

Committee on Resources, Subcommittee on Water & Power

[water](#) - - Rep. Ken Calvert, Chairman

U.S. House of Representatives, Washington, D.C. 20515-6204 - - (202) 225-8331

Witness Statement

Statement of

Southwest Rivers, Grand Canyon Trust, and Grand Canyon River Guides

Regarding

The importance of considering environmental and other factors in the management of Federal hydropower facilities

Before the

Subcommittee on Water and Power

Committee on Resources

U.S. House of Representatives

Statement by

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Mr. Chairman, members of the Committee, my name is Rick Johnson and I am the Executive Director for Science for Southwest Rivers, a non-profit conservation organization dedicated to the protection and restoration of the rivers in the Colorado River watershed. I represent environmental concerns for the Glen Canyon Dam Adaptive Management Program, where I serve as a member of the Adaptive Management Work Group (a Federal Advisory Committee) and also as the Chair of the Technical Work Group. In addition to my own views, this statement also represents the views of Geoff Barnard of the Grand Canyon Trust and Andre Potochnik of Grand Canyon River Guides, both of whom also serve on the Adaptive Management Work Group.

I am delighted to have been asked to speak with you today regarding the importance of considering environmental and other factors in the management of federal hydropower facilities, especially in the Colorado River basin. My focus today will be mostly on Glen Canyon Dam because that is the system I know the best. However, these comments also apply to many other hydropower facilities.

Dam operations affect biological, cultural, and recreational resources.

The flows of the Colorado River once fluctuated widely from year to year and season to season. The power of flood flows eroded and transported a tremendous load of sand, silt, and other fine-grained sediment. Unique plants, animals, and habitats evolved in these extreme environmental conditions. However, extensive water developments have transformed the Colorado from a warm and sediment-laden river with highly variable flows to a relatively cool and clear river with stabilized flows.

These changes have had a profound effect on the ecological, cultural, and recreational resources in the river corridor. Key resources include: native ecosystems, wilderness areas, world-class whitewater rafting, blue-

ribbon trout fishing, archaeological and other cultural entities such as Traditional Cultural Properties, and threatened and endangered species such as the humpback chub, Kanab ambersnail, and southwestern willow flycatcher. Dam operations have been implicated in the degradation of aquatic ecosystems through the loss of native fish and other species, the invasion of nonnative plants and animals, and widespread beach erosion. Dam operations have also diminished whitewater recreational experiences through the narrowing of rapids and the loss of camping beaches, and resulted in the erosion of archaeological and other culturally important sites.

Because of these ecological changes, dam operations are of great concern to many Americans. The concern is heightened at Glen Canyon Dam because Grand Canyon National Park lies just 15 river miles below the dam. Grand Canyon National Park is one of the jewels of the National Park system, it is a World Heritage Site, it is considered one of the seven natural wonders of the world, and it is visited by five million people every year. The park is legally charged with protecting native biological resources and cultural resources, and it provides world-class recreational opportunities.

hydropower production needs to be balanced with resource protection.

In response to the degradation of resources by dam releases at Glen Canyon Dam, former Secretary Lujan ordered the preparation of an Environmental Impact Statement (EIS) in 1989. The EIS was completed in 1995, and the Record of Decision (ROD) was signed in 1996. The goal of selecting the preferred alternative in the ROD was to find an alternative dam operating plan that would meet statutory responsibilities and permit recovery and long-term sustainability of downstream resources while minimizing impacts to hydropower capability and flexibility.

In the midst of the EIS process, Congress enacted the Grand Canyon Protection Act of 1992 which requires that the dam be operated to *"...protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use."* In essence, the Grand Canyon Protection Act requires a balancing of benefits derived from water and power delivery with benefits to biological, cultural, and recreational resources. In addition, several other authorities have a bearing on how dams are operated, including the 'Law of the River,' the National Park Service Organic Act, the Endangered Species Act, and the National Historic Preservation Act.

An Adaptive Management Program is in place to ensure that the diverse interests of the american public are achieved.

The Glen Canyon Dam Adaptive Management Program (AMP) was an outcome of the EIS process. The establishment of the AMP was a revolutionary decision in 1996 as it implemented the relatively new concept of adaptive management and also provided for on-going input into management decisions by a diverse group of stakeholders.

Adaptive Management is a process to cope with the uncertainty in our scientific understanding of how to manage complex ecosystems. It is based on collaboration, consensus, and sound science. We believe it is the most effective way to develop appropriate management strategies to meet the interests of the American public--including biological and cultural resource protection, recreation, and hydropower production.

The Adaptive Management Work Group provides advice to the Secretary of Interior regarding the effects of dam operations on downstream resources and any needed modifications to dam operations to meet the intent

of the Grand Canyon Protection Act. The Adaptive Management Program serves as a model for resource management efforts in other areas. A recent National Research Council report stated that the Adaptive Management Program for Glen Canyon Dam is a "*science-policy experiment of local, regional, national, and international importance.*"

Conclusions and Recommendations.

1 There are many biological, cultural, and recreational values in addition to water delivery and hydropower production that the American public holds for the Colorado River.

2 The Glen Canyon Dam Adaptive Management Program is an outgrowth of an unprecedented amount of scientific research and public participation over the past 17 years.

3 Grand Canyon means too much to the American public to sacrifice the integrity of this working partnership between local interests and the federal government.

4 We recommend that the current operations at Glen Canyon Dam are maintained and any potential alterations be evaluated and recommended through the Adaptive Management Program.

I thank you for your attention to this very important matter and the opportunity to speak to you today. I am happy to answer any questions that you may have.

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