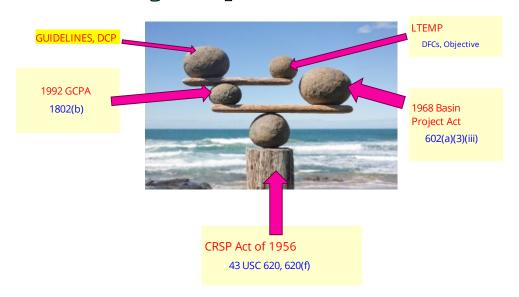
HYDROPOWER AND THE GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM

The Hydropower Foundation



THE COLORADO RIVER STORAGE PROJECT ACT OF 1956 (CRSPA) IS THE FOUNDATION

CRSPA Section 1 (43 U.S.C. § 620) defines the purposes of the CRSP, which are (numbers added): In order to initiate the comprehensive development of the water resources of the Upper Colorado River Basin, for the purposes, among others, of 1) regulating the flow of the Colorado River, 2) storing water for beneficial consumptive use, making it possible for the States of the Upper Basin to utilize, consistently with the provisions of the Colorado River Compact, the apportionments made to and among them in the Colorado River Compact and the Upper Colorado River Basin Compact, respectively, providing for the 3) reclamation of arid and semiarid land, 4) for the control of floods, and for the 5) generation of hydroelectric power, as an incident of the foregoing purposes.

Note the use of the word INCIDENT. It is **not INCIDENTAL**. It is **not** secondary, lesser, subservient, nonexistent, or any other descriptor. **It is RELATED TO** the foregoing purposes. Section 1 of the Act also contains another reference to hydropower by its authorization "to construct, operate and maintain…dams, reservoirs, powerplants, transmission facilities and appurtenant works."

The protection and clarity about hydropower isn't limited to these two references. Later in the Act, section 7 (43 U.S.C. § 620f) requires that the GCD hydropower plants "be operated in conjunction with other Federal powerplants, present and potential, so as to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates". Note that this is not maximizing *revenues!*

THE GRAND CANYON PROTECTION ACT (GCPA)/CRSPA/ HYDROPOWER

The 1992 GCPA purpose is defined in section 1802. Section 1802 is comprised of parts (a) and (b), which **must be interpreted in tandem**.

Section 1802(a): "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 National Park and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use."

HOWEVER in the same section, Congress goes on to condition HOW 1802(a) must be implemented......

(b) "Compliance With Existing Law. -- The Secretary shall implement this section in a manner fully consistent with and subject to the Colorado River Compact, the Upper Colorado River Basin Compact, the Water Treaty of 1944 with Mexico, the decree of the Supreme Court in Arizona v. California, and 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. "

The key words are *fully consistent AND SUBJECT TO*. Some may argue that only water is addressed in 1802(b). CRSPA Sections 1 and 7 explicitly create the inextricable link by law between water and hydropower.

The "consistent with and subject to" was also clarified in the early days of the Glen Canyon Dam Adaptive Management Program (GCDAMP)

GCDAMP/CRSPA/GCPA/HYDROPOWER

In 2000, the Solicitor of the Interior, in response to questions and requests from the GCDAMP, created a "Guidance Document".

In "Authority" (referencing the AMP): "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."

In other words, the GCPA did not modify the authorized purposes of the CRSPA, and the GCDAMP derives its authority from the GCPA. The United States cited to this history in its GCT v. US Memo in Opposition Dkt. 135 at p. 38, fn22.

As a sidenote, section 102 of the 1968 Colorado River Basin Project Act (43 U.S.C. § 1501(a) also uses "incident" in the same way as CRSPA. This Act "added in" recreation and improving conditions for fish and wildlife.

GCD/HYDROPOWER/LTEMP

In 2009, the United States District Court, through the GCT v. U.S. case, described Reclamation's obligation in its operation of Glen Canyon Dam, calling out the importance of the

hydropower purpose. Judge David Campbell's statement is direct, unequivocable, and continues to be cited in current legal briefs in the most recent litigation (Save the Colorado et al v. U.S.).

"Reclamation is charged with balancing a complex set of interests in operating the dam. Those interests include not only the endangered species below the Dam, but also tribes in the region, the seven Colorado River basin states, large municipalities that depend on water and power from Glen Canyon Dam, agricultural interests, Grand Canyon National Park, and national energy needs at a time when clean energy production is becoming increasingly important."

In 2012, following an extensive facilitated process, the Secretary of the Interior, Ken Salazar, supported the "DFC Report" (Desired Future Conditions), which was the AMWG's consensus view of what goals the Adaptive Management Program should strive for. Page 1 of the "DFC Report" cites sections 1802(a) and 1802(b) of the GCPA, along with Judge Campbell's statement (above). The anticipated next steps beyond the DFCs were going to be quantifying those that hadn't been quantified (hydropower had established metrics), through the LTEMP. As we see today, the AMP is still struggling with metrics for some of the resource goals.

DFCs were the precursors to the objectives in LTEMP. Power was a standalone DFC, later morphing into the LTEMP objective to "Maintain or increase Glen Canyon Dam electric energy generation, load following capability, and ramp rate capability, and minimize emissions and costs to the greatest extent practicable, consistent with improvement and long-term sustainability of downstream resources."

DROUGHT CONTINGENCY PLAN (DCP) AGREEMENTS

GCD operations, and therefore the GCDAMP, are affected by the 2019 DCP Agreements. Page 1, the Background and Objectives, is very explicit as to hydropower:

- 2. Maintain the ability to generate hydropower at Glen Canyon Dam so as to protect:
- a. Continued operation and maintenance of the CRSPA Initial Units and participating projects authorized under the 1956 Colorado River Storage Project Act, as amended ("CRSPA");
- b. Continued implementation of environmental and other programs historically funded by CRSPA revenues that are beneficial to the Colorado River system;
- c. Continued electrical service to power customers including municipalities, cooperatives, irrigation districts, federal and state agencies and Native American Tribes, and the continued functioning of the western Interconnected Bulk Electric System that extends from Mexico to Canada and from California to Kansas and Nebraska; and
- d. Safety contingencies for nuclear power plant facilities within the Colorado River Basin.

CRSPA is the foundation and a key authority underpinning Glen Canyon Dam and all aspects of its operations. Congress and the Courts have inextricably linked water and hydropower operations in the Colorado River. They are INCIDENT to one another, NOT INCIDENTAL.