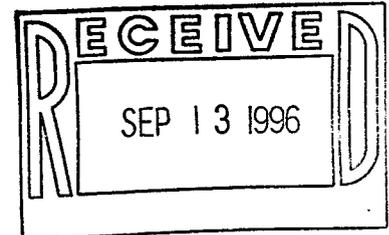


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CONFIDENTIAL

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**



DRAFT

draft

Revised Report Prepared for

United States Bureau of Reclamation
Cooperative Agreement for the Hualapai Tribe
Coordination with the Glen Canyon Environmental Studies
and the Glen Canyon Dam Environmental Impact Statement

CONFIDENTIAL

GLEN CANYON ENVIRONMENTAL
STUDIES OFFICE

SEP 26 1996

Revised Report Prepared by

RECEIVED
FLAGSTAFF, AZ

Loretta Jackson
Principal Investigator
Hualapai Tribe's Office of Cultural Resources
P.O. Box 310
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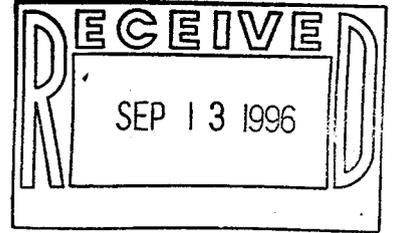
September 13, 1996

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September 13, 1996



Dr. Signa Larralde
U.S. Department of the Interior
Bureau of Reclamation
Upper Colorado Region
125 S. State Street, Mail Rm 6107
Salt Lake City, UT 84138-1102

GLEN CANYON ENVIRONMENTAL
STUDIES OFFICE

SEP 26 1996

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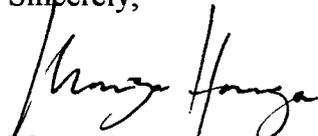
Dear Dr. Larralde,

As per the Programmatic Agreement between the BOR and the Hualapai Tribe, please find enclosed two draft reports. The Hualapai Tribe's 1) "*Cultural Inventory of the Grand Canyon, Colorado River Corridor from Separation Canyon (Rivermile 239.7) to Pearce Ferry (Rivermile 276), Mohave County*" and 2) "*Traditional Cultural Properties On and Along the Colorado River through the Grand Canyon.*"

With today's ever-growing technology and fast pace we still face miscommunication problems. Part of that problem is because we are human and partly because we need more direct communication in working relationships. The Office of Cultural Resources became its own office within the Hualapai Tribal Government in February 1995. We are separate from the Natural Resource Department. Therefore, we ask that you update your files and when Hualapai cultural resources are discussed this Office needs to be present.

Please review and comment, so we may submit final reports as soon as possible. If you have any questions please contact myself or Loretta Jackson at the number above.

Sincerely,


Monza Honga, Director

CONFIDENTIAL

xc: Bruce Moore
Dave Wegner

ABSTRACT

The intensive archaeological survey of 1990-1991 conducted along the Colorado River by the National Park Service terminated at the mouth of Separation Canyon (RM 239.7). This left a stretch of the corridor between Separation Canyon and Pearce Ferry unsurveyed. Between February 24 and March 19 of 1992 this portion of the river corridor was surveyed by a joint team from the Hualapai Tribe's Cultural staff and Grand Canyon National Park Service archaeologists (NPS). Over 700 acres were inventoried along a 45 mile stretch of river. A total of 9 archaeological sites were recorded during the fourteen (14) days in the field.

PROJECT BACKGROUND

Operations of the Glen Canyon Dam began in 1963 and irreversibly changed the nature of the Colorado River and the Grand Canyon ecosystems. As a result, the varied water, natural and cultural resources of the Hualapai Tribe were affected. The Hualapai Tribal Council and the United States Bureau of Reclamation (Reclamation) collaboratively initiated Hualapai involvement in the GCES/GCD-EIS on April 10, 1991 through contractual agreements. The Hualapai Cultural Resources Division prepared and submitted an archaeological survey proposal through the Tribal Council to Reclamation in the Phase II of GCES and the GCD-EIS.

From August of 1990 through May of 1991 an intensive cultural inventory was completed by the Cultural Branch of the Resource Management Division, Grand Canyon National Park (GRCA) in conjunction with Northern Arizona University (NAU) for the Glen Canyon Dam-Environmental Impact Statement (GCD-EIS). This inventory began at the base of the Glen Canyon Dam and terminated at the mouth of Separation Canyon, River Mile (RM) 239.7. The river corridor was intensively surveyed below the hypothetical 300,000 cubic feet per second (cfs) level to the river's edge (along the left and right banks) by GRCA archaeologists consisting of four crews.

A total of 475 archaeological sites were recorded. This left a stretch of river from Separation Canyon to Lake Mead unsurveyed. In 1991 a fourteen (14) day survey was proposed and initiated by the Hualapai Tribe's Wildlife Management Department (known now as the Natural Resources Department), Cultural Resources Division (currently a separate department known as Office of Cultural Resources) in coordination with GRCA Resource Management Division through the Glen Canyon Environmental Studies (GCES) for the GCD-EIS.

Although federal legislation mandate that all federal land managers conduct archaeological surveys and inventories per the National Historic Preservation Act (NHPA) most land managing agencies lack the funding to fulfill the responsibilities and compliance's of such laws. The only portion of the GCE-EIS zone to be archaeologically investigated was the 45-mile stretch between Separation Canyon and Pearce Ferry as required for the EIS to have a complete cultural site inventory for the entire river corridor downstream of GCD.

Between February 24 and March 19, 1992, a crew consisting of Hualapai Tribe's Cultural Resources staff and

GRCA archaeologists conducted a cultural inventory along the Colorado River corridor from Separation Canyon (RM 239.7) to Pearce Ferry (RM 276.0). Nine (9) individuals, including Boatmen, took a total of 14 days divided into two (2) sessions to complete the survey. The survey findings included nine (9) archaeological sites over the forty-five (45) mile stretch of the Colorado River corridor (see Figure 1. on the following page).

PREVIOUS RESEARCH

In previous research, GRCA, in conjunction with the United States Geological Survey (USGS), conducted a pilot research project to evaluate archaeological site erosion at one site along the Colorado River (Balsom et al. 1989). Analysis of the information from the project suggested that the operation of Glen Canyon Dam might be a contributing factor to ongoing site erosion to numerous other sites in the canyon (Fairley et al. 1994). Such site erosions and the possible connection of the operation of the dam required further evaluations of impacts to cultural resources along the river corridor.

All the archaeological work that had been done in the past were sporadic and incomplete. Side canyon surveys and excavations done by Civilian Conservation Corp (CCC) archaeologists in the 1930's is a lost body of work or very little information is available that has been done by Harrington, a NPS consultant to CCC (eg. Harrington 1936; Lewis & Chappell 1936).

In 1978 some archaeological work was done by GRCA Anthropologist, Robert Euler and archaeologist, Trinkle Jones. This work consisted of an aerial survey by helicopter flights through the Grand Canyon from Separation Canyon to Pearce Ferry. Numerous prehistoric and historic sites were located and recorded in very minimalist fashion. Lithic scatters, open sites lacking structures, and smaller roasting features were not readily observed by this method of survey and thus not documented.

In 1988-89 a cooperative survey between the Wilderness Studies Institute and GRCA was conducted on the north side of the river between Separation Canyon and Pearce Ferry. The principal investigators for the Institute were Stephen and Janet Glass. The survey encompassed terrain from the river's edge to the base of the Muav Limestone, was centered on the major side canyons, including 236 mile, Separation Canyon, 242 Mile, Surprise Canyon, Chimney Rock, Salt Creek, Burnt Springs, Tinn cannabits, and Dry Creek. Nine (9) weeks of

Hualapai Tribes Cultural Resources
Cultural Inventory of Grand Canyon, Colorado River
Corridor from Separation Canyon (rm239.7) to Pearce Ferry (rm276)

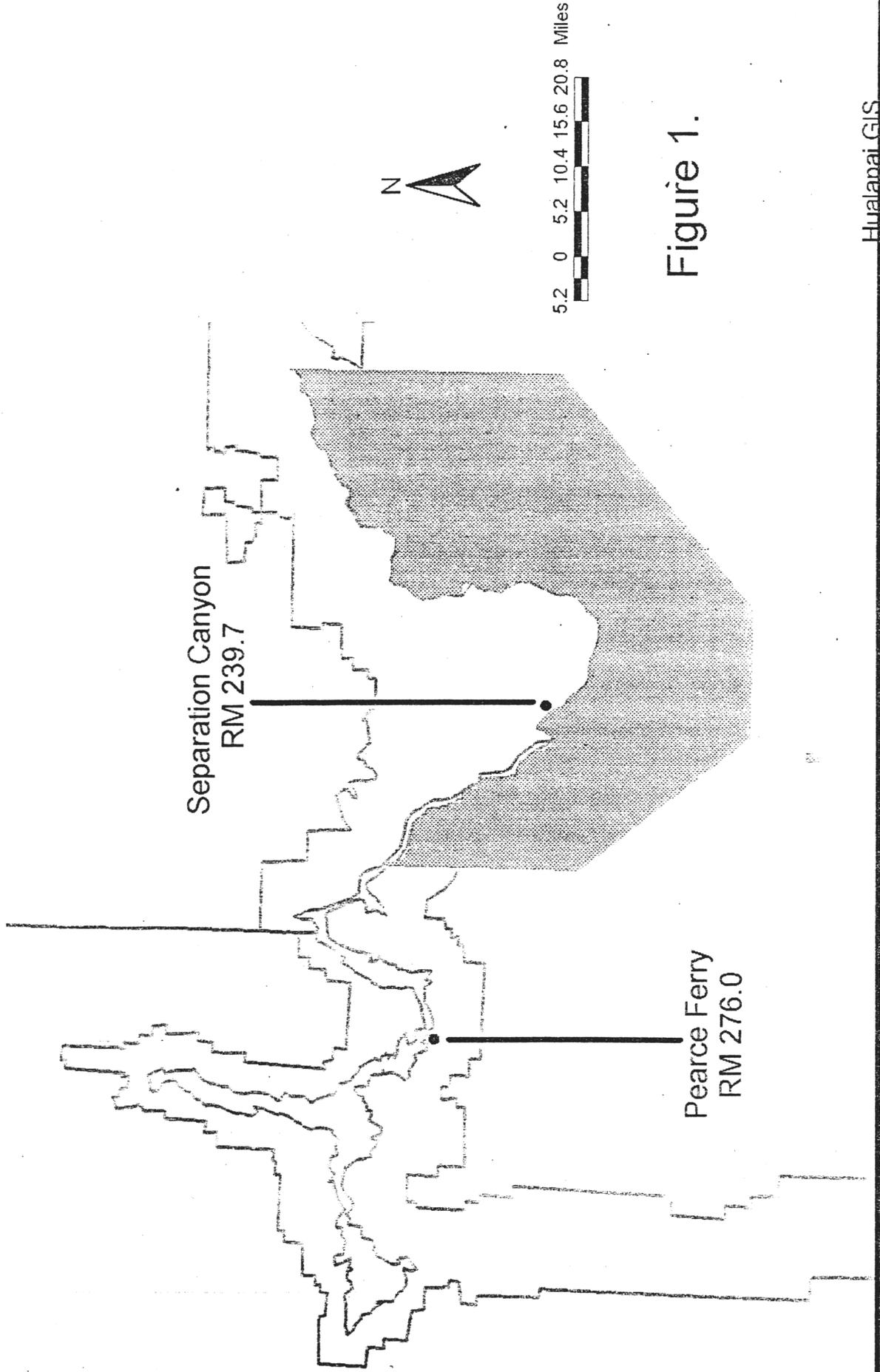


Figure 1.

work by volunteers yielded sixty-one (61) sites on the five thousand (5,000) acres surveyed. A field report for this work was submitted to Jan Balsom, GRCA Archaeologist. Artifacts were collected and they are currently with Stephen Glass. Subsequent work done by the Institute in the western portion during the early 1990's has so far gone without report.

SETTING/ENVIRONMENT

The Colorado River corridor between Separation Canyon and RM 270.0 is steep and narrow. Flat open areas are rare, making human habitation near river level difficult and archaeological surveys sporadic. The project area is situated between elevations of 1,000 and 1,350 feet (ft) above sea level. The climate is arid and the river provides little support to the plant communities surviving on the slopes that rise above the high water zone. It does however give a permanent source of sustenance to the faunal communities found there, i.e., desert bighorns sheep, coyote, burros, the numerous birds and the aquatic life itself. The vertebrate aquatic life is represented by declining populations of native fish and thriving populations of introduced species. Aquatic vertebrates include the resilient beaver and the rare river otter.

Desert plants in the project area are dominated by acacia, barrel cactus, creosote, brittle bush and arrowweed. Riparian species, native and introduced, have expanded since the construction of the GCD. Species such as the tamarisk, willow and arrowweed have taken over the high water zone and give portions of the corridor at river level *lush riparian zones*. The biological resources of the canyon have been integral to the culture of the Hualapai Bands (Kroeber 1935; Mapatis 1982), and formal studies undertaken in the past few years have focused on the ethnobotanical resources of the Canyon (Phillips 1994, 1995; Hogan 1993, 1995). Rich in its botanical resources, the Inner Gorge of the Grand Canyon supports more than 900 species of plants, and the flora is richest in the lower, or western, portion of the Canyon (Phillips et al. 1987). Recent ethnobotanical studies at specific locations along the river corridor signify that ethnobotanical cultural resources at sites are traditional cultural properties (TCP's) and are significant to the Hualapai people (Phillips and Jackson 1996).

Recent research involving the USGS geomorphology studies began addressing erosion of Colorado River terraces at specific locations within the GCD-EIS zone including Granite Park (RM 209) (Hereford et al. 1995). Numerous

archaeologic sites in the Granite Park area have been damaged or destroyed by erosion. As documented in Hereford's open-file report to GCES in 1993, the daily operation of Glen Canyon Dam probably did not cause accelerated erosion in eastern Grand Canyon, although the dam's presence indirectly effects erosion. Intensive topographic maps display drainage basins associated with pre-dam terraces in the Granite Park area from Hereford's studies. It indicates local rainfall and resulting runoff are the direct agents of erosion, although river-based streams is indirectly related to regulated flows of the GCD. Therefore is has been instrumental to use geomorphology to determine exposure and erosion of archaeological sites and to productively focus stabilizing (with structural support) terrace-based streams with large catchment areas. Additional investigative research along the lower western portion of the Canyon may yield information that will aid in the resource management strategies of the Hualapai Tribe in cultural resources.

CULTURAL HISTORY

The archaeological survey for this report covers ancestral traditional homelands familiar with Hualapai Bands of the Hualapai Tribe. The Hualapai Tribe occupy nearly one million acres of what is the Hualapai Indian Reservation located in northwestern Arizona on the Coconino & Hualapai plateaus. For nearly a millennium the Hualapai people have displayed a consummate ability to survive and expand in a country where others had tried but could not be sustained. At the time of the first European contact (1776) the Hualapai were at the maximum extent of their range (Dobyns 1958; Kroeber 1935). Occupying the uplands of northwestern Arizona south of the Colorado River, their boundaries were conceptual as well as flexible on four directional sides: to the east the Hualapai ranged as far as Moenkopi and east of the San Francisco Peaks, south to the Bill Williams Fork, west on the Colorado River as it rolled southward, and to the north their frontier was anchored by the Colorado River as it cut through the Grand Canyon.

Linguistically the Hualapai are the most northeastern group of a larger world of Yuman-speaking people which extends down the Colorado River valley into southern California and Mexico. Historically tribes within this group included the Mojave, the Maricopa, the Quechan, the Cocopah, the Pai Pai, the Diegueno and others (Kroeber 1943; Hinton and Watahomigie 1984). The Yuman language is subdivided into four groups. Hualapai is placed in the category referred to as upland Yuman, which includes the Havasupai, Yavapai and Pai Pai (Kroeber 1943; Hinton and Watahomigie 1983).

Archaeologically the prehistoric Hualapai were/are known as the Cerbat culture. This distinction was based upon ceramic evidence and served in the past to create an artificial academic boundary between the Hualapai and their heritage. Today it is accepted that the Cerbat were the direct ancestors of the Hualapai (personal communications, Robert Euler, 1993).

Socially and politically the Hualapai recognize(d) fourteen (14) separate bands which occupied areas centered around living water. These boundaries previously mentioned were conceptual and flexible within the tribe (see Figure 2. on the following page). Overlap was common and boundaries were socially acknowledged, not politically enforced. Utilization of resources was established and sanctified by traditions. The bands existed in what Euler (1958, p.55) calls territorial equilibrium. Within the tribe itself subgroups were recognized: the Middle Mountain People, the Plateau People, the Yavapai Fighters and People of the Rising Sun. The bands that lived along the south rim between National Canyon (RM 165) and the Grand Wash Cliffs (RM 275) were collectively known as the Plateau people and were also known geographically to the rest of the Hualapai as the Matava Kopai, the Northern People. These bands include the "People of the Blue Green Water", "Pine Springs Band", "Peach Springs Band", "Milkweed Springs Band", "Grass Springs Band", and the "Red Rock Band".

Hualapai origin accounts of creation in the sacred canyons of the Grand Canyon have been orally transmitted (Kroeber 1935) since time immemorial. Sacred places along the Colorado River have place names and have been retained within tribal consciousness. In 1992 during oral historical surveys conducive to the GCD-EIS, an elderly Hualapai cultural scholar recounted, "Before God created Madwida for the Hualapai, there was one Indian Nation--all the same tribe of Indians. They started fighting with one another, so God changed their language and sent them on their way to different parts of the land. The Hualapai were on the top so He saved them for the last. After all the other Indians were gone, He told the Hualapai, 'Go along the River (Colorado) and find the place that I have made for you.' This was Madwida. He told them, 'Stay there and I will come back and show you how to use all the plants, seed and wildlife for our survival.' The Hualapai did this, and multiplied, and they owned all this land all the way down to just this side of Parker...that is our land." (Hualapai Cultural Resources Division 1993).

"PAI" Affiliated Ancestral Clan/Band Territorial Homelands

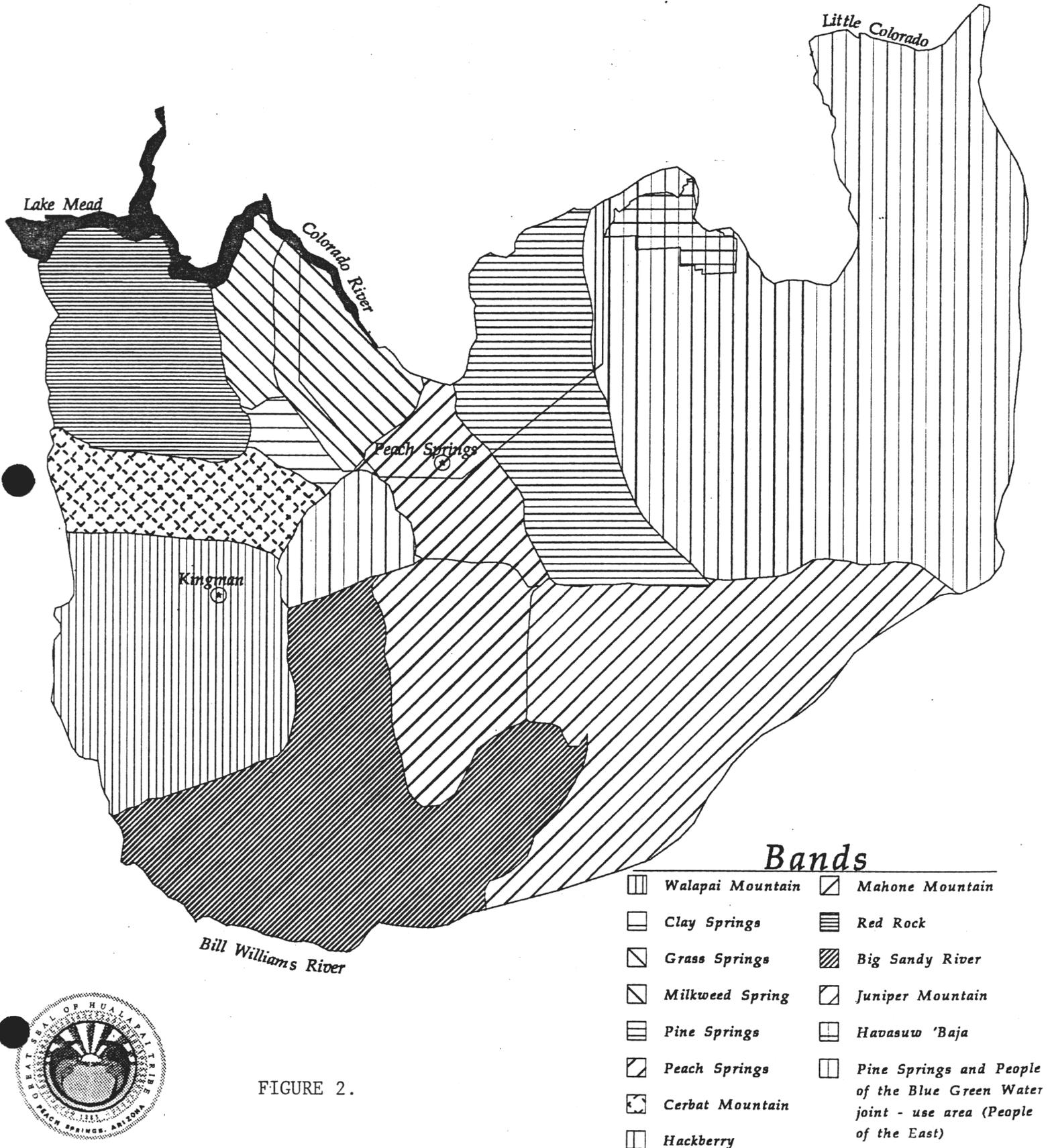


FIGURE 2.



SURVEY METHODS

GRCA archaeologist and Crew Chief, Jim Huffman, and GRCA archeologists, Christopher Coder, Pete Bungart and the Lake Mead National Recreation Area River Ranger, Mike McGinnis were the GRCA archaeology crew. Hualapai Tribe's Cultural Resources staff principal investigator, Lorétt Jackson and cultural resources technicians, Ronald Susanyatame, Sharon Brown and Hualapai Boatman, Warren Powskey were the Hualapai archaeology crew. There were two archaeological survey sessions. The first session was conducted February 24-28, 1992. The second session was conducted March 11-19, 1992.

The stretch between Separation Canyon and Pearce Ferry was more typical of the Inner Gorge than the more "wide open" areas such as below the Little Colorado River, RM 60 (LCR) and Granite Park, RM 209. Essentially, the terrain consisted of very steep talus slopes and vertical cliffs relieved by the occasional side drainage outlets, most of which were relatively small. Where level terrain was encountered, thick vegetation was often present or mud flats had formed during episodes of high water. Thus surveying was relegated to sections of the corridor where the boats could put ashore and the crews could actually walk.

The surveying techniques attempted to examine 100 percent of the project area, this however does not mean 100 percent of the sites were found due to several factors: surface exposure, ground visibility, accessibility, and changing environmental conditions. Some stretches of the river usually are choked with dense vegetation making it impossible to survey anything but the surrounding slopes and rare terraces.

Ground coverage was accomplished by having the survey crew walk parallel transects where it was possible. The strategy consisted of dropping 1-3 people off at each surveyable area, then they inspected the slopes to approx. 20 m above the high water line. However, every that was possible to access below the 300,000 cfs level was included in the survey.

Absolutely no artifacts were collected on this particular survey. All sites recorded aimed to record evidence of past human activity in the canyon, and many activities do not result in the deposition of numerous or extensive remains. In-field analysis was employed for in situ preservation.

Once a site was located, it was recorded on a modified version of the Intermountain Archaeological Computer System (IMACS) form. Then the site was mapped to scale and photographed. Crew members also marked the surveyed areas on the aerial photos with permanent ink pens.

FINDINGS/SITE DESCRIPTIONS

A total of nine sites were recorded during both sessions. Overall site density was quite low due to the lack of availability of useable topography. Much of the terrain is restricted to unconsolidated talus slopes and steep ridges; level, habitable areas are few and far between, and tended to be above the survey corridor. The Bright Angle Formation does provide a few small shelters, but these locations are actively eroding. If sites has once been located at river level, they are now buried beneath lake sediment or have been swept away. The area with the highest

CONCLUSION

Of the nine sites that were recorded from this survey, seven sites are recommended for long term monitoring with site visitations at least once a year. Traditional Cultural Properties assessments from tribes involved in the GCD-EIS and Programmatic Agreement should bridge gaps in any consultations required through mandated laws.

Files of all survey reports with documentation were housed at the Northern Arizona University/GRCA archaeology office. All these files need to be retrieved by the Hualapai Tribe in order to finalize pertinent data so that both parties may have duplicate information and data.

The Hualapai Tribal cultural staff and GRCA crews worked well with each other. The Cultural staff is appreciative of the fine and diligent work done in the face of some mean and treacherous terrain.

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