

**GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM  
ACTIVITIES WITHIN THE SCOPE OF THE PROGRAM**

June 14, 2002

The Grand Canyon Protection Act States:

*"Section 1802 (a) **IN GENERAL** - The Secretary shall operate Glen Canyon Dam in accordance with the **additional criteria and operating plans specified in section 1804 and** exercise other authorities under existing law in such a manner as to **protect, mitigate adverse impacts to, and improve the values** for which Grand Canyon and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use."*

Section 1804 is limited to the operation of Glen Canyon Dam, the preparation of an environmental impact statement on the operations of Glen Canyon Dam, and the adoption of operating criteria and plans for Glen Canyon Dam and nothing more. **Section 1805 requires long-term monitoring of programs and activities that will ensure that Glen Canyon Dam is operated in a manner consistent with section 1802.** Long-term monitoring and research are allowed to determine the effect of the Secretary's actions under 1804(c) on the natural, recreational and cultural resources of the park and recreation area. All these actions are constrained by existing law as stated in Section 1802(b).

The Adaptive Management Program is a program that was established by the EIS and ROD on Glen Canyon Dam operations. Therefore, it has always been the position of the states that GCAMP is limited to dam operations and the effect of those dam operations on the Park and Recreation Area.

The Grand Canyon Protection Act is specific that the act does not alter the responsibilities of any agency to take other actions to protect, mitigate adverse impacts to, and improve the values for the Park and Recreation Area. However, those actions are part of those agencies normal day-to-day responsibilities and not the adaptive management program. GCAMP activities should compliment those "other actions." **The GCAMP was not established as a supplemental source of funding** for other management actions.

Furthermore, this position is made abundantly clear in the Guidance Document prepared by Scott Loveless and the specific language under the Authority Section of that paper on pages 2, 3 and 4. The "**Authority, Grand Canyon Protection Act, Legislative History, and Law of the River**" section reads as follows:

*"It is quite clear that when Congress enacted the Grand Canyon Protection Act of 1992, 106 Stat. 4669 (GCPA), it intended to maintain all that had gone before - the Compacts, the Park units, and Glen Canyon Dam - and to find a way to operate the dam so as to "protect, mitigate adverse impacts to, and improve" downstream NPS resources without interfering with the "Law of the River," including compact and treaty obligations*

for water delivery (GCPA, section 1802(a) and (b)). The Senate Report on the bill puts it quite simply: "The primary purpose of this title is to authorize changes in the operation of Glen Canyon Dam to prevent damage to downstream resources, principally the dam's power operations." The Secretary's responsibilities for water storage, allocation and delivery act as limits on the Secretary's discretion in implementing the GCPA. It is also clear that Congress understood that these objectives would have certain costs in the form of lost incremental hydropower generating opportunity (GCPA, section 1809) and that the existence of the dam was to be taken as a given.

The basic question Congress was addressing was how can Glen Canyon Dam operations be modified within the provisions of existing law so as to improve conditions for downstream NPS resources (with similar benefits certainly occurring on other similarly situated lands). The GCPA itself does not direct consideration of cultural resources within the boundaries of Native American reservations, only "the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established," although all federal agencies have such obligations under other law. The entire adaptive management program (AMP), including the Grand Canyon Monitoring and Research Center and the Adaptive Management Work Group, must be understood within this context. In accordance with section 1804 of the GCPA, the EIS was conducted to attempt to find an answer to that question, and the 1996 ROD was the Department's best first answer. Recognizing that more experience and knowledge with operations might enable further refinements in operations and might further improve downstream resource conditions, however, Congress added section 1805 to the GCPA. This section required the Secretary to "establish and implement long-term monitoring programs and activities that will ensure that Glen Canyon Dam is operated in a manner consistent with that of section 1802, "namely, "to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established," within the parameters of other applicable law and the physical constraints of the dam. **Accordingly, the Department included in the EIS and in the ROD the provisions setting up the AMP, thereby allowing for further refinement of and changes to dam operations to better meet the Act's objectives.**

The charge given to the AMWG in its Charter is to "facilitate the AMP, recommend suitable monitoring and research programs, and make recommendations to the Secretary as required to meet the requirements of the Act." **The scope of the AMWG responsibility, therefore, is to identify aspects of dam operations that can be modified to beneficially affect the downstream resources identified as the focus of study (i.e. "the target") in the EIS. This covers flow rates, ramping rates, periodicity of peak flows, monitoring sediment input rates and the relation of sediment movement to water release and ramping rates, chemical content and temperature of releases, among possible others -- any aspect of dam operations, in other words, which has a reasonably demonstrable effect on the downstream resources sought to be improved by the GCPA. The key to the scope of AMWG's responsibilities is whether a specific desired resource effect downstream of the dam can be achieved through some manipulation of dam operations.** Under the ROD, the upper limit of planned release level is 45,000 cfs. Long-term monitoring and research, including test flows within the current range of authorized operations, are intended to enable finer and finer tuning of operations over time, as

*additional knowledge and experience are gained, to better achieve the target mix of resource benefits, as outlined in the EIS, pages 54-65.*

***Without losing track of this primary focus on improving conditions for downstream resources, the Charter also specifies that the "AMWG may recommend research and monitoring proposals outside the Act which complement the AMP process, but such proposals will be funded separately, and do not deter from the focus of the Act."*** This would include anything the AMWG committee considers relevant but tangential or attenuated in its effects on riparian resources downstream of the dam, as identified above. The relevant Senate Report language says, after the discussion of the primary purpose of the Act, that: "other reasonable remedial measures may be available to the Secretary. The phrase 'exercise other authorities under existing law' means that the Secretary should consider and may implement non-operational measures to address downstream effects of Glen Canyon Dam if such other remedial measures meet this title's goal of protecting, mitigating damage to, and improving the resources downstream of the dam." Again, as emphasized in the Senate Report, "the water storage, allocation and delivery requirements of the Law of the River place substantial limits on the Secretary's ability to change other elements of GCD operations. All measures undertaken pursuant to the authority of this Act have as their focus the improvement of conditions for downstream resources within the two Park Service units. The TWG's responsibility is similarly limited, but even more so; it is to carrying out only specific assignments within the scope of the AMWG's responsibility, as directed by the AMWG.

The AMWG was set up pursuant to the Federal Advisory Committee Act (FACA) and must comply with FACA's requirements for notice and public meetings, etc., as laid out in the GSA regulations at 41 CFR subpart 101-6.10. The AMWG and TWG may establish their own internal operating procedures as they wish, so long as they comply with the specific requirements of FACA and its implementing regulations.

One area that has been a source of some recent discussion has been the question of planned high releases from Glen Canyon Dam for such purposes as "beach habitat building flows." The Department expects the AMWG to work and provide its recommendations within the following context. Since the GCPA is clear that it was not intended to modify the compacts or "the provisions of the Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968 that govern allocation, appropriation, development, and exportation of the waters of the Colorado River Basin" (GCPA, section 1802(b)), any operational changes under the auspices of the GCPA are clearly subordinate to and must fit within the constraints of those provisions. Historically, questions have been raised over related matters, such as whether releases of water above power plant capacity, if made for authorized purposes, can be considered as not constituting "spills" within the meaning of section 602(a) of the Colorado River Basin Project Act of 1968 and the Operating Criteria implemented pursuant to section 602. However, given the limitations provided in the ROD, the Glen Canyon Dam operating criteria, and the 1996 agreement between the Department and the Basin States, it is believed that these issues have been adequately addressed. Clearly, section 7 of CRSPA, which directs the Secretary "to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates" provided that the primary purposes of compact deliveries and state compact allocation development are not precluded or impaired, remains in effect, even though the GCPA (section 1809)

*authorized, and the EIS/ROD implemented, and incremental reduction in the value of the hydropower resource. Under the conditions of the ROD, Glen Canyon Dam operating criteria, and the 1996 agreement, flows above power plant capacity would be conducted utilizing reservoir releases required for dam safety purposes. The Department is currently focusing on operational modifications at release levels below 45,000 cfs. Modifications to the operating criteria involving flows above 45,000 cfs would require additional NEPA compliance."*

Given this background, the states have always viewed anything not specifically linked to dam operations as outside the scope and authority of the GCAMP. The GCAMP focus is dam operations. While it is useful to have a shared vision of the desired resources and resource levels for the Grand Canyon, it is inappropriate to build into the GCAMP targets, activities and information needs for resources that are not impacted by dam operations. Thus, we deem the following activities to be outside the scope of the Strategic Plan:

1. RIN 2.1.1, 2.2.1, 2.2.2, 2.2.3, 2.2.6 and 2.5.6 which are all activities that should be accomplished by the U.S. Fish and Wildlife Service as part of their development of recovery goals for any threatened and endangered species.
2. All of Goal 3 restoration of extirpated species. No targets or research needs here only coordination of any reintroduction efforts. We do not any reintroduction to defeat existing efforts.
3. RIN 5.1.5, 5.1.6 and 5.1.7 All of which are taxonomic considerations that should be addressed by the U.S. Fish and Wildlife Service.
4. IN 6.3, 6.4, and 6.5 which are clearly research not directly linked to dam operations.
5. RIN 6.7.3 and 6.7.4 which deal with the Southwest Willow Flycatcher. The Flycatcher occupies a much larger area and these questions are too broad. We should limit the focus to how dam operations have impacted flycatcher habitat.
6. All of Goal 7 - Water Quality issues have should be limited to areas provided for in the paper already prepared on this subject.
7. Proposed New M.O. 8.6, which is redundant.
8. All of Goal 12 - While we certainly want to index information and results in a meaningful manner, make information available and keep anyone interested informed, we do not need research on how to do this. Project scoping should determine the extent of sampling and usefulness in meeting the research and monitoring needs previously identified. Peer review and experience will tell us how to do things better in the future. Some socio-economic data may be necessary and should be scoped as part of appropriate research in the areas needed such as for recreation and power.