

March 29, 2019

TO: Republican Members, Subcommittee on Water, Oceans and Wildlife FROM: Republican Committee Staff – Bill Ball (x63529); Annick Miller (x55273)

On Tuesday, April 2, 2019 at 10:00 a.m. in room 1324 Longworth House Office Building, the Subcommittee on Water, Oceans, and Wildlife will hold an oversight hearing on "WOW 101: The State of Western Water Infrastructure and Innovation."

I. WITNESSES

- **Dave Eggerton**, Executive Director, Association of California Water Agencies, Sacramento, CA
- Norman Semanko, Shareholder, Parsons, Behle and Latimer, Boise, ID [Republican Witness]

II. BACKGROUND

Since 1902, the Bureau of Reclamation has constructed more than 600 dams and reservoirs. These water projects were the driving force promoting economic development of the West. The majority of these projects were financed under the "beneficiary pays" principle, which requires users to pay back the initial federal investment in these facilities through long-term contracts.

Today, Reclamation is the largest water wholesaler in the nation, providing water to 31 million people and helping irrigate 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.³ Many of Reclamation's projects are multi-purpose in nature, and its reservoirs and dams generate enough emissions-free electricity to serve at least 3.5 million homes annually.⁴ This is accomplished through the operation of 53 hydroelectric power plants that have annually produced, on average, 40 billion kilowatt-hours over the last 10 years.⁵

In the West, drought conditions and more intense snowmelt have increased the need for additional water storage facilities.⁶ In the Colorado River Basin, the abundance of storage capacity – 60 million acre feet (maf) or 4 times the annual flows – ensured the region had enough

¹ https://www.usbr.gov/main/about/mission.html

 $^{^{2}}$ Id.

³ http://www.usbr.gov/main/about/fact.html.

⁴ *Id*.

⁵ *Id*.

⁶ Testimony of Mr. Dan Keppen, before the House Water and Power Subcommittee, Legislative Hearing on H.R. 5412, 113th Congress, p. 2.

water in the face of a historic drought. Without surface storage projects, the Colorado River Basin would have put in jeopardy the livelihood of 40 million people. In contrast, California's Central Valley Project (CVP), which consists of 20 dams and reservoirs, has a combined storage capacity of nearly 12 maf. The lack of surface storage in the Central Valley means that during periods of increased rain precipitation the water will be lost to the ocean. In fact, the Central Valley has received enough precipitation in the recent weeks that Shasta, Folsom, New Melones, and Friant Dams are currently releasing water at elevated rates for flood control operations. All CVP reservoirs are receiving water at well over 100 percent of the 15-year average. However, this water is not being captured and stored for future drought years.

Surface storage continues to be the most cost-effective form of water infrastructure, as shown in the table below showing the average cost of water infrastructure options in California.¹¹

Type of Water Infrastructure	Cost per Acre Foot
Surface Storage	\$400 to \$800
Water Recycling	\$1,200 to \$1,800
Desalination	\$1,800 to \$2,800

With a few exceptions, construction of new multi-purpose surface water storage has largely stalled. Except for the Animas-La Plata project in southwestern Colorado, Reclamation has not built any large multi-purpose dams and reservoirs over the last generation, due in part to the "paralysis-by-analysis" nature of permitting these facilities, cost and other factors. Federal permitting of such facilities is a major impediment. Many of these permitting issues are the result of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.).

Due to budget constraints and other factors, non-federal ownership of major surface storage projects is becoming a trend. For example, Reclamation and the California Department of Water Resources began the North-of-the-Delta Offstream Storage Investigation in 2002 for the proposed Sites Reservoir, a new 1.8 million-acre-foot reservoir in northern California. At one time, 52 alternative locations for the reservoir were evaluated. This potential project – along with others in California – continue to be subject to feasibility and environmental studies more than a decade after they were initiated.

A federal surface storage project that has advanced closer to construction is the proposed elevation raise of Shasta Dam, which sits at the southern border of the Shasta-Trinity National Forest. Reclamation plans to raise this existing dam by 18.5 feet, which would result in an estimated 630,000 additional acre-feet of storage. ¹⁴ This project has the support of locals as well

 $^{\rm 11}$ California Desalination Policy and Energy Impacts, November 6, 2015.

⁷ Department of the Interior, Open Water Data Initiative, Drought in the Colorado River Basin, at https://www.doi.gov/water/owdi.cr.drought/en/#Shortage

⁸ https://www.usbr.gov/lc/region/programs/crbstudy/FactSheet_June2013.pdf

⁹ https://www.usbr.gov/mp/cvo/vungvari/dayrpt.pdf

¹⁰ Id.

 $[\]underline{https://www.energy.gov/sites/prod/files/2015/11/f27/Desalination \%20 Workshop \%202015\%20 Oglesby.pdf}$

¹² Site Project Executive Summary, p. 5. https://cwc.ca.gov/WISPDocs/Sites A1%20ExecSum.pdf . https://cwc.ca.gov/WISPDocs/Sites A1

¹⁴ U.S. Bureau of Reclamation: Shasta Dam and Reservoir Expansion project, Sept. 2018 https://www.usbr.gov/mp/ncao/docs/sdrep-facts.pdf

as bipartisan support from Congress, which last year appropriated \$20 million for preconstruction and design work. ¹⁵ As is the case with any storage project, the Shasta Dam raise has been met with opposition, specifically from the State Water Control Board for possible impacts to the McCloud River, even though that river flows into the already established Shasta Reservoir. ¹⁶

On August 15, 2017, President Trump signed Executive Order 13807¹⁷ which states that it is the policy of the federal government to "conduct environmental reviews and authorization processes in a coordinated, consistent, predictable, and timely manner in order to give public and private investors' confidence necessary to make funding decisions for new infrastructure projects." In addition, on October 19, 2018, President Trump signed the "Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West," directing the Secretary of the Interior and the Secretary of Commerce to "work together to minimize unnecessary regulatory burdens and foster more efficient decision-making so that water projects are better able to meet the demands of their authorized purposes." The federal regulatory process has become a main obstacle in building both federal and non-federal new water storage, and some investors have questioned the viability of new storage projects if they are unable to get permitted in a timely manner. ²⁰

During the last several Congresses, the House of Representatives has passed legislation to streamline the current multi-agency permitting process for new or expanded surface storage by creating a "one-stop-shop" permitting process through the Bureau of Reclamation to help facilitate the construction of non-federal facilities. ²¹ Unfortunately, the Senate has failed to act. Recommendations have also been made to give Reclamation the streamlined water project development process that was given to the U.S. Army Corps of Engineers in the Water Resources Reform and Development Act of 2014 (Public Law 113-121) for new or expanded surface water storage projects, rural water supply, and other water development projects. ²²

In this hearing, Democrats will attempt to make the point that climate change and global warming are the greatest threat to Western water availability and abundance, not a lack of storage or federal statutes such as the Endangered Species Act. They will also likely make the case that new, "innovative" technologies such as desalination, water recycling, and stormwater capture surpass the benefits of traditional storage. However, as expressed in the table on page 2, these technologies are much more expensive per acre-foot of water than traditional, proven surface storage projects.

¹⁵ Shasta Dam proposal: on-again, off-again, Redding Record Searchlight Damon Arthur, January 17, 2019

¹⁶ *Id*

¹⁷ E.O. 13807 of Aug 15, 2017

¹⁸ *Id*.

^{19 83} FR 53961

²⁰ Testimony of Mr. Dan Keppen, before the House Water and Power Subcommittee Legislative Hearing on, September 10, 2014, p. 3.

²¹ Testimony of Mr. Patrick O'Toole before the House Water and Power Subcommittee Legislative Hearing on February 05, 2014, p. 4

²² Testimony of Mr. Dan Keppen, before the House Water and Power Subcommittee Legislative Hearing on, September 10, 2014, p. 3.