

**Interagency Agreement # 06-AA-40-2458**  
**Between the Bureau of Reclamation and the National Park Service, Grand Canyon National Park**  
**Glen Canyon Dam Adaptive Management Program**  
**Grand Canyon Research Permit Facilitation and Environmental Compliance**  
**December 2008 Annual Report**  
Revised April 2009

## **Background**

The administration of scientific research permitting in Grand Canyon National Park (GRCA) has evolved from the oversight of the Superintendent's Office to the scrutiny of the Division of Science and Resource Management. Prior to the 1970s, no formal research application process existed, and during this decade GRCA saw a substantial increase in research requests. A major cause for this increase was the Colorado River Research Program (CRRP), a result of cooperative efforts between the Museum of Northern Colorado (MNA) and GRCA. This program resulted in large volume, long-term river research projects which caused difficulties in the administration of research permits for the Superintendent.

In the early 1980s, the Bureau of Reclamation (BOR) initiated the Glen Canyon Environmental Studies (GCES) program, another long-term river research program. The focus of this multi-agency research program was to determine downstream effects of Glen Canyon Dam (GCD) on the aquatic habitat, terrestrial resources, and later, cultural and recreational resources of the Colorado River. The GCES program operated without adequate NPS management and permitting oversight into the 1990s. In 1995 Dr. Robert Winfree, Senior Scientist at GRCA, initiated a Research Permitting Program agreement between NPS and the BOR in order to manage the large volume of science projects. The agreement was to provide funding to GRCA for administrative support to facilitate research permits for the multi-million dollar Glen Canyon Dam Adaptive Management research program (GCDAMP) which replaced the GCES following completion of the GCD Environmental Impact Statement in 1995. The GCDAMP, overseen by BOR and ongoing since 1996, is funded through power revenues generated from GCD.

Entrance fees and fees associated with backcountry and river use, as well as administrative and overhead costs associated with GCDAMP research were waived for this research program as a result of NPS receiving partial funding support for research permitting management from BOR. The actual cost to NPS for providing the entire Research Permitting program for the GCDAMP is much greater than the current \$118,000 funding. GRCA has estimated that costs to the park are greater than \$250,000 for staff involvement alone in administering the Research Permitting program for the GCDAMP.

## **Purpose and Authority**

### **National Park Service Research Permitting Requirements**

All research projects in GRCA and throughout the NPS require a Research and Collecting Permit and must adhere to NPS policies and guidelines regarding scientific quality, conduct of studies, collections, resource impacts, and wilderness restrictions (NPS Management Policies 2006, US CFR 2007, NPS Director's Orders No. 6, 12, 74, and 77). Research activities must be evaluated for compliance with applicable federal laws. In addition, GRCA must consult with Native American tribes regarding research permits and activities. Issuance of a research permit is evidence that the compliance process has been completed and NPS research policies have been followed.

## **Research Permitting and Deliverable Results**

In 2008, the GCRA Research Office **reviewed 40 new** applications and **issued 86** scientific research and collection permits (34 new, and 52 continuing, totaling 86 permits). Out of these 86 permits issued, 25

river permits were issued to GCMRC for a total of 7138 user days. For each of these GCMRC permits, assistance was provided to the Principal Investigator in completing the Minimum Requirement Analysis (MRA) and related compliance documents. In addition to the GCMRC permits and related river trips, three tribal monitoring river trips were permitted for the Hopi, Hualapai and Paiute tribes. The following table summarizes the information relative to 2008 AMP related research activities and associated permits.

<b>2008 Scientific Research &amp; Collection Permits related to AMP and associated Colorado River trips</b>						
<b>Study Title</b>	<b>Launch Date</b>	<b>End Date</b>	<b>Trip Length</b>	<b># Participants</b>	<b>User Days</b>	<b>Comments</b>
<b>Aquatic Foodbase</b>						
AQFB 08-I	4-Jan-08	18-Jan-08	15	18	270	
AQFB 08-II	17-Apr-08	1-May-08	13	19	247	
AQFB 08-III	14-Jun-08	1-Jul-08	18	17	306	
AQFB 08-IV	13-Sep-08	29-Sep-08	17	17	289	
<b>Mainstem Collaborative Fish Monitoring</b>						
DSF 08-I	5-Feb-08	26-Feb-08	22	10	220	
DSF 08-II	27-Mar-08	17-Apr-08	22	10	220	
<b>Sandbar and Campsite Monitoring</b>						
Campsite 08-I	11-Oct-08	27-Oct-08	17	24	408	
<b>FGS-Mass Balance/Streamgage Monitoring</b>						
FGS 08-I	24-Jan-08	8-Feb-08	16	10	160	
FGS 08-II	21-Aug-08	4-Sep-08	14	10	140	
<b>Control Point Database Project</b>						
SS DB 08-I	3-Jul-08	18-Jul-08	16	20	320	
SS DB 08-II	24-Jul-08	8-Aug-08	16	20	320	
<b>Near Shoreline Ecology Pilot Study</b>						
NSE Pilot 08-I	16-Aug-08	29-Aug-08	14	12	168	
NSE Pilot 08-II	11-Sep-08	24-Sep-08	14	12	168	
<b>High Flow Experiment 2008</b>						
HFE 08-I	2-Feb-08	19-Feb-08	17	17	289	
HFE 08-III	28-Feb-08	19-Mar-08	21	10	210	HFE 08-III
HFE 08-IV	2-Mar-08	16-Mar-08	15	5	75	HFE 08-IV
HFE 08-V	29-Feb-08	16-Mar-08	17	13	221	HFE 08-V
HFE 08-VI	1-Mar-08	17-Mar-08	17	11	187	HFE 08-VI
HFE 08-VII	2-Mar-08	10-Mar-08	9	21	189	HFE 08-VII
HFE 08-VIII	6-Mar-08	13-Mar-08	8	12	96	HFE 08-VIII
HFE 08-IX	28-Mar-08	14-Apr-08	18	22	396	HFE 08-IX
HFE 08-X	29-Mar-08	15-Apr-08	18	14	252	HFE 08-X
HFE 08-XI	10-May-08	27-May-08	18	21	378	HFE 08-XI
HFE 08-XII	17-Mar-08	3-Jun-08	18	24	432	HFE 08-XII

<b>Collaborative Fish Monitoring Backwater Seine 08-III Kanab Ambersnail Monitoring 08-I Vegetation Mapping 08-I</b>	18-Sep-08	3-Oct-08	16	20	320	Collaborative trip that combined three research projects in one river trip
<b>Hopi Cultural Monitoring 2008</b>	22-May-08	30-May-08	9	12	108	
<b>Hualapai Cultural Monitoring 2008</b>	1-Aug-08	11-Aug-08	11	20	220	
<b>Paiute Cultural Monitoring 2008</b>	18-Jun-08	28-Jun-08	11	19	209	
<b>Total Number of User Days</b>			<b>437</b>	<b>440</b>	<b>7138</b>	