitor every 3 years to observe human impact more so than natural impact.
C:13:335			
	95-5	5	Monitor in three years and compare good photos. If no change is found, test and then discontinue monitoring. Testing may give us some more information and cultural affiliation. Overall, the site looks good. This site is only impacted by the standard eolian processes.
C:13:336			
	92-1	3	
	94-2	4	
	96-1	4	Check Feature 4 photo and map. The monitor schedule recommended for this site is every five years. Note: in 2/96 L. Leap changed the monitor schedule from every 3-5 years to biennial.
	98-2	5	
C:13:337			
	97-2	5	Due to the isolated, dune-covered location, this very stable site is not being impacted by the operations of Glen Canyon Dam. Human visitation appears to be minimal, if non-existent. It is recommended that this site be monitored every five years.
C:13:338			
	96-2	4	Excavate feature 3 before it is gone. We are losing the feature due to bank slumpage. Monitor this site on a biennial basis.
	98-2	4	
C:13:339			

Site #	Sess.	Sched.	Comments
	93-4	3	*NOTE SITE MAP ADDITIONS EROSION FROM SLOPE RUN OFF AND HUMAN VISITATION ARE THE MAIN i THREATS TO THE SITE AND IMPACTS FROM THESE AGENTS ARE CURRENTLY i OCCURRING. THE BEAMER TRAIL SHOULD BE REROUTED ALONG THE RIVER i AND CHECK DAMS MAY HELP SLOW THE GULLYING TO SOME DEGREE.
	95-2	3	In February, Crumbo is going to retrail adjacent to feature 7. Monitor annually because of speedy erosion. It retrailing does not work, test the feature before it erodes away.
	96-1	3	Trail work completed in Feb. 95. Photos of trial work were taken 10/95, including Feature 7. Overall, the trail work is very good. It cuts close to Feature 7 but it is still intact and well hidden. Need to keep a close eye on Feature 1 and the entrenchment that is occurring there.
	97-1	3	No previous photos were available to monitor Features 4 & 5. The site looked good and stable during this visit. No management actions are recommended. After the heavy rains, much of the water percolated into the ground. There was very little sign of water channeling into the gully systems on the site. Further north of the structure, the Beamer/Tanner trail may be impacting the dune on it's eastern side. Compaction and several rills were observed, causing piping and collapse of sediment.
	98-2	3	
C:13:340			
	96-2	5	Retrailing is currently underway at this site. Obliteration of the trails is scheduled to be completed during fiscal year 1996. Monitor this site every 3 years.
C:13:342			
	92-3	3	
	93-3	3	
	95-2	4	The site should be monitored every other year, due to previous human impacts. The artifacts are out in the open and easy to see. They were moved in the past and increased visitation could result in missing artifacts or artifact movement.
	97-2	4	The site looks in very good, stable condition. Human impact is still a legitimate concern due to the proximity of this site to the Tanner/Escalante Trail. Monitoring will continue biennially.
C:13:343			
	92-3	4	
	93-3	4	
	95-3	4	Monitor every other year because of the potential of the artifact scatter, adjacent to the arroyo, eroding away. A charcoal sample should be taken from the cut before it erodes.
	97-2	3	The two rock alignments appear to be rocks naturally deposited in a line following the drainage flow and not cultural manifestations. There are several diagnostic artifacts including Black Mesa B/W and corrugated grayware. A basalt scrapper was identified. It is apparent that an extensive site existed on this dune at one time. Artifacts are mixed and eroding downslope. These features should be tested for subsurface significance. Monitor this site next year to determine the activeness of the erosion.
	98-2	3	
C:13:344			
	96-3	6	The site should be discontinued due to its location above the 300,000 cfs level. The ephemeral nature of the site (a few flakes in Feature 2) probably makes this site a low priority. The presence of a collapsed cist is questionable. It is also difficult to identify the site as a roasting feature. Check map location and replot one contour higher on river guide. Note: per L. Leap in 7/96, the site will be placed on the "inactive" monitoring list.
C:13:345			

Site #	Sess.	Sched.	Comments
	96-2	6	There is no reason to continue monitoring this site when there is so much legitimate work needing to be done. Per L. Leap in 7/96, put this site on the "inactive" monitoring list and perform testing.
C:13:346			
	96-3	5	Surface erosion can still be controlled by placing rocks in the headcuts. Stabilization should be done soon. Check map location and replot one contour higher. Continue monitoring every 3 years.
C:13:347			
	92-3	4	THIS SITE HAS A HIGH LEVEL OF ACTIVE EROSION. CONSIDERING IT'S ì LOCATION AND CONDITION IT SHOULD BE MONITORED ANNUALLY.
	93-3	4	
	95-3	2	There is a very high potential for additional artifacts becoming exposed. This site is located within an active arroyo and should be monitored closely.
	96-1	2	The arroyo shows evidence of surface erosion and it is connected to the river. Animal burrowing behind the slab is deepening. Even so, this site seems fairly unchanged. Annual monitoring is probably sufficient unless there is a big event (storm) which could expose or erode out more artifacts. The previous monitoring recommendation was semiannually. Note: in 2/96 L. Leap changed the monitor schedule from annual to semiannual. In 7/96, L. Leap added the recommendations to stabilize and excavate.
	96-3	2	This site is a good candidate for stabilization. It is on the list for total station mapping. Continue semiannual monitoring.
	97-1	2	More cultural materials continue to be exposed at this site in the active arroyo. There is a moderate amount of water that runs through this channel. A managment action of data recovery is worthy of discussion.
	97-4	2	Recommend data recovery to asses if installing checkdams will slow erosion of the arroyo and stabilize this site. The site appears to be in good condition. Continue semiannual monitoring. Per L. Leap in 5/97, testing is recommended.
	98-1	3	
C:13:348			
	96-3	4	NOTE: the artifact scatters have been labelled as Northern, NE, SE and SW. These designations have been written on existing photo labels to aid in identification. Perhaps in the future the gullies could be assessed and stabilized. The location plotted on the river map should be checked. The site appears to be one contour higher. Photo #10 identifies the NE scatter as "dogleash" area. This is also the analysis unit. The map shows SW corner as the analysis unit. Check the original site report and correct any photo or map discrepancies.
	98-2	4	
C:13:349			
	93-4	3	IT MAY BE WORTHWHILE TO MONITOR NICK POINT MIGRATION WITH A ì STATIONARY CAMERA TO RECORD CUTTING EVENTS. DATA RECOVERY IS IN ì ORDER AT THIS SITE AS THERE IS NO WAY TO STABILIZE IT.
	94-5	5	
	95-3	3	The arroyo cut is in an advanced stage, beyond practical stabilization. Continuation of monitoring and mapping as a form of data recovery is recommended. Expect new artifacts to erode from the main arroyo.
	96-2	3	Continue annual monitoring. Note the increase and loss of sediment in the drainage. The arroyo is too big for any remedial action to be effective. We think the process occurrs when water reaches this site and removes eolian sands. There is enough time between erosional episodes for new eolian deposition to occur. Until headcut movement is observed, we will consider the arroyo stable.

Site #	Sess.	Sched.	Comments
	97-1	3	The main activity at this site occurs in the arroyo. Continue annual monitoring in case newly exposed features are identified. If new features appear, data recovery will be recommended. Per L. Leap in 5/97, testing is recommended.
	98-1	3	
C:13:350			
	92-3	5	
	93-4	5	NOTE ADDITIONS TO SITE MAP.
	97-2	6	This site is in stable condition with no immediate or future disturbances likely. R. Hereford took a charcoal sample with a date of AD 240-585. No further work is recommended. This site is suggested for the inactive monitoring schedule.
C:13:352			
	96-2	5	There is a nice assemblage of artifacts at this site. This site is off the beaten path of backpackers and boaters so it remains in great condition. Monitor every 5 years. Discontinue monitoring Locus C. It is likely an artifact concentration from another area due to its location in a debris fan.
C:13:353			
	96-2	5	Minor changes have occurred, though overall the site is stable. Monitor every 5 years.
C:13:354			
	92-3	4	EVEN THOUGH THE RANK OF THIS SITE IS THREE, THIS SITE WARRANTS i ANNUAL MONITORING DUE TO THE NATURE OF FEATURE 1. ACCESS FROM i THE BOAT IS EASY.
	93-3	4	F1, F3 AND F4 ALL HAVE EVIDENCE OF PLANT GROWTH WITHIN THE i FEATURES. THERE IS MINOR SPALLING OFF OF OVERHANGING ROCK i FORMATIONS IN F1, F2 AND F3. F1 SEEMS TO HAVE SUFFERED i DETERIORATION MORE SINCE THE LAST VISIT THAN THE OTHER FEATURES. i THERE WAS THE SAME RATE OF DETERIORATION AS SEEN IN THE 9/92 i MONITORING.
	94-2	5	
	98-2	5	
C:13:355			
	93-2	4	
	93-5	3	THIS SITE NEEDS TO BE MAPPED WITH A TOTAL STATION IN ORDER TO i TRACK ARROYO EXPANSION.
	94-2	5	We may want to remap this site.
	98-2	4	
C:13:356			
	93-4		
	94-5	4	Note: in 2/96 L. Leap changed the monitor schedule from annual to biennial.
	96-3	5	Monitor every 3 to 5 years. The arroyo at this site is already too large to stabilize. Note: per L. Leap in 7/96, data recovery is recommended. Per L. Leap in 5/97, testing (rather than data recovery) is recommended.
C:13:357			
	94-5	4	Note: in 2/96 L. Leap changed the monitor schedule from annual to biennial.

Site #	Sess.	Sched.	Comments
	96-3	1	Discontinue monitoring this site. The site is located above the mesquite zone on a low angle of transport slope underlain by Dox sandstone. Impacts to this site are minimal. Note: per L. Leap in 7/96, testing is recommended.
C:13:358			
	96-3	6	This site exists in an uplifted root ball. There is no integrity left, no further information is attainable at this site. Discontinue monitoring. Note: per L. Leap in 7/96, the site should be tested for subsurface materials and placed on the "inactive" monitoring list.
C:13:359			
	92-1	3	
	93-3	3	THE GULLY THAT F2 IS LOCATED IN HAS MADE MINOR IMPACTS ON THE ì FEATURES. IMPACTS ARE; MINOR SPALLING OF ROCK ALIGNMENTS, ì CHARCOAL THAT WAS LOCATED IN THE GULLY ABOVE THE FEATURE (SW) HAS ì BEEN WASHED DOWN GULLY TOWARDS THE RIVER. THE GULLY CUTBANKS ì APPEAR TO BE ONLY SLIGHTLY ERODED SINCE LAST VISIT. CRYPTOGAMIC ì SOIL STILL GROWS DOWN THE CUTBANK SLOPE INDICATING MINOR IMPACTS ì FROM THE DRAINAGE. THE THIN VERTICAL SANDSTONE SLAB UPSTREAM FROM ì F2 IS SPLIT AND UNSTABLE. F3 SEEMS TO HAVE BEEN UNDISTURBED SINCE ì THE LAST MONITORING VISIT. THE CRYPTOGAMIC SOIL IS HEAVY AND ì UNDISTURBED, NEW VEGETATION IS GROWING WITHIN AND AROUND THE ì FEATURE.
	94-2	4	
	95-3	5	Continue monitoring every 3-5 years. Any other monitoring schedule would establish trails through this site. The stationary camera at Escalante Creek was taken out by M. Manone at 10:30. This site looks stable and in good condition. The stationary camera will be relocated to an unstable site (C:13:006).
	96-2	3	Feature 2 could be helped at least for the short term by a few check dams. The small drainage meanders for <30 to 40 meters and has a width range of 30 to 180 centimenters. Depths are less than one meter. This will soon move from the gully to the arroyo category. Monitor the site every 3 years. Note: per L. Leap in 3/96 the monitoring schedule was changed to annual. Per L. Leap in 7/96, data recovery was added to the recommendations and check dams removed.
	97-2	3	Features 1 and 3 are stable. Feature 2 is being impacted by an active gully. It is recommended that checkdams be placed in the gully to curtail further impacts. Seven small checkdams would need to be constructed of local materials. It is anticipated that this work would take approximately 3/4 of one day to complete.
	98-2	3	
C:13:360			
	97-4	5	There were no baseline photographs to make comparisions with. The site appears fairly stable, monitor every 5 years. If no changes are observed during the next monitoring episode, place on the inactive list.
C:13:361			
	97-2	6	The site is in very good and stable condition. It is also well-protected from physical and visitor-related impacts. Therefore, it is recommended that this site be placed in the inactive monitoring schedule.
C:13:362			
	96-2	5	Trail obliteration may protect features 2, 3, 4, & 5. If these trails entrench, they could cause more impacts and uncover more artifacts. This may be a good time to prevent further impact. Monitor the site every five years.
C:13:363			
	97-2	5	The site is mostly unchanged since it was initially recorded in 1991. There is only the presence of packrats as a potential souce of disturbance. This site may be above the project boundary and should be placed on the inactive monitoring list after monitoring the site in five years. Note: per J. Balsom in 12/96 this site should be monitored in 3 years.

Site #	Sess.	Sched.	Comments
C:13:364			
	94-5	1	Since this beach is closed and no change has occurred since 1991, I see no reason to continue monitoring this site.
	96-3	5	This site is stable. Continue monitoring every 5 years.
C:13:365			
	92-3	4	THE CULTURAL ORIGIN OF FEATURE 1 AND ASSOCIATED GROUNDSTONE ITEMS i IS HIGHLY QUESTIONABLE; IT LOOKS NATURAL. HOWEVER, THERE ARE A i COUPLE OF CHERT FLAKES NEARBY THAT ARE CLEARLY ARTIFACTS.
	93-3	4	FEATURE 1 AND ASSOCIATED GROUNDSTONE ITEMS ARE NOT CULTURAL.
	94-1	3	A research design will be written before the proposed 45,000 CFS.
	94-2	4	
	95-3	6	The only impact to this site is possibly from animal trailing. Monitoring of this site has been extensive. Feature 2 has potential for impact because of its minor gullying but the big rains haven't impacted it as of yet. The only other possible impact is from rising river levels. Discontinue monitoring this site until a high CFS does occur then monitor after the high water release. Note: per L. Leap in 2/96, monitor annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
C:13:367			
	95-2	3	The site is stable; no measures should be taken. Although it is a control site from the "N" group, continue monitoring yearly.
	96-1	5	This site is in good condition overall. It is well-protected by the large boulder overhang. Continue annual monitoring as a "N" control group site. Note: per the 96-1 Trip Report, this site will be deleted from the GCES program because it is above 300,000 cfs. The site is out of reach of current and catastrophic future dam flows. It is above or on a Pleistocene terrace. There is no alluvium, just residual sediment. Note: per L. Leap in 9/96 this site will be returned to the control group and monitored every 3 years.
C:13:368			
	92-3	4	
	93-3	4	
	95-5	5	Test for depth of subsurface material and collect charcoal samples for a possible date. If cultural material is found during testing, then continue to monitor the site every five years for human impacts, increased gullying, or missing artifacts. If no cultural material is found, then discontinue monitoring.
C:13:370			
	96-2	5	This site is probably located right at the 300,000 cfs level. There is some movement of artifacts, so monitor every 5 years. Note: per L. Leap in 7/96, stabilization is recommended.
C:13:371			
	92-1	3	
	92-3	3	
	93-2	3	
	93-4	3	NOTE CHANGES TO THE SITE MAP.
	94-2	2	
	94-4	2	The site was mapped with a total station unit. Monitoring should occur with only two people. The slopes are easily eroded and the features are mostly on slopes.

Site #	Sess.	Sched.	Comments
	95-1	2	The site has high potential for natural impacts. It is a very fragile site and should be monitored twice a year. There is a strong potential for new materials to be exposed.
	95-4	2	Q. #17 Con't: will probably have future impact on the fire-cracked rock eroding downslope. Look at photos of 2/95 to see any comparisons. New sheet washing was noted in 2/95 but those photos were not available for comparison. The area does appear slightly deeper. It is still approximately 2 meters below the bone which was recorded earlier. Healthy vegetation below the sheet washed area. The dune is stable. Feature 1 is stable. Q. #31: Monitor semiannually because of on-going erosional changes. Make photo comparisons of 2/95 to this session to see if more change occurred during the rains of early March. This site is fragile. Maybe plant native vegetation in the gullies to slow down the erosion. '
	96-1	2	The site is an obvious example of erosion and slumping, hastened by the loss of supporting lower beach sand. Near Feature 2, minor erosion control procedures could be implemented such as placing cobbles and large rocks in the gully to slow down erosion. Test the charcoal near Feature 2. This is a "second" assessment.
	96-3	2	This site is still settling from side canyon flooding in 1990. Monitor semiannually. Revegetation may increase site stability. In February 1996, 3 check dams were installed near feature 3 by the Zuni Conservation group and National Park Service employees. Also, two radiocarbon samples were taken from features 2 and 4.
	97-1	2	The western outside edge of checkdam #2 shows some minor sediment deposition. Checkdam #3A is also experiencing minor deposition. The site is in fair condition and exhibits erosion in the forms of bank slumping and sheetwash. A charcoal sample may be taken from Feature 3 during the scheduled data recovery trip in April, 1997 for comparison with previous dates obtained from Features 2 and 4 during 96-3 monitoring activities. Continue semiannual monitoring.
	97-4	2	The checkdams were monitored. No changes were observed in the three checkdams. No run-off signs are present since installation of the checkdams.
	98-1	2	
	98-4	2	
C:13:372			
	96-2	6	Although the site is within the 300,000 cfs (probably right at it) level, L. Leap recommends discontinuing monitoring activities. The site is very stable and located in a discrete position. Note: per L. Leap in 7/96, this site will be placed on the "inactive"monitoring list.
C:13:373			
	97-2	3	The feature and sherds are in a precarious position on the lip of a river-side dune. The location should be accurately plotted by instrument. Monitoring only documents the demise of this unique feature. It is recommended that data recovery be conducted at this feature. Repeat photography of the fragile slope will compromise the sites integrity. A single monitoring visit increases erosion along the dune face. Branches adjacent to the feature on two mesquite limbs were historically sawed out. Monitor every three to five years. The previous biennial schedule is too frequent and potentially damaging to the site. Note: per J. Balsom in 12/96, this site will be monitored annually.
C:13:374			
	92-1	3	
	93-4	3	THIS SITE SHOWS NO RECENT EVIDENCE OF VISITATION. THERE IS ì NOTICEABLE EROSION SINCE THE LAST VISIT, ESPECIALLY AT F2, A ì BURIED HEARTH WHICH HAS LOST SOME ROCKS AND CHARCOAL. F3 HAS LOST ì A GOOD AMOUNT OF MATTING AND THE CORN COB SINCE IT WAS RECORDED. ì THIS SITE NEEDS TO BE TESTED AND STABILIZED AS SOON AS POSSIBLE.
	94-2	1	Discontinue monitoring this site. It is out of the project area.
C:13:377			
	96-2	5	Nothing can be done about the natural eolian processes that might uncover or cover artifacts at this site. Monitor in 5 years to re-evaluate site condition and visitor impacts.

Site #	Sess.	Sched.	Comments
C:13:379			
	92-1	3	
	93-2	3	
	93-4	3	NOTE SITE MAP CHANGES.
	94-2	4	
	96-2	5	This site is bordering just at 300,000 cfs. The structures are very questionable and the site is located on a Pleistocene terrace. Monitor every 5 years. Note: per L. Leap in 7/96, stabilization is also recommended.
C:13:381			
	92-3	3	
	93-3	3	
	93-4	3	NOTE THE SITE MAP CHANGES. THE PHOTOS FOR THIS SITE NEED LABLES.
	94-2	4	
	96-2	5	A single check dam would save us a lot of consternation later. Turn the site over to the backcountry monitoring office. Note: per L. Leap in 3/96 the monitoring schedule was changed from discontinue to monitor every 5 years.
C:13:384			
	92-1	3	
	93-3	3	
	94-2	5	Note: in 2/96 L. Leap changed the monitor schedule from annual to every 3-5 years.
	97-2	3	We could not locate the enigmatic historic rock feature or the snuff can and china plate. Coder says the artifacts were removed and are now at the South Rim. A new feature (F 4) was located above Feature 3 on the terrace. Directly above Feature 3 on the bank surface are a can fragment, milled board, and other small metal fragments. This is not a collection pile but a scatter of historic trash. Monitor this site every three years. Note: per J. Balsom in 12/96, this site will be monitored annually.
	98-2	4	
C:13:385			
	93-4	3	NOTE THE SITE MAP CHANGES.
	94-2	3	A 1 x 1 m. artifact sample unit was placed at the site. See the map for details.
	95-5	5	Monitor every 4 years due to feature and artifact location. The movement of artifacts downslope may increase and more may be uncovered. We won't know until the site is monitored in a few years. This area should be monitored after a large rain. Note: upon further assessment, this site will be monitored biennially (every other year) per L. Leap on 7/95. On 2/96 L. Leap changed the monitor schedule from biennial back to every 3-5 years.
C:13:386			
	93-2	4	THIS IS A FRAGILE FEATURE AND SHOULD BE MONITORED ANNUALLY. THE ì SCORE (#45) DOES NOT REFLECT THIS BECAUSE THE HUMAN IMPACT SCORE ì IS LOW.
	94-2	4	
	96-1	4	Keep schedule on biennial schedule due to the dune location and gradient. Overall, the site is in good to fair condition. Watch for more erosion on the downslope side.

Site #	Sess.	Sched.	Comments
	98-2	4	
C:13:387			
	96-1	3	There was no previous photo of Feature 1,. New ones were taken of the major burrowing. On the photos, Feature 1 is acutally Feature 2 and needs to be changed. Cut mesquite is present from gully at Feature 6 to the arroyo on the west side. It is possible that this is the work of the trails crew. New photo was taken of Feature 5 burnt limestone. There were no previous photos of Feature 5 so we were unable to make comparisons. The dune is very loose. Monitor the two metates annually. Monitor the remaining features every 3 to 5 years due to the loose nature of the dunes. Bury or move metates if integrity is further threatened.
	97-1	3	The metates were the only cultural materials monitored at this site. The rest of the site will be monitored in FY98 or FY99.
C:13:389			
	96-3	3	Dismantle the new courses added to feature 1 and the log/rock structure. Recommend making this site less appealing for visitor use. Retrailing would also help protect the features. Continue annual monitoring.
	97-2	3	There is a faint trail leading from Nevill's beach to the site. It is possible that the displacement of the wall element is due to visitor impacts. The biface in the overhang was not located. There are minimal physical impacts to this site. Overall, the site is very stable.
	98-2	3	
C:13:392			
	96-3	3	Monitor annually due to visitation impacts and fire damage. It would be best to monitor after the monsoon season to see fire impacts.
	97-2	1	Keep tabs on the trailing. This site is affected most by backpackers. It is also located on side canyon sediment from Red Canyon and so the site is beyond the parameters of the river corridor monitoring project. This site should be turned over to the park-based, backcountry monitoring project.
C:13:393			
	96-3	5	The site appears stable. There does not seem to have been any changes since the initial recording of this site during the survey. Continue monitoring every 5 years.
C:13:486			
	97-4	5	Due to recent spalling in the month and a half since the site was first identified, the site will be monitored again in five years. If no further changes are evident, place the site on the inactive monitoring list.
G:02:001			
	92-H		THIS SITE HAS FEW DIRECT IMPACTS AS IT IS SITUATED ON A LEVEL ì SAND-GRAVEL BED, "PROTECTED" ON NEARLY ALL SIDES BY TALL OUTCROPS ì OF BASALT. SOIL HAS PROBABLY ACCUMULATED IN THIS AREA, SO SOME ì DEPOSTION IS LIKELY. THERE IS NO GULLYING OR ARROYO CUTTING, JUST ì VERY MINOR SHEET WASHING. THERE ARE NO OBVIOUS HUMAN IMPACTS.
	95-5	1	This site is very descreet, with a very low profile. Although it would be a nice place to camp, access would be a pain. Therefore, discontinue monitoring.
G:02:009			
	92-H		AT THIS SITE CONTINUOUS AND INCREASED VISITATION ARE IMMINENT AND ì LONG TERM THREATS. THE SITE WILL EVENTUALLY DETERIORATE DUE TO ì VISITATION. THE SITE HAS SEEN MANY SIGNIFICANT CHANGES SINCE IT'S ì RECORDING IN 1978 (SEE FIELD NOTES FOR DETAILED ACCOUNT OF ì CHANGES).
	95-5	3	Obliterate multiple trailing. This will not stop the human impact but it may make a difference.

Site #	Sess.	Sched.	Comments
G:02:032			
	92-H		
	95-5	1	This site was not monitored because it is located high above the high water mark in a side canyon.
G:02:100			
	95-5	5	The site has been mapped by the project using a total station. The Bureau of Reclamation team may want to spend another day at this location filling in topography. Possibly turn this site over to the Hualapai for monitoring down the road.
G:02:101			
	95-5	5	The site is well-protected from the elements and it appears that very few people visit it. Due to the easy access and high visibility it is recommended that the site be monitored every five years.
G:02:102			
	95-5	1	Discontinue monitoring because we don't like climbing up the steep schist slope and the site is above the 300,000 cfs mark. This may be a good site for the Hualapai to monitor as a backcountry monitoring project.
G:02:103			
	95-5	1	Define a better trail to avoid multiple trails to this site.
G:02:105			
	95-5	1	Discontinue due to site stability. This would be a great site for researchers interested in historic sites. Further analysis of many of the cans, tobacco, etc. may give a better time period to this site. The site appears only impacted by normal gravity similar to every other slope down here.
G:02:106			
	95-5	1	Discontinue monitoring. It seems that it is dangerous for us to hike here. Furthermore, too many of us may cause more impact.
G:02:107			
	95-5	1	Discontinue monitoring. This may be a site of interest to the Hualapai. The structure probably served or may still serve as a hunting blind.
G:02:108			
	92-H		
	95-5	5	Monitor every 5 years now that we have photos to compare. The canyon is narrow here and the site would be flooded during very high water.
G:03:002			
	93-3	3	F1: THERE IS A NOTICABLE TRAIL THROUGH THE MIDDLE OF THE FEATURE. F2: THERE IS A SLIGHT TRAIL THROUGH THE MIDDLE OF THE i ROASTER.
	94-2	3	Monitor this site every year because this is an area with frequent visits by researchers.
	95-3	4	The site looks very stable. There is no reason to visit this site more than biennially.
	97-2	5	Overall, the site is in excellent condition and only subject to minor surface erosion. Cryptogamic soil growth has increased and filled in many of the trails that were formed on the survey. Monitor every four years because of the stable condition.
G:03:003			
	92-1	3	

Site #	Sess.	Sched.	Comments
	93-2	3	
	94-1	2	
	94-3	2	We need to talk with Jan Balsom and Kim Crumbo about the Hualapai desires for this site. The main trail should be shut down from the drainage. We will map this site on the May trip.
	95-4	2	All the features with the exception of feature 1 are stable, with good vegetation. Feature 1 is experiencing a lot of human impact. People are sleeping at this feature. This is a good site to monitor human impact. The March rains widened the side canyon and wiped away a major trail entrance to the site. We photographed the new arroyo cuts and will monitor to determine if a new main trail leading up from the river begins to form. Reassess the monitoring schedule after the next monitoring trip (after the tourist season).
	96-1	2	Retrailing and obliteration of the trails to this site are on hold, pending further negotiations with the Hualapai tribe.
	96-3	2	The obliterated trailwork looks excellent and stable at this time. Monitoring the trail work in the fall will give a more comprehensive understanding of the success of the obliteration. Continue semiannual monitoring until the success of the trailwork can be determined.
	97-1	2	Question 26: The point and chert biface were placed near a prickly pear and a creosote bush below Feature 1. Visitation has resulted in the displacement of rocks at the Feature 1 structure. Question 30: We may need to reasses this site due to increased human impacts. The use or abuse may be uncontainable on-site. Either establish a different trail or series of trails or consult with the Hualapai about regulating site access.
	97-4	2	The site is stable. The impacts observed at the shelter and the features are related to visitation. Continuing communication with the Hualapai and education with the river-running community is necessary to curtail further impacts. Monitor in October 1997 to evaluate the effectiveness of totally blocking access to the shelter.
	98-1	3	
	98-4	2	
G:03:004			
	93-1	3	THIS SITE HAS BEEN RECEIVING CONSIDERABLE VISITATION. MORE ì FREQUENT MONITORING IS WARRANTED DUE TO INCREASED VISITOR USE AND ì IMPACT.
	93-2	3	THIS SITE HAS BEEN RECEIVING CONSIDERABLE VISITATION. MORE ì FREQUENT MONITORING IS WARRANTED DUE TO INCREASED VISITOR USE AND ì IMPACT.
	94-1	2	Monitoring is essential for this site because of its popularity with river traffic and the increase of human impact.
	94-4	2	Total station mapping done 5/8/94. The trail north of Features 2 and 7 should be obliterated because it is getting pretty deep and has the potential of becoming a gully.
	95-2	2	Continued from #17..... at feature 3 also. Feature 4 is stable. Feature 5 has minor deflation on the east slope. Another trail has formed along the base of the roaster. Feature 6 is showing signs of sheetwashing on the western edge. There is potential for future gullying. Severe surface erosion is beginning to form on the northern boundary of feature 6. It is not quite a gully but it is very active. Monitor twice a year because human impacts are vey active. Obliterate the multiple trails and create one main trail. This may be a good place for artifact analysis units.
	95-4	3	The impacts at this site are strictly human. It is well known because of the Bundi jars and a popular camp nearby as well. Natural impacts don't exist at present. Features are stable in that regard. The big question is how do we cut back the human impact? Obliterate trails that cut through features, and maybe retrail one trail to the overhangs where the jars are located. I think it would be difficult to keep the public out when this place is already a hot spot. Obliterate trails, monitor in a year and reassess the monitoring schedule after trail obliteration. Keep in mind that although the artifacts are moving around, they are not leaving the site.

Site #	Sess.	Sched.	Comments
	96-2	3	The trail work appears to be working. No increases in visitor impacts below feature 1. The vandalism appears to be very recent at feature 1. Animal burrowing at features 1 and 6 are the main natural impacts. Visitor impacts at feature 1 have also increased. A historic can was found in the gully north of feature 6. It is 7.5 centimeters in diameter, with a solder dot. This can was marked on the map. Also see site map for vandalism.
	97-1	3	Continue annual monitoring. The site is experiencing both physical and visitor-related impact. Note: There is an unrecorded slab-lined roaster approximately 1 m diameter about 1 m southeast of the square boulder in front (southeast) of the Feature 1 shelter with bundy jars. We took pictures of it. It is right in the pathway between Features 1 and 2 and getting a lot of foot-traffic over it. Per L. Leap in 5/97, data recovery is one recommended option for this site.
	98-1	3	
G:03:006			
	94-1	5	This site is in great condition.
	98-2	6	
G:03:019			
	95-3	5	Monitor every 3 to 5 years because of the degree of stability of the site and the presence of some human impact. At this time, the trail is the impact of most concern.
	96-1	5	The only disturbance noticed was the packrat midden near the coarsed wall and cleared area. Overall the entire site looks great with no human impact identified. Continue annual monitoring as a "N" control group site. Note: per the 96-1 Trip Report, this site will be monitored by the Park backcountry program because it is above the 300,000 cfs level. It is located on talus, and the maximum dam release or a catastrophic flood could not reach this site. Note: per L. Leap in 9/96 this site will be returned to the control group and monitored every 3 years.
G:03:020			
	92-1	3	
	93-3	2	NATURAL EROSION IS THE MAIN IMPACT OCCURING AT THIS SITE. THE ì SITE IS ERODING AND RECEIVING VISITATION DUE TO PROXIMITY TO TWO ì CAMPS, SO MONITORING PRIORITY HAS INCREASED. WE NEED TO PAY MORE ì ATTENTION TO GULLIES AND TRAILS ON THE SITE AND TAKE MORE ì PICTURES OF THEM AS THIS IS WHERE EROSION IS MOST LIKELY TO BE ì OBSERVABLE. F5: APPEARS TO BE A NATURAL DEBRIS FAN COLLUVIUM, NOT CULTURAL. ì DISCONTINUE MONITORING F5. F7: HAS BEEN ERODED BY HEADWARD MIGRATION OF ARROYOS AND THE ì WIDENING OF ARROYO WALLS.
	94-4	2	Feature 2 needs help! It is suggested that dead vegetation be placed in the gully to catch sediments and slow down erosional impacts, preferably before the monsoon season. Check dams may be needed in the future if the dead vegetation doesn't work. The concern though is that the check dam would divert water, creating a new gully at this fragile site. Feature 7 has been exposed a great deal in this last year. The Hopi opinion is to do some charcoal testing at Feature 7 and a profile.
	95-2	4	Discontinue monitoring features 3 and 4. The gully at features 2 and 7 should be closely watched. Currently, the gullys do not threaten the features but we may want to take soil and C14 samples if it is determined that the gullies will impact the features.
	95-4	3	Question #17: At feature 1 the charcoal lenses are gone from eolian deposition or washing away. Animal bone is still present. The head cut of the gully on the east side of feature 2 is moderately active. New sluffs have occurred since September 1994. The gully continues to erode. Locus B, features 3 and 4 are stable. There is animal trailing through locus B but it is not currently impacting the loci. Question #31: This site was monitored in September 1994 but none of the photos were present during this session. We had 1993 photos. Because of the active erosion at features 2 and 7, the recommended monitoring schedule is annual,. Locus B is incredibly stable and we recommend discontinuing monitoring.

Site #	Sess.	Sched.	Comments
	96-3	3	Q. 17: Feature 7 appears unchanged, including the nick point of the gully. There is a decrease in vegetation. Although the feature is precariously perched on the gully edge, it appears stable until the next good downpour. Overall, the site is highly stable. Features 1 and 7 are vulnerable and should be monitored perhaps in the fall on an annual basis. Fall monitoring is beneficial to assessing visitor impacts in this area.
	97-1	3	A large amount of charcoal is eroding out of Feature 7. It is recommended that this feature be excavated in the next couple of years. Carbon dates and botanical remains should be analyzed.
	98-1	3	
G:03:023			
	93-1	4	
	93-4		THIS SITE IS CONTEMPORARY WITH THE CHIMNEY ACROSS FROM PUMPKIN i SPRING AND MAY BE RELATED TO IT. MORE HISTORICAL RESEARCH SHOULD i BE CONDUCTED TO TRY TO ASCERTAIN WHO LEFT THIS MATERIAL HERE AND i WHAT CIRCUMSTANCES BROUGHT THE PERSON TO THE GRAND CANYON IN THE i 1930'S.
	95-5	1	The site is too high to continue monitoring under this program. Backcountry monitoring is highly recommended to document human visitation.
G:03:024			
	93-4	4	THIS ENTIRE GRANITE PARK AREA IS VERY FRAGILE AND WILL i DETERIORATE FROM EROSION IF VISITATION CONTINUES AT THE PRESENT i RATE OR INCREASES. ANY FORM OF GROUND DISTURBANCE WILL WORSEN THE i EROSION SO CHECKING GULLIES WITH ROCK WALLS IS NOT ADVISABLE. i FILLING THE GULLIES WITH BRUSH MIGHT SLOW EROSION ENOUGH TO ALLOW i THE AREA TO STABILIZE. IF NO ACTION IS TAKEN, THIS AREA WILL i UNDOUBTEDLY EXPERIENCE CONTINUED AND INCREASING SEVERE GULLYING i AND ARROYO CUTTING. THE SITE MAP NEEDS TO BE RE-DRAFTED TO i ACCURATELY MAP THE FEATURES IN RELATIONSHIP TO ONE ANOTHER. THIS i COULD BE ACCOMPLISHED THROUGH GPS AND/OR LARGE SCALE AERIAL i PHOTOGRAPHS. THIS AREA SHOULD ONLY BE MONITORED IN THE LATE FALL i OR WINTER AFTER THE MAIN VISITATION SEASON IS OVER AND THE i VEGETATION HAS DIED BACK. * NOTE SITE MAP ADDITIONS.
	94-5	2	
	95-3	4	Recommend monitoring every other year because of impacts to Feature 3. We also need to replot some features on the map.
	97-2	3	The main concern of this site is the active gully adjacent to Features 2 and 3. We recommend biennial monitoring because of the active gully. If comparison photos show increased erosional activity, consider data recovery and/or checkdam construction. The old map was misleading and we have created a new map. Note: per J. Balsom in 12/96, this site will be monitored annually.
	98-1	4	
G:03:025			
	93-2	3	
	94-2	3	
	95-3	4	Monitor every other year because of the possibility of human impact. A lot of people camp here. We were here during heavy rains. Granite Park flashed and so did 209 Canyon. The site was not impacted.
	97-2	5	The site is in great condition. All features are stable at this time. Checkdams were placed in the arroyo adjacent to Feature 7 in February, 1996 to slow down headcutting of the arroyo into the site area. Recommend monitoring every 4 years because of the stability of the site.
G:03:026			

Site #	Sess.	Sched.	Comments
	92-1	3	
	93-2	3	
	94-2	2	This is a large and unique site. NPS resource management should confer with the Hualapai cultural resource representative to determine a retrailing plan.
	94-5	2	
	95-3	3	Monitor annually due to the nautral impacts (gullies, arroyos) surrounding the site. The large amount of visitation is also a concern regarding exposed artifacts at certain features. Retrail and obliterate old trails that pass near features 1, 3, 5, and 6. This might reduce trailing and other impacts due to visitation. Continue monitoring and increase the photo collection at this site.
	96-1	3	For the rehabilitation crew, obliterating trails should be the main objective, funnelling traffic into one main trail. Trails are becoming gullies and vise versa. In previous monitoring session forms, "perishables" should be non-applicable.
	97-1	3	One area of the trail obliteration work showed some evidence of people hiking through it near Features 5 & 6. This site survived the summer tourism and is in fair condition. There are some defined trails from the main trail, leading up the dunes. Once on top of the dunes, the trails disperse. It is recommended that trail work continue at these new locations before the new trails become established. The trail work completed in February, 1996 looks good with no new trails forming near them. This site appears to be in better shape than G:03:003
	98-1	3	
G:03:027			
	92-3	4	
	93-2	4	
	95-5	1	Discontinue monitoring unless there is a major flood.
G:03:028			
	93-2	3	
	94-2	2	The "recommended measures" in question 29 are dependent on NPS Resource Management (K. Crumbo) amd the Hualapai Tribe (L. Jackson).
	94-5	2	R. Hereford has mapped the entire area. We should continue semiannual monitoring to ensure that the site is in stable condition for awhile. It is important to monitor when there is little vegetation.
	95-3	4	The only impacts to this site are human trailing. No natural impacts are apparent. There is a lot of vegetation. This area (site) could be monitored biennially. If Hualapai's want to monitor area for human impact, they should do it, not us.
	97-2	4	Monitoring Feature 4 is probably not necessary, however, a photograph was taken. Locus A and F are the priority areas for future monitoring due to the proximity of the site to the slope and trails. The rest of the site is very stable. The lower trail obliteration work from the camp to the terrace has been destroyed by visitors. This is the section that leads directly to Loci A and F.
G:03:029			
	93-5		
	95-2	1	This site is in no danger of natural or human impacts. Monitoring is unnecessary.
G:03:030			
	96-3	4	Monitor the gully every other year due to presence of nick points in the gully. The site is above the 300,000 cfs level, but because the drainage is terrace based, monitoring should continue. Note: per L. Leap in 7/96, check dams are recommended.
	98-2	4	

Site #	Sess.	Sched.	Comments
G:03:032			
	95-1	5	Presently, this site is stable. The site should be monitored every three years due to the site location near a side caynon, arroyos and gullies.
G:03:033			
	96-2	4	The site looks very stable. Monitor every five years. Note: per L. Leap in 3/96 the monitoring schedule was changed to biennial.
	98-2	5	
G:03:034			
	94-4	3	Burial area was covered with deadfall and pendant? buried. Monitors should check for any additional erosion. Add to existing map or map with total station.
	95-5	4	Question # 17 continued: Directly impacting the feature on the south side. Bank slumpage is also present Question # 31: Watch the erosion at features 8 and 9. Testing may be a good idea, then let the features erode away. Discontinue monitoring feature 1 because it is too high.
	97-2	4	The gully on the south side of Feature 9 is not yet impacting the feature. Less vegetation is visible on the north side of this feature. Cryptogamic soil is stabilizing the feature. Feature 10 is stable with a few flakes present. No photo was available to compare Feature 11, but no artifacts or bone were visible. We recommend discontinuing monitoring Feature 1 because it is out of the project area. Watch for erosional impacts to Features 8 and 9.
G:03:037			
	97-2	5	Overall, the site is stable. We recommend monitoring the site every three to five years since Locus B has surface erosion in the artifact concentration area.
G:03:038			
	96-2	4	The site tag was mislabeled (G:3:44 D-crew). The tag was re-labeled and placed in the same place. Monitor in three years now that we have photos. A large rain event could cause more impacts to features 1 and 3. The site has minor impacts that have potential for a larger scale based on heavy local rains. Note: per L. Leap in 3/96 the monitoring schedule was changed to biennial. Per L. Leap in 7/96, stabilization is recommended.
	98-2	4	
G:03:040			
	94-2	3	
	95-3	3	This site should be visited during the next monitoring session. Photos were not accurate and erosion comparisons could not be made. The map was modified. A monitoring schedule cannot be recommended at this time.
	96-2	3	This site was mapped with an instrument during the 96-2 monitoring trip. Note: per L. Leap in 7/96, stabilization and data recovery are recommended.
	97-1	3	Continue annual monitoring due to the increase in the presence of the gullies. The site was mapped with an instrument in August, 1996.
	98-1	3	
G:03:041			
	96-2	4	The features at this site appear stable though the terrace is being impacted by gullying. Monitor every 3 years and possibly check the gullying during the monitoring at G:3:64. Note: per L. Leap in 3/96 the monitoring schedule was changed to biennial. Per L. Leap in 7/96, stabilization is recommended.
	98-2	3	
G:03:042			

Site #	Sess.	Sched.	Comments
	92-2	4	
	93-2	4	
	94-2	5	
	98-2	6	
G:03:043			
	94-4	5	
	98-2	4	
G:03:044			
	92-1	3	
	93-3	4	THIS SITE HAS NOT BEEN RECEIVING VISITATION AND EROSION HAS NOT i BEEN SIGNIFICANT SINCE THE SITE WAS RECORDED IN 3/91.
	94-2	3	F3 should be tested at some point. The site should be monitored annually because the sherd is a good marker.
	95-2	3	Monitor bottom roasters only, those located in deltas. We may want to excavate roasters or collect pollen samples before they completely erode away.
	96-3	3	The shelters are far above the 300,000 cfs level. Perhaps they should be discontinued and only Locus B should be monitored. This site is undergoing many natural impacts and should be monitored at least every other year. Check dams may prevent increased erosion at Locus B. Assessment should be done soon before more of the roasting features erode into the arroyo.
	97-1	3	Locus B was the only area of this site monitored due to the high shelter location of Locus A. At this stage in the arroyo development, checkdams may prevent increased erosion. This recommendation was agreed upon by all monitors and assessment was completed by L. Leap.
	98-1	4	
G:03:046			
	94-3	3	This site should be monitored annually by a single archaeologist, not a group. The site was remeasured with the abney level and is 17 ft. above the 28,000 cfs line.
	95-5	6	Discontinue monitoring unless there is a flood over 50,000 cfs. Also, may need to map (just a site map). There is a chance that subsurface materials exist. Note: per L. Leap in 2/96, this site will be monitored annually as a control group site. Note: per L. Leap in 9/96 this site will be placed in the "inactive" group.
G:03:048			
	95-1	5	Three to four year monitoring of this site is recommended due to the steepness of the slope where the artifacts are located. There is a possibility of spalling from the Tapeats sandstone.
G:03:049			
	97-2	5	This site has seen little change since the survey. Monitor every three to five years due to minimal visitor-related disturbances. New collection piles could become a future problem due to the sites proximity to the Diving Board.
G:03:052			
	96-2	4	Obliterate multiple trails and retrail from the beach to the chert boulders. The site appears stable but has been impacted by multiple trails. Trailing was photographed. Note: per L. Leap in 7/96, stabilization is also recommended.
	98-2	5	
G:03:053			

Site #	Sess.	Sched.	Comments
	97-2	6	The site does not need to be monitored. It is in very stable condition. We recommend placing this site on the inactive monitoring schedule.
G:03:054			
	96-3	6	This site is a single roasting feature with only a few flakes. The significance of the site is questionable. The site is located above the 300,000 cfs level so discontinue monitoring. Note: per L. Leap in 7/96, the site should be tested for depth and placed on the "inactive" monitoring list.
G:03:055			
	96-2	5	Monitor in 3 years to establish any change in the large upstream arroyo next the fire-cracked rock concentrations. Increased burrowing should also be checked at the downstream pile (see photos). Note: per L. Leap in 7/96, stabilization is recommended.
G:03:056			
	94-5	1	The site is above the 300K zone and not currently impacted. For the record, this is where Nancy Andrews hurt her foot while walking down the steep dune slope after monitoring.
G:03:057			
	97-2	4	Natural impacts are fairly minor to moderate. Animal burrowing is the most extensive and in the future may provide information about the site's habitational make up. The site does see some visitation from humans. It doesn't appear that visitors have trashed the site, the only evidence of human visitation is the collection piles. Monitor every 3 to 5 years because of the minor changes occurring now. The site is stable but fragile and best to monitor less frequently to lessen impacts. Note: per J. Balsom in 12/96, this site will be monitored biennially.
G:03:058			
	94-4	4	The site is relatively stable. Monitoring of the gully in the short term should indicate how actively erosion is occurring. At this time, erosion does not threaten site integrity.
	96-2	4	The trail to this area should be obliterated and vegetation planted to discourage visitors from using this area as a tent spot. It does not appear that visitors have disturbed the roasting feature. Note: per L. Leap in 7/96, stabilization is recommended.
	98-2	4	
G:03:059			
	94-4	6	Discontinue monitoring because the site is very stable. Note: per L. Leap in 2/96, this site will be monitored annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
G:03:060			
	94-2	3	
	95-3	5	Monitor every three to five years. The site is presently stable but has the potential for new artifact exposure. This potential is justified in the two newly uncovered bifaces observed during this monitoring trip.
G:03:061			
	92-2	4	
	93-3	4	THIS SITE DOES NOT APPEAR TO RECEIVE VISITATION AND IS RELATIVELY i STABLE. IT HAS A LOW MONITORING PRIORITY.
	94-2	4	
	95-1	5	The site has been stable since it was monitored last year. Recommend monitoring every five years due to the site's location on a steep slope.
	96-2	1	Discontinue monitoring because the site is located within the creosote/mesquite terrace at the approximate 300,000 cfs level. Monitoring will be done by the Park backcountry program.

Site #	Sess.	Sched.	Comments
G:03:062			
	96-2	5	It may be useful to obliterate trail at/leading out of 221.2 camp. However, the trail itself may have historic significance. Note: per L. Leap in 7/96 the monitor schedule is changed to every 3 years.
G:03:063			
	94-4	3	Monitor annually because it appears that this site is in the beginning stages of erosion by gullying.
	95-2	6	This site is stable. No erosional impacts are evident. Discontinue monitoring because of stability. This site is composed of a few fragments of fire-cracked rock, but it is questionable to some degree because of the small quantity and lack of artifacts. Note: per L. Leap in 2/96, this site will be monitored annually as a control group site. Note: per L. Leap in 9/96 this site will be placed on the "inactive" list.
G:03:064			
	94-1	2	In reference to questions 28 - 30, a work plan detailing any remedial action will be determined by the park archaeologist in conjunction with the geomorphologial work and the Hualapai Tribe.
	94-2	2	This site is excavating itself! Andres Chiama, the Zuni Conservation representative, suggests cross sections and concerted monitoring to determine what kind of action (i.e., structures, check dams) are necessary. Initially, a check dam might stop headward erosion.
	95-1	2	Semiannual monitoring of this site should continue because this is a very active area (constantly changing). The site, particularly the features in or adjacent to the arroyo cuts, are almost beyond repair. Installing checkdams may slow down erosional processes. This site should be mapped in correlation with R. Hereford's map. Also, make sure we have all the C14 dates. Testing for cultural deposits is recommended to see how far, if at all, the features go beyond the current arroyo cuts.
	95-4	3	Recommend annual monitoring to watch the rate of erosion, which might be viable information for rates of erosion at sites that have similar topography and make up, like Granite Park. What is bizarre about this site is the lack of artifacts. Were they washed away in the initial parts of the arroyo cuts or were they never here to begin with? Feature 1 is bisected by the arroyo cut and shows a shallow framework, something you wouldn't expect, because on the surface the feature is large and spread out. So, the cultural remains could be shallower than we think and perhaps expedient features rather than long term use areas. Also, it would be nice to know if the rate of erosion has increased because of the dam.
	96-2	3	Q17 continued: Feature 4 contains 2 gully headcuts that have lengthened 3-4' and widened 4-5'; otherwise it is fairly stable. Ant hills found on the northwest side. Feature 5 is stable but previous photos were poor,so new ones were taken. Feature 6 shows an increase in grass cover otherwise, no change. Feature 7 is heavily vegetated and stable. Charcoal lens 28 shows noticeable bank slumpage. The "sediment pillar" has also noticeably slumped on the west end, with approximately 10-20 cm of sediment eroded off the top and sides. The surface side of feature 1 looks stable, but there is a minor increase in surface erosion and gullying on the side adjacent to the arroyo. A possible knife or point tip of redwall chert is exposed in the cutbank across the arroyo from feature 1. Arroyo experiencing on-going erosion and slumping. Metate exposed in arroyo still present, shows no change. Note: per L. Leap in 7/96, stabilization and data recovery are recommended.
	97-1	3	Overall, the site is very fragile with high potential for further natural impacts. The features are currently stable with minor changes to selected roasters within or near the arroyo. The concern for this site is heavy local rains and the lack of sediment in the system to plug this major drainage. The arroyo system is in an active and mature state. We expect increased erosion in the furture and the discovery of new features and artifacts in this area is likely.
	98-1	3	
G:03:065			
	94-5	5	
	98-2	5	
G:03:066			

Site #	Sess.	Sched.	Comments
	92-1	4	
	93-2	4	
	94-2	4	This is a nice simple site with a datable feature.
	96-2	6	This site is in excellent condition. Monitor every five years. Note: per L. Leap in 7/96, this site is placed on the "inactive" monitoring list.
G:03:067			
	92-2	2	
	93-4	3	NOTE ADDITIONS TO SITE MAP.
	94-2	3	There is a possible recommendation to obliterate the trails that bisect the features. There is no need for that many trails in the site area.
	95-2	4	There is a general concern regarding human impact at this site. Trail obliteration is recommended to reduce human impact.
	97-2	4	The previous trail obliteration completed February,1996, was successful in keeping visitors off the site. Monitoring will continue biennially.
G:03:069			
	95-1	1	None, out of our zone.
G:03:071			
	97-2	4	The site looks good. Aside from the pack rat activity and cacti death, the site is stable. It does not look like any human visitation has occurred at the site. This site will be placed on the inactive monitoring list. Note: per J. Balsom in 12/96, monitor this site biennially.
G:03:072			
	93-4	3	THE SITE MAP NEEDS TO BE RE-DRAFTED WITH GREATER ACCURACY AS IT i IS IMPOSSIBLE TO SHOW PROPER PHOTO ANGLES IN RELATION TO FEATURES i ON THE CURRENT MAP. * RE-DRAFT MAP IN FIELD TO REFLECT CHANGES NOTED ON MAP DURING i 93-4 SESSION.
	95-2	3	Feature 14 has two gullies that may have future impact. One gully is exposing charcoal fragments and the other is working its way upward into the roasters. Monitor this feature in a year to see if gully erosion has increased, then decide on future monitoring schedule. Features 11 and 12 are both located in dune areas without cryptogamic soil. Eolian deposits have helped to stabilize them. Watch these three features for changes. All other features are incredibly stable because of the extensive cryptogamic soil and vegetation growth. Even trails made by the 1990-91 survey are starting to have cryptogamic growth. There is no need to mess with the rest of the features. The less archaeology traffic on them, the better.
	96-3	3	Monitor features 11, 12 & 14 annually. These 3 features are showing the most dramatic changes with increased gullying and eolian activity. Features 2 through 10 and 13 are very stable and should be monitored every 3-5 years. All features are intact with healthy cryptogam and vegetation growth. Take Feature 1 in AZ:G:03:023 off the map, it is not part of G:03:072 and should be on a separate map. There may be foot traffic up to the basalt overhang in G:3:23 because of its historical nature. The roasters of G:03:072 are not being impacted by humans. Note: per L. Leap in 7/96, check dams are recommended.
	97-2	3	It was recommended that Features 11, 12, & 14 be monitored annually. This was a good call because they are located in two active gullies. We will continue with this schedule. It is further recommended that a boulder or two be placed in the gully at Feature 14. No action is recommended for Features 11 & 12. The gully between these two features seems to have reached its greatest angle of repose and so it is assumed that no further downcutting will occur.
	98-2	3	

Site #	Sess. Sched.	Comments
G:03:073		
96-1	5	This site is safe from any high water events and is immune from the operations of the dam due to its position on Tapeats ledges. It should be considered for removal from the monitoring schedule after the next visit. Note: per L. Leap this site will be monitored every 4 years.
G:03:076		
96-2	5	Monitor every three years. New photos were taken of this site, since no previous photos were available. Feature 3 was not previously noted but appears distinct from features 1 and 2. Feature 3 is a large fire-cracked rock scatter. This feature was added to the map and photographed. Note: per L. Leap in 7/96, stabilization is recommended.
G:03:077		
93-2	4	THIS SITE SHOULD BE DEALT WITH ACCORDING TO THE WISHES OF THE ì HUALAPAI TRIBE AS IT IS THEIR TRADITIONAL CULTURAL PROPERTY.
95-5	5	Discontinue monitoring due to stability and the location of this site. Monitor after a large flood. Nothing is presently impacting this site. A sheep bone was discovered directly beneath the grinding slick in the packrat midden. Note: upon further assessment, this site will be monitored every 3 to 5 years per C. Coder in 7/95. The site is highly visited in summer and is also a Hualapai traditional cultural property.
G:03:078		
97-2	6	Due to its highly stable location atop a Tapeats Sandstone ledge, this site is not being impacted by the operations of Glen Canyon Dam. Monitoring this site may enhance trails and lead to increased visitation by others, as well as disturb the healthy cryptogamic soils. The only gully in the area is not impacting the site, and drains into Three Springs Canyon.
G:03:079		
92-1	5	
93-3	1	In FY95, L. Leap changed the monitor schedule from every 3-5 years to ì discontinue. Testing in the spring of 1994 determined that this site is ì ineligible for National Register listing.
G:03:080		
92-1	2	
93-2	2	
95-3	3	Due to human disturbance in the panel area, it is recommended that annual monitoring continue. W. Imus, the Hualapai representative, agrees with this recommendation.
96-2	3	Detailed photos with good light conditions should be taken at Locus A (rock art) due to a possible seep and moisture damage. The rock art is located on the edge of 300,000 cfs level judging by the vegetation (creosote and acacia). This monitoring episode was completed in fading light, so no rock art photos were taken . Detailed documentation should be done next year with re-evaluation of the schedule after that. Mapping of the pictographs, individual anthropomorphs, and overall site area should be done.
97-2	3	Most of the trails leading across the site do have cryptogamic soil growth. Locus A, the rockshelter, is heavily visited. Monitor Locus A and the rock art annually because of the visitor impacts and vandalism activities. All other features are stable and should only be monitored every three to five years unless trailing increases from Locus A to the remaining features to the rock art area. An ARPA violation notification was sent to the river district rangers and the Hualapai tribe.
98-1	3	
G:03:082		
92-2	4	
93-2	4	

Site #	Sess.	Sched.	Comments
	95-5	1	The site appears stable and presently is in no danger of increasing impacts. Discontinue due to stability of all areas. Check after a large flood event.
G:03:083			
	97-2	3	An additional gas can, a white china (Royal Ironstone China, Alfred Meakin, England) coffee mug, and a tool sharpening device are located 34 meters downstream at 172 degrees. Annual monitoring is recommended due to the visitation by boaters to the site and the artifacts being rearranged.
	98-1	6	
G:03:085			
	92-1	4	
	93-3	4	THIS SITE DOES NOT NEED TO BE MONITORED MORE THAN ONCE EVERY i THREE YEARS.
	95-2	5	This site appears to be stable. There is no real threat from visitation. Monitoring should be discontinued. Note: upon further assessment, this site will be monitored every three to five years per L. Leap on 7/95.

APPENDIX G

GLCA MONITORING SCHEDULES (1992-1997)

GLCA Monitoring Schedules (1992-1997)

SITE#	SESS.	SCHED.	COMMENTS
C:2:011 FEA 01			
	GLCA94-1	5	NO SURFACE SAMPLE UNIT PLACED. THE FEATURES ARE IN STABLE CONDITION. FEATURE 1 IS STABLE. SOMEONE STOOD THE WOODEN WHEEL UP. PHOTOS 94-36 EXP 20-21, 95-11, EXP 9-14
	GLCA97-1	5	PHOTOS ROLL 97-15, EXPOSURES 21-24
C:2:011 FEA 03			
	GLCA94-1	3	NO SURFACE SAMPLE UNIT PLACED. #18-THE CABLE HAS BEEN MOVED ALONG THE TRAIL AGAIN. ST2-COLLAPSE OF STONE ELEMENT 94-25EX4-5. ST3-NO CHANGES. PHOTOS 94-25EX3-7, 94-43EX5-10. #23HUMAN WASTE & T PAPER NEAR ST3.RB-ANNUALLY LB-3-5YRS
	GLCA95-1	3	PHOTO ROLL 95-22, EXP 7. OVERALL, THERE IS LESS VISITATION NOTED THAN IN PREVIOUS YEARS.
	GLCA96-1	3	ANNUAL MONITORING RECOMMENDED ON THE LEFT BANK OF THE RIVER. NO PHOTOS TAKEN.
	GLCA97-1	5	PHOTOS ROLL 97-15, EXPOSURES 10-13
C:2:011 FEA 04			
	GLCA94-1	3	NO SURFACE SAMPLE UNIT PLACED. PHOTOS 94-25 EXP 8-12.
	GLCA95-1	3	NO NEW PHOTOS TAKEN.
	GLCA96-1	4	NO PHOTOS TAKEN.
	GLCA97-1	4	NO CHANGES NOTED, NO PHOTOS TAKEN
C:2:011 FEA 05			
	GLCA94-1	4	NO SURFACE SAMPLE UNIT PLACED. THE INSCRIPTIONS SHOULD BE DRAWN AND MAPPED. EIGHT PANELS WERE ASSIGNED AND PLACED ON THE SITE SKETCH MAP. PHOTOS 94-42 EXP 0-11, 94-43, EXP 11.
	GLCA96-1	4	INSCRIPTIONS SHOULD BE DRAWN AND MAPPED.
C:2:011 FEA 06			
	GLCA94-1	3	NO SURFACE SAMPLE UNIT PLACED. THERE HAS BEEN NO CHANGE IN THE WALL. PHOTOS 94-43 EXP 19-20.
	GLCA95-1	3	THERE ARE NO CHANGES TO THE WALL SEGMENTS. PHOTOS ROLL 95-13, EXP 22.
	GLCA96-1	3	NO CHANGES WERE NOTED.
	GLCA97-1	3	NO CHANGES NOTED, THIS FEATURE IS OVERLOOKED BY A STATIONARY CAMERA.
C:2:011 FEA 11			
	GLCA92	3	THIS FEATURE ILLUSTRATES A PART OF THE HISTORY OF THE AREA. IF VISITATION INCREASES AN INTERPRETIVE SIGN OR GUIDE WOULD BE USEFUL.
	GLCA93	4	There appears to be no recording of how this feature actually functioned.
	GLCA94-1	5	NO SURFACE SAMPLE UNIT PLACED. FEATURES ARE IN STABLE CONDITION. PHOTOS 94-36 EXP 20-21.

SITE#	SESS.	SCHED.	COMMENTS
GLCA97-1		5	
C:2:011 FEA 12			
GLCA92		3	TO BETTER PRESERVE THE SITE RIVER FLOWS SHOULD BE NO LOWER THAN 8,000 CFS AND NO HIGHER THAN 20,000 CFS. THIS WOULD CAUSE A DECREASE IN VISITATION. WET-DRY CYCLES INCREASE DETERIORATION. EXTEND THE "NO WAKE" ZONE TO THE STEAMBOAT.
GLCA93		0	
GLCA94-1		3	NO SURFACE SAMPLE UNIT PLACED. A 50,000 CFS FLOOD IS PLANNED FOR FY95. RECOMMEND BEFORE AND AFTER DIVES TO DETERMINE IMPACTS. PHOTOS 94-25 EXP 0-2.
GLCA95-1		3	DUPLICATE PHOTOS 95-22 EXP 8 & 9 TO DOCUMENT FURTHER ALGAE GROWTH. REFER TO FISCAL YR. 94 FOR RECOMMENDATIONS REGARDING SPIKE FLOOD.
GLCA96-1		3	THIS IS THE PREFLOOD SPENCER STEAMBOATDIVE. PHOTO ROLLS 96-22:17, 18; 96-23, 24, 25, 26, 27.
GLCA96-2		3	PHOTO ROLLS 96-30 AND 96-31. THIS WAS THE POST FLOOD DIVE ON THE STEAMBOAT.
GLCA97-1		3	PHOTO ROLL 97-15: EXPOSRES 14-17. THIS FEATURE IS OVERLOOKED BY A STATIONAY CAMERA.
C:2:011 FEA 13			
GLCA94-1		5	NO SURFACE SAMPLE UNIT PLACED. THE FEATURE IS IN STABLE CONDITION. LOSS OF SHINGLES ATOP FEATURE 13 IS NOTED, HOWEVER. PHOTOS 94-36 EXP 20-21.
GLCA97-1		5	THE CEILING SHOULD BE REROOFED.
C:2:011 FEA 14			
GLCA94-1		3	NO SURFACE SAMPLE UNIT PLACED. PHOTO 94-43 EXP 21.
GLCA95-1		3	NO SURFACE SAMPLE UNIT PLACED. PHOTOS ROLL 95-12, EXP 0; 95-13, EXP 23, 24.
GLCA96-1		3	PHOTO ROLL 96-7:9
GLCA97-1		3	PHOTO ROLL 96-57, EXPOSURE 6
C:2:011 FEA 17			
GLCA94-1		4	PHOTOS WERE TAKEN, 94-52:19-24.
GLCA96-1		4	NO PHOTOS TAKEN. THE SITE IS STABLE. THERE ARE NO CHANGES.
C:2:011 FEA 20			
GLCA94-1		5	NO SURFACE SAMPLE UNIT PLACED. SITE IS NOT PARTICULARLY VISIBLE TO THE PUBLIC. PHOTOS 94-36 EXP 22-24
GLCA97-1		5	PHOTO ROLL 97-14, EXPOSURES 9-10
C:2:011 FEA 21			
GLCA94-1		4	PHOTOS WERE TAKEN, 94-51:0-7. A C-14 SAMPLE SHOULD BE COLLECTED FROM THE HEARTH IN STRUCTURE 1.
GLCA96-1		4	NO PHOTOS TAKEN.
C:2:012			

SITE#	SESS.	SCHED.	COMMENTS
	GLCA92	2	THIS SITE MAY HAVE BEEN A GOOD CHOICE FOR A STATIONARY CAMERA, BUT BANKS APPEAR STABLE. RETAINING WALLS SHOULD BE STABILIZED AND SITE SHOULD BE MAPPED IN DETAIL FOR FUTURE DEVELOPMENT.
	GLCA93	2	A stationary camera was once in place and should be reinstalled and better hidden to monitor water fluctuation impacts on the lower road retaining wall.
	GLCA94-1	5	PHOTOS WERE TAKEN, 95-1:7-15.
	GLCA97-1	5	PHOTO ROLL 97-14, EXPOSURE 19
C:2:013			
	GLCA93	3	Cattle are the primary disturbing agents, and without their removal, those impacts will continue.
	GLCA94-1	3	SURFACE SAMPLE UNIT WAS PLACED. SEE MAP. PHOTO 94-14 EXP 1.
	GLCA95-1	3	NO PHOTOS TAKEN.
	GLCA96-1	3	PHOTO ROLL 96-43:13.
	GLCA97-1	3	NO PHOTOS WERE TAKEN
C:2:032			
	GLCA92	3	THESE CHARCOAL LENSES ARE RAPIDLY DISAPPEARING AND NEED TO BE AT LEAST TEST EXCAVATED AND SAMPLED TO DETERMINE ORIGIN. STATIONARY CAMERAS MIGHT HELP TO DOCUMENT THE RATE OF EROSION AND THE EROSIVE FACTORS AT THE SITE.
	GLCA93	3	Testing completed in 1992 failed to confirm that the charcoal stains are cultural.
	GLCA94-1	3	#30. THE SITE, CHARCOAL SAMPLES, WAS TESTED IN 1992. NO ARTIFACTS WERE LOCATED. NO SURFACE SAMPLE UNIT WAS PLACED.PHOTOS WERE TAKEN, 94-18:31-36.
	GLCA95-1	3	THE CHARCOAL LENSES WERE TESTED IN 1992. NO ARTIFACTS WERE LOCATED. NO SURFACE SAMPLE UNIT PLACED. PHOTOS ROLL 95-18, EXP 4,5,6.
	GLCA96-1	3	PHOTOS ROLL 96-43:3 TO 10
	GLCA97-1	3	PHOTO ROLL 96-57, EXPOSURES 2-3
C:2:033			
	GLCA94-1	4	#29. THE WALLS OF FEATURE 2 SHOULD BE REPOINTED, TWO ELEMENTS HAVE COLLAPSED. #30. TEST IN THE ARTIFACT CONCENTRATION.A 1X1 SURFACE SAMPLE UNIT WAS PLACED WITH A NAIL AT THE NW CORNER. PHOTOS WERE TAKEN, 94-24:9-14.
	GLCA96-1	4	
C:2:035			
	GLCA93	4	The charcoal-stained sediments below the wall should be tested for buried deposits, and radiocarbon samples should be collected before the gullies intrude further.
	GLCA94-1	3	A SURFACE SAMPLE UNIT WAS PLACED WITH A NAIL WRAPPED WITH YELLOW FLAGGING TAPE AT THE NW CORNER. PHOTOS WERE TAKEN, 94-17:7. MAPPING WILL BE CONDUCTED APRIL 25-26, 1994.
	GLCA95-1	3	SURFACE SAMPLE UNIT WAS CHECKED. THERE IS NO DOWNSLOPE MOVEMENT OF THE ANTIFACTS. PHOTOS ROLL 95-22, EXP 10-14. THE SITE WAS MAPPED ON APRIL 11, 1995.
	GLCA96-1	3	THE SURFACE SAMPLE UNIT SHOWS NO FURTHER MOVEMENT OF ARTIFACTS DOWNSLOPE.

SITE#	SESS.	SCHED.	COMMENTS
	GLCA97-1	4	PHOTO ROLL 97-6, EXPOSURE 13
C:2:036			
	GLCA93	4	
	GLCA94-1	5	PHOTOS WERE TAKEN, 94-43:0-3 AND 94-44:15-24.
	GLCA97-1	5	NO PHOTOS TAKEN
C:2:037			
	GLCA94-1	4	PHOTOS WERE TAKEN, 94-24:16-19.
	GLCA96-1	4	RELOCATE FEA. 2 PANEL PHOTO ROLL 95-65:3
C:2:038			
	GLCA92	3	BECAUSE THIS SITE IS VISITED BY ARA TOURISTS IT IS VERY IMPORTANT TO MONITOR AND MAINTAIN THE SITE. VEGETATION WOULD DECREASE DEFLATION.
	GLCA93	3	If human impacts such as additional graffiti remain high, recommend closing the site to public viewing.
	GLCA94-1	2	NO SURFACE SAMPLE UNIT WAS PLACED. TESTING IN FRONT OF THE PANEL COULD REVEAL BURIED DEPOSITS. THE PROTECTIVE WALL SHOULD BE STABILIZED OR REBUILT AND ALTERNATE TRAILS RAKED OUT. PHOTOS WERE TAKEN, 94-17:1-4.
	GLCA95-1	2	NO SURFACE SAMPLE UNIT PLACED. TESTING IN FRONT OF THE PANEL WOULD REVAL BURIED DEPOSITS. PHOTOS ROLL 95-18, EXP. 7-8.
	GLCA95-2	2	
	GLCA96-1	2	PHOTO ROLL 95-66:4 TO 6
	GLCA96-2	2	NO NEW PHOTOS WERE TAKEN.
	GLCA97-1	2	PHOTO ROLL 96-57, EXPOSURES 0-1. THE ZUNI RECOMMEND TO INCREASE THE HEIGHT OF THE WALL TO 3-5 FT. LARGE FORMAT CAMERA WORK WAS PERFORMED BY DUANE HUBBARD AND MIKE QUINN.
	GLCA97-2	2	PHOTO ROLL 97-14, EXPOSURES 23-24
C:2:039			
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE PLAN. PHOTOS WERE TAKEN, 94-24:22-23.
	GLCA96-1	4	NO PHOTOS TAKEN.
C:2:040			
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE MAP. PHOTOS WERE TAKEN, 94-44:4-5.
	GLCA96-1	5	
C:2:041			
	GLCA92	4	THIS SITE IS IN GOOD CONDITION AND RELATIVELY UNDISTURBED. IT SHOULD BE LEFT ALONE. MOST OF ALL THE ANIMAL AND HUMAN TRAFFIC IS CONFINED TO STANTON'S ROAD JUST BELOW THE SITE.
	GLCA94-1	5	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-16:0-1.
	GLCA97-1	5	NO PHOTOS TAKEN
C:2:048			

SITE#	SESS.	SCHED.	COMMENTS
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS ROLL 95-2, EXP 10.
	GLCA96-1	4	PHOTO 96-44:7, DUP OF 93-33:18.
C:2:050			
	GLCA94-1	3	A 1X1 SURFACE SAMPLE WAS PLACED AS SHOWN ON THE SITE MAP. PHOTOS WERE TAKEN, 94-24:1-8 AND 94-25:24.
	GLCA95-1	3	PHOTOS 95-37, EXP 3. THE NAIL WAS NOT FOUND.
	GLCA96-1	3	PHOTO ROLL: 96-10:10 TO 12
	GLCA97-1	3	PHOTO ROLL 97-14, EXPOSURES 11-17. FEATURE 8 WAS LOCATED ON THE MAP BUT HAS NEVER BEEN PHOTOGRAPHED. WE DID SO THIS MONITORING EPISODE.
C:2:053			
	GLCA92	5	THIS SITE IS NEAR THE WEAVER DUDE RANCH SO SITE CAREFULLY MONITORED FOR FUTURE VISITATION. SITE SHOULD BE MONITORED AT LEAST YEARLY FOR VISITOR IMPACT OR AFTER VERY HIGH WATER LEVELS (FLOODING).
	GLCA94-1	4	NO SURFACE SAMPLE WAS PLACED. PHOTOS WERE TAKEN, 94-25:23.
	GLCA96-1	4	NO PHOTOS TAKEN.
C:2:056			
	GLCA94-1	5	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-25:17-18.
	GLCA97-1	5	NO PHOTOS TAKEN
C:2:057			
	GLCA92	3	THE MAIN STRUCTURE (FEATURE 2) SHOULD BE STABILIZED SOON. ALL OF THE SITES' STRUCTURES SHOULD BE MAPPED IN DETAIL. EVENTUALLY WE MAY WANT TO SURFACE COLLECT THE SITE, OR AT LEAST COLLECT THE DIAGNOSTIC AND DATABLE HISTORIC ARTIFACTS.
	GLCA93	3	The site should be mapped and at least Feature 2 should be stabilized.
	GLCA94-1	4	THERE WERE NO CHANGES AT FEATURES 5 AND 7. AT FEATURE 6 A SANDSTONE SLAB WAS BROKEN IN HALF AT THE SOUTH END ONTHE EXTERIOR SIDE OF THE EAST WALL. PHOTOS ROLL 94-43:12-15.
	GLCA96-1	4	F2:CHANGES- S WALL AND ROOF BEAMS AND STACK OF DEBRIS 5M TO NE. PHOTO ROLL 96-45:19 TO 24
C:2:058			
	GLCA93	3	
	GLCA94-1	4	#27. FEATURES AND ARTIFACTS ARE VERY STABLE AND DON'T REQUIRE FREQUENT MONITORING. NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-25:13 AND 94-43:4.
	GLCA96-1	5	PHOTOS 96-9:1-9. MONITOR LOCUS D EVERY 3-5 YEARS. NOT MUCH LEFT AFTER THE DEBRIS FLOW.
C:2:059			
	GLCA93	4	The site is stable and appears unthreatened by human visitation and natural impacts. Because it is easily visible from the Lee's Ferry launch area, it can be monitored from there.
	GLCA94-1	1	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 95-1:16.
C:2:060 FEA 01			
	GLCA93	4	

SITE#	SESS.	SCHED.	COMMENTS
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-14:4 IS AN OVERVIEW OF THE SITE.
	GLCA96-1	4	NO PHOTOS TAKEN.
C:2:060 FEA 02			
	GLCA93	3	A detailed map of the entire road with its associated features plotted is recommended. They should be plotted on the areals as well.
	GLCA94-1	3	IT IS RECOMMENDED THAT CATTLE BE KEPT OFF THE SITE. NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-15:22.
	GLCA95-1	4	REMOVE CATTLE.
	GLCA96-1	4	
	GLCA97-1	4	THE REMNANT STRUCTURE SHOULD BE STABILIZED. NO PHOTOS TAKEN
C:2:060 FEA 04			
	GLCA93	4	
	GLCA94-1	5	IT IS RECOMMENDED THAT CATTLE BE REMOVED FROM THE AREA. NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-14:3.
	GLCA97-1	5	THE STOCK GATE SHOULD BE STABILIZED. PHOTO ROLL 97-15, EXPOSURE 9
C:2:060 FEA 06			
	GLCA93	4	No recommended action.
	GLCA94-1	5	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-16:7.
	GLCA97-1	5	PHOTO ROLL 97-1, EXPOSURES 23-24
C:2:060 FEA 07			
	GLCA93	3	The site structures are in stable condition and baring extensive earth moving activities or flash floods, will remain so.
	GLCA94-1	5	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-16:8.
	GLCA97-1	5	
C:2:060 FEA 08			
	GLCA93	5	
	GLCA94-1	3	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-16:3.
	GLCA95-1	4	PHOTO ROLL 95-37, EXP 17.
	GLCA96-1	4	
	GLCA97-1	5	
C:2:070			
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED, AND PHOTOS WERE TAKEN, 94-24:15.
	GLCA96-1	4	
C:2:071			
	GLCA93	3	For Locus A, there is little left here to monitor. Locus B is stable.
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED. NO NEW PHOTOS WERE TAKEN.

SITE#	SESS.	SCHED.	COMMENTS
	GLCA96-1	4	PHOTO ROLL 95-65:13,12 MONITOR SCHEDULE: 4 OR 5
C:2:072			
	GLCA92	3	THIS SITE IS RAPIDLY ERODING, SO IF ANY MITIGATION IS COMPLETED AT SITE IT SHOULD INCLUDE SURFACE COLLECTION AND TESTING.
	GLCA93	3	The site is rapidly eroding and the loss of spatial integrity is eminant.
	GLCA94-1	3	A ROCK ALIGNMENT, PROBABLY A CHECK DAM, IS PRESENT 105 M, AT 134 DEGREES, FROM THE HISTORIC HEARTH. IT WAS ADDED TO THE MAP. NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-43:16-17.
	GLCA95-1	3	THERE IS NO CHANGE TO THE CHECKDAM.
	GLCA96-1	3	
	GLCA97-1	3	PHOTO ROLL 97-15, EXPOSURES 0-2
C:2:073			
	GLCA93	4	The terrace has good potential for buried deposits. There appears to be little visitation.
	GLCA94-1	5	TEST FOR SUBSURFACE DEPOSITS. NO NEW PHOTOS WERE TAKEN AND NO SURFACE SAMPLE UNIT WAS PLACED.
	GLCA97-1	5	
C:2:074			
	GLCA92	4	THIS SITE IS NOT VERY SIGNIFICANT. THERE ARE VERY FEW ARTIFACTS AND LITTLE DEPOSIT.
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-24:24.
	GLCA96-1	4	NO PHOTOS TAKEN.
C:2:075			
	GLCA92	3	A VERY LARGE ARROYO IS IMPACTING THE SITE. MAJOR UNDERCUTTING AND WASHING AWAY OF ARTIFACTS HAS OCCURED SINCE THE LAST VISIT BY GCRCS IN 1991.
	GLCA93	3	Very few artifacts were noted in either locus, and this is due to the severe erosion and undercutting of the terrace. Buried artifacts and features may be buried, however, and if so, they are threatened by erosion.
	GLCA94-1	3	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE MAP. PHOTOS WERE TAKEN, 94-14:5-8.
	GLCA95-1	3	THE SITE WAS INSTRUMENT MAPPED ON 4-13-95. PHOTO ROLL 95-22, EXP 0-6.
	GLCA96-1	3	MAP RECOVERY DONE FY95. PHOTO ROLL 95-65:7,8,9. LOCUS B NEEDS TO BE EXCAVATED.
	GLCA97-1	3	THE SITE WAS MAPPED FY95. PHOTO ROLL 97-15, EXPOSURES 5-8. LOCUS B SHOULD BE EXCAVATED.
C:2:076			
	GLCA93	4	
	GLCA94-1	4	CONSULTATION WITH THE NAVAJO NATION HISTORIC PRESERVATION DEPARTMENT RESULTED IN INITIAL MONITORING EVERY OTHER YEAR, THEN EVERY 3-5 YEARS. PHOTO ROLL 95-1, EXP 23, 24. NO SURFACE SAMPLE WAS PLACED.
	GLCA96-1	4	PHOTO ROLL 96-43:17

SITE#	SESS.	SCHED.	COMMENTS
C:2:077			
	GLCA93	3	Fire-cracked rock fragments may indicate the presence of a roasting feature. Alluvial terraces probably contain other buried material that will continue to erode especially out of the cut bank of the upper terrace.
	GLCA94-1	3	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE MAP. NO NEW PHOTOS WERE TAKEN.
	GLCA95-1	3	SITE WAS MAPPED 4-13-95.
	GLCA96-1	3	*PEND FY 95 PHOTO ROLL 95-65:11
	GLCA97-1	3	THE SITE WAS MAPPED FY95. PHOTO ROLL 97-15, EXPOSURE 4.
C:2:078			
	GLCA94-1	3	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-4:12-14.
	GLCA95-1	3	PHOTOS ROLL 95-37, EXP 15-16.
	GLCA96-1	3	PHOTOS ROLL 96-43:18, 19.
	GLCA97-1	3	PHOTO ROLL 97-6, EXPOSURE 14.
C:2:079			
	GLCA94-1	3	NO SURFACE SAMPLE UNIT WAS PLACED. NO NEW PHOTOS WERE TAKEN.
	GLCA95-1	3	THE SITE WAS MAPPED ON 4-13-95. NO NEW PHOTOS.
	GLCA96-1	3	MAP RECOVERY DONE FY95. PHOTO ROLL 96-65:4 TO 6
	GLCA97-1	4	THE SITE WAS MAPPED IN FY95. NO CHANGES WERE NOTED. NO PHOTOS WERE TAKEN.
C:2:080			
	GLCA92	4	DISCONTINUE MONITORING ONLY IF ARTIFACTS ARE REMOVED FROM THE SITE. A MORE ACCURATE MAP NEEDS TO DRAFTED.
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE MAP. NO NEW PHOTOS WERE TAKEN.
	GLCA96-1	5	NO CHANGE IN SURFACE SAMPLE UNIT.
C:2:081			
	GLCA93	3	A testing program is needed to evaluate the nature and extent of subsurface cultural deposits that are probably buried.
	GLCA94-1	2	A 1X1 SURFACE SAMPLE UNIT WAS PLACED WITH THE NW CORNER AT THE SITE DATUM NOTED ON THE SITE MAP. IT WAS RE-ESTABLISHED FOLLOWING ITS REMOVAL, PRESUMABLY BY VISITORS. PHOTOS WERE TAKEN, 94-17:8-10.
	GLCA95-1	2	THE SITE WAS TESTED, SURFACE COLLECTED AND MAPPED IN FY95. THE TRAIL IS GOING TO BE REHIBILITATED. PHOTOS ROLL 95-18, EXP 9-12.
	GLCA95-2	2	NO NEW PHOTOS WERE TAKEN.
	GLCA96-1	3	SURF. COLLECT ENTIRE SITE AND TEST DEPTH DONE FY95. MAP RECOVERY DONE FY94. SITE WAS TESTED IN WINTER 94. SURFACEARTIFACTS WERE MAPPED AND COLLECTED. NOTHING TO INSPECT IN THE OBSERVATION UNIT. PHOTO ROLL 96-1:0 TO 3.
	GLCA96-2	3	THE SITE WAS MONITORED FOLLOWING THE TRAIL REHABILITATION PROJECT.
C:2:082			

SITE#	SESS.	SCHED.	COMMENTS
	GLCA92	4	IT IS POSSIBLE THAT THIS SITE HAS SUB-SURFACE DEPOSITS BUT THIS IS VERY UNLIKELY DUE TO THE FEW SURFACE ARTIFACTS.
	GLCA93	4	The potential for subsurface deposits is limited based on the small numbers of surface artifacts, however, prior to discontinuing monitoring, subsurface testing should be performed.
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN 94-15:23.
	GLCA96-1	4	
C:2:083			
	GLCA93	2	The site should be remapped. The existing one is inadequate. The site should be tested for buried cultural deposits. The potential is good.
	GLCA94-1	3	ANNUAL MONITORING IS NEEDED BECAUSE ACTIVE SURFACE EROSION IS DEVELOPING INTO GULLIES AND CHARCOAL STAINS, STILL PRESENT, ARE ERODING DOWNSLOPE. NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN 95-1:17-18.
	GLCA95-1	3	MONITOR ANNUALLY DUE TO ACTIVE SURFACE EROSION. CHARCOAL STAINING IS STILL PRESENT.
	GLCA96-1	3	
	GLCA97-1	3	PHOTO ROLL 97-14, EXPOSURES 20-22.
C:2:084			
	GLCA93	4	Natural erosion and human visitation will eventually take their toll on the site. In order to obtain as much information as possible, it is recommended that the site eventually be surface collected and tested.
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE MAP. NO NEW PHOTOS WERE TAKEN.
	GLCA96-1	4	NO MOVEMENT NOTICED IN SURFACE UNIT.
C:2:086			
	GLCA94-1	4	#29. REMOVING CATTLE FROM THE AREA IS RECOMMENDED. #30. FEATURES 1 AND 3 SHOULD BE TESTED FOR SUBSURFACE MATERIAL.NO NEW PHOTOS WERE TAKEN.
	GLCA96-1	4	
C:2:087			
	GLCA93	4	Spatial distribution of artifacts may help to distinguish activity areas.
	GLCA94-1	4	THE SITE SHOULD BE MAPPED FOR HISTORIC INFORMATION. NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-44:8-10.
	GLCA96-1	5	NO PHOTOS TAKEN. MAP FOR HISTORIC INFORMATION.
C:2:088			
	GLCA94-1	3	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-25:14-16.
	GLCA95-1	3	PHOTOS 95-37, EXP 4
	GLCA96-1	3	NEW PHOTO ROLL 96-9:10 TO 12. INSTALL CHECKDAM EAST OF METATE TO REDIRECT FLOW IN FRONT OF THE DRIPLINE.
	GLCA97-1	3	PHOTO ROLL 97-14, EXPOSURE 18. A CHECKDAM SHOULD BE INSTALLED TO THE EAST OF THE METATE TO REDIRECT FLOW IN FRONT.
C:2:090			
	GLCA93	3	

SITE#	SESS.	SCHED.	COMMENTS
	GLCA94-1	4	CATTLE SHOULD BE KEPT OUT OF THE AREA.
	GLCA96-1	4	PHOTO ROLL 96-43:2
C:2:091			
	GLCA93	3	The charcoal stain in Locus A is slumping into the arroyo. Charcoal samples should be collected.
	GLCA94-1	3	PHOTOS WERE TAKEN, 95-1:21-22.
	GLCA95-1	3	PHOTO ROLL 95-37, EXP 5
	GLCA96-1	3	PHOTO ROLL 96-43:15,16
	GLCA97-1	3	PHOTO ROLL 97-6, EXPOSURE 15.
C:2:094			
	GLCA92	4	THIS SITE IS NOT VERY SIGNIFICANT. THERE ARE FEW ARTIFACTS AND LITTLE DEPOSIT.
C:2:095			
	GLCA92	4	SUBSURFACE DEPOSITS ARE UNLIKELY AND THE SITE HAS PROBABLY BEEN DISTURBED BY ROAD CONSTRUCTION. THE SITE DOES HAVE A VARIETY OF CERAMIC TYPES.
	GLCA93	3	Because of continuous colluvial movement and sheetwash, site integrity is poor; little potential for subsurface remains; however, collection of local chert flakes and PII ceramics may explain nature of occupation.
	GLCA94-1	4	A 1X1 SURFACE SAMPLE UNIT WAS PLACED AS SHOWN ON THE SITE MAP. PHOTOS WERE TAKEN, 94-25:22.
	GLCA96-1	4	PHOTO ROLL 96-10:9. NO MOVEMENT IN SURFACE SAMPLE UNIT.
C:2:099			
	GLCA93	4	The site is rapidly deflating. Spatial context is being quickly lost.
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-43:18.
	GLCA96-1	4	PHOTO ROLL 96-46:20 TO 24
C:2:100			
	GLCA92	3	THIS SITE IS SUPERFICIAL BUT THE CHARCOAL LENS NW OF THE TWO HEARTHS WOULD BE GOOD TO DATE. THE ARROYO CUT NEAREST THE RIVER WILL BE MONITORED BY A STATIONARY CAMERA. THE SITE WOULD NOT BE IMPACTED BY FLUCTUATING RIVER FLOW.
	GLCA93	3	Since the charcoal lens northwest of the two hearths was sampled last year (Leap and Neal 1992) and the two hearths appear to be ephemeral with no charcoal in or near them, the site should be mapped immediately.
	GLCA94-1	3	PHOTOS WERE TAKEN, 94-43:22-24.
	GLCA95-1	3	PHOTOS ROLL 95-12, EXP. 1-3.
	GLCA96-1	3	PHOTO ROLL 96-7:10 TO 13
	GLCA97-1	3	PHOTO ROLL 96-57, EXPOSURES 4-5.
C:2:102			
	GLCA94-1	5	ONE PHOTO WAS TAKEN, 94-24:21.
	GLCA97-1	5	NO PHOTOS TAKEN

SITE#	SESS.	SCHED.	COMMENTS
C:2:103			
	GLCA94-1	5	PHOTOS WERE TAKEN, 94-17:11-12.
	GLCA97-1	5	MEDIUM FORMAT PHOTOS WERE TAKEN BY DUANE HUBBARD AND MINE QUINN.
C:2:104			
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-25:19-21.
	GLCA96-1	4	NO PHOTOS TAKEN. NO CHANGES WERE NOTED. THE SITE IS IN STABLE CONDITION.
C:2:105			
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. NO NEW PHOTOS WERE TAKEN.
	GLCA96-1	5	PHOTO ROLL 96-46:16 TO 19
C:2:106			
	GLCA92	4	THE SITE HAS NUMEROUS POT SHERDS ERODING. IT IS DIFFICULT TO DETERMINE IF ANY SUBSURFACE INTACT ARTIFACTS EXIST. EVENTUALLY THE ARTIFACTS WILL ALL WASH DOWNSLOPE.
	GLCA93	2	Eventually, all artifacts will wash downslope. Most are out of original context.
	GLCA94-1	4	THIS ROASTER IS THE ONLY ONE ON THE GLCA PORTION OF THE RIVER. CATTLE SHOULD BE KEPT OUT OF THE AREA. PHOTOS WERE TAKEN, 94-14:2.
	GLCA96-1	4	
C:2:108			
	GLCA94-1	4	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-16:4-6.
	GLCA96-1	4	
C:3:003			
	GLCA93	3	The stairway needs to be stabilized and remortared. The consequences are that it will continue to be undermind by sheet wash and talus slope wash.
	GLCA94-1	4	PHOTOS WERE TAKEN, 94-17:33-34.
	GLCA96-1	4	PHOTO ROLL 96-44:1-3
C:3:004			
	GLCA94-1	4	PHOTOS FROM 1991 WERE NOT FOUND IN THE FILE, BUT THERE APPEARS TO BE NO CHANGE SINCE THE 1980 PHOTOS. NEW PHOTOS WERE TAKEN, 94-17:13-20.
	GLCA96-1	4	NO PHOTOS TAKEN. NO CHANGES SINCE 1994.
C:3:006			
	GLCA94-1	4	PHOTOS WERE TAKEN, 94-17:26-32, PARTICULARLY OF NEW AND RECENT GRAFFITI. ONE TALL PREHISTORIC FIGURE IN THE CENTER OF THE PANEL HAS BEEN IMPACTED BY SCRATCHES FORMING AN "R" OVER ITS FEET.
	GLCA96-1	4	PHOTO ROLL 96-44:4
C:3:010			
	GLCA92	3	THE SITE SHOULD BE MAPPED AS A FORM OF DATA RECOVERY AND THE LENS SHOULD BE TESTED BEFORE IT ERODES AWAY.

SITE#	SESS.	SCHED.	COMMENTS
GLCA93		2	Excavation of the hearth can provide samples for radiocarbon dating. These should be gathered soon.
GLCA94-1		3	NO SURFACE SAMPLE UNIT WAS PLACED. PHOTOS WERE TAKEN, 94-17:35-36.
GLCA95-1		3	PHOTOS ROLL 95-37, EXP 22-24.

APPENDIX H

GRCA MONITORING SCHEDULES TABLE (1990-1998)

Monitor Schedules

Site #	*Impact Category*	*Last Session*	*Last Date*	*Schedule*	*Next Date*	*Comments*
A:15:001	SI	98-3	3/ 9/98	Discontinue		Site is above the highwater zone and should be turned over to backcountry monitors.
A:15:003	SI	98-2	11/17/97	Biennial	11/17/99	
A:15:004	SI	98-2	11/17/97	Inactive		No impacts are threatening site integrity, so place on the inactive list.
A:15:005	SI	98-1	10/23/97	Annual	10/23/98	
A:15:017	N	96-1	10/24/95	Control Group	10/24/98	
A:15:018	I	96-3	5/ 6/96	3-5 Years	5/ 6/01	
A:15:020	SI	98-3	3/ 8/98	3-5 Years	3/ 8/02	Monitor in 4 years with the new photographs.
A:15:021	SI	95-4	4/ 3/95	3-5 Years	4/ 3/99	
A:15:022	SI	96-2	2/27/96	3-5 Years	2/27/01	
A:15:025	I	95-5	5/ 7/95	Inactive		
A:15:026	SI	98-2	11/17/97	3-5 Years	11/17/02	Monitor in 5 years and if still stable, maybe make it a backcountry site.
A:15:027	SI	95-3	3/ 4/95	3-5 Years	3/ 4/99	
A:15:028	SI	96-2	2/28/96	3-5 Years	2/28/01	
A:15:029	SI	96-2	2/28/96	3-5 Years	2/28/01	
A:15:030	SI	97-2	11/18/96	Discontinue		
A:15:031	SI	95-3	3/ 4/95	Inactive		
A:15:032	SI	94-5	9/19/94	Inactive		
A:15:033	SI	96-2	2/28/96	3-5 Years	2/28/00	
A:15:035	SI	98-1		3-5 Years	10/ 1/02	Monitor every 5 years because the site is stable.
A:15:036	SI	96-3	5/ 6/96	Inactive		
A:15:037	SI	96-3	5/ 7/96	Inactive		
A:15:038	SI	96-3	5/ 7/96	3-5 Years	5/ 7/01	
A:15:039	SI	95-2	11/17/94	3-5 Years	11/17/98	
A:15:040	SI	95-5	5/ 7/95	3-5 Years	5/ 7/99	
A:15:042	SI	95-2	11/17/94	3-5 Years	11/17/98	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
A:15:043	SI	96-3	5/ 7/96	Inactive		
A:15:044	SI	98-3	3/ 8/98	Discontinue		Site is above the highwater zone and should be monitored by the backcountry archaeologists. It is stable and unchanged since 1994.
A:15:047	SI	96-3	5/ 7/96	3-5 Years	5/ 7/01	
A:15:048	SI	98-2	11/17/97	3-5 Years	11/17/00	Monitor every 3 years.
A:15:051	SI	94-2	3/ 8/94	3-5 Years	3/ 8/98	
A:16:001	SI	90-0	11/ 8/90	Discontinue		
A:16:002	N	95-5	5/ 6/95	Discontinue		
A:16:003	SI	94-3	4/ 5/94	Discontinue		
A:16:004	SI	98-2	11/17/97	Biennial	11/17/99	The upper shelters might be put on a regular monitoring schedule via the backcountry archaeology program, since they are receiving visitation as is evidenced by a fairly impressive collection pile.
A:16:148	SI	98-3	3/ 7/98	3-5 Years	3/ 7/02	Monitor in 4 years. The terrace-based drainage near the rock cluster does not appear active. The terrace is stable with abundant vegetation.
A:16:149	SI	96-3	5/ 5/96	3-5 Years	5/ 5/00	
A:16:150	SI	96-2	2/26/96	Inactive		
A:16:151	SI	98-3	3/ 7/98	3-5 Years	3/ 7/02	Monitor again in 4 years and they maybe place on the inactive list.
A:16:153	SI	96-3	5/ 5/96	Inactive		
A:16:154	SI	96-2	2/26/96	3-5 Years	2/26/01	
A:16:155	I	98-3	3/ 7/98	Inactive		The site is well-protected by the overhang. The gully is no threat.
A:16:156	N	96-1	10/24/95	Control Group	10/24/98	
A:16:157	SI	96-3	5/ 6/96	Inactive		
A:16:158	SI	95-5	5/ 6/95	3-5 Years	5/ 6/99	
A:16:159	SI	98-1	10/22/97	3-5 Years	10/22/00	Monitor every 3 years due to the site's close proximity to the river and the pictograph panel. Annual monitoring is too frequent and may damage the site.
A:16:160	SI	98-2	11/16/97	Inactive		Monitor after trail work is completed, then go to inactive schedule.
A:16:161	SI	96-3	5/ 6/96	Inactive		
A:16:162	SI	97-2	11/17/96	Inactive		
A:16:163	SI	98-2	11/16/97	3-5 Years	11/16/02	Monitor the site in 5 years.

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
A:16:167	I	98-2	11/16/97	Biennial	11/16/99	
A:16:171	SI	98-2	11/17/97	Inactive		
A:16:172	SI	96-3	5/ 6/96	3-5 Years	5/ 6/01	
A:16:173	SI	98-2	11/16/97	Discontinue		There are no gullies or arroyos that lead to the historic highwater line. We recommend discontinuing monitoring. Turn the site over to the backcountry monitors.
A:16:174	SI	98-2	11/16/97	Biennial	11/16/99	
A:16:175	SI	94-2	3/ 8/94	Inactive		
A:16:176	SI	94-4	5/ 7/94	Inactive		
A:16:179	I	96-3	5/ 5/96	Discontinue		
A:16:180	SI	98-2	11/16/97	Biennial	11/16/99	Keep a monitor schedule of every other year to watch the gullying and the unstable slope. If features stay stable, renegotiate monitoring schedule.
A:16:184	SI	96-3	5/ 6/96	Inactive		
A:16:185	SI	95-3	3/ 4/95	3-5 Years	3/ 4/99	
B:09:314	N	98-1	10/21/97	3-5 Years	10/21/02	Site is stable. Monitor in 5 years.
B:09:315	I	96-3	5/ 5/96	Discontinue		
B:09:316	SI	98-1	10/21/97	3-5 Years	10/21/01	
B:09:317	SI	98-1	10/21/97	Biennial	10/21/99	
B:09:319	I	96-3	5/ 5/96	Discontinue		
B:09:320	I	91-0	4/24/91	Discontinue		
B:10:111	SI	96-2	2/24/96	3-5 Years	2/24/00	
B:10:121	N	96-1	10/21/95	Control Group	10/21/98	
B:10:224	I	95-3	3/ 1/95	3-5 Years	3/ 1/99	
B:10:225	N	98-1	10/18/97	3-5 Years	10/18/02	Monitor every 5 years due to minor erosion potential. Monitoring too frequently may result in damage or trailing.
B:10:227	N	94-3	4/ 4/94	Inactive		
B:10:229	SI	95-2	11/15/94	Inactive		
B:10:230	N	96-1	10/22/95	Control Group	10/22/98	
B:10:231	SI	96-2	2/24/96	Inactive		
B:10:236	N	96-1	10/20/95	Control Group	10/20/98	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
B:10:237	SI	96-2	2/25/96	3-5 Years	2/25/01	
B:10:248	I	96-1	10/21/95	Discontinue		
B:10:249	I	97-2	11/15/96	3-5 Years	11/15/01	
B:10:260	N	95-2	11/14/94	Inactive		
B:10:261	SI	98-1	10/18/97	3-5 Years	10/18/02	Site is stable.
B:10:262	SI	95-4	4/ 2/95	Inactive		
B:11:271	SI	95-4	4/ 1/95	3-5 Years	4/ 1/99	
B:11:272	SI	98-2	11/14/97	Biennial	11/17/99	
B:11:275	SI	98-2	11/14/97	Inactive		The site is stable and the drainage downslope of the site area is not active. The site should be categorized as inactive.
B:11:277	I	95-5	5/ 5/95	3-5 Years	5/ 5/99	
B:11:278	SI	96-3	5/ 3/96	3-5 Years	5/ 3/01	
B:11:279	SI	95-3	3/ 1/95	Discontinue		
B:11:280	SI	95-4	4/ 1/95	Inactive		
B:11:281	I	95-1	10/15/94	3-5 Years	10/15/98	
B:11:282	SI	97-2	11/14/96	Biennial	11/14/98	
B:11:283	SI	94-5	9/17/94	Inactive		
B:11:284	I	93-4	5/ 2/93			
B:13:001	I	97-2	11/16/96	3-5 Years	11/16/00	
B:13:002	SI	95-3	3/ 3/95	Inactive		
B:14:093	SI	98-1	10/18/97	Biennial		
B:14:095	I	95-3	3/ 1/95	3-5 Years	3/ 1/99	
B:14:105	N	98-1	10/18/97	Biennial	10/18/99	
B:14:107	SI	98-1	10/18/97	3-5 Years	10/18/00	Monitor in 3 years.
B:14:108	SI	97-2	11/14/96	3-5 Years	11/14/00	
B:15:001	N	94-1	10/ 9/93	Discontinue		
B:15:091	N	95-3	2/28/95	Control Group	10/19/98	
B:15:096	I	95-3	2/28/95	Inactive		
B:15:097	I	97-2	11/13/96	Biennial	11/13/98	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
B:15:118	N	95-2	11/14/94	Discontinue		
B:15:119	I	98-2	11/14/97	3-5 Years	11/14/02	Monitor again in 5 years to check out the surface erosion and animal trailing, which could uncover more artifacts.
B:15:120	SI	97-2	11/12/96	3-5 Years	11/12/99	
B:15:121	N	96-1	10/19/95	Control Group	10/19/98	
B:15:122	I	97-2	11/13/96	3-5 Years	11/13/99	
B:15:123	SI	97-2	11/13/96	3-5 Years	11/13/99	
B:15:124	SI	95-3	2/28/95	Inactive		
B:15:126	N	96-1	10/19/95	Control Group	10/19/98	
B:15:127	I	95-1	10/14/94	3-5 Years	10/14/98	
B:15:128	I	97-2	11/13/96	3-5 Years	11/13/01	
B:15:131	SI	96-3	5/ 2/96	Discontinue		
B:15:132	N	96-1	10/19/95	Control Group	10/19/98	
B:15:134	I	97-2	11/13/96	Inactive		
B:15:135	I	96-2	2/24/96	3-5 Years	2/24/01	
B:15:138		98-1	10/18/97	Annual	10/18/98	
B:15:139	I	97-2	11/13/96	3-5 Years	11/13/00	
B:15:143	N	96-1	10/19/95	Control Group	10/19/98	
B:16:001	SI	93-5	5/28/93	Discontinue		
B:16:003	SI	97-2	11/12/96	Biennial	11/12/98	
B:16:257	SI	94-4	5/ 2/94	Inactive		
B:16:258	I	97-4	4/18/97	Inactive		
B:16:259	SI	95-3	2/27/95	3-5 Years	2/27/00	
B:16:261	SI	94-4	5/ 3/94	Inactive		
B:16:262	SI	94-3	4/ 3/94	Inactive		
B:16:364	SI	97-4	4/19/97	Inactive		
B:16:365	I	93-2	3/15/93	Discontinue		
C:02:050	SI	93-1	10/ 8/92	Discontinue		
C:02:085	SI	97-2	11/ 5/96	Inactive		

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
C:02:089	I	98-2	11/ 6/97	Discontinue		The site is out of the project boundary and well-protected.
C:02:092	SI	95-5	5/ 1/95	3-5 Years	5/ 1/99	
C:02:094	SI	98-1	10/ 7/97	Annual	10/ 7/98	Monitoring will continue annually because there is potential for subsurface, prehistoric artifacts.
C:02:096	SI	98-1	10/ 7/97	Annual	10/ 7/98	
C:02:097	SI	98-1	10/ 7/97	Biennial	10/ 7/99	
C:02:098	SI	98-1	10/ 7/97	Annual	10/ 7/98	
C:02:101	SI	98-2	11/ 6/97	Biennial	11/ 6/99	
C:05:004	SI	98-1	10/ 9/97	Inactive		Monitor before experimental flows.
C:05:007	I	95-5	5/ 1/95	Inactive		
C:05:009	SI	95-3	2/22/95	Inactive		
C:05:031	SI	97-2	11/ 6/96	Biennial	11/ 6/98	
C:05:035	I	94-2	2/24/93	Inactive		
C:05:037	SI	95-3	2/22/95	3-5 Years	2/22/99	
C:05:039	I	98-1	10/ 9/97	Inactive		Monitor before experimental flows over 45,000 cfs.
C:06:002	SI	95-5	5/ 1/95	3-5 Years	5/ 1/00	
C:06:003	SI	98-1	10/ 8/97	Discontinue		This is a backcountry site.
C:06:004	SI	95-3	2/22/95	Inactive		
C:06:005	I	98-1	10/ 8/97	Inactive		The information potential is exhausted. Place on the inactive list. River patrol will periodically visit to check on vandalism.
C:06:006	SI	97-2	11/ 5/96	3-5 Years	11/ 5/00	
C:06:008	SI	96-2	2/13/96	3-5 Years	2/13/01	
C:06:010	SI	95-4	3/27/95	3-5 Years	3/27/99	
C:09:001	SI	93-4	4/28/93	Discontinue		
C:09:004	I	95-5	5/ 1/95	Discontinue		
C:09:005	I	97-2	11/ 7/96	Inactive		
C:09:028	SI	90-0	12/ 4/90	Discontinue		
C:09:030	SI	97-2	11/ 7/96	3-5 Years	11/ 7/99	
C:09:031	SI	95-3	2/23/95	3-5 Years	2/23/99	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
C:09:032	N	94-2	2/25/94	Inactive		
C:09:034	SI	97-2	11/ 7/96	Biennial	11/ 7/98	
C:09:050	SI	98-4	4/18/98	Semiannual	10/18/98	
C:09:051	SI	98-1	10/10/97	Annual	10/10/98	
C:09:052	SI	98-2	11/ 8/97	Biennial	11/ 8/99	
C:09:053	SI	97-2	11/ 8/96	3-5 Years	11/ 8/00	
C:09:054	SI	96-2	2/15/96	Discontinue		
C:09:056	I	97-2	11/ 8/96	Inactive		
C:09:058	SI	96-3	4/26/96	Discontinue		
C:09:059	SI	96-3	4/26/96	Discontinue		
C:09:061	SI	96-3	4/26/96	Inactive		
C:09:062	SI	96-1	10/14/95	3-5 Years	10/14/00	
C:09:065	I	97-2	11/ 7/96	3-5 Years	11/ 7/01	
C:09:067	SI	96-3	4/27/96	Inactive		
C:09:068	SI	97-2	11/ 8/96	Inactive		
C:09:069	SI	97-2	11/ 8/96	Biennial	11/ 8/98	
C:09:071	SI	96-3	4/26/96	Discontinue		
C:09:072	SI	98-2	11/ 8/97	3-5 Years	11/ 8/02	Monitor again in 5 years, then assess for placing the site on the inactive list.
C:09:073	SI	96-2	2/15/96	Discontinue		
C:09:080	N	96-1	10/14/95	Control Group	10/14/98	
C:09:082	SI	96-2	2/14/96	3-5 Years	2/14/99	
C:09:083	I	98-1		Discontinue		The site is outside the project area. Backcountry should continue to monitor it due to visitation.
C:09:084	SI	98-2	11/ 8/97	3-5 Years	11/ 8/00	Monitor again in 3 years.
C:09:088	SI	97-2	11/ 7/96	Biennial	11/ 7/98	
C:13:001	SI	91-0	3/18/91	Discontinue		
C:13:003	SI	90-0	12/ 7/90	Discontinue		
C:13:005	SI	98-1		Discontinue		The site is outside the project area. Let the backcountry archaeologists monitor it.
C:13:006	SI	98-1	10/11/97	Annual	10/11/98	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
C:13:007	SI	98-2	11/ 9/97	Biennial	11/ 9/99	
C:13:008	SI	95-5	5/ 3/95	Inactive		
C:13:009	SI	97-2	11/ 9/96	Biennial	11/ 9/98	
C:13:010	SI	98-3	3/ 1/98	Annual	3/ 1/99	
C:13:033	SI	96-1	10/15/95	3-5 Years	10/15/00	
C:13:069	SI	97-1	10/ 6/96	Annual	10/ 6/97	
C:13:070	SI	98-1	10/13/97	Annual	10/13/98	
C:13:092	SI	97-1	10/ 6/96	Biennial	10/ 6/98	
C:13:098	SI	98-4	4/19/98	Annual	4/19/99	Monitor the gullies with the checkdams annually.
C:13:099	SI	98-4	4/19/98	Semiannual	10/19/98	
C:13:100	SI	98-4	4/19/98	Semiannual	10/19/98	
C:13:101	SI	96-1	10/15/95	3-5 Years	10/15/00	
C:13:131	SI	95-1	10/ 9/94	Inactive		
C:13:132	N	96-2	2/18/96	Discontinue		
C:13:272	SI	96-1	10/15/95	Biennial	10/15/97	
C:13:273	SI	98-2	11/ 9/97	Annual	11/ 9/98	
C:13:274	SI	96-1	10/15/95	Inactive		
C:13:291	SI	98-1	10/13/97	Annual	10/13/98	
C:13:321	SI	98-2	11/ 9/97	Annual	11/ 9/98	
C:13:322	SI	98-2	11/10/97	Inactive		River patrol will monitor the site in the summer.
C:13:323	SI	98-2	11/ 9/97	3-5 Years	11/ 9/01	Monitor in 4 years.
C:13:324	SI	96-2	2/18/96	Discontinue		
C:13:325	SI	98-2	11/ 9/97	3-5 Years	11/ 9/01	Monitor in 4 years.
C:13:326	SI	94-5	9/14/94	Inactive		
C:13:327	SI	98-2	11/ 9/97	Biennial	11/ 9/99	Monitor the site and the checkdams biennially.
C:13:329	SI	97-2	11/ 8/96	Biennial	11/ 8/98	
C:13:333	SI	95-5	5/ 3/95	3-5 Years	5/ 3/99	
C:13:334	SI	95-2	11/ 7/94	3-5 Years	11/ 7/98	
C:13:335	I	95-5	5/ 3/95	3-5 Years	5/ 3/99	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
C:13:336	SI	98-2	11/ 9/97	3-5 Years	11/ 9/00	Monitor in 3 years.
C:13:337	I	97-2	11/ 9/96	3-5 Years	11/ 9/01	
C:13:338	SI	98-2	11/ 9/97	Biennial	11/ 9/99	
C:13:339	SI	98-2	11/ 9/97	Annual	11/ 9/98	
C:13:340	SI	96-2	2/18/96	3-5 Years	2/18/99	
C:13:342	SI	97-2	11/ 9/96	Biennial	11/ 9/98	
C:13:343	SI	98-2	11/ 9/97	Annual	11/ 9/98	
C:13:344	SI	96-3	4/28/96	Inactive		
C:13:345	SI	96-2	2/19/96	Inactive		
C:13:346	SI	96-3	4/28/96	3-5 Years	4/28/99	
C:13:347	SI	98-1	10/13/97	Annual	10/13/98	
C:13:348	SI	98-2	11/ 9/97	Biennial	11/ 9/99	
C:13:349	SI	98-1	10/13/97	Annual	10/13/98	
C:13:350	SI	97-2	11/ 9/96	Inactive		
C:13:351	SI	96-2	2/19/96			
C:13:352	SI	96-2	2/19/96	3-5 Years	2/19/01	
C:13:353	SI	96-2	2/16/96	3-5 Years	2/16/01	
C:13:354	SI	98-2	11/11/97	3-5 Years	11/11/02	Monitor in 5 years.
C:13:355	SI	98-2	11/ 9/97	Biennial	11/ 9/99	
C:13:356	SI	96-3	4/29/96	3-5 Years	4/29/00	
C:13:357	SI	96-3	4/29/96	Discontinue		
C:13:358	SI	96-3	4/29/96	Inactive		
C:13:359	SI	98-2	11/11/97	Annual	11/11/98	
C:13:360	I	97-4	4/15/97	3-5 Years	4/15/02	
C:13:361	I	97-2	11/10/96	Inactive		
C:13:362	SI	96-2	2/20/96	3-5 Years	2/20/01	
C:13:363	I	97-2	11/10/96	3-5 Years	11/10/99	
C:13:364	I	96-3	4/29/96	Inactive		
C:13:365	SI	95-3	2/24/95	Inactive		

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
C:13:367	N	96-1	10/14/95	Control Group	10/14/98	
C:13:368	SI	95-5	5/ 2/95	Inactive		
C:13:370	SI	96-2	2/16/96	3-5 Years	2/16/01	
C:13:371	SI	98-4	4/18/98	Semiannual	10/18/98	
C:13:372	SI	96-2	2/16/96	Inactive		
C:13:373	I	97-2	11/ 9/96	Annual	11/ 9/97	
C:13:374	SI	94-2	2/26/94	Discontinue		
C:13:377	SI	96-2	2/20/96	3-5 Years	2/20/01	
C:13:379	SI	96-2	2/20/96	3-5 Years	2/20/01	
C:13:381	SI	96-2	2/21/96	3-5 Years	2/21/01	
C:13:384	SI	98-2	11/ 9/97	Biennial	11/ 9/99	Visit this site in conjunction with C:13:007 on a biennial schedule.
C:13:385	SI	95-5	5/ 3/95	3-5 Years	5/ 3/99	
C:13:386	SI	98-2	11/11/97	Biennial	11/11/99	
C:13:387	SI	97-1	10/ 7/96	Annual	10/ 7/97	
C:13:389	SI	98-2	11/11/97	Annual	11/11/98	
C:13:392	SI	97-2	11/10/96	Discontinue		
C:13:393	SI	96-3	4/30/96	3-5 Years	4/30/01	
C:13:486		97-4	4/15/97	3-5 Years	4/15/02	
G:02:001		95-5	5/10/95	Inactive		
G:02:009		95-5	5/10/95	Annual	5/10/98	
G:02:032		95-5	5/10/95	Discontinue		
G:02:100	I	95-5	5/ 9/95	3-5 Years	5/ 9/99	
G:02:101	I	95-5	5/ 9/95	3-5 Years	5/ 9/99	
G:02:102	I	95-5	5/ 9/95	Inactive		
G:02:103	I	95-5	5/ 9/95	Inactive		
G:02:105	I	95-5	5/ 9/95	Inactive		
G:02:106	I	95-5	5/ 9/95	Inactive		
G:02:107		95-5	5/10/95	Inactive		

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
G:02:108		95-5	5/ 9/95	3-5 Years	5/ 9/99	
G:03:001	SI	91-0	4/ 1/91	Discontinue		
G:03:002	SI	97-2	11/18/96	3-5 Years	11/18/00	
G:03:003	SI	98-4	4/30/98	Semiannual	10/30/98	The trail should also be monitored both fall and spring.
G:03:004	SI	98-1	10/23/97	Annual	10/23/98	
G:03:006	SI	98-2	11/19/97	Inactive		Place on the inactive list based on site stability and the fact that the drainages are not threatening the site and die out in dune terraces.
G:03:019	N	96-1	10/25/95	Control Group	10/25/98	
G:03:020	SI	98-1	10/24/97	Annual	10/24/98	
G:03:023	N	95-5	5/ 8/95	Discontinue		
G:03:024	SI	98-1	10/23/97	Biennial	10/23/99	The monitor schedule is changed to biennial to minimize trail damage.
G:03:025	SI	97-2	11/18/96	3-5 Years	11/18/00	
G:03:026	SI	98-1	10/23/97	Annual	10/23/98	
G:03:027	SI	95-5	5/ 8/95	Inactive		
G:03:028	SI	97-2	11/18/96	Biennial	11/18/98	
G:03:029	N	95-2	11/18/94	Inactive		
G:03:030	SI	98-2	11/18/97	Biennial	11/18/99	
G:03:032	I	95-1	10/20/94	3-5 Years	10/20/98	
G:03:033	SI	98-2	11/19/97	3-5 Years	11/19/01	
G:03:034	I	97-2	11/20/96	Biennial	11/20/98	
G:03:037	I	97-2	11/18/96	3-5 Years	11/18/00	
G:03:038	SI	98-2	11/17/97	Biennial	11/17/99	Continue biennial monitoring but maintain the checks annually.
G:03:040	SI	98-1	10/23/97	Annual	10/23/98	
G:03:041	SI	98-2	11/18/97	Annual	11/18/98	The schedule changed from biennial to annual due to Feature 3 and Check 2 condition or possible catastrophic potential.
G:03:042	SI	98-2	11/17/97	Inactive		These features are in no danger of impact.
G:03:043	SI	98-2	11/18/97	Biennial	11/18/99	
G:03:044	SI	98-1	10/24/97	Biennial	10/24/99	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
G:03:046	SI	95-5	5/ 8/95	Inactive		
G:03:048	SI	95-1	10/20/94	3-5 Years	10/20/98	
G:03:049	I	97-2	11/20/96	3-5 Years	11/20/00	
G:03:052	SI	98-2	11/19/97	3-5 Years	11/19/00	Monitor in 3 years.
G:03:053	I	97-2	11/20/96	Inactive		
G:03:054	SI	96-3	5/ 8/96	Inactive		
G:03:055	SI	96-2	3/ 3/96	3-5 Years	3/ 3/99	
G:03:056	I	94-5	9/19/94	Inactive		
G:03:057	I	97-2	11/20/96	Biennial	11/20/98	
G:03:058	SI	98-2	11/20/97	Biennial	11/20/99	
G:03:059	SI	94-4	5/ 8/94	Inactive		
G:03:060	SI	95-3	3/ 5/95	3-5 Years	3/ 5/99	
G:03:061	I	96-2	3/ 3/96	Discontinue		
G:03:062	SI	96-2	3/ 3/96	3-5 Years	3/ 3/99	
G:03:063	SI	95-2	11/18/94	Inactive		
G:03:064	SI	98-1	10/23/97	Annual	10/23/98	
G:03:065	I	98-2	11/19/97	3-5 Years	11/19/00	Monitor in 3 years.
G:03:066	SI	96-2	3/ 3/96	Inactive		
G:03:067	SI	97-2	11/20/96	Biennial	11/20/98	
G:03:069	N	95-1	10/19/94	Discontinue		
G:03:071	I	97-2	11/18/96	Biennial	11/18/98	
G:03:072	SI	98-2	11/20/97	Annual	11/20/98	Monitor Features 11, 12, and 14 annually and the checkdams in drainages 3 and 4. All other features may remain on a 3-5 year schedule.
G:03:073	SI	96-1	10/25/95	3-5 Years	10/25/99	
G:03:076	SI	96-2	3/ 3/96	3-5 Years	3/ 3/99	
G:03:077	I	95-5	5/ 8/95	3-5 Years	5/ 8/99	
G:03:078	I	97-2	11/20/96	Inactive		
G:03:079	I	93-3	4/11/93	Discontinue		
G:03:080	SI	98-1	10/24/97	Annual	10/24/98	

Site #	Impact Category	Last Session	Last Date	Schedule	Next Date	Comments
G:03:082	I	95-5	5/ 8/95	Inactive		
G:03:083	I	98-1	10/24/97	Inactive		Let the river patrol check on this site.
G:03:085	SI	95-2	11/19/94	3-5 Years	11/19/98	

APPENDIX I

REVIEW OF GRCA MONITORING SCHEDULES (1992-1998)

Review of GRCA Monitoring Schedules (1992-1998)

Site #	*Session Schedule*	*Notes*
A:13:100		
92-H		
A:13:101		
92-H		
A:13:103		
92-H		
A:15:001		
93-5	1	Above 300,000 cfs, but Impact Category was "SI." Why wasn't this site originally placed in the "N Impact Category? This site should be relabeled as an "N" if it is above the 300,000cfs. Has this been done?
98-3	1	Why was this site re-monitored when it was scheduled as a "1" during the 93-5 trip?
A:15:003		
93-2	3	
94-2	4	
96-2	4	
98-2	4	
A:15:004		
93-4	4	
94-2	5	Biennial monitoring suggested/monitored annually.
98-2	6	
A:15:005		
93-5	2	
95-4	3	Suggested semiannual monitoring, monitored biennial.
96-3	3	
97-1	3	
98-1	3	
A:15:017		
95-3	5	This site is in the "N" group, but in notes in 93 and 95 reports, it suggests that it be monitored on a annual basis (although scheduled as 3 to 5 years).
96-1	5	Suggested 3-5 year monitoring, monitored annually.
A:15:018		
96-3	5	
A:15:020		

Site #	Session	Schedule	Notes
	93-4	3	
	94-4	5	
	98-3	5	
A:15:021			
	94-3	3	Similar descriptions in 1994 and 1995 reports ("feature is deteriorating due to exposure," however, shifts from annual motoring to 3-5 years without providing a reason.
	95-4	5	
A:15:022			
	96-2	5	
A:15:025			
	93-3	3	
	94-3	3	
	95-5	1	Site outside 300,000 cfs level. However, this is an "I" site and was monitored annually in 1993 an 1994. Why did they wait until 1995 to discontinue after monitoring the site twice?
A:15:026			
	92-1	4	
	93-3	5	Suggested discontinuing in field notes. No reason provided for disregarding this suggestion.
	93-5	4	
	94-2	5	
	98-2	5	
A:15:027			
	92-1	3	
	93-1	4	
	93-2	3	
	94-3	3	Same description, different schedule provided in report for 1994 and 1995. However, in data shee notes, reasons fore lengthening time between monitoring is provided, e.g., the visibility of site, increased trailing by monitors. Such explanations should be provided in the report.
	95-1	4	
	95-3	5	
A:15:028			
	96-2	5	
A:15:029			
	96-2	5	
A:15:030			
	95-1	4	
	97-2	1	Discontinued because excavated. Should make a new Monitor Schedule category for excavations category "1" is to represent those sites above 300,000 cfs.

Site # Session	Schedule	Notes
A:15:031		
93-1	4	In data sheet notes, states that, as per L. Leap, this site will be discontinued from the river corridor monitoring program. Is it above the 300,000 cfs? Why is it given a monitoring schedule of "4"?
95-3	6	On data sheet notes, L.Leap changes the schedule to "annual as a control group site" in 2/96, the she suggested it being placed on the "inactive" list in 9/96. Why were such suggestions provided why were they different? This probably means that the monitoring schedule suggested in 1995 w not a 6. I don't think that the schedule should be changed in the data, but a new field should be provided that allows for altering the monitoring schedule (as well as provide reasons for such chan in the notes).
A:15:032		
94-5	6	
A:15:033		
96-2	5	This site received a priority 3 in 1996 (for stabilizing) when it was monitored, but received a priority in 1997 (plant veg) when it wasn't monitored. When/where did this recommendation/priority listing come from? Accordingly, assessments may be done in the office instead of the field. There shoul be some sort of separate data sheet filled out that records such assessments, their reason, as wel the remedial actions completed.
A:15:035		
93-1	5	Originally given a schedule of "3," L. Leap later changed it to "5."
97-2	3	Originally given a monitoring schedule of "5," J. Balson changed it to "3." Comparing to the previo monitoring schedule change, why do L.Leap and J. Balson disagree with each other?
98-1	5	
A:15:036		
96-3	6	
A:15:037		
96-3	6	
A:15:038		
96-3	5	
A:15:039		
92-1	3	
93-3	4	Same descriptions between 1993/1994, different monitoring schedule.
94-3	3	
95-2	5	Same description, different monitoring schedule between 1995 and 1995. Actually recommended discontinue on data sheet but L.Leap gave it a "5." Description in report don't say why monitoring schedules should be different between years. Description in report doesn't match notes on data sheets.
A:15:040		
92-3	4	
93-5	4	
95-5	5	
A:15:042		

Site # Session	Schedule	Notes
92-2	4	
93-3	3	
94-3	4	Doesn't seem as if suggested biennial monitoring is followed (monitored annually).
95-2	5	In report notes, suggests a monitoring schedule of "4," but L.Leap changed it to a "5" after report written.
A:15:043		
96-3	6	
A:15:044		
94-4	5	
98-3	1	Above "the highwater zone" although originally placed in the "SI" category.
A:15:047		
96-3	5	
A:15:048		
94-5	5	
98-2	5	
A:15:051		
93-4	4	
94-2	5	
A:16:002		
93-1		
95-5	1	Part of the "N" group. Aren't these suppose to be monitored every 3 years?
A:16:003		
93-1	3	
94-1	3	
94-3	1	Monitored annually by the backcountry program. However, originally placed in the "SI" group. Is i isn't it in the 300,000 cfs area?
A:16:004		
92-1	3	
93-3	3	
94-1	4	
94-4	4	
96-3	4	
98-2	4	
A:16:148		
94-1	4	

Site #	Session	Schedule	Notes
	96-1	4	
	98-3	5	
A:16:149			
	96-3	5	
A:16:150			
	96-2	6	
A:16:151			
	93-1	5	
	93-4	3	Monitored annually although recommended in the previous year to monitor every 3-5 years.
	94-3	3	
	94-5	3	
	95-3	5	
	98-3	5	
A:16:153			
	96-3	6	
A:16:154			
	96-2	5	
A:16:155			
	94-5	5	
	98-3	6	
A:16:156			
	95-2	3	This is part of the "N" group, suppose to receive a "5."
	96-1	5	
A:16:157			
	96-3	6	
A:16:158			
	92-3	5	
	93-4	5	
	94-3	3	
	95-5	5	
A:16:159			
	92-2	3	
	93-2	3	
	94-1	2	

Site #	Session	Schedule	Notes
	94-2	4	Different monitoring schedules for the same year - while the biennial monitoring was suggested du the 94-2 , the report reflects the first trip's suggestion of semi-annual monitoring. In general, monitoring schedules seem to jump around too much for this site, and they aren't being followed e year.
	95-1	3	Same description in report notes, different monitoring schedules between 1994 and 1995.
	95-4	3	
	96-3	3	
	97-1	3	
	98-1	5	
A:16:160			
	94-4	5	
A:16:161			
	96-3	6	
A:16:162			
	92-3	5	
	93-3	5	Monitored annually although suggested in 92 to monitor every 3-5 years
	97-2	6	
A:16:163			
	94-5	5	
	98-2	5	
A:16:167			
	93-5	4	
	94-1	4	
	96-2	4	
	98-2	4	
A:16:171			
	94-5	5	
	98-2	6	
A:16:172			
	96-3	5	
A:16:173			
	94-5	5	
	98-2	1	Suggests to turn this site over to the back country monitors, however, this is a "SI" site, suggestin that it is within the 300,000 cfs level. If so, it should be given a "6."
A:16:174			
	93-4	4	

Site #	Session	Schedule	Notes
	94-1	4	
	96-2	4	
	98-2	4	
A:16:175			
	92-1	4	
	93-2	4	
	93-4	4	This site monitored annually for three years, although was scheduled as biennial.
	94-2	6	Two years after this monitoring session, L.Leap suggests that this site be monitored annually as a control group site. Seven months later, she places it on the "inactive" list. What was the actual monitor schedule recommended in 1994? Another field in the data sheet should be made to recor subsequent changes in the monitoring schedule, plus reasons why.
A:16:176			
	94-4	6	
A:16:179			
	96-3	1	Above the 300,000 cfs level, but originally part of the "I" group. Why was it originally mislabeled?
A:16:180			
	96-3	4	
	98-2	4	
A:16:184			
	96-3	6	
A:16:185			
	93-2	4	
	95-3	5	
A:16;160			
	98-2	6	
B:09:314			
	98-1	5	This is part of the control "N" group, but is still monitored. Why are some "N" sites discontinued a others continued?
B:09:315			
	96-3	1	This is a stable site with no indication that it is above the 300,000 cfs level. It thus should be give "6."
B:09:316			
	92-2	5	
	93-3	5	
	94-2	5	Monitored annually although given a "5."
	98-1	5	

Site #	Session	Schedule	Notes
B:09:317			
	93-4	3	
	94-1	2	
	94-2	2	
	95-1	3	
	95-4	3	
	96-2	4	
	98-1	4	
B:09:319			
	96-3	1	Should be a "6."
B:10:111			
	93-5		
	94-2	4	
	96-2	5	
B:10:121			
	95-1	3	
	96-1	5	Part of the "N" group, but continues to be monitored.
B:10:224			
	92-2	3	
	93-2	3	
	94-1	3	
	94-2	2	The earlier 94 trip suggested a "3," but the "2" made it in the report.
	95-3	5	Exactly the same description but different monitoring schedules between 1994 and 1995 ("2" vs "5 No reason provided for lengthening the period between monitoring schedules.
B:10:225			
	93-4	3	
	93-5	4	
	94-4	5	
	98-1	5	
B:10:227			
	92-1	3	
	94-1	2	
	94-3	1	Why does this site receive a "2" earlier in the year and then a few months later is discontinued? T site was originally an "N," meaning that it is outside the 300,000 level - so why should that be a re it is discontinued? Are "inactive" control groups discontinued automatically (although, based on previous monitoring schedules, this site doesn't seem inactive).

Site #	Session Schedule	Notes
B:10:229		
	93-5 4	
	95-2 1	Not above the 300,000 cfs level, but also not a "cultural manifestation." A new category should be made in the monitoring schedule - possibly a "0" if it is not a true cultural site.
B:10:230		
	95-3 3	
	96-1 5	Control group.
B:10:231		
	96-2 6	
B:10:236		
	95-2 3	
	96-1 5	Control group.
B:10:237		
	96-2 5	
B:10:248		
	96-1 1	"Ineligible for National Register listing." Consider a new category of "0."
B:10:249		
	97-2 5	
B:10:260		
	95-2 1	A "no impact" control group. Why discontinue?
B:10:261		
	92-1 3	
	93-2 3	
	94-4 4	
	96-2 4	
	98-1 5	
B:10:262		
	95-4 1	An inactive "SI" site within the 300,000 cfs level. Should be a "6." However, field-notes suggests there is no site left. If true, this site should be placed in a new schedule category, possibly "0."
B:11:271		
	95-4 5	
B:11:272		
	92-1 3	
	93-3 4	
	94-1 2	

Site #	Session	Schedule	Notes
	94-2	4	In report, recommends semiannual monitoring, which was a suggestion made during the 94-1 trip. Why is not the most recent schedule reported? The report/field-notes are unclear as to why the schedule changed between the 1994 trips.
	95-1	3	
	95-4	3	
	96-3	4	Good description in field notes on data sheets as to why monitoring schedule changed between 1 and 1996, but no indication was provided in the report. I should not need to go back to the data sheets to figure why monitoring schedules change, but should readily find it in the report.
	98-2	4	
B:11:275			
	95-1	5	
	98-2	6	
B:11:277			
	95-5	5	
B:11:278			
	96-3	5	
B:11:279			
	93-5	3	
	94-1	3	
	95-3	1	Should be a "6."
B:11:280			
	95-4	6	
B:11:281			
	95-1	5	
B:11:282			
	92-1	3	
	93-2	3	
	94-1	3	
	94-2	5	
	95-3	4	Same description, different monitoring schedule between 1994 and 1995. No reason provided for change.
	97-2	4	
B:11:283			
	94-5	1	Should be a "6."
B:11:284			
	93-4	4	Site hasn't been monitored since 1993, although it was scheduled to be monitored in 1995. It was suggested that this site should be tested and possibly discontinued in fieldnotes, although it receiv a schedule of "4." This site needs to be re-evaluated.

Site #	Session Schedule	Notes
B:13:001		
	97-2 5	
B:13:002		
	92-2 3	
	93-2 3	
	94-3 2	
	94-5 4	The monitoring schedule for this site seems to change too much each time the site is visited. Actually, in 1994, it was suggested that the site be discontinued, but it received both a "4" and a "
	95-3 1	In the report, it states that it was removed because the site was stable and "outside the parameter the on-going project." However, this is an "SI" site.
B:14:093		
	92-1 3	
	93-2 3	
	94-2 5	
	98-1 4	
B:14:095		
	93-3 4	
	95-3 5	
B:14:105		
	92-2 3	
	93-2 3	
	94-2 4	
	96-3 4	
	98-1 4	
B:14:107		
	95-4 3	
	96-3 4	
	98-1 5	
B:14:108		
	92-2 5	
	93-2 5	
	97-2 5	
B:15:001		
	92-2 3	
	93-1	
	93-3 3	

Site #	Session	Schedule	Notes
	94-1	1	Discontinued because is above the 300,000 cfs level. However, this was always known since this control group - "N."
B:15:091			
	93-1	4	
	95-3	5	
B:15:096			
	92-2	4	
	93-1	4	
	93-3	4	
	94-1	2	
	94-4	3	This monitoring schedule goes in the report rather than the earlier one (94-1) of "2." In some case it's the first trip's monitoring schedule that makes it to the report, in others, it's the second school - inconsistent. The monitoring schedules for this site, however, seem not the be followed.
	95-3	1	Should be a "6."
B:15:097			
	97-2	4	
B:15:118			
	94-1	3	
	95-2	1	Control "N" group, substituted by another.
B:15:119			
	94-5	5	
	98-2	5	
B:15:120			
	92-1	5	
	93-3	5	
	97-2	5	Control group - receiving monitoring schedules as they are suppose to (every 3 years), although t schedule was not followed in 1993.
B:15:121			
	95-2	3	
	96-1	5	"Highly impacted" control group.
B:15:122			
	97-2	5	
B:15:123			
	92-1	5	
	93-3	5	
	97-2	5	

Site #	Session	Schedule	Notes
B:15:124			
	92-2	3	
	93-3	4	
	94-1	3	
	94-3	2	This monitoring recommendation was made because the site is easy to monitor. In general, the monitoring schedules for this site seem to change too much each year with no reasons provided.
	95-3	1	Should be a "6." Looking at how the time between monitoring trips decreases each trip (from bien to annual to semiannual), the recommendation to discontinue seems out of place.
B:15:126			
	95-3	5	
	96-1	5	Control group. Suppose to monitor every three years but monitored annually for two years.
B:15:127			
	95-1	5	
B:15:128			
	97-2	5	
B:15:131			
	92-3	4	L. Leap changed the schedule from a "5," but also suggests in the report that this be made into a " site."
	96-3	1	Still within the 300,000 cfs level but with questionable archeological significance (roughly 20 years old). Thus, if it is considered a non-site, it needs a new schedule ("0").
B:15:132			
	95-3	1	Part of the control group - "N."
	96-1	5	Why was this site even visited if it was discontinued the previous year?
B:15:134			
	97-2	6	
B:15:135			
	93-4	3	
	94-4	4	
	95-5	5	
	96-2	5	Suggested monitoring schedules are not followed since 1994.
B:15:138			
	97-4	3	
	98-1	3	
B:15:139			
	97-2	5	
B:15:143			

Site # Session	Schedule	Notes
95-2	3	Control "N" group. Should have received a "5."
95-3	1	Why was this site removed if it was part of the control group.
96-1	5	Why was this site re-monitored if it was suggested to be discontinued the previous year? How wa that decision made? The monitoring schedules are not being followed. If a mistake was made, th needs to be a way to report such mistakes and provide reason for changing the monitoring schedu at a later date.
B:16:001		
93-5	1	
B:16:003		
93-1	4	
95-5	4	
97-2	4	
B:16:257		
93-5	4	
94-4	1	
B:16:258		
97-4	6	
B:16:259		
92-1	3	
93-3	3	
94-1	3	
95-3	5	
B:16:261		
93-5	3	
94-4	1	This is part of the "SI" group, although in report states that it is "outside the parameters of the curr project." I'm not sure if this is an accurate statement. If not, then the site should receive a "6."
B:16:262		
92-2	3	
92-3	4	
94-3	1	This site is within the 300,000 cfs level and should receive a "6." In the report, it suggests a "5." There is no indication why the report does not match the data sheets.
B:16:364		
93-5	5	
97-4	6	
B:16:365		
92-2	3	

Site #	Session Schedule	Notes
93-2	1	Part of the "I" group. Discontinued because it is maintained by the Phantom Ranch Personnel. Consider a new monitoring category.
C:02:050		
93-1	1	
C:02:085		
93-4	3	
95-2	4	
97-2	6	
C:02:089		
94-5	5	
98-2	1	
C:02:092		
92-3	4	
93-3	4	
95-5	5	
C:02:094		
92-3	3	
93-3	4	
96-3	3	
97-1	3	
98-1	3	
C:02:096		
95-4	3	
96-3	3	
97-1	3	
98-1	3	
C:02:097		
95-4	3	
97-1	3	According to monitoring schedule, should have been monitored in 1996.
98-1	4	
C:02:098		
95-4	3	
97-1	3	According to monitor schedule, should have been monitored in 1996.
98-1	3	
C:02:101		

Site # Session	Schedule	Notes
92-3	4	
93-3	4	
94-4	4	In report, suggests a "5," but in data sheets, L.Leap changed it to a "4." Something should be sai about such changes in the report. However, the "5" was followed since this site was not monitore again until 1997. Also, check dams were recommended in 1994 (a priority 1), but weren't installed until 3 years later.
97-2	3	
98-2	4	
C:02:109		
93-1		
C:05:004		
92-2	3	
93-3	3	
94-4	5	
98-1	6	
C:05:007		
95-5	1	Should be a "6."
C:05:009		
95-3	1	Should be a "6."
C:05:031		
92-3	3	
93-4	3	
94-1	3	
94-2	3	
95-2	4	
97-2	4	
C:05:035		
94-2	1	Should be a "6."
C:05:037		
92-2	3	
93-2	3	
94-2	3	
95-3	5	
C:05:039		
97-2	3	
98-1	6	

Site #	Session	Schedule	Notes
C:06:002			
	92-2	3	
	93-1	4	
	93-3	3	
	94-1	3	
	95-5	5	
C:06:003			
	94-1	2	This monitoring schedule (semiannual) made it into the report, although the later 1994 trip recommended annual monitoring. It seems random as to which monitoring schedule is recommended in the report when site is monitored twice in one year.
	94-2	3	
	95-1	2	
	95-3	3	
	96-3	3	
	97-1	3	Different loci (plural of locus?) in this site receive different monitoring recommendations. Each Lo should have a separate data sheet if some are to be monitored and others are inactive, or monitor following a different schedule.
	98-1	1	This suggestion to discontinue seems rather abrupt. Since I neither have the report or notes from data sheets, I can't base this observation on the findings.
C:06:004			
	92-2	4	
	93-4	4	
	94-5	3	
	95-3	1	Should be a "6," although the recommendation to make this an "inactive" site seems out of place, based upon the frequency of previous monitoring schedules. There also is no indication on the previous reports notes or field notes on the data sheets that this site is inactive.
C:06:005			
	94-2	3	
	95-2	3	
	96-3	3	
	97-1	3	
	98-1	6	After 5 years of annual monitoring, it seems rather abrupt to place this site on the "inactive" list. However, I have no notes or report to judge the reason why this site received a "6."
C:06:006			
	92-3	4	
	93-4	4	
	97-2	5	According the monitoring schedule recommended in 1993, this site should have been monitored in 1995.
C:06:008			
	92-3	4	

Site #	Session Schedule	Notes
96-2	5	According the monitoring schedule recommended in 1992, this site should have been monitored in 1994.
C:06:010		
95-4	5	
C:09:001		
92-1	3	
93-4	1	Part of the "SI" group - now to be monitored by back-country archeologists. Should it be removed f the "SI" listing?
C:09:004		
95-5	1	Should be a "6."
C:09:005		
97-2	6	
C:09:030		
93-1	5	
97-2	5	
C:09:031		
95-3	5	
C:09:032		
93-1		
94-2	1	Part of the control "N" group.
C:09:034		
95-3	4	
97-2	4	
C:09:050		
92-2	3	
93-1	4	
93-2	3	
94-1	2	
94-2	3	
95-1	3	
95-4	2	No real reason provided for shifting between 2's, 3's and 4's during the past several years (althoug the site has been monitored semiannually consistently).
96-1	2	
96-3	2	
97-1	2	
97-4	2	

Site #	Session	Schedule	Notes
	98-1	2	
	98-4	2	
C:09:051			
	92-2	2	
	93-2	2	
	94-1	2	
	94-3	2	
	95-1	3	
	95-4	3	
	96-2	3	
	97-1	3	
	98-1	3	
C:09:052			
	92-1	3	
	93-1	3	
	93-2	3	
	94-1	2	
	94-3	2	
	95-1	3	
	95-4	3	
	96-2	4	
	98-2	4	
C:09:053			
	93-1	3	
	93-5	3	
	95-1	4	
	97-2	5	
C:09:054			
	96-2	1	Should be a "6."
C:09:056			
	97-2	6	
C:09:058			
	96-3	1	Fieldnotes states that the site is above the 300,000 cfs line. However, this was originally an SI sit
C:09:059			
	96-3	1	Fieldnotes states that the site is above the 300,000 cfs line. However, this was originally an SI sit

Site #	Session Schedule	Notes
C:09:061		
	96-3 6	
C:09:062		
	96-1 5	
C:09:065		
	97-2 5	
C:09:067		
	96-3 6	
C:09:068		
	93-4 5	This site was originally given a "2" - suggested re-monitored in the Fall. However, L.Leap gave it two years later (1996) - presumably in the office because it wasn't re-monitored until 1997. How w this decision made? It needs to be recorded somewhere.
	97-2 6	
C:09:069		
	92-1 5	
	93-1	
	93-2 5	
	97-2 4	
C:09:071		
	96-3 1	Fieldnotes states that the site is above the 300,000 cfs line. However, this was originally an SI sit
C:09:072		
	94-5 5	
	98-2 5	
C:09:073		
	96-2 1	Should be a "6."
C:09:080		
	95-2 3	Control - "N" site, should have received a "5."
	96-1 5	
C:09:082		
	92-2 3	
	93-2 3	
	94-1 2	
	94-3 2	In report, says to monitor on an annual basis, on data sheet notes, suggests semiannually. Such inconsistencies should be avoided.
	95-1 3	

Site #	Session Schedule	Notes
95-4	3	L.Leap changed monitoring schedule from 5 to 3, but no reasons provided. There is definitely a n to record such changes on the data sheets, as well as reasons why they are made.
96-2	5	
C:09:083		
94-5	5	
98-1	1	Should be a "6."
C:09:084		
96-3	4	
98-2	5	
C:09:088		
92-3	3	
93-5	3	
94-2	3	
95-3	4	
97-2	4	
C:13:005		
95-5	3	
96-3	3	
97-2	3	
98-1	1	The Monitoring Schedule table states that this site is outside the project area. However, this was originally an "SI" site. Also, the recommendation to discontinue seems out of place here after thre years of annual monitoring with no indication that the site would be discontinued.
C:13:006		
92-1	3	
93-2	3	
94-1	3	
94-3	3	
95-2	3	
95-5	3	
96-3	3	
97-1	3	
98-1	3	
C:13:007		
93-4	3	
94-3	3	
95-2	4	

Site #	Session	Schedule	Notes
	97-2	3	
	98-2	4	
C:13:008			
	92-3	3	
	93-3	3	
	95-5	1	L.Leap changed from "3" to "1," stating that the site is above the high water mark. However, this i after discussion in the fieldnotes that states the need for re-monitoring the site.
C:13:009			
	93-1	2	
	94-2	4	
	97-2	4	According to the monitoring schedule, this site should have been monitored in 1996.
C:13:010			
	95-3	3	
	96-3	3	
	97-2	3	
	98-3	3	
C:13:033			
	96-1	5	
C:13:069			
	93-4	2	
	95-1	3	
	96-3	3	
	97-1	3	
C:13:070			
	93-2	2	
	94-2	2	
	94-4	2	
	95-1	2	
	95-4	3	
	96-1	3	
	96-3	3	
	97-1	3	
	98-1	3	
C:13:092			
	93-1	2	

Site #	Session	Schedule	Notes
	93-5	2	
	94-2	3	
	95-5	3	
	96-3	3	
	97-1	4	
C:13:098			
	93-1	2	
	93-2	3	
	94-1	2	Semiannual monitoring suggested in report, although the later 1994 trip's recommended monitorin schedule was a "3." A lot of preservation work (priorities 2 - 4) was recommended since 1994, but nothing has yet been done according to the Preservation Options table (however, it was suggeste 1997 that checkdams be monitored - indicating that they were set up). In 1995, it is suggested in t field-notes that this become a priority site for measures to reduce site impacts.
	94-4	3	
	95-1	2	
	95-4	2	
	96-1	2	
	96-3	2	
	97-1	2	
	97-4	2	
	98-1	4	This monitoring recommendation seems out of place - and it is not followed.
	98-4	3	
C:13:099			
	93-1	2	
	93-2	2	
	94-1	2	
	94-4	3	This monitoring schedule seems out of place, and it is not followed.
	95-1	2	
	95-4	2	
	96-1	2	
	96-3	2	
	97-1	2	
	97-4	2	
	98-1	2	
	98-4	2	
C:13:100			
	92-1	3	

Site #	Session	Schedule	Notes
	93-1	3	
	93-2	2	
	94-1	2	
	94-2	3	This monitoring schedule seems out of place, and it is not followed.
	95-1	2	
	95-4	2	
	96-1	2	
	96-3	2	
	97-1	2	
	97-4	2	
	98-1	3	
	98-4	2	
C:13:101			
	93-1	3	
	93-2	4	
	94-2	4	
	95-5	5	
	96-1	5	Doesn't seem as if the monitoring recommendations were being followed.
C:13:131			
	92-2	2	
	93-2	2	
	95-1	1	Originally given a "2." L. Leap gave it a "1" because "site integrity has been lost due to heavy visitation." Since this site is below the 300,000 cfs line, and it's not "stable," I would suggest anot monitoring schedule - possible a "0" (as a non-site), or a new category.
C:13:132			
	94-1	4	
	96-2	1	Part of the "N" control group.
C:13:272			
	92-1	3	
	93-1	3	
	93-2	3	
	94-1	2	
	94-2	4	
	95-1	3	
	95-4	5	
	96-1	4	No real reason provided for such great shifts in monitoring schedules, which don't seem to be followed anyhow.

Site #	Session Schedule	Notes
C:13:273		
93-4	2	
95-1	3	According to the monitoring schedule, this site should have been monitored (at least once) in 1994
96-1	3	
97-1	3	
98-2	3	
C:13:274		
95-2	3	
96-1	6	Field notes for both 1995 and 1996 state that this is part of the "N" group, but on Monitoring Sched table, it is part of the "SI" group. Notes also suggest monitoring every 3 years, but L.Leap change to "inactive" without providing reasons why.
C:13:291		
92-1	3	
93-1	3	
93-2	3	
94-1	3	
94-2	3	
95-2	3	
96-2	3	
97-1	3	
98-1	3	
C:13:321		
93-1	3	
93-4	3	
94-2	3	
95-2	3	
95-5	3	
96-2	3	
97-1	3	
98-2	3	
C:13:322		
94-5	4	
96-2	4	
98-2	6	
C:13:323		
94-5	5	

Site #	Session	Schedule	Notes
	98-2	5	
C:13:324			
	96-2	1	Should be a "6."
C:13:325			
	94-5	5	
	98-2	5	
C:13:326			
	94-5	1	Should be a "6." Report does suggest that it should be monitored every 3-5 years. No indication notes are different from report.
C:13:327			
	96-2	4	
	98-2	4	
C:13:329			
	92-2	4	
	93-2	4	
	95-3	4	
	97-2	4	
C:13:333			
	92-3	4	
	93-5	4	
	95-5	5	
C:13:334			
	93-2	4	
	95-2	5	
C:13:335			
	95-5	5	
C:13:336			
	92-1	3	
	94-2	4	
	96-1	4	
	98-2	5	
C:13:337			
	97-2	5	
C:13:338			

Site #	Session Schedule	Notes
	96-2 4	
	98-2 4	
C:13:339		
	93-4 3	
	95-2 3	
	96-1 3	
	97-1 3	
	98-2 3	
C:13:340		
	96-2 5	
C:13:342		
	92-3 3	
	93-3 3	
	95-2 4	
	97-2 4	
C:13:343		
	92-3 4	
	93-3 4	
	95-3 4	
	97-2 3	
	98-2 3	
C:13:344		
	96-3 6	Suggested to discontinue in notes because it is above 300,000 cfs, although is part of the "SI" gro Changed to "inactive" by L.Leap, but no reason provided.
C:13:345		
	96-2 6	
C:13:346		
	96-3 5	
C:13:347		
	92-3 4	
	93-3 4	
	95-3 2	
	96-1 2	
	96-3 2	
	97-1 2	

Site #	Session	Schedule	Notes
	97-4	2	
	98-1	3	
C:13:348			
	96-3	4	
	98-2	4	
C:13:349			
	93-4	3	
	94-5	5	This schedule seems out of place, although it was not followed.
	95-3	3	
	96-2	3	
	97-1	3	
	98-1	3	
C:13:350			
	92-3	5	
	93-4	5	
	97-2	6	
C:13:352			
	96-2	5	
C:13:353			
	96-2	5	
C:13:354			
	92-3	4	
	93-3	4	
	94-2	5	The monitoring schedule doesn't seem to be followed.
	98-2	5	
C:13:355			
	93-2	4	
	93-5	3	
	94-2	5	
	98-2	4	
C:13:356			
	93-4		
	94-5	4	
	96-3	5	

Site #	Session Schedule	Notes
C:13:357		
94-5	4	Annual monitoring suggested in report, but L. Leap changed to Biennial two years later in notes (a skipping a scheduled monitoring session). Doesn't say why.
96-3	1	Site located above the mesquite zone - does this mean that it is above the 300,000 cfs line, or sho it be given a "6." L. Leap recommended testing after monitoring was discontinued.
C:13:358		
96-3	6	Suggests that there is no integrity left to this site. If so, consider a new monitoring schedule (poss "0").
C:13:359		
92-1	3	
93-3	3	
94-2	4	
95-3	5	
96-2	3	The monitoring schedules shift around too much, and they aren't being followed. On data sheets recommends monitoring every 3 years, L. Leap changed it to annual - no reason provided.
97-2	3	
98-2	3	
C:13:360		
97-4	5	
C:13:361		
97-2	6	
C:13:362		
96-2	5	
C:13:363		
97-2	5	
C:13:364		
94-5	1	Should be a "6."
96-3	5	Why was this site re-monitored when it was discontinued two years earlier, especially since it is sti reported as stable? The report suggests that the site be placed on the inactive list.
C:13:365		
92-3	4	
93-3	4	
94-1	3	
94-2	4	The recommended monitoring sessions are not being followed.
95-3	6	In 2/96, L. Leap recommended placing this site on the control group and monitored annually. However, this site is not above the 300,000 cfs line and control groups are to be monitored every t years. Is there another form of control group? L. Leap then changes this site to a "6" several mon later.

Site #	Session Schedule	Notes
C:13:367		
95-2	3	
96-1	5	
C:13:368		
92-3	4	
93-3	4	
95-5	5	
C:13:370		
96-2	5	
C:13:371		
92-1	3	
92-3	3	
93-2	3	
93-4	3	1992 and 1993 monitoring schedules should have been "2's", since they were monitored semiann
94-2	2	
94-4	2	
95-1	2	
95-4	2	
96-1	2	
96-3	2	
97-1	2	
97-4	2	
98-1	2	
98-4	2	
C:13:372		
96-2	6	
C:13:373		
97-2	3	
C:13:374		
92-1	3	
93-4	3	
94-2	1	States that this site is outside the project area, but is originally in the "SI" group. If it is, it should b given a "6," unless it isn't stable and needs to be monitored.
C:13:377		
96-2	5	

Site #	Session	Schedule	Notes
C:13:379			
	92-1	3	
	93-2	3	
	93-4	3	
	94-2	4	
	96-2	5	
C:13:381			
	92-3	3	
	93-3	3	
	93-4	3	
	94-2	4	
	96-2	5	
C:13:384			
	92-1	3	
	93-3	3	
	94-2	5	Suggests annual monitoring in the report, but changed by L.Leap in 1996 (two years after monitori date) to a "5." When it was re-monitored in 1997, it was changed back to annual (actually, the fieldnotes suggest every three years, but J. Balson changed it to annually). Should the site have monitored in 1995 and 1996 as suggested in 1994. How can the schedule be changed two years after it was made? Were there disagreements between Leap and Balson on how often the site ne to be monitored? Reasons for the changes need to be provided, as well as leaving the original recommended monitoring dates so we can see when and how they change when not in the field - important stuff for perfecting the monitoring procedures.
	97-2	3	
	98-2	4	
C:13:385			
	93-4	3	
	94-2	3	
	95-5	5	
C:13:386			
	93-2	4	
	94-2	4	
	96-1	4	
	98-2	4	
C:13:387			
	96-1	3	
	97-1	3	
C:13:389			

Site #	Session Schedule	Notes
96-3	3	
97-2	3	
98-2	3	
C:13:392		
96-3	3	
97-2	1	"Outside the parameters of the river corridor monitoring project," but is part of the "SI" group.
C:13:393		
96-3	5	
C:13:486		
97-4	5	
G:02:001		
92-H		
95-5	1	Should be a "6."
G:02:009		
92-H		
95-5	3	
G:02:032		
92-H		
95-5	1	This site does not have an Impact Category number.
G:02:100		
95-5	5	
G:02:101		
95-5	5	
G:02:102		
95-5	1	Above the 300,000 cfs mark, but originally part of the "I" group.
G:02:103		
95-5	1	Should be a "6."
G:02:105		
95-5	1	Suggests that it is "outside the zone of potential impact," although it is part of the "I" group.
G:02:106		
95-5	1	Should be a "6," or a new schedule because it was discontinued due to the safety of the personnel
G:02:107		
95-5	1	Should be a "6."

Site #	Session Schedule	Notes
G:02:108		
92-H		
95-5	5	
G:03:002		
93-3	3	
94-2	3	
95-3	4	
97-2	5	
G:03:003		
92-1	3	
93-2	3	
94-1	2	
94-3	2	
95-4	2	Missed a second 1995 monitoring session.
96-1	2	
96-3	2	
97-1	2	
97-4	2	
98-1	3	
98-4	2	
G:03:004		
93-1	3	
93-2	3	
94-1	2	
94-4	2	
95-2	2	
95-4	3	
96-2	3	
97-1	3	
98-1	3	
G:03:006		
94-1	5	
98-2	6	
G:03:019		
95-3	5	

Site #	Session Schedule	Notes
96-1	5	
G:03:020		
92-1	3	
93-3	2	
94-4	2	Not monitoring semiannual as suggested for the past two years. Also, suggest should discontinue monitoring after stabilization (which was completed in 1996, although monitoring continues).
95-2	4	Suggests discontinue monitoring two features but intensely monitor other features. Such informati needs to be recorded on data sheets. Possibly a separate sheet for each feature?
95-4	3	Report suggest annual monitoring, thus ignoring the earlier 1995 monitoring suggestion.
96-3	3	
97-1	3	
98-1	3	
G:03:023		
93-1	4	
93-4		
95-5	1	This site was discontinued because it is above the 300,000 cfs level. But this was already known because it was part of the control "N" group, so that's no reason to discontinue monitoring. Don't t field people know what is a control group and what is not?
G:03:024		
93-4	4	
94-5	2	
95-3	4	
97-2	3	
98-1	4	The monitoring schedules for this site shifted too much, and they weren't being followed.
G:03:025		
93-2	3	
94-2	3	
95-3	4	
97-2	5	Good descriptions for this site - talks about stability which rationalizes the increased time between monitoring.
G:03:026		
92-1	3	
93-2	3	
94-2	2	
94-5	2	
95-3	3	
96-1	3	
97-1	3	

Site #	Session	Schedule	Notes
	98-1	3	
G:03:027			
	92-3	4	
	93-2	4	
	95-5	1	Should be a "6."
G:03:028			
	93-2	3	
	94-2	2	
	94-5	2	
	95-3	4	
	97-2	4	
G:03:029			
	93-5		
	95-2	1	Says that this site is inactive and monitoring is unnecessary. But isn't monitoring necessary beca this is part of the control "N" group?
G:03:030			
	96-3	4	
	98-2	4	
G:03:032			
	95-1	5	
G:03:033			
	96-2	4	
	98-2	5	
G:03:034			
	94-4	3	
	95-5	4	
	97-2	4	
G:03:037			
	97-2	5	
G:03:038			
	96-2	4	
	98-2	4	
G:03:040			
	94-2	3	
	95-3	3	

Site #	Session	Schedule	Notes
	96-2	3	
	97-1	3	
	98-1	3	
G:03:041			
	96-2	4	
	98-2	3	
G:03:042			
	92-2	4	
	93-2	4	
	94-2	5	
	98-2	6	
G:03:043			
	94-4	5	
	98-2	4	
G:03:044			
	92-1	3	
	93-3	4	
	94-2	3	
	95-2	3	
	96-3	3	
	97-1	3	
	98-1	4	
G:03:046			
	94-3	3	
	95-5	6	
G:03:048			
	95-1	5	
G:03:049			
	97-2	5	
G:03:052			
	96-2	4	
	98-2	5	
G:03:053			
	97-2	6	

Site #	Session Schedule	Notes
G:03:054		
96-3	6	Says located above the 300,000 cfs level (although part of the "SI" group), which would mean it should be given a "1." However, L. Leap later changed it to a "6." No reason provided.
G:03:055		
96-2	5	
G:03:056		
94-5	1	Says above 300,000 cfs level, but originally part of the "I" group.
G:03:057		
97-2	4	
G:03:058		
94-4	4	
96-2	4	
98-2	4	
G:03:059		
94-4	6	In 2/96, L. Leap stated that this site will be monitored annually as a control group site (but is below 300,000 cfs level), but then changed it to "6" several months later. Need to provide reasons for su changes.
G:03:060		
94-2	3	
95-3	5	
G:03:061		
92-2	4	
93-3	4	
94-2	4	
95-1	5	Not following suggested monitoring schedule.
96-2	1	States that this site is "at the approximate 300,000 cfs level." Is it or isn't it. If so, why did it take fi years of continuous/annual monitoring before it was "realized" that it was out of the project area?
G:03:062		
96-2	5	
G:03:063		
94-4	3	
95-2	6	Almost opposite description between field notes on data sheets and the report description. The fie notes suggest that this site is stable and no erosional impacts evident. In the report, "Erosion is ongoing." Discontinuing was suggested because little potential for recovery existed. So, why was site discontinued? If there is no data recover possible, maybe it should receive a different schedul (such as a "0" for "non site")
G:03:064		
94-1	2	

Site #	Session Schedule	Notes
94-2	2	
95-1	2	
95-4	3	
96-2	3	
97-1	3	
98-1	3	
G:03:065		
94-5	5	
98-2	5	
G:03:066		
92-1	4	
93-2	4	
94-2	4	
96-2	6	
G:03:067		
92-2	2	
93-4	3	
94-2	3	
95-2	4	
97-2	4	
G:03:069		
95-1	1	No fieldnotes were provided because this site was "out of our zone." Of course it was because it i part of the control "N" group, which means that it should have been monitored every 3 years even is "out of our zone." Don't the field people know about the control groups?
G:03:071		
97-2	4	
G:03:072		
93-4	3	
95-2	3	
96-3	3	
97-2	3	
98-2	3	
G:03:073		
96-1	5	
G:03:076		

Site #	Session	Schedule	Notes
	96-2	5	
G:03:077			
	93-2	4	
	95-5	5	
G:03:078			
	97-2	6	
G:03:079			
	92-1	5	
	93-3	1	Site is "ineligible for National Register listing." It then should receive a different schedule, such as "0" (non-site).
G:03:080			
	92-1	2	
	93-2	2	Semiannual monitoring was not followed - as suggested for the past two years.
	95-3	3	
	96-2	3	
	97-2	3	
	98-1	3	
G:03:082			
	92-2	4	
	93-2	4	
	95-5	1	Should be a "6."
G:03:083			
	97-2	3	
	98-1	6	This site didn't seem "inactive" in 1997.
G:03:085			
	92-1	4	
	93-3	4	
	95-2	5	

APPENDIX J

REVIEW OF GLCA MONITORING SCHEDULES (1992-1997)

Review of GLCA Monitoring Schedules (1992-1997)

SITE#	*SESSION*	*SCHEDULE*	*COMMENTS*
C:2:011 FEA 01			
	GLCA94-1	5	
	GLCA97-1	5	
C:2:011 FEA 03			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	5	In report site summary, suggests annual monitoring (3) although the report table reports every 3 to 5 years (5). No reason is provided for the different monitoring schedule.
C:2:011 FEA 04			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	4	A good reason is provided in site summary of the report for less frequent monitoring, although recommendation wasn't followed.
	GLCA97-1	4	
C:2:011 FEA 05			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:011 FEA 06			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:011 FEA 11			
	GLCA92	3	
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	5	
	GLCA97-1	5	
C:2:011 FEA 12			
	GLCA92	3	
	GLCA93	0	What does a schedule of "0" mean?
	GLCA94-1	3	

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA96-2	3	
	GLCA97-1	3	
C:2:011 FEA 13			
	GLCA94-1	5	
	GLCA97-1	5	
C:2:011 FEA 14			
	GLCA94-1	3	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:011 FEA 17			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:011 FEA 20			
	GLCA94-1	5	
	GLCA97-1	5	
C:2:011 FEA 21			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:012			
	GLCA92	2	Monitoring Schedule not followed.
	GLCA93	2	Monitoring Schedule not followed.
	GLCA94-1	5	No reason provided for such a change in Monitoring Schedules.
	GLCA97-1	5	
C:2:013			
	GLCA93	3	
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:032			
	GLCA92	3	

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA93	3	
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:033			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:035			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	4	
C:2:036			
	GLCA93	4	
	GLCA94-1	5	
	GLCA97-1	5	
C:2:037			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:038			
	GLCA92	3	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA93	3	
	GLCA94-1	2	
	GLCA95-1	2	
	GLCA95-2	2	
	GLCA96-1	2	
	GLCA96-2	2	
	GLCA97-1	2	
	GLCA97-2	2	
C:2:039			
	GLCA94-1	4	
	GLCA96-1	4	

SITE#	SESSION	SCHEDULE	COMMENTS
C:2:040			
	GLCA94-1	4	
	GLCA96-1	5	
C:2:041			
	GLCA92	4	
	GLCA94-1	5	
	GLCA97-1	5	
C:2:048			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:050			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:053			
	GLCA92	5	This monitoring schedule doesn't fit description of fieldnotes, which suggests annual (3) monitoring. Monitoring Schedule not followed.
	GLCA94-1	4	
	GLCA96-1	4	
C:2:056			
	GLCA94-1	5	
	GLCA97-1	5	
C:2:057			
	GLCA92	3	
	GLCA93	3	
	GLCA94-1	4	
	GLCA96-1	4	
C:2:058			
	GLCA93	3	
	GLCA94-1	4	
	GLCA96-1	5	
C:2:059			
	GLCA93	4	Monitoring Schedule not followed.

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA94-1	1	In report site description, states that this site was discontinued because it was stable. Should be a "6."
C:2:060 FEA 01			
	GLCA93	4	
	GLCA94-1	4	
	GLCA96-1	4	
C:2:060 FEA 02			
	GLCA93	3	
	GLCA94-1	3	
	GLCA95-1	4	Monitoring Schedule not followed.
	GLCA96-1	4	Monitoring Schedule not followed. Report suggests annual (3) monitoring.
	GLCA97-1	4	Report suggests annual (3) monitoring.
C:2:060 FEA 04			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	5	
	GLCA97-1	5	
C:2:060 FEA 06			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	5	
	GLCA97-1	5	
C:2:060 FEA 07			
	GLCA93	3	Monitoring Schedule seems out of place.
	GLCA94-1	5	
	GLCA97-1	5	
C:2:060 FEA 08			
	GLCA93	5	Monitoring Schedule not followed.
	GLCA94-1	3	Monitoring Schedule seems out of place. In report, suggests biennial (4).
	GLCA95-1	4	Monitoring Schedule not followed.
	GLCA96-1	4	Monitoring Schedule not followed.
	GLCA97-1	5	Report site description suggests biennial (4) monitoring while report table suggest a 5. Monitoring Schedules for this site in general is inconsistent - changes too frequently.
C:2:070			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:071			

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA93	3	
	GLCA94-1	4	
	GLCA96-1	4	
C:2:072			
	GLCA92	3	
	GLCA93	3	
	GLCA94-1	3	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:073			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	5	
	GLCA97-1	5	
C:2:074			
	GLCA92	4	
	GLCA94-1	4	
	GLCA96-1	4	
C:2:075			
	GLCA92	3	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA93	3	
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:076			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	4	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA96-1	4	Although this site monitored biennially, priority 1 recommendations provided annually. If this is such a high priority site, why is it only monitored biennially?
C:2:077			
	GLCA93	3	
	GLCA94-1	3	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA95-1	3	
	GLCA96-1	3	Report site description suggests biennial (4) monitoring, report table suggests annual (3) monitoring.
	GLCA97-1	3	Report site description suggests biennial (4) monitoring, report table suggest annual (3) monitoring.
C:2:078			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:079			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	4	
C:2:080			
	GLCA92	4	
	GLCA94-1	4	
	GLCA96-1	5	
C:2:081			
	GLCA93	3	
	GLCA94-1	2	Monitoring Schedule not followed.
	GLCA95-1	2	
	GLCA95-2	2	
	GLCA96-1	3	
	GLCA96-2	3	From 1994 to 1997, received a priority of "1" for remedial action. That action was completed in 1997 and the site was discontinued. However, this wasn't recorded in the data nor in the report site description notes.
C:2:082			
	GLCA92	4	Monitoring Schedule not followed.
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	4	
	GLCA96-1	4	
C:2:083			
	GLCA93	2	
	GLCA94-1	3	
	GLCA95-1	3	

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA96-1	3	
	GLCA97-1	3	Received a priority 1 for remedial action, but no indication in report site description why needs work (mapping).
C:2:084			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	4	
	GLCA96-1	4	
C:2:086			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:087			
	GLCA93	4	Monitoring Schedule not followed.
	GLCA94-1	4	
	GLCA96-1	5	
C:2:088			
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:090			
	GLCA93	3	
	GLCA94-1	4	
	GLCA96-1	4	
C:2:091			
	GLCA93	3	
	GLCA94-1	3	
	GLCA95-1	3	
	GLCA96-1	3	From 1994 to 1996, received a priority of "1" for remedial action (i.e., obliterate trail), because of surface erosion, gullying, panel surface erosion, trailing. Will all these impacts be addressed though trail obliteration?
	GLCA97-1	3	In 1997, received a rank of "0," because of trail overgrowth. However, in report site description, other impacts still occurring (e.g., surface erosion and bank slumpage), suggesting the need for other forms of remedial action.
C:2:094			
	GLCA92	4	What happened to this site? Was it discontinued? If so, needs to be recorded.
C:2:095			
	GLCA92	4	

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA93	3	
	GLCA94-1	4	
	GLCA96-1	4	
C:2:099			
	GLCA93	4	Monitor Schedule not followed.
	GLCA94-1	4	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA96-1	4	Although this site monitored biennially, priority 1 recommendations provided annually. If this is such a high priority site, why is it only monitored biennially?
C:2:100			
	GLCA92	3	
	GLCA93	3	
	GLCA94-1	3	From 1994 to 1997, received a priority of "1" for remedial action. Why hasn't such needed work been completed at this site?
	GLCA95-1	3	
	GLCA96-1	3	
	GLCA97-1	3	
C:2:102			
	GLCA94-1	5	
	GLCA97-1	5	
C:2:103			
	GLCA94-1	5	
	GLCA97-1	5	
C:2:104			
	GLCA94-1	4	
	GLCA96-1	4	
C:2:105			
	GLCA94-1	4	
	GLCA96-1	5	
C:2:106			
	GLCA92	4	Monitoring Schedule not followed.
	GLCA93	2	Monitoring Schedule seems out of place.
	GLCA94-1	4	
	GLCA96-1	4	
C:2:108			
	GLCA94-1	4	

SITE#	SESSION	SCHEDULE	COMMENTS
	GLCA96-1	4	
C:3:003			
	GLCA93	3	
	GLCA94-1	4	
	GLCA96-1	4	
C:3:004			
	GLCA94-1	4	
	GLCA96-1	4	
C:3:006			
	GLCA94-1	4	
	GLCA96-1	4	
C:3:010			
	GLCA92	3	
	GLCA93	2	Monitoring Schedule seems out of place.
	GLCA94-1	3	
	GLCA95-1	3	From 1994 to 1995, received a priority of "1" for remedial action (excavation), which was completed in 95. Does this mean that the site was discontinued? Needs to be recorded.

APPENDIX K

GRCA PRESERVATION OPTIONS TABLE (1992-1997)

Preservation Options

Site Number / Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
A:15:00					
Obliterate Trail	0	1/ 1/95	1/ 1/96	1/ 1/97	
Checkdams	2	10/23/97			
Retrail	0	1/ 1/95	1/ 1/96	1/ 1/97	
MF Photos	0	1/ 1/96	1/ 1/96	3/ 4/97	
A:15:01					
MF Photos	0	1/ 1/97	1/ 1/97	3/ 3/97	
A:15:03					
Other1	4	1/ 1/96	1/ 1/97		
Plant Vegetation	1	1/ 1/96	1/ 1/97		
A:15:04					
Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/95	
Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
A:15:04					
Other1	1	11/17/97			Assess for remedial work after testing.
A:16:00					
MF Photos	0	1/ 1/97	1/ 1/97	3/ 2/97	
A:16:00					
Plant Vegetation	2	11/17/97			
Obliterate Trail	2	11/17/97			
A:16:14					
Plant Vegetation	1	1/ 1/96	1/ 1/97		
Checkdams	1	1/ 1/96	1/ 1/97		
A:16:15					
Other1	4	1/ 1/96	1/ 1/97		
A:16:15					
Obliterate Trail	0	1/ 1/94	1/ 1/97	1/ 1/97	
A:16:15					
Close Site	4	1/ 1/94	1/ 1/95		

Site Number / Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
MF Photos	0	1/ 1/94	1/ 1/95	3/ 2/97	
A:16:16					
Obliterate Trail	4	11/16/97			
Other1	1	11/16/97			Maintain the trail obliteration work. Tell trail crew.
Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/97	
Plant Vegetation	4	11/16/97			
A:16:16					
MF Photos	0	1/ 1/97	1/ 1/97	3/ 1/97	
A:16:16					
Retrail	2	11/16/97			
A:16:17					
MF Photos	0	1/ 1/97	1/ 1/97	3/ 1/97	
A:16:17					
Checkdams	1	11/16/97			
A:16:17					
MF Photos	0	1/ 1/97	1/ 1/97	3/ 1/97	
A:16:18					
Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
Plant Vegetation	4	11/16/97	1/ 1/97		
A:16:18					
Obliterate Trail	0	1/ 1/97	1/ 1/97	1/ 1/97	
B:09:31					
Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/97	
B:10:11					
Other1	4	1/ 1/96	1/ 1/97		
B:10:12					
Obliterate Trail	4	1/ 1/95	1/ 1/95		
B:10:23					
Other1	4	1/ 1/96	1/ 1/97		
B:11:27					
Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
B:11:28					

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	MF Photos	0	1/ 1/97	1/ 1/97	2/27/97	
B:13:00						
	Obliterate Trail	2	1/ 1/97			
B:14:10						
	Plant Vegetation	1	10/18/97			
	Other1	1	10/18/97			Keep up the trail work during monitoring visits.
	Obliterate Trail	0	1/ 1/96	1/ 1/97	1/ 1/97	
B:14:10						
	Other1	4	1/ 1/96	1/ 1/97		
	Checkdams	0	1/ 1/96	1/ 1/97	4/ 1/97	Construction of diversion.
	Other1	0	10/18/97		3/24/98	Extension of water diversion.
B:15:09						
	Obliterate Trail	4	1/ 1/95	1/ 1/96		
B:15:11						
	MF Photos	0	1/ 1/97	1/ 1/97	2/27/97	
B:15:12						
	Other1	4	1/ 1/95	1/ 1/96		
B:15:13						
	Retrail	1	10/18/97			
	Obliterate Trail	1	10/18/97			
	Plant Vegetation	1	10/18/97			
	Obliterate Trail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Retrail	0	1/ 1/97	1/ 1/97	1/ 1/97	
C:02:09						
	MF Photos	0	1/ 1/96	1/ 1/97	2/19/97	
	Other1	1	10/ 7/97			Remove the new graffiti.
	Other1	1	1/ 1/97	1/ 1/97		Place a sign above site on trail directed at day hikers.
	Other1	0	1/ 1/96	1/ 1/97	1/ 1/97	Graffiti removal
C:02:09						
	Checkdams	4	1/ 1/96	1/ 1/97		Not practical. At the data recovery stage.
C:02:09						
	Retrail	2	1/ 1/97			

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Retrail	0	1/ 1/95	1/ 1/96	1/ 1/96	
C:02:09						
	Checkdams	2	10/ 7/97			
	Other1	1	10/ 7/97			Trail maintenance during monitoring.
	Obliterate Trail	0	1/ 1/95	1/ 1/96	1/ 1/96	
C:02:10						
	Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/97	
	Other1	1	11/ 6/97			Maintenance on checkdams during monitoring.
C:05:00						
	MF Photos	0	1/ 1/97	1/ 1/97	4/14/97	This is a backcountry site.
C:05:00						
	MF Photos	0	1/ 1/97	1/ 1/97	2/20/97	
C:06:00						
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/96	
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/96	
	Checkdams	3	1/ 1/96			
	Checkdams	4	1/ 1/94	1/ 1/95		
C:06:00						
	Other1	0	1/ 1/96	1/ 1/97	1/ 1/97	Graffiti removal conducted.
	MF Photos	0	1/ 1/96	1/ 1/97	2/20/97	
	Other1	1	1/ 1/97	1/ 1/97		
	Other1	1	10/ 8/97			Additional graffiti removal on the "X" recommended.
C:06:00						
	MF Photos	0	1/ 1/97	1/ 1/97	2/20/97	
C:09:03						
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	MF Photos	0	1/ 1/97	1/ 1/97	2/21/97	
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
C:09:03						
	Obliterate Trail	0	1/ 1/95	1/ 1/97	1/ 1/97	
	Retrail	0	1/ 1/95	1/ 1/97	1/ 1/97	
C:09:03						

Site Number / Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
Plant Vegetation	4	1/ 1/95	1/ 1/97		
Obliterate Trail	0	1/ 1/95	1/ 1/97	1/ 1/97	
Retrail	0	1/ 1/95	1/ 1/97	1/ 1/97	
C:09:05					
Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
C:09:05					
Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/96	
Checkdams	4	1/ 1/97	1/ 1/97		Not practical. Trying to control Nankoweap Creek.
Other1	2	10/10/97			Trail maintenance as needed by Park trail crew.
Retrail	0	1/ 1/94	1/ 1/96	1/ 1/96	
C:09:05					
Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/96	
C:09:05					
Other1	2	1/ 1/96			
C:09:08					
Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/97	
C:09:08					
Checkdams	4	1/ 1/96	1/ 1/97		
C:13:00					
MF Photos	0	1/ 1/97	1/ 1/97	2/22/97	
C:13:00					
Retrail	2	1/ 1/97			
Obliterate Trail	0	1/ 1/95	1/ 1/96	1/ 1/96	
C:13:00					
Other1	1	10/11/97			Minor checkdam maintenance.
Plant Vegetation	0	1/ 1/96	1/ 1/96	1/ 1/97	
Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/96	
Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/96	
Plant Vegetation	2	10/11/97			
Checkdams	0	1/ 1/96	1/ 1/96	1/ 1/97	
C:13:01					
Other1	4	1/ 1/96	1/ 1/97		

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Close Site	0			1/ 1/85	
	Checkdams	4	1/ 1/96	1/ 1/97		Data recovery is being implemented.
C:13:06						
	Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
C:13:07						
	Checkdams	2	1/ 1/95	1/ 1/97		
	Other1	4	1/ 1/95	1/ 1/97		
	Close Site	4	1/ 1/95	1/ 1/97		Not necessary. Visitation is at a minimum.
	Obliterate Trail	4	1/ 1/95	1/ 1/97		
C:13:09						
	Obliterate Trail	2	1/ 1/94	1/ 1/95		
	Other1	4	1/ 1/94	1/ 1/95		
	Plant Vegetation	4	1/ 1/94	1/ 1/95		
	Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/95	Checks were placed just below the main cabin designated as C:13:099.
	Obliterate Trail	2	10/12/97			
	Plant Vegetation	3	10/12/97			
	Retrail	3	1/ 1/94	1/ 1/95		
	Retrail	3	10/12/97			
C:13:09						
	Checkdams	0	10/12/97		2/26/98	Checkdam maintenance.
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Obliterate Trail	0	1/ 1/96	1/ 1/97	1/ 1/97	
	Other1	0	1/ 1/94	1/ 1/94	1/ 1/95	
	Other1	1	2/26/98			Checkdam maintenance.
	Plant Vegetation	4	1/ 1/96	1/ 1/97		
	Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
	Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Plant Vegetation	4	1/ 1/94	1/ 1/95		
	Plant Vegetation	3	4/19/98			
C:13:10						
	Obliterate Trail	0	1/ 1/96	1/ 1/96	1/ 1/96	
	Other1	1	4/19/98			Maintain the checkdams annually.

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Other1	0	10/12/97		2/26/98	Maintenance on checkdams.
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Plant Vegetation	4	1/ 1/94	1/ 1/95		
C:13:13						
	Retrail	4	1/ 1/95	1/ 1/95		
	Obliterate Trail	4	1/ 1/95	1/ 1/95		
C:13:13						
	MF Photos	0	1/ 1/97	1/ 1/97	2/23/97	
C:13:27						
	Obliterate Trail	4	1/ 1/95	1/ 1/95		
	Plant Vegetation	4	1/ 1/95	1/ 1/95		
C:13:27						
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Obliterate Trail	4	1/ 1/94	1/ 1/95		
	Other1	4	1/ 1/94	1/ 1/95		Not applicable to stabilize Feature 4.
C:13:29						
	Retrail	0	1/ 1/94	1/ 1/97	1/ 1/97	
	Checkdams	4	1/ 1/94	1/ 1/97		
	Obliterate Trail	0	1/ 1/94	1/ 1/97	1/ 1/97	
	Other1	2	10/13/97			Trail maintenance.
	Other1	4	1/ 1/94	1/ 1/97		
C:13:32						
	Other1	4	1/ 1/95	1/ 1/96		
C:13:32						
	Other1	1	11/10/97			Remove graffiti above petroglyphs.
C:13:32						
	Retrail	0	1/ 1/96	1/ 1/96	1/ 1/97	
	Checkdams	0	1/ 1/96	1/ 1/96	1/ 1/97	
	Obliterate Trail	0	1/ 1/96	1/ 1/96	1/ 1/97	
C:13:33						
	Checkdams	2	11/ 9/97			Assess first.

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
C:13:33						
	Other1	0	1/ 1/96	1/ 1/97	1/ 1/97	
	Retrail	4	1/ 1/96	1/ 1/97		
	Obliterate Trail	4	1/ 1/96	1/ 1/97		
C:13:33						
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Obliterate Trail	4	1/ 1/94	1/ 1/95		
	Plant Vegetation	1	1/ 1/94	1/ 1/95		
C:13:34						
	Retrail	0	1/ 1/96	1/ 1/96	1/ 1/96	
	Obliterate Trail	0	1/ 1/96	1/ 1/96	1/ 1/97	
C:13:34						
	Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
C:13:34						
	Other1	4	1/ 1/96	1/ 1/97		
	Checkdams	4	1/ 1/96	1/ 1/97		
C:13:34						
	Other1	4	1/ 1/96	1/ 1/97		
	Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
C:13:34						
	Checkdams	4	1/ 1/94	1/ 1/97		
	Other1	4	1/ 1/94	1/ 1/97		
C:13:35						
	Other1	2	11/ 9/97			Assess for stabilization.
C:13:35						
	Checkdams	2	1/ 1/97	1/ 1/97		
C:13:35						
	Checkdams	0	1/ 1/95	1/ 1/97	1/ 1/97	
C:13:36						
	Obliterate Trail	0	1/ 1/96	1/ 1/97	1/ 1/97	
C:13:37						
	Other1	3	1/ 1/96			

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
C:13:37						
	Checkdams	0	1/ 1/95	1/ 1/96	1/ 1/96	
	Plant Vegetation	4	1/ 1/95	1/ 1/96		
	Other1	4	1/ 1/95	1/ 1/96		
	Checkdams	1	10/11/97			Conduct checkdam maintenance.
	Plant Vegetation	4	10/11/97			
C:13:37						
	MF Photos	0	1/ 1/97	1/ 1/97		The photo was not taken. This is a backcountry site.
C:13:37						
	Other1	3	1/ 1/96			
C:13:38						
	Checkdams	0			4/24/98	Checkdam maintenance.
	Checkdams	0	1/ 1/96	1/ 1/97	2/25/97	Checkdams constructed.
	Other1	4	1/ 1/96	1/ 1/97		
C:13:38						
	Other1	1	1/ 1/96	1/ 1/97		
	Checkdams	4	1/ 1/96	1/ 1/97		
C:13:38						
	Retrail	2	1/ 1/96			
	Obliterate Trail	4	1/ 1/96			
	Other1	1	1/ 1/96			Dismantle the walls that visitors have built.
	Retrail	2	11/11/97			
C:13:39						
	Obliterate Trail	4	1/ 1/96	1/ 1/96		
G:02:00						
	Obliterate Trail	2	1/ 1/95			
G:02:10						
	Retrail	2	1/ 1/95			
G:03:00						
	Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/96	
	Checkdams	0	1/ 1/97	1/ 1/97	1/ 1/97	
G:03:00						

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Retrail	0	1/ 1/94	1/ 1/96	1/ 1/96	
	Other1	1	10/23/97			Trail maintenance is required.
	Checkdams	0	1/ 1/94	1/ 1/96	1/ 1/96	
	Retrail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Obliterate Trail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Checkdams	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/96	
G:03:00						
	Other1	1	1/ 1/97	1/ 1/97		Graffiti removal.
	Other1	1	10/23/97			Maintain trail. Surface collect.
	Obliterate Trail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	MF Photos	0	1/ 1/97	1/ 1/97	3/ 4/97	
	Retrail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Retrail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/95	
	Plant Vegetation	4	1/ 1/97	1/ 1/97		
G:03:02						
	Plant Vegetation	4	1/ 1/94	1/ 1/96		
	Checkdams	1	1/ 1/94	1/ 1/96		
	Obliterate Trail	1	10/24/97			
G:03:02						
	Checkdams	0		1/ 1/97	1/ 1/97	
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/96	
G:03:02						
	Checkdams	0	1/ 1/94	1/ 1/96	1/ 1/96	
	Obliterate Trail	0	1/ 1/94	1/ 1/96	1/ 1/96	
	Checkdams	0	1/ 1/97	1/ 1/97	1/ 1/97	
G:03:02						
	Plant Vegetation	0	2/ 1/95	2/ 1/95	2/ 1/96	
	Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/96	
	Retrail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Obliterate Trail	0	1/ 1/97	1/ 1/97	1/ 1/97	
	Checkdams	0	1/ 1/97	1/ 1/97	1/ 1/97	

Site Number / Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
Retrail	0	1/ 1/94	1/ 1/95	1/ 1/96	
Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/96	
G:03:02					
Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/96	
Retrail	1		1/ 1/97		
Obliterate Trail	1		1/ 1/97		
Plant Vegetation	0	2/ 1/95	2/ 1/95	2/ 1/96	
Checkdams	0	1/ 1/94	1/ 1/95	1/ 1/96	
Retrail	0	1/ 1/94	1/ 1/95	1/ 1/96	
G:03:03					
Checkdams	2	1/ 1/96			
Checkdams	2	11/18/97			
G:03:03					
Other1	1	11/17/97			Maintain the checkdams annually.
Plant Vegetation	1	11/17/97			Jute mat placement.
Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
Other1	4	1/ 1/96	1/ 1/97		
G:03:04					
Other1	1	10/23/97			Checkdam maintenance during monitoring.
Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
Other1	4	1/ 1/96	1/ 1/97		
G:03:04					
Obliterate Trail	1	11/18/97			
Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
Plant Vegetation	4	11/18/97			
Other1	4	1/ 1/96	1/ 1/97		
G:03:04					
Checkdams	2	1/ 1/96	1/ 1/97		
Obliterate Trail	0	1/ 1/96	1/ 1/97	1/ 1/97	
G:03:05					
Obliterate Trail	0	1/ 1/96	1/ 1/97	1/ 1/97	
Retrail	0	1/ 1/96	1/ 1/97	1/ 1/97	
Other1	4	1/ 1/96	1/ 1/97		

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
G:03:05						
	Other1	3	1/ 1/96			
G:03:05						
	Other1	4	1/ 1/96	1/ 1/97		
	Obliterate Trail	0	1/ 1/96	1/ 1/97	1/ 1/97	
	Plant Vegetation	4	1/ 1/96	1/ 1/97		
	Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
	Obliterate Trail	1	11/20/97			
	Plant Vegetation	1	11/20/97			
G:03:06						
	Obliterate Trail	4	1/ 1/96	1/ 1/97		
G:03:06						
	Obliterate Trail	1	10/23/97			
	Checkdams	4	1/ 1/94	1/ 1/97		
	Other1	4	1/ 1/94	1/ 1/97		
G:03:06						
	Obliterate Trail	0	1/ 1/94	1/ 1/95	1/ 1/96	
G:03:07						
	Checkdams	0	1/ 1/96	1/ 1/97	1/ 1/97	
G:03:07						
	Other1	4	1/ 1/96	1/ 1/97		
G:03:07						
	MF Photos	0	1/ 1/97	1/ 1/97	3/ 4/97	
G:03:08						
	MF Photos	0	1/ 1/97	1/ 1/97	3/ 5/97	

APPENDIX L

GRCA RECOVERY OPTIONS TABLE (1992-1997)

Recovery Options

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
A:15:005						
	Other2	1	10/23/97			Remap gully with the total station.
A:15:021						
	Data Recovery	4	1/ 1/94			
A:15:030						
	Data Recovery	0			1/ 1/97	
	Test	4	1/ 1/94			
A:15:031						
	Test	4	1/ 1/95			
A:15:039						
	Test	4	1/ 1/94			
A:15:048						
	Data Recovery	1	11/17/97			Feature 1.
A:16:174						
	Other2	2	11/16/97			Bone fragments should be analyzed.
A:16:180						
	Test	4	1/ 1/96			
	Data Recovery	0			1/ 1/97	
B:10:111						
	Data Recovery	4	1/ 1/96	1/ 1/97		
B:10:230						
	Other2	0	1/ 1/96		1/ 1/96	
B:10:237						
	Data Recovery	4	1/ 1/96	1/ 1/97		
B:11:271						
	Test	4	1/ 1/95			
B:13:002						
	Test	4	1/ 1/95			
B:15:143						

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Test	4	1/ 1/95			
C:02:096						
	Data Recovery	2	1/ 1/96	1/ 1/97		
	Data Recovery	1	10/ 7/97			Do by FY99 to supplement past research.
C:02:098						
	Test	4	1/ 1/95	1/ 1/97		
	Data Recovery	1	1/ 1/95	1/ 1/97		Profile deposition below shelter.
	Other2	0	10/ 7/97		4/30/98	Site was mapped in Spring, 1998.
C:06:008						
	Test	4	1/ 1/96			
C:09:050						
	Test	3	10/10/97			Look for a floor at possible structure.
C:09:051						
	Test	4	1/ 1/97	1/ 1/97		
	Data Recovery	0	1/ 1/97	1/ 1/97	8/15/97	
C:09:058						
	Data Recovery	2	1/ 1/96			
C:09:069						
	Test	1	1/ 1/97			
C:13:006						
	Other2	4	1/ 1/94			
	Test	4	1/ 1/94			
C:13:010						
	Data Recovery	0	1/ 1/96	1/ 1/97	4/22/98	Done on the 98-4 trip.
	Data Recovery	1	4/22/98	4/22/98		Should complete data recovery recommended for FY98.
	Data Recovery	0	3/ 1/98		4/23/98	Done on the 98-4 trip.
C:13:070						
	Data Recovery	1	1/ 1/94	1/ 1/97		
	Test	4	1/ 1/94	1/ 1/97		
C:13:099						
	Data Recovery	1	4/19/98			Data recovery at Fea. 1, 3, 4, and 7.
	Data Recovery	1	10/12/97			By FY99 at features near drainage system.

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Test	4	1/ 1/94	1/ 1/97		
	Data Recovery	2	1/ 1/94	1/ 1/97		
C:13:100						
	Data Recovery	1	10/12/97			Fea. 5, 6, 9, and 11.
	Data Recovery	1	4/19/98			Data recovery at Fea. 5 and 6.
	Test	1	4/19/98			Exploratory testing at Structure 9, and F7, F10.
C:13:273						
	Data Recovery	0	1/ 1/96		1/ 1/97	
	Data Recovery	2	11/ 9/97			Recommended at Feature 3.
	Test	0	1/ 1/94		1/ 1/95	Testing done for trail work.
C:13:291						
	Data Recovery	1	10/13/97			Dendro sample and charcoal from below F4.
	Data Recovery	1	1/ 1/96	1/ 1/97		
	Test	2	10/13/97			Test Feature 5 to see if cultural.
C:13:321						
	Test	0	1/ 1/95		1/ 1/96	
C:13:327						
	Data Recovery	4	1/ 1/96			
C:13:333						
	Test	4	1/ 1/95			
C:13:335						
	Test	4	1/ 1/95			
C:13:338						
	Data Recovery	0	1/ 1/96		1/ 1/97	
C:13:339						
	Test	0	1/ 1/94		1/ 1/95	Testing done for trail work.
	Test	4	1/ 1/95			
C:13:343						
	Test	1	1/ 1/97			
	Test	4	1/ 1/95			
	Data Recovery	3	1/ 1/95			
C:13:347						

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Data Recovery	1	10/13/97			Do exploratory data recovery in structure.
	Test	1	1/ 1/96	1/ 1/97		
	Data Recovery	4	1/ 1/96	1/ 1/97		
C:13:349						
	Data Recovery	4	1/ 1/94	1/ 1/97		
	Test	1	1/ 1/94	1/ 1/97		
C:13:355						
	Data Recovery	2	11/ 9/97			Test F3 charcoal lens (horizontal extent).
C:13:356						
	Test	1	1/ 1/96	1/ 1/97		
	Data Recovery	4	1/ 1/96	1/ 1/97		
C:13:359						
	Test	4	1/ 1/94			
	Data Recovery	0			1/ 1/97	
C:13:365						
	Test	0	1/ 1/94		1/ 1/96	
C:13:371						
	Data Recovery	1	4/18/98			Full data recovery at Feature 2.
	Other2	1	4/18/98			Date the charcoal at Feature 3.
	Test	2	4/18/98			Test Features 6 and 7.
	Test	0	1/ 1/94		1/ 1/96	
C:13:373						
	Data Recovery	2	1/ 1/97			
C:13:379						
	Test	4	1/ 1/96			
C:13:384						
	Test	4	1/ 1/94			
G:03:004						
	Data Recovery	2	1/ 1/94	1/ 1/97		
	Other2	1	10/23/97			Surface collect in Feature 8 area.
	Data Recovery	1	10/23/97			Excavate F8 before integrity is gone. Put a trench through Feature 2.
G:03:020						

Site Number	Action	Priority	Date Recommended	Date Assessed	Date Completed	Comments
	Test	4	1/ 1/94			
	Data Recovery	1	1/ 1/97			Feature 7.
G:03:030						
	Other2	0	11/18/97		1/ 1/98	Total station map completed.
G:03:033						
	Test	2	11/19/97			Test for depth of cultural deposits within a year.
G:03:034						
	Test	4	1/ 1/95	1/ 1/97		
	Data Recovery	4	1/ 1/95	1/ 1/97		
G:03:040						
	Data Recovery	4	1/ 1/96	1/ 1/97		
G:03:043						
	Data Recovery	1	11/18/97			Features 4 and 5.
G:03:044						
	Data Recovery	2	10/24/97			At roasting features.
	Test	4	1/ 1/94			
G:03:064						
	Data Recovery	1	10/23/97			Fea. 1, 8, 11, 12, 13, char. Lens 28 & new Fea
	Data Recovery	1		1/ 1/97		
	Test	4	1/ 1/94	1/ 1/97		
G:03:072						
	Data Recovery	1	11/20/97			Feature 14.
	Test	4	1/ 1/95			

APPENDIX M

RCMP REMEDIAL ACTION DOCUMENTATION FORM

FY 1997

REMEDIAL ACTION DOCUMENTATION

1. SITE #: _____ 2. RIV. MI/BK _____

3. DATE: _____ 4. SESSION _____

5. RECORDER: _____

6. PA REPRESENTATIVES: _____

_____

7. REMEDIAL WORK: 1 = YES 0 = NO
____RETRAIL ____OBLITERATE TRAIL ____INSPECTION
____INSTALL CHECKS* ____PLANT VEGETATION ____OTHER
* See separate checkdam documentation form to complete checkdam descriptions.

8. LOCATE ON SITE MAP

9. REMEDIAL WORK: _____

DESCRIPTION: _____
(est. lgth. when applicable)

_____

_____

MATERIALS USED: _____

_____

10. REMEDIAL WORK: _____

DESCRIPTION: _____
(est. lgth. when applicable)

_____

_____

MATERIALS USED: _____

_____

11. NUMBER OF PERSONS: _____

12. TIME SPENT (HRS): _____ TOTAL: _____
(computer use only)

13. PHOTOS: ROLL#(S) and EXP.(S): _____
1 = YES 0 = NO ____COLOR SLIDES ____BLACK AND WHITE

14. COMMENTS:

DOCUMENTATION FOR CHECKDAMS

1. TOTAL NUMBER OF CHECKS: _____

2. CHECK TYPE: 1 = YES 0 = NO
____BASKET WEAVE ____LOG CHECK ____ROCK CHECK
____ROCK LINING ____ROCK LINING WITH POSTS ____OTHER
(describe in 14)

3. NUMBER AND LABEL ON SITE MAP

4. DRAINAGE DESCRIPTION
FOR EACH MAJOR DRAINAGE SYSTEM LABEL ON THE SITE MAP, THEN DESCRIBE BELOW.
* Headcuts greater than 25cm

DRAINAGE #	RIVER OR TERRACE BASED	# OF HEADCUTS*	# OF CHECKS

5. INDIVIDUAL CHECK DESCRIPTION

CHECK #	CHECK TYPE	MAX. LxWxD (m)	MATERIALS USED