

Briefing Summary for The Interim Water & Natural Resources Committee on the NM CAP Projects

History of the Colorado Basin Project Act as amended by the current Arizona Water Settlement Act

• Arizona vs. California

- New Mexico, Nevada, Utah intervened and the United States also intervened to protect federal water rights, including reserved water rights held for the benefit of five Indian reservations. The Supreme Court largely adopted the Special Master's recommendations and issued a decree in 1964. This decree has been reopened a number of times with the court making some adjustments addressing Tribal claims until to as recently as 2015.
- Based on what "present uses" that could be documented at the time of the Special Master's evaluation the Gila River users in Upper Gila, Cliff-Gila and Buckhorn-Duck Creek and Red Rock Areas were awarded 15,895 acre-feet during any one year. The Virden area users of the Gila River were awarded diverting or permitting the diversion of water from the Gila River and its underground water sources in the Virden Valley, New Mexico, except for use on lands determined to have the right to the use of such water by the decree entered by the United States District Court for the District of Arizona on June 29, 1935, in [376 U.S. 340, 349] United States v. Gila Valley Irrigation District et al. (Globe Equity No. 59) (herein referred to as the Gila Decree), and except pursuant to and in accordance with the terms and provisions of the Gila Decree. The San Francisco River users were awarded 4,112 acre-feet during any one year.
- The Special Master's recommendations were based on what "present uses" could be documented at the time of the evaluation. New Mexico argued that due to the depression, drought and World War II many of the agricultural lands previously in use were fallow but should be considered.

• Gila & San Francisco Water Rights Adjudication

- The New Mexico Office of the State Engineer initiated an adjudication of the Gila and San Francisco River Basins based on the Supreme Court's decree that was completed in 1968. The four years of adjudication is the most rapid adjudication of water rights in New Mexico history.
- **Hooker Dam or Alternative Efforts**
 - Shortly after passage of the Act proponents in the Silver City, Grant County area established the Hooker Dam Association to promote construction of the dam.
 - At the same time opponents to the construction began organizing. Throughout the years opponents have used every means to block and delay implementation.
- **Arizona Water Settlement Act (AWSA)**
 - One of the primary purposes of the AWSA was to put into effect the settlement of the Gila River Indian Community claims to additional water in Arizona.
 - Members of the Southwest New Mexico Water Study Group were left out the input and negotiations in the development of the AWSA.

The AWSA amended the Colorado River Basin Project Act (CRBA) and reduced the amount of water immediately available for New Mexico by 4,000 ac/ft. It also extinguished an additional 30,000 ac/ft that would have been made available to New Mexico if the Colorado River were augmented.
 - The Consumptive Use and Forbearance Agreement (CUFA) was made a part of the AWSA to insure that no downstream Arizona water users are impacted by diversion in New Mexico and to eliminate environmental impacts due to reduction of in-stream flow.

Benefits From Additional Water

○ The Present & Future Costs and Value of Water

- The current cost of senior water rights in the Gila-San Francisco river basins run between \$10,000 to 15,000 per ac/ft.

*If society is to respond appropriately to water challenges, it is important to understand the implications of limited current supplies and growing demands. **Action today is needed to forestall shocks, either in price spikes resulting from the need for supplies that are expensive to acquire, or the loss of reliability resulting from failure to secure additional supplies. Better to appreciate the value of water now than regret our lack of understanding in the future.***¹

¹ What is the Value of Water? A Complex Question, Water Resources Research Center, College of Agriculture and Life Sciences, The University of Arizona, [Arroyo](#) 2014

- Since authorization of the CBPA it is estimated that 800,000 ac/ft of water eligible for use in New Mexico has flowed into Arizona.

Goals

- **Making Water Available to Agriculture When it is Needed**
 - Currently agricultural water for use in the Gila and San Francisco River valleys is subject to low or no flow conditions during the growing season. Stored water taken from high off-season flows can be released for use when needed.
- **Divert and Secure 14,000 AC/Ft Annually Water for Future Use in Southwest New Mexico**
 - As stated above the value of additional water for Southwest New Mexico is immeasurable. AWSA water is the only foreseeable additional source of water for future economic development.

Water Conservation Projects

- The Southwest Water Planning Group and successor the Gila-San Francisco Water Commission studied and recommend to the ISC a number of water conservation projects throughout the four county region. These projects totaled \$9,100,000 for Non-NM Unit project awards.

Contemplated Projects

- **Gila River Diversions & Storage**
 - Phase I – Diversion near the existing Upper Gila Diversion site. The preliminary design of the diversion structure provides for delivery of AWSA water to both east and west irrigation systems at a design capacity of 150 Cubic Feet per Second with improvements to the existing conveyance structures.
 - 5 (500 gallon per minute) wells to give irrigators opportunity to utilize alternative irrigation methods such as Drip or Sprinkler irrigation. 8 on and off farm storage ponds with a maximum storage capacity of 2800 ac/ft. 5 on farm storage ponds in the upper Gila River valley (1300 acre feet), Winn Canyon excavation (1000 acre feet) and on Farm storage ponds Virden Valley (500 acre feet).
- **San Francisco River Diversions & Storage**
 - Phase I – Construction of a diversion on the San Francisco River near the 180 Bridge Crossing at the existing Spurgeon Diversion Site plus 6750 linear feet of concrete box culvert or piping for delivery to both sides of the San Francisco.
- **Total Estimated NM Units Phase I project costs = \$49.5 million**
 - Based on the construction costs for the phase I and II diversion and storage projects it is estimated that the per ac/ft price for the additional 14,000 ac/ft would be around \$2,500.00 per ac/ft and approximately \$70.00 per ac/ft annually for delivery of exchange water to downstream Arizona users.
 - The phase I proposed projects can be paid with the Lower Colorado River Basin Development Fund (Construction Fund) identified solely for the purpose of funding the construction of the New Mexico Unit.
- **Gila Diversion and Bill Evans Lake Storage and Transmission**
 - The NM CAP Entity has agreed to study acquisition of the Gila River diversion and Bill Evans lake storage and transmission infrastructure.

Environmental Considerations

- Per the AWSA all proposed projects shall undergo a full environmental impact and threatened and endangered species analyses.
- Water will be diverted and stored only during high flood flows pursuant to the CUFA.

Current Status of the New Mexico Unit Fund

- Total received since January 2012 = \$54.24 million
- Cumulative total expenditures for FY12-17 = \$12.64 million
- Interest earned on fund balance = \$2.5 million
- Current Fund Balance = \$44.1 million

Future Revenue Potentials

- Additional water would be available for purchase or lease in the Southwest four county area. This would allow for bonding to complete future storage and distribution systems.
- The NM CAP Entity has also explored the storage and marketing of water in Arizona to provide funding for the future phases of AWSA projects.