Testimony of Mr. Dave Eggerton On behalf of National Water Resources Association and the Association of California Water Agencies House Subcommittee on Water, Oceans and Wildlife "WOW 101: The State of Western Water Infrastructure and Innovation" U.S. House of Representatives April 2, 2019

Chairman Huffman, Ranking Member McClintock, members of the Subcommittee,

Thank you for the opportunity to appear before you today and to testify on the importance of water infrastructure. Today's hearing is especially timely as this is 2019 Water Week, a week when water users from across the nation come to DC to advocate for sound water policy. My name is Dave Eggerton; I am the Executive Director of the Association of California Water Agencies (ACWA). I am also a member of the National Water Resources Association's (NWRA) State Executives Council. I testify today on behalf of both organizations.

ACWA is a statewide association whose more than 450 local public water agency members are responsible for about 90% of the water delivered in California for agricultural and municipal uses. NWRA is a non-partisan, non-profit association that represents state water associations and agricultural and municipal water providers. Collectively NWRA members help provide water to more than 50 million Americans. Sound water management is fundamental for life, critical to our economy, and vital for the environment.

From 2014 to 2018 I served as general manager of Calaveras County Water District, so I bring very recent, on the ground experience dealing with the many challenges water managers navigate every day. My time as a water manager and as a member of NWRA and ACWA gives me a unique perspective on the numerous challenges facing our nation's water infrastructure. It is vitally important for our nation to invest in public water infrastructure. Water infrastructure investment will benefit this and future generations.

It is critical that any infrastructure package developed by Congress contain water infrastructure as a major component. The water infrastructure need affects every corner of our nation from major metropolitan areas to rural communities. Water is the most important, yet often overlooked, component of our nation's infrastructure network.

America is blessed to have one of the most comprehensive water infrastructure systems the world has ever seen. This infrastructure was built thanks to the foresight and sacrifice of prior generations. Today these systems need re-investment. According to combined estimates from the Environmental Protection Agency, Bureau of Reclamation, Army Corps of Engineers, Department of Agriculture, and Indian Health Service, the needed investments in water infrastructure in the coming decades for drinking water, wastewater, and irrigation systems total more than \$780 billion dollars.

Aging infrastructure presents a major problem for many water systems. More than 60 percent of Reclamation managed dams are over 50 years old and a sizeable portion of Reclamation infrastructure is more than a century old. Similarly, more than 50 percent of the dams operated by the Corps have reached or exceeded the 50-year service life for which they were designed. According to the Association of State Dam Safety Officials (ASDSO) the number of deficient dams rose by 137% between 1998 and 2015. Today more than 2,100 dams in the United States are classified as deficient and highly hazardous.

The water infrastructure need is not limited to steel and concrete. When discussing water infrastructure we must also recognize that our nation's forests are a critically important part of this network. Healthy forests are integral to healthy watersheds and the protection of water supplies. The Forest Service has an estimated maintenance backlog of over \$5 billion. Its maintenance need includes 3,200 dams (almost half owned by the Forest Service), 7,500 bridges, and around 370,000 miles of roads, which are necessary infrastructure to care for the health of our nation's forested watersheds.

Ignoring America's water infrastructure needs not only threatens the health and safety of our people, it jeopardizes the health of our economy. The American Society of Civil Engineers (ASCE) 2017 Infrastructure Report Card gives our nation's water infrastructure a grade of D. The ASCE report highlights the paramount importance of water infrastructure investment, noting that the lack of funding for water infrastructure projects: "will cause the U.S. to lose nearly 500,000 jobs by 2025. Unless the infrastructure deficit is addressed by 2040, 956,000 jobs will be at risk relative to what is otherwise anticipated for that year. By 2025, the nation will have lost over \$508 billion in GDP, while the cumulative impact through 2040 is expected to be \$3.2 trillion of GDP."

Addressing our nation's water infrastructure need is a monumental challenge. Our nation has faced and overcome similar challenges in its past, and we are capable of doing so again. In his first address to Congress delivered on December 3, 1901, President Theodore Roosevelt, the founder of the Bureau of Reclamation, stated: "water problems are perhaps the most vital internal questions of the United States." Today, over a hundred years later, the need to build on the legacy of President Roosevelt and invest in water resources remains paramount. Our nation has benefited from a prior generation's commitment to water infrastructure. It is now our turn to take the steps necessary to ensure a safe, reliable, and affordable supply of water for future generations. To borrow a phrase from the energy sector, our nation needs an "all-of-the-above" answer to water infrastructure. This "all-of-the-above", or truly comprehensive approach should include:

- Responsive infrastructure that can deal with challenges posed by climate change;
- New surface water storage in response to changing precipitation patterns;
- Additional groundwater storage and aquifer recharge;
- Major water transmission systems that can bring sustainable surface water supplies to areas with declining aquifers or degraded water quality;
- Greater utilization of water recycling and desalination;
- Access to safe drinking water for disadvantaged communities;

- Enhanced investment in water use efficiency and conservation efforts for both agricultural and municipal water users;
- Pursuit of new and innovative ideas that look at new data and emerging information on advanced forecasting and atmospheric rivers; and
- Recognition that increased investment in simple time-proven projects like canal lining, utilization of smart irrigation gates, and metering systems can provide vast water infrastructure efficiencies.

We cannot limit the discussion to what we need; we must also discuss strategies to get there. Our nation has a strong infrastructure foundation that we can build upon. Through innovation and engineering our nation's water managers are ready to build the next generation of infrastructure. One of the primary obstacles to developing this infrastructure is access to financing options that meet the diverse needs of local communities. Recognizing that communities in the Reclamation states are different we believe there are several financing options that should be considered.

Municipal Bonds

We understand that the Committee does not have jurisdiction over municipal bonds. However, it is important to mention their value. They are one of the most important sources of funding for water agencies. We ask Congress to maintain the tax-exempt status of municipal bonds. Municipal bonds are by far the most often used method of financing for water and other infrastructure projects. Nearly two-thirds of all infrastructure in the U.S. (water, roads, hospitals, schools) is financed with municipal bonds. In addition to maintaining the current tax-exemption for municipal bonds we believe that Congress should also reinstate the advanced refunding of bonds. Advanced refunding allows water agencies to "refinance" existing bonds and realize savings that can be reinvested in other infrastructure projects.

Tax Credit Bonds

We support the use of tax credit bonds, similar to the "Build America Bonds" briefly authorized in 2009, to provide an effective and flexible method for the federal government to encourage the mobilization of private capital to assist in financing infrastructure projects, including water and sanitation, without relying on Congressionally appropriated dollars. In authorizing the use of tax credit bonds Congress could set aside a specific allocation of such bonds for new water supply projects and the rehabilitation of aging water systems. The use of tax credit bonds should be done without impacting local governments' access to tax exempt municipal bonds.

Appropriations

Throughout the last two Administrations, Congress has consistently increased appropriations for the Bureau of Reclamation and the U.S. Army Corps of Engineers over the President's requests. The 2019 enacted budget for the Bureau of Reclamation is over \$1.5 billion. We are extremely grateful to Congress for increasing appropriations for water infrastructure and strongly encourage you to continue this trend. Numerous Bureau of Reclamation programs, like WaterSmart, have direct on the ground impacts that improve efficiency and increase water supply resiliency.

Increased Access to Reclamation Fund

The Bureau of Reclamation was founded on the principle of investing federal resources in water infrastructure to grow our nation's economy. Many years later, this investment continues to pay dividends. A key component of this success was affordable, long-term loans to develop water infrastructure. In this sense Bureau of Reclamation infrastructure is unique from other federally developed infrastructure. Project beneficiaries repay the federal government for the infrastructure investment. According to a 2014 report from the Government Accountability Office 75 percent of the \$6.4 billion in repayment costs allocated to Bureau of Reclamation irrigation projects has been repaid. This figure grows every day as water users continue to pay-off federal investments.

Access to safe water is critically important to every community and is certainly in the public interest. It also provides significant economic benefits for the nation. The Bureau of Reclamation's annual budget has fluctuated between \$1 and 1.5 billion over the last decade. This funding has provided an annual, direct economic benefit to the nation of more than \$20 billion and a total economic contribution of more than \$48 billion each year. With this kind of return on investment it is clear that funding water infrastructure is fiscally responsible policy.

Congress has also recently authorized new water financing programs like the Water Infrastructure Finance and Innovation Act (WIFIA), which is helping local agencies realize the completion of important water supply projects. Moreover, with P.L. 115-270, WRDA 2018, Congress authorized the Bureau of Reclamation to enter into discussions with the Environmental Protection Agency to study the potential creation of a Reclamation Infrastructure Finance and Innovation Act (RIFIA) program. We greatly appreciate the leadership of members of this Committee in support of this effort. It is a worthy cause that deserves further attention to help provide local agencies with additional funding vehicles for water infrastructure investment.

Chairman Huffman we appreciate your efforts championing the Indian Water Rights Settlement Extension Act. This legislation supported by ACWA would extend funding for Indian water right settlements by accessing monies from the Reclamation Fund. As members of this Committee are aware, the Reclamation Fund consists of several sources of revenue, including hydropower generation, water sales, the repayment of construction costs by water and power users, and funds generated by energy and mineral production on lands managed by the federal government.

Over the last decade the amount of funds deposited into the Reclamation fund, especially those derived from mineral royalty payments, has increased while the amount dedicated to water infrastructure development has remained relatively flat or, in some years, has decreased. This funding disconnect has created a perceived surplus in the Reclamation Fund. Unfortunately, this surplus is not an indication of a lack of need for water infrastructure investment, and we encourage Congress to work with the Bureau of Reclamation to allocate additional resources for this purpose.

We also encourage the Committee, and Congress in general, to look at utilizing a similar funding mechanism envisioned by the Indian Water Rights Settlement Extension Act to create a dedicated source of funds that can be applied to water infrastructure. As previously noted, there is an enormous need for increased investment in water resource infrastructure across the nation.

NWRA believes this funding could include several components as discussed below.

• **Revolving loan program:** Loans could be dedicated to storage, transmission, and conservation. Projects where the federal government holds title can struggle to obtain needed funding because the federal government retains title to these facilities. This prevents the facilities from being used by the operators as collateral to secure a private loan. At the same time federally appropriated dollars for water infrastructure are becoming more and more scarce. This puts numerous water managers in a catch 22 where they struggle to access private funds but are also seeing declining access to federal resources. We thank the Committee for the recently passed title transfer authorization in S.47. This new authority will help alleviate some of the strain on local districts that are in a position to take title. However, many others will remain in funding-limbo making a loan program practical and necessary.

The establishment of a revolving loan program recognizes the history of Reclamation and the vast infrastructure network that was developed through federal loans. It would also address a key hurdle prior Reclamation loan programs have faced by providing a dedicated source of funding.

- **Matching Grant Program:** We see value in establishing a matching grant program for Reclamation projects located in rural, economically disadvantaged areas where the poverty rate is above the national average. States, local governments, and individual water users are willing to invest in water infrastructure. However, in many rural areas with smaller rate bases the cost of infrastructure outpaces the customer base's immediate ability to pay. A matching grant fund that leverages non-federal dollars with federal funds would be a welcome investment in rural economies.
- Innovation and Technology: The future of the water industry relies on bridging the gap between old and new technologies. The water industry in both the irrigation and municipal sectors continues to embrace emerging technology. Yet funding can often be a limiting factor. Throughout the U.S., water managers are installing devices to more accurately measure and meter water, detect leaks, and maximize efficiencies. This work is paying off. According to the USGS, since peaking in 1980 water used for irrigation has dropped from almost 150 billion gallons per day to about 115 billion gallons a day in 2010. Since 2005 alone, 950,000 more acres of land have been put into irrigated agricultural production while water use has been reduced by 9 percent. At the same time production from agriculture has skyrocketed. According to the most recent data from the USDA Economic Research Service, U.S. farm output grew by 170 percent between 1948 and 2015.

Meeting our nation's needs with less water is made possible because agricultural and municipal water suppliers are making significant investments in water use technologies. As an example, NWRA members in New Mexico have invested in subsurface drip irrigation systems that help reduce water lost to evaporation. Producers in Arizona are laser-leveling their fields to help reduce water lost to runoff. In Washington irrigators are using SCADA technology to help measure and respond to water demands in real-time, which yields water savings. On the municipal side, for example, Los Angeles Department of Water and Power (LADWP) customers reduced their water use from 180 gallons per capita per day in 1990 to 106 in 2016 – even as the population increased from 3.5 to 4 million people.

Increasing access to new technologies and dedicating funds to the development of merging technologies would further aid the improvement of water system management, project operations, and system efficiencies.

Funding Only One Part of Complex Problem

Funding is only one part of the water infrastructure puzzle; water managers also need a regulatory environment that works to achieve progress. Water managers are responsible members of the regulated community. We recognize that warranted regulations provide important protections. However, our current regulatory structure is exceptionally complex with numerous areas of overlap that are at best duplicative and in some cases contradictory. We encourage Congress to continue looking for opportunities to improve the federal permitting process by streamlining regulations, improving interagency coordination, providing greater transparency, and reducing unnecessary duplication. Legislation like the bipartisan H.R.1764, recently introduced by Congressman John Garamendi, would provide certainty to ratepayers and long-term efficiencies for water suppliers without adverse environmental impacts. This common sense legislation would extend NPDES permit terms up to a fixed period of ten years. Both ACWA and NWRA support this legislation.

Future of Infrastructure

An investment in water infrastructure is an investment in our nation, its future, and its economy. Funding devoted to water infrastructure is a powerful economic driver and provides a significant return on investment. Every dollar invested in water and wastewater infrastructure increases long-term GDP by more than six dollars. This multiplier clearly shows that investing in water infrastructure is sound fiscal policy. Investing in water is not just about economic return. It is also about health and safety. Reliable water infrastructure is essential to the health and well-being of all Americans; your efforts to ensure adequate investment in this critical sector of our nation's infrastructure are greatly appreciated, and NWRA stands ready to assist you in this work.

Thank you and your colleagues on this Committee for your work on Title Transfer authorization that was included in S.47. I also want to thank you for your recent work on the Colorado River Drought Contingency Plan (DCP), which is supported by NWRA and ACWA who seek its prompt passage.

I applaud the members of the Committee for their dedication to wise resource management and I know that members of the Committee recognize the importance of water infrastructure. The future of our nation's economy is directly tied to safe and reliable water infrastructure. I appreciate your commitment and the commitment of the Subcommittee to ensuring that water is a key consideration in the infrastructure dialogue.

Thank you again for your work and the opportunity to testify. ACWA, NWRA and the entire water supply community stand ready to assist you in this vitally important effort. I would be happy to answer any questions that you may have.

Again, it is critical that any infrastructure package developed by Congress contain water infrastructure as a major component.