

# USBR FY05 PROJECT SUMMARY SHEET

## Project A.1. AMWG Personnel Costs

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary	162,000	163,000	173,000	151,000	155,530	
<b>Project Total</b>	162,000	163,000	173,000	151,000	155,530	
% total contracted						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project represents Reclamation staff costs to perform the daily work activities required to operate the Adaptive Management work Group. The work includes completing assignments resulting from AMWG meetings, consulting with stakeholders on a variety of AMP issues relating to the operation of Glen Canyon Dam, disseminating pertinent information to the AMWG, preparing and tracking budget expenses, complying with FACA requirements and completing reports, and updating Reclamation's web page.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:** AMP web postings may be affected

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Personnel costs will not exceed what has been proposed in the budget and Reclamation staff will provide budget information to the AMWG on a regular basis. Completed work products will be of high quality and promptly distributed to AMWG members/alternates and interested parties. Budget reports will be presented in a format conducive to AMWG needs.

# USBR FY05 PROJECT SUMMARY SHEET

## Project A.2. AMWG Member Travel Reimbursement

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary						
<b>Project Total</b>	10,000	10,000	10,000	13,000	15,540	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project covers the costs to reimburse AMWG members or alternates to attend regularly scheduled AMWG meetings and/or participate in ad hoc groups.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** The Glen Canyon Dam Adaptive Management Program will benefit from having all the AMWG members participate in regularly scheduled meetings. As a collective body, they address and resolve concerns associated with the operation of Glen Canyon Dam and make recommendations to the Secretary of the Interior for continued science efforts performed below the GCD.

# USBR FY05 PROJECT SUMMARY SHEET

## Project A.3. AMWG Reclamation Travel

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary						
<b>Project Total</b>	17,000	18,000	18,000	18,000	13,390	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project covers travel expenses Reclamation staff incur to attend AMWG meetings , participate in ad hoc group meetings, complete ad hoc assignments, and attend USGS sponsored workshops. In order to work on AMWG/ad hoc group assignments, the meetings are often held in Phoenix, Arizona. As such, Reclamation staff must make additional trips throughout the year in completion of those assignments.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Reclamation staff will be involved with AMWG/TWG members in completing work assignments and resolving issues that affect the AAMP. They will develop better working relationships with all involved and work toward consensus on a variety of sensitive issues.

# USBR FY05 PROJECT SUMMARY SHEET

## Project A.4. AMWG Facilitation Contract

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
<b>Contracts</b>	25,000	25,000	25,000	21,000	21,000	
<b>Logistics</b>						
<b>Operations</b>						
<b>Salary</b>						
<b>Project Total</b>	25,000	25,000	25,000	21,000	21,000	
<b>% total contracted</b>	100%	100%	100%	100%	100%	

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project represents the work assigned to one individual under contract to the Bureau of Reclamation to facilitate at Adaptive Management Work Group meetings. This person may also assist at TWG meetings and work with ad hoc groups in completing AMWG assignments.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Ongoing

**EXPECTED PRODUCTS/DELIVERABLES:** The facilitator will create an atmosphere in which the members and other participants at AMWG meetings feel comfortable expressing their individual viewpoints. The facilitator will bring the AMWG members to consensus on pertinent issues affecting the Glen Canyon Dam Adaptive Management Program.

# USBR FY05 PROJECT SUMMARY SHEET

## Project A.5. AMWG Other Expenses

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary						
<b>Project Total</b>	8,000	8,000	11,000	9,000	7,000	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project represents some of the other "miscellaneous" expenses incurred in operation of the AMWG: overnight mailings of AMWG meeting packets, copying reports, purchasing meeting materials (cassette tapes, markers, etc.) equipment repair (audio recording/transcribing machines). In addition, training courses are often required for staff to keep current on environmental issues, Federal Advisory Committee Act changes, computer technology improvements, etc.

Also included in this category are monetary awards given to Reclamation staff who have contributed significantly to the success of the GCD AMP.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Other expenses will be kept to a minimum in an effort to reduce the administrative portion of the AMP budget.

# USBR FY05 PROJECT SUMMARY SHEET

## Project B.1. TWG Personnel Costs

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary	64,000	74,000	78,000	69,000	71,070	
<b>Project Total</b>	64,000	74,000	78,000	69,000	71,070	
% total contracted						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project represents Reclamation staff costs to perform the daily work activities required to operate the Technical Work Group, a subgroup of the AMWG. The work includes completing assignments resulting from TWG meetings, consulting with stakeholders on a variety of AMP issues relating to the operation of Glen Canyon Dam, disseminating pertinent information to the TWG, preparing and tracking budget expenses, and updating Reclamation's AMP web page.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Personnel costs will not exceed what has been proposed in the budget and Reclamation staff will provide budget information to the TWG on a regular basis. Completed work products will be promptly distributed to TWG members/alternates and interested parties.

# USBR FY05 PROJECT SUMMARY SHEET

## Project B.2. TWG Member Travel Reimbursement

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary						
<b>Project Total</b>	10,000	10,000	10,000	17,000	15,450	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project cover the costs to reimburse TWG members or alternates to attend regularly scheduled TWG meetings and/or ad hoc group meetings.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** The Glen Canyon Dam Adaptive Management Program will benefit from having all the TWG members participate in regularly scheduled meetings. As a collective body, they address and resolve concerns associated with the operation of Glen Canyon Dam and make recommendations to the AMWG for continued research in the canyon.

# USBR FY05 PROJECT SUMMARY SHEET

## Project B.3. TWG Reclamation Travel

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary						
<b>Project Total</b>	18,000	18,000	18,000	17,000	15,510	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project covers travel expenses Reclamation staff incur to prepare and attend TWG meetings as well as ad hoc group meetings which result from AMWG/TWG assignments. In order to work on those assignments, the meetings are often held in Phoenix, Arizona, because it is centrally located to those entities/states represented on the AMWG/TWG. This often requires Reclamation staff to make additional trips throughout the year in completion of AMWG/TWG assignments.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Reclamation staff will continue to be involved in meeting with AMWG/TWG members in completing work assignments and resolving issues that affect the operation of Glen Canyon Dam. They will develop better working relationships with all involved and work toward consensus on a variety of AMP issues.

# USBR FY05 PROJECT SUMMARY SHEET

## Project B.4. TWG Chair Reimbursement

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
<b>Contracts</b>	25,000	25,000	25,000	21,000	21,630	
<b>Logistics</b>						
<b>Operations</b>						
<b>Salary</b>						
<b>Project Total</b>	25,000	25,000	25,000	21,000	21,630	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project represents the work assigned to an individual to serve as the chairperson for TWG meetings. For FY04, this assignment is being performed by a Federal employee of the National Park Service. As such, there is no contract but the chairperson will be reimbursed for travel expenses. For FY05 and beyond, it is anticipated a TWG member will fulfill this assignment.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Ongoing

**EXPECTED PRODUCTS/DELIVERABLES:** The chairperson will create an atmosphere in which the members and other participants at TWG meetings feel comfortable expressing their individual viewpoints. The chairperson will bring the TWG members to consensus on sensitive issues with the ultimate goal of doing what is best for the canyon and the natural resources. The chairperson will follow up on action items and make assignments as necessary to accomplish TWG objectives.

# USBR FY05 PROJECT SUMMARY SHEET

## Project B.5. TWG Other Costs

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary						
<b>Project Total</b>	2,000	2,000	2,000	2,000	2,000	
<b>% total contracted</b>						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project represents some of the other "miscellaneous" expenses incurred in operation of the TWG. For example: overnight mailings of TWG meeting packets, copying reports, purchasing meeting materials (cassette tapes, markers, etc.), and equipment repair (audio/recording/transcribing machines).

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Other expenses will be kept to a minimum in an effort to keep within the AMP budget.

# USBR FY05 PROJECT SUMMARY SHEET

## Project C.1. Compliance Documents

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary	26,000	26,000	26,000	26,000	26,780	
<b>Project Total</b>	26,000	26,000	26,000	26,000	26,780	
% total contracted						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:**

**SUMMARY PROJECT DESCRIPTION:** This project covers the costs for preparing compliance documents for AMP-proposed actions in order to comply with the Endangered Species Act, National Environmental Policy Act, and National Historic Preservation Act.

**MO's and RIN's ADDRESSED:**

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Reclamation staff will be involved in all compliance issues related to the Glen Canyon Dam Adaptive Management Program. They will utilize travel expenses to meet with the AMP stakeholders to resolve any differences.

# USBR FY05 PROJECT SUMMARY SHEET

## Project C.2. Contract Administration

FUNDING HISTORY	Fiscal year					
	2001	2002	2003	2004	2005	2006
Contracts						
Logistics						
Operations						
Salary	50,000	25,000	25,000	25,000	25,750	
<b>Project Total</b>	50,000	25,000	25,000	25,000	25,750	
% total contracted						

**PRINCIPAL INVESTIGATORS:** Not Applicable

**STATEMENT OF PROBLEM:** Not Applicable

**SUMMARY PROJECT DESCRIPTION:** This project covers the expenses for Reclamation staff to prepare and monitor contracts associated with the GCD AMP. Specifically, these contracts are for AMWG Facilitation, TWG Chairperson reimbursement, and Programmatic Agreement work.

**MO's and RIN's ADDRESSED:** Not Applicable

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATION:**

**STATUS/SCHEDULE:** Not Applicable

**EXPECTED PRODUCTS/DELIVERABLES:** Contract specialists will ensure that individual contractors are fulfilling the requirements of their contracts. They will maintain accurate records of payments made against the contracts and will keep Reclamation staff informed of discrepancies or concerns. Work will be completed on time and within the limits of the contract.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 1 “Reclamation Administration of Programmatic Agreement and Tribal Cooperative Agreements”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
BOR Salary, Travel and Indirect Costs	50,000	50,000	50,000	43,000*	52,500
Project Total					
% total outsourced*					

\*Reduced based on vote of AMWG.

PRINCIPAL INVESTIGATORS: Reclamation’s Regional Archeologist and Grant and Cooperative Agreement Officers.

STATEMENT OF PROBLEM: This project funds Reclamation’s administration of the tribal cooperative agreements and consultation and compliance with section 106 of the National Historic Preservation Act. The project funds Reclamation’s procurement or assistance personnel (Grant and Cooperative Agreement Officers) who work on the six tribal cooperative agreements, the two National Park Service monitoring cooperative agreements, and any other requisitions, contracts or acquisitions of goods or services related to administration of the tribal consultation program of the AMP and the programmatic agreement. The project also funds Reclamation’s regional archeologist who works on compliance with section 106 of the National Historic Preservation Act for the undertaking defined as operation of Glen Canyon Dam.

SUMMARY PROJECT DESCRIPTION: This project funds Reclamation’s administration of cooperative agreements, grants, requisitions or contracts related to tribal consultation and cultural resources and Reclamation’s section 106 of the National Historic Preservation Act compliance for Glen Canyon Dam (and occasionally compliance on other CRSP facilities). The procurement office costs average \$11,000 costs per fiscal year under this project. The regional archeologist expends the remaining average annual amount of \$39,000 for travel, salary, benefits, and indirect costs related to section 106 compliance.

MO’s and IN’s ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: FY05 will be the first year that Reclamation has requested an inflation adjustment in the total administrative amount. It is anticipated that additional work will be required by Reclamation's personnel in FY05 given the treatment planning work underway in Glen Canyon and Navajo Nation and due to the budget reduction voted on by the AMWG for FY04.

STATUS/SCHEDULE: Continuing project.

EXPECTED PRODUCTS/DELIVERABLES:

Six tribal cooperative agreements or contacts will be negotiated during FY05. Accruals will be maintained, accounting will be to government standards, etc.

The treatment plan to mitigate for adverse effects of dam operations on historic properties in Glen Canyon and on Navajo Nation lands should continue this fiscal year. This will require consultation and related salary, travel and expenses of the regional archeologist in FY05.

Another expected product from this work will be an updated status report on the programmatic agreement.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 2 “Database and Geographic Information System Plan and Implementation”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
BOR Salary, Travel and Indirect Costs	0	0	29,000	0	0*
Project Total					
% total outsourced*					

See project #8 which is a GIs and database project.

**PRINCIPAL INVESTIGATORS:** Reclamation’s Regional Archeologist, GCMRC’s GIS and Cultural Resources Program Managers (Fairley), and in FY03, Patrick Wright and Bill Beottlicher, Denver Technical Service Center Remote Sensing and GIS Group

**STATEMENT OF PROBLEM:** The Protocol Evaluation Panel for the Cultural Resources Programs of GCMRC and Reclamation called for a cultural resources data management plan. In September 2000, Reclamation and the GCMRC staff met to determine components of this plan, beginning with identification and inventory of what data exists and what data are needed by the members of the AMP. A formal, written plan has yet to be developed due to difficulties completing this preliminary inventory of legacy data and obtaining data sharing agreements. In FY03, Reclamation and the GCMRC determined that the priority was integrating existing archeological site locational data with GCMRC’s ORACLE and GIS data management systems. This work was begun in FY03. Additional work is necessary to determine needs and being developing the GIS and relational databases that will be maintained by GCMRC.

**SUMMARY PROJECT DESCRIPTION:** The beginning of the cultural resources data layer occurred in FY03 when Reclamation funded an outside contractor to prepare an ARCVIEW data layer showing now housed and maintained by GCMRC. The data consist of the UTM locations of the center points of archeological sites within the river corridor, coupled with the historical vegetation data (Waring) and a line depicting the area inundated by the highest historical release of the dam. The data were presented at a meeting of the PA signatories; CD-ROMs of the data are being distributed to PA signatories and others with a need for the information. The ARCVIEW data will be housed at GCMRC and made available upon a need-to-know basis. The next step in the

process will occur in FY04 when Reclamation will have the National Park Service or contractors provide digital site boundaries to improve the accuracy of the GIS data layer housed by the GCMRC.

MO's and IN's ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: No funding for the cultural data layer specifically proposed for FY05, but see project #8.

STATUS/SCHEDULE: Continuing project, but specific work needs or contracts have not been developed for FY05.

EXPECTED PRODUCTS/DELIVERABLES: The expected product is a cultural resources data layer or layers housed and maintained by GCMRC in conjunction with the other natural resource data generated by the AMP. The products will result in better integration across disciplinary lines in the GCMRC and AMP.

RECLAMATION PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 3 “NPS-GRCA Monitoring”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics	\$15,000	\$15,000	\$15,000	\$15,000	\$15,00
Operations					
NPS Salary, Travel and Indirect Costs	\$210,000	\$185,000	\$185,000	\$186,000	\$191,000
Project Total	\$225,000	\$200,000	\$200,000	\$201,000	\$206,000
% total outsourced*					

PRINCIPAL INVESTIGATORS: Janet Balsom, Grand Canyon Cultural Resources Manager; Jeff Cross, Direct of Grand Canyon Science Center and subcontract with Northern Arizona University Department of Anthropology for data management services.

STATEMENT OF PROBLEM: The National Park Service conducted field observations of a judgment sample of archeological sites since 1991. This field work was performed to meet a stipulation in the programmatic agreement for documenting alterations to the historic district. The NPS has also conducted minor stabilization or preservation maintenance and archeological data recovery efforts. The problem is that the Cultural Resources PEP recommended that the current NPS monitoring program be reoriented to contribute information to prioritize historic properties for treatment, and to evaluate the effectiveness of treatment options such as the check dams or restriction of access to sites.

SUMMARY PROJECT DESCRIPTION: The NPS has provided descriptive field observations of alterations to historic properties in the river corridor since 1991. Photographs are taken and descriptive field observations are made. These observations are documented on monitoring forms that the NPS archives and enters into a database using subcontracted services of Northern Arizona University Department of Anthropology. In addition, the NPS has had the Zuni Conservation Crew install and maintain check dams at selected sites in the corridor. (This is considered preservation maintenance, or a treatment for adverse effects of dam operations.) The field observations are reported to PA signatories in the format of an annual report.

MO’s and IN’s ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: The NPS has asked for funding increases to their current monitoring program based on inflation. Reclamation recommends that all monitoring should be transferred to the GCMRC in FY05 to fulfill all the federal agencies' needs to comply with the GCPA and to meet AMP protocols, as well as the NPS recommendation to complete all work in the river corridor.

STATUS/SCHEDULE: Continuing project since 1991. Status is that the observations of effect will be taken into consideration in the treatment plans that are part of the historic preservation plan currently in preparation. The schedule question is when to transfer current NPS monitoring for adverse effects to historic properties to GCMRC's core monitoring program for cultural resources.

EXPECTED PRODUCTS/DELIVERABLES: The main product delivered by the NPS has been a report describing alternations to historic properties within the river corridor, as well as additional data added to the NPS database and photos archived.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 4 “NPS-GLCA Monitoring”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
NPS Salary, Travel and Indirect Costs	\$27,500	\$27,500	\$28,000	\$28,000	\$28,840
Project Total					
% total outsourced*					

PRINCIPAL INVESTIGATORS: Chris Kincaid, Glen Canyon Cultural Resources Manager and John Ritenour, Glen Canyon Chief of Resources

STATEMENT OF PROBLEM: The National Park Service has documented adverse effects to cultural sites in Glen Canyon since 1991. In 2001, GLCA used this project to have the Western Archaeological and Conservation Center of the NPS to conduct archeological nature and extent testing of four archeological sites. This resulted in a determination that at least one site in GLCA should be excavated to retrieve important data in prehistory. Other treatment options are being explored in a treatment plan in preparation during FY04. The treatments will undoubtedly in FY05.

SUMMARY PROJECT DESCRIPTION: The NPS has provided descriptive field observations of alterations to historic properties in the river corridor since 1991. In addition, testing sites for eligibility to the National Register of Historic Places has been conducted. Treatment of adverse effects of dam operations will begin in FY04. The question for the AMP is whether monitoring to document effect is necessary in FY05 with the treatment plan in progress.

MO’s and IN’s ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: The NPS has asked for funding increase to this program based on inflation; instead, Reclamation proposes eliminating this project and replacing it with the work under the FY04-05 treatment plan. The treatment plan will determine how Reclamation will avoid, minimize, or mitigate adverse effects of dam operations on historic properties in the Glen Canyon reach.

**STATUS/SCHEDULE:** Continuing project since 1991. Question is whether to increase funding as requested by NPS and what questions the field observations will answer. Reclamation's recommendation is to transfer responsibility for cultural monitoring to GCMRC in FY05. Further documentation of effects would be unnecessary in FY05 because the treatment plan will be addressing observed or foreseeable effects.

**EXPECTED PRODUCTS/DELIVERABLES:** The question is what deliverables are needed by the AMP for compliance with GCPA. Reclamation does not need the monitoring data in GLCA for its Section 106 compliance in FY05 given the treatment plan.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 5 “Navajo Nation and Glen Canyon Treatment Plan”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
NPS Salary, Travel and Indirect Costs	0	0	0	\$100,000	\$100,000
Project Total					
% total outsourced*				100%	100%

PRINCIPAL INVESTIGATORS: Davina Twobears and Tony Klesert, Navajo Nation Archeology Department

STATEMENT OF PROBLEM: The PEP for Cultural Resources recommended completing the Historic Preservation Plan as a top priority. The HPP is to include many subplans, including a historic properties treatment plan. (Other subplans are the research design completed in FY03, the traditional cultural property plan, public involvement plan, Native American consultation plan, database plan and monitoring plan). While some PA signatories, including the Advisory Council on Historic Preservation and the Arizona State Historic Preservation Office have stated that the treatment plan should include the entire river corridor, based on the results of the recent experimental flows and research by GCMRC, adverse effects of dam operations are most likely to occur closest to the dam in the Glen Canyon and Marble Canyon reaches. Therefore, a treatment plan will be prepared in FY04. This planning effort will begin in FY04 and is expected to continue into FY05.

SUMMARY PROJECT DESCRIPTION: Beginning in FY04 and continuing through FY05, a treatment plan will be prepared and implemented. The purpose of the plan is to specify how adverse effects of dam operations on historic properties should be avoided, minimized or mitigated in this reach of the river. The plan will be written in FY04 and implementation is expected to take at least two years. The plan will be contracted between Reclamation and the Navajo Nation Archaeology Department.

MO’s and IN’s ADDRESSED:

**CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS:** The continued funding of the treatment plan will help fulfill Reclamation's section 106 compliance mandates, as well as all the agencies' compliance responsibilities under GCPA.

**STATUS/SCHEDULE:** The PEP recommended preparation of many subplans that will make up the historic preservation plan stipulated in the PA. Completion of these subplans document Reclamation's compliance with the National Historic Preservation Act. The treatment plan has been proposed for implementation beginning in FY04 ever since the Cultural Resources PEP was completed.

**EXPECTED PRODUCTS/DELIVERABLES:** The treatments or mitigating measures that will be developed in the treatment plan are the expected products during FY05. At the present time, it is not clear what these products will be. Some archeological data recovery will probably occur, so one product will probably be a data recovery report. Other products will serve to mitigate for the adverse impacts on traditional cultural values for the Native American tribes with traditional cultural properties that are damaged by dam operations in this reach of the river.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 6 “Whole Canyon Treatment Plan”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
NPS Salary, Travel and Indirect Costs	0	0	0	0	\$250,000
Project Total					
% total outsourced*					100%

PRINCIPAL INVESTIGATORS: To be determined

STATEMENT OF PROBLEM: The PEP for Cultural Resources recommended completing the Historic Preservation Plan as a top priority. The HPP is to include a treatment plan describing how adverse effects of dam operations will be avoided, minimized, or mitigated. In FY04, a treatment plan will be prepared for historic properties in the Glen Canyon reach (i.e., GLCA and Navajo Nation lands). These properties are those most likely to be adversely affected by dam operations. In addition, a treatment plan needs to be prepared to avoid, minimize or mitigate adverse effects to historic properties located downstream in Grand Canyon.

SUMMARY PROJECT DESCRIPTION: A treatment plan will be contracted for the historic properties further from the dam, but still subject to adverse effects of dam operations.

MO’s and IN’s ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: Reclamation had recommended funding this project during FY05; however, several PA signatories have commented that this planning effort is premature and should be delayed.

STATUS/SCHEDULE: The PEP recommended preparation of a single treatment plan encompassing all historic properties likely to be affected by dam operations; however, given the likelihood of more severe adverse effects occurring in the Glen Canyon reach, the treatment planning effort is beginning in FY04 starting at the dam and ending with

the southern boundary of Navajo Nation and Glen Canyon NRA. The schedule for planning downstream treatments could begin in FY05, or it could be deferred.

**EXPECTED PRODUCTS/DELIVERABLES:** The treatments or mitigating measures that will be developed in the treatment plan are the expected products during FY05. At the present time, it is not clear what these products will be. Some archeological data recovery will probably occur, so one product will probably be a data recovery report. Other products will serve to mitigate for the adverse impacts on traditional cultural values for the Native American tribes whose traditional cultural properties have been damaged.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 7 “Zuni Check dams”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
NPS Salary, Travel and Indirect Costs	? (out of NPS monitoring funds)	? (out of NPS monitoring funds)	0	0	\$10,000
Project Total					
% total outsourced*					100%

PRINCIPAL INVESTIGATORS: Zuni Conservation Program, Natural Resource Department

STATEMENT OF PROBLEM: Under its interim monitoring and remedial action plan, the National Park Service had the Zuni Conservation Program staff build and maintain check dams to help preserve archeological sites. Geomorphologists on the Cultural Resources PEP questioned the efficacy of these check dams given the hill slope processes operating in the Grand Canyon. In addition, Reclamation has questioned whether the check dams are a suitable long-term preservation maintenance measure for mitigating adverse effects of dam operations. Nonetheless, the National Park Service has suggested that additional check dams be installed and existing check dams maintained by the Zuni in FY05.

SUMMARY PROJECT DESCRIPTION: The project would fund Zuni Conservation Program staff to maintain existing check dams and possibly install new ones.

MO’s and IN’s ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: The need for this project is contingent on treatment plans stipulating the installation and maintenance of the check dams as a preservation maintenance measure. It is possible to defer this until both the Glen Canyon reach and downstream treatment plans are complete.

STATUS/SCHEDULE: The PEP recommended development of a treatment plan to mitigate for adverse effects of dam operations. The plan has not yet been written, nor

have the adverse effects of dam operations been determined within Grand Canyon; consequently, it may be premature to fund this project.

**EXPECTED PRODUCTS/DELIVERABLES:** The product, should this be funded, is the maintenance of existing check dams or installation of new ones.

PROGRAMMATIC AGREEMENT FY05 PROJECT SUMMARY SHEET

Project 8 “Traditional Cultural Property Geographic Information System Documentation”

FUNDING HISTORY	2001	2002	2003	2004	2005
Outsourced Science/labor					
Logistics					
Operations					
BOR Salary, Travel and Indirect Costs	0	0	0	0	\$150,000 (\$30,000/tribe)
Project Total					
% total outsourced*					

PRINCIPAL INVESTIGATORS: Jonathan Damp, Zuni; possibly other tribal representatives

STATEMENT OF PROBLEM: Traditional cultural significance is derived from the role a specific place or property plays in a community’s historically rooted beliefs, customs, and practices. Properties may have significance (and eligibility to the National Register) if they are associated with events, or series of events, or persons significant to the cultural traditions of a community. The purpose of this project is to document, using GIS, places within the river corridor that hold such significance to one or more tribes.

SUMMARY PROJECT DESCRIPTION: The Pueblo of Zuni has proposed that it map, using GIS technology, the specific places within the canyon that contribute to the overall historical or traditional significance of the canyon. While not all places could be revealed due to confidentiality concerns of the pueblo, the tribe and the GCMRC could maintain a common data layer of places of concern within the canyon.

MO’s and IN’s ADDRESSED:

CONSEQUENCES OF FY05 FUNDING RECOMMENDATIONS: The project was originally proposed assuming all tribes would want to participate at ca. \$30,000 per tribe; however, based on additional comments received by Reclamation, it seems prudent to begin this project as a pilot project with Zuni (or possibly Hopi) to assess its utility. If the project is successful for one tribe, then it would become part of the database project in #2.

If successful and useful, then the project could be extended to other tribes wishing to use GIS to manage cultural resource geospatial data.

**STATUS/SCHEDULE:** Would be part of the continuing effort to document and evaluate the National Register significance of the canyon and places within the river corridor as traditional cultural properties.

**EXPECTED PRODUCTS/DELIVERABLES:** The expected product is a component of the larger cultural resources data layer housed and maintained by GCMRC. The product could also be used as the basis for a National Register determination of eligibility form, if the pueblo wishes to formally document the associative value of the canyon to the pueblo.