

FY 07 ARCHEOLOGICAL SITE ASSESSMENT PLAN

Project Goals:

The focus of the cultural program in FY 07 will be on completing the assessment and field protocol testing phase for developing a long-term, core monitoring program for archaeological resources in the CRE. In addition, criteria will be established that define the basis for site inclusion or exclusion in the monitoring program. The following discussion pertains specifically to the assessment task for archeological sites identified in GCMRC FY 07 annual work plan; other elements of the work plan are not affected.

Site Assessment:

The assessment of archaeological sites for the development of the long-term monitoring program was begun in FY06. Work has consisted of assembling, evaluating, and verifying legacy information (NPS monitoring data) regarding the archaeological resources and updating the information where warranted. This work has been coordinated with the site-specific assessments being conducted by USU geomorphologists and Dr. Jonathan Damp from Zuni Cultural Resources Enterprise (ZCRE) for the Bureau of Reclamation's (BOR) section 106 treatment plan development. The goal of the assessment phase is to ensure that accurate, up-to-date, and comparable levels of information exist for all of the potentially monitored archaeological sites. Uniform baseline data is critical for selecting a statistically valid sample of the sites to be used in the long-term core monitoring program.

Assumptions that will guide development of criteria for inclusion of sites in the long-term core monitoring program are as follows:

- Not all sites in CRE will be monitored by GCMRC.
- Monitoring will collect information related to both the Grand Canyon Protection Act (GCPA) and the National Park Service (NPS) Colorado River Management Plan (CRMP) monitoring and other NPS or tribal management and monitoring requirement. This will improve efficiency of effort and cost with information from both monitoring efforts shared. The results of the monitoring for the GCPA and CRMP can be used to re-open the National Historic Preservation Act section 106 for BOR if effects from dam operations or AMP activities on archaeological sites are identified.
- Sampling approaches will be developed which adequately address the information needs and strategic science questions. The questions should drive the sample selection, not the other way around.
- Sample size and sampling periodicity will be designed to answer science monitoring questions and meet the management-determined precision criteria.
- The site population from which the samples are drawn will comprise the full range of site types in the CRE (including temporal, cultural, functional, and geomorphological variability). In addition, a multi-purpose sampling design may be needed to address differing questions.

- The Adaptive Management Program (AMP) will not be responsible for monitoring all of the sites originally identified in the area of potential effect in the Environmental Impact Statement; the monitoring program will allow coordination between the AMP program and other monitoring programs, such as the NPS CRMP. Protocol for assigning monitoring responsibility may include items such as stage criteria, geomorphic criteria, and management activities. Which agency is ultimately responsible for funding or conducting specific portions of the site monitoring should not dictate sample selection so long as valid AMP information needs are being addressed.

Assessment Tasks:

Evaluation of Remaining Legacy Data

The original GCMRC assessment project was to examine 323 archaeological sites that were determined Register-eligible under the original NPS Colorado River corridor survey. In FY 06, the legacy data for 151 of these sites were evaluated. A field verification of their current condition was performed and an evaluation of their research potential and suggested treatment options generated under the BOR's section 106 activities. The initial GCMRC plan called for 162 additional sites in Grand Canyon to be assessed at the same level of effort in FY 07 as proposed by the GCMRC. However, due to concerns expressed by a number of stakeholders that the full 323 sites (which includes sites in Grand Canyon and Glen Canyon) may include sites that fall outside the purview of the AMP program, it was suggested that the number of sites to be assessed in FY 07 be significantly reduced. A compromise reached by the Cultural Resource Ad Hoc Group (CRAHG) recommended limiting the number of sites to be assessed for FY 07 to 147; these are sites that had been previously either discontinued or were considered inactive by the NPS monitoring program. In addition, the CRAHG recommended that the assessment be based on 1) insight gained from the FY 06 assessments and 2) the NPS Legacy data.

It was discussed that these additional sites needed to be included in the assessment for a number of reasons: 1) criteria for their "classification" as inactive or discontinued was inconsistent; 2) some sites had not been monitored for many years, so their current status was unknown; 3) the 151 sites already assessed for the treatment plan were not necessarily representative of the overall site population in the Colorado River Corridor; 4) in order to develop a credible long-term monitoring program, it was necessary to identify the full range of variability in the archaeological site population before the sample(s) to be monitored could be developed; and 5) they may be important in addressing some of the AMP information needs and strategic science questions (e.g., some might be needed as control for addressing rates of change due to dam operation).

Therefore, in FY 07, efforts initially will be focused on assessing the legacy information for the remaining 147 sites using information gained during the FY 06 work. This effort will draw on the expertise of GCMRC, USU and ZCRE and the NPS. Correlations in the legacy data and the FY 06 assessments will be sought that can be applied to assessing the legacy data for the remaining sites. For those sites that still lack the necessary information, or for which information is insufficient to allow evaluations for the purposes of the long-term monitoring program, field visitation will occur.

Development of the Criteria for Inclusion of Sites in the Long-Term Monitoring Program

This process can begin simultaneously with the assessment of the remaining sites. It will require coordination with the CRAHG in developing the criteria that will guide the long-term monitoring program site selection process. Aspects that will be developed include: 1) the specific questions to be addressed by the long-term monitoring program (including elements defined as triggers in the

treatment plan MOA); 2) scope of the monitoring program from the standpoint of the AMP, 3) coordination with NPS; and 4) development of the actual monitoring protocols. The first item is most critical in developing the sampling strategy for sites to be included in the long-term monitoring program. The remaining items are vital for developing the implementation methodology. The results of this task will be incorporated into the Monitoring and Research Plan.

Monitoring Protocols

Monitoring protocols for both dam operations effects and visitor impacts need to be established in order to implement monitoring in FY 08. These protocols need to meet the monitoring needs for both GCPA and CRMP. The protocols will include a form and methodology for both programs as well as how to set schedules for site monitoring. There will be some description of how to integrate the actual field monitoring and data entry for all monitoring efforts. All of these elements need to be vetted through the CRAHG.

Budget Recommendations

The original GCMRC FY 07 work plan called for two FY 07 river trips to complete the full on-site assessment. This recommendation minimizes the necessity of site visitation because only sites with insufficient information will require field recordation. Thus, the two river trips should be sufficient to access the FY 07 assessment needs of the program, as originally planned.

The FY 07 budget includes support for NPS participation. Currently, funding is allocated from two sources; \$67,000 from GCMRC and \$70,000 from BOR. It is recommended that these funds be pooled under the BOR Interagency with NPS in order to avoid the GCMRC overhead cost. A similar procedure was used in FY06 for the administration of the tribal protocol contracts. GCMRC will develop the NPS Scope of Work for the monitoring program.

Section 106 Considerations

The SPG requested clarification on how Section 106 compliance will be achieved and how Section 106 compliance requirements will be articulated with long-term monitoring. BOR is the lead agency for Section 106 compliance for the undertaking which is defined as the operation of Glen Canyon Dam. The first step in this process was analyzing the monitoring data to understand erosional processes. The second step is the development of treatment plans for Grand Canyon and the Glen Canyon. The Grand Canyon work is being accomplished through a CESU agreement with USU and the ZCRE. The Glen Canyon work is being done by the Navajo Nation Archaeological Department (NNAD) under a cooperative agreement. The USU/ZCRE agreement runs through January 1, 2007 with the final report to be completed no later than April 1, 2007. The NNAD report is due by October 1, 2006. Treatment, which is the third step, will begin in both Grand Canyon and Glen Canyon in FY2008. All work proposed under this process is subject to Arizona State Historic Preservation Office (SHPO) approval.

During FY 07, Reclamation will develop a Memorandum of Agreement (MOA) which will satisfy BOR's Section 106 requirements for the undertaking regarding the two treatment plans. The MOA will address the treatment measures for archaeological sites in both Grand Canyon and the Glen Canyon reach. This will close out a piece of Section 106 for sites that receive treatment by mitigating adverse effects as currently understood. The MOA will also include indicators (measurements and rates of erosion) and triggers (erosional or damage thresholds) to re-initiate Section 106 consultation on a case-by-case basis should it be determined that 1) mitigation

measures implemented during the treatment plan prove to be inadequate or 2) cultural resources not previously reported as deteriorating are being adversely affected by dam operations. These triggers – to be developed during the multi-year treatment plan – will be incorporated in GCMRC’s long-term monitoring protocol. Once the MOA has been signed, the current Programmatic Agreement for cultural resources can be terminated. During FY 07, BOR will focus on tribal, federal and SHPO consultation for the treatment plans.

A new Programmatic Agreement will be crafted by the federal agencies in the AMP in consultation with the SHPO to govern the conduct of the long-term monitoring program. It should include language specifying the partitioning of responsibility (i.e., determination of lead agency role) for any new undertakings sponsored/recommended through the GCDAMP.