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**ORANGE COUNTY WATER DISTRICT**  
ORANGE COUNTY'S GROUNDWATER AUTHORITY

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**AND**  
**COUNCIL MEMBER**  
**CITY OF SANTA ANA CALIFORNIA**  
**PRESENTED TO**  
**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**  
**UNITED STATES SENATE**  
**WASHINGTON, D.C.**  
**ON**  
**THE LONG-TERM VALUE TO U.S. TAXPAYERS OF LOW-COST FEDERAL**  
**INFRASTRUCTURE LOANS**  
  
**July 11, 2018**

Good morning Chairman Barrasso, Ranking Member Carper and members of the committee. It is a pleasure and an honor to appear before the committee to address a vital federal responsibility, the need to support the financing of our nation's public water infrastructure.

I am Vicente Sarmiento. I appear before you today on behalf of the Orange County Water District, otherwise known as OCWD, as a Director of OCWD. I am also an elected official, serving on the City Council of Santa Ana, California. By way of background, OCWD is an internationally-recognized leader in the water industry and its international reach is growing. OCWD takes the limited water supply found in nature and supplements it to provide water for more than the 2.5 million citizens that live and work in Orange County, California. OCWD was created in 1933 by the California Legislature. Since that time, OCWD has been entrusted to guard our precious and limited water resources and specifically the groundwater basin that serves as the crucial source of water supply for our region. OCWD not only manages the basin, we have led the way on water supply and demand innovation; most prominently with the Groundwater Replenishment System or GWRS that has been internationally acclaimed, receiving the Stockholm Water Prize and Lee Kwan Yew Prize, among other international and domestic recognitions. I enclose, as part of my testimony, information on the GWRS and its contribution to meeting the water sustainability needs of our region.

OCWD manages Orange County's Groundwater Basin, which is a large underground aquifer that through OCWD's careful management, supplies approximately seventy-five percent of the water supply for north and central Orange County. To replace the groundwater that is pumped

out, OCWD has a proactive program to refill and protect the basin to ensure a reliable water supply.

As early as 1975, OCWD recognized the importance of finding new and sustainable water supplies and developed Water Factory 21 to take wastewater, treat it, and inject high-quality water into the groundwater basin to guard against advancing seawater intrusion. From this initial project, our efforts have evolved into the Groundwater Replenishment System that will ultimately produce 130 million gallons of water per day upon completion of the Final Expansion.

The GWRS takes treated wastewater that otherwise would be sent to the Pacific Ocean and purifies it using a three-step advanced process to produce high-quality water that meets or exceeds all state and federal drinking water standards.

The GWRS is the result of a collaborative effort between OCWD and the Orange County Sanitation District or OCSD. Operational since 2008, the GWRS initially produced 70 million gallons of high-purity water and was expanded in 2015 to produce a total of 100 million gallons per day or enough water for 850,000 people. The ultimate capacity will be 130 million gallons per day with the Final Expansion, which is enough water for one million residents. At a cost of \$270 million and with completion set for in 2023, the GWRS Final Expansion project will create 700 jobs during the design and construction.

With this Final Expansion project, OCSD and OCWD together will be recycling 100 percent of the recyclable water within their service area.

At the outset, let me express OCWD's appreciation of the role that Congress and this committee has played (as well as the United States Environmental Protection Agency and United States Bureau of Reclamation) in making the GWRS a reality.

Our work and successes are not limited to Orange County. Rather, the research and project development have served as models for other communities across the nation and the world. We share our technical specifications, data and analyses that can lead to sustainable water supply practices in other communities. In any given year, we host thousands of visitors and dignitaries to learn how the most valuable resource—water—can be conserved without jeopardizing economic growth, and recreational activities and ensure a high quality of life.

As background, allow me to provide an overview of OCWD, and specifically the GWRS, and the role that a productive collaboration with the federal government has served in making the GWRS a reality. From this overview, I will then turn to the needs of the future and the approaches that the committee has put forth as embodied in America's Water Infrastructure Act or S. 2800.

OCWD manages, replenishes and protects the Orange County Groundwater Basin. This basin is the largest source of drinking water for Orange County. For purposes of conceptualizing this

basin, consider that it is an underground reservoir for our almost three million citizens. It is a 270 square-mile basin providing seventy-five percent of our water supply. We serve nineteen cities and water agencies including the communities of Santa Ana, Garden Grove, Anaheim (home of Disneyland), Irvine, Huntington Beach, Fullerton, Yorba Linda, Newport Beach, Fountain Valley, Stanton, Westminster, Orange, Villa Park, Tustin, Buena Park, La Palma, Placentia, Cypress, Seal Beach, Los Alamitos, and Costa Mesa. OCWD is governed by a ten member Board of Directors drawn from these communities.

OCWD pioneered the development of the world's largest water purification system for indirect potable reuse with our sister agency, OCSD that provides the feedstock for our water project—highly treated wastewater that is purified by our project. This collaboration has the added benefit of helping to realize the Clean Water Act's goals and objectives of zero discharge as we anticipate that OCSD will, upon completion of the Final Wxansion of the GWRS, dedicate its entire flow of reclaimable wastewater for purification.

As we like to say: GWRS—New water you can count on. This is increasingly the point as we in California have come to the realization that water scarcity is a way of life and we need to manage our resources wisely, efficiently and effectively. This is a priority. We are a semi-arid region that receives on average 14 inches of rain per year. This water year, we received a paltry 4.7 inches. Given that GWRS currently provides enough water for 850,000 citizens and will increase to a million citizens with the completion of the Final Expansion in 2023, you can begin to recognize the invaluable role the GWRS serves.

The GWRS is a major piece in the sustainable water supply puzzle. The GWRS is not inexpensive, but the alternative reality of unreliable water supplies is even more expensive. OCWD, in partnership with the state and federal governments, constructed the GWRS and today our purification process is helping to drought-proof the region, decrease reliance on imported water supplies and offer up water conservation that is protective of the environment and helps maintain the economic health of our region.

In order to make the GWRS work, wastewater flows from residential, commercial and industrial sources along 396 miles of pipelines to one of two OCS D treatment plants.

The cost to construct the GWRS was substantial. We may well have developed the project, but the collaboration of the federal government through the U.S. Bureau of Reclamation's Title XVI Program and the U.S. Environmental Protection Agency's State Revolving Loan Fund Program provided critical assistance to the project. It served in securing public support for the project's development. Specifically, the Title XVI program provided us with \$20 million in grant assistance. The SRF program loaned \$135 million to support the first phase of the project. When we embarked upon the design and construction of the final phase, we considered the costs and benefits of the proposed project, recognizing the value of developing a long-term sustainable water supply within the context of the avoided cost of alternative water supply options.

Our experiences with the GWRS original phase demonstrate that it is vital to bring the costs of the water in line with existing sources of potable water supplies and to drought-proof water deliveries. The absence of these goals would subject project approval to constant questions from ratepayers on the value of the project. OCWD carries one of the highest bond ratings a public agency can secure—AAA Bond Rating.

Fortunately, OCWD was able to leverage federal, state and local policies and programs to ensure public acceptance of the costs of the project. I want to emphasize that this financial assistance was critical to the GWRS timely construction and its operation today. Without the assistance, it is highly likely that the project would have been delayed in the best case scenario. OCWD was able to combine multiple sources of assistance. This included: \$194 million from our local partner the Orange County Sanitation District, \$20 million from the U.S. Bureau of Reclamation's Title XVI Program, \$135 from the Clean Water Act's State Revolving Loan Fund, \$37 from California's water bonds, and, of course, the backing of our rate structure made possible by the support of ratepayers in Orange County. As you can begin to recognize, the GWRS represented a carefully-balanced financing strategy that could reduce burdens on ratepayers and expedite project construction.

Today, we are in the process of expanding the GWRS to deliver 130 million gallons per day of highly-purified water that will meet the needs of more than one million people. In order to achieve this goal, we must address both technical and financial challenges.

On the technical matter of wringing out the final volume of water from the remaining wastewater flow is challenging. We are partially meeting this challenge because of Congress and the U.S. Bureau of Reclamation's commitment to support the advancement of our knowledge on how to develop treatment solutions. Specifically, OCWD and OCSD received financial assistance through the Water Infrastructure Improvements for the Nation Act. This committee is to be congratulated for its foresight in providing federal support to agencies, like OCWD and OCSD, that meet the challenges—financial and technical—that can lead to sustainable water supplies that are resilient, cost-effective and protect public health. While the assistance provided was limited (approximately \$1.1 million), the federal involvement helped us to move forward and commit the resources that will allow us to capture the remaining flow of water and make it available to the GWRS.

The ability of our nation to meet the ever increasing demand to modernize our infrastructure is clear. We are now changing to managing our water resources infrastructure from a use once mentality to an almost closed loop system that can recycle water to stretch the supply.

These and other demands are vividly illustrated by USEPA surveys. The Safe Drinking Water Act's Sixth Drinking Water Infrastructure Needs Survey and Assessment documents that over the next twenty years \$472 billion is required, of which \$83 billion is required to meet the treatment needs of water agencies. Similarly, the Clean Water Act's most recent Watershed Needs Survey identifies \$271 billion in financial needs. From a state level, according to the American Society of Civil Engineers' 2017 Infrastructure Report Card, California has \$26 billion

in wastewater infrastructure needs and \$44 billion in drinking water needs over the next twenty years. These numbers are mirrored throughout the nation. We expect that without a cogent response from the federal government to renew a financial partnership commitment to agencies, like OCWD, we will witness a continued degrading of our water infrastructure's integrity that, in turn, will impact our economic growth and public health.

Fortunately, this committee has taken up the challenge of charting a course to address the financial needs of agencies like OCWD. I refer to the pending legislation, the America's Water Infrastructure Act (S. 2800). This legislation, if enacted, would build on the lessons learned from the implementation of Water Infrastructure Finance and Innovation Act (WIFIA) that the committee wisely developed as part of WRDA 2014.

OCWD was one of twelve original applicants selected to seek WIFIA assistance. We submitted a WIFA application, because it provided us with the ability to reduce the overall costs of financing the final phase of the GWRS, estimated approximately \$270 million. OCWD expects that we will close on the WIFIA assistance within the month of July. We are excited with this prospect.

Our WIFIA loan will provide up to 49% or approximately \$135 million of the project's cost. As of the end of June, the borrowing rate on this assistance is approximately 3%. By comparison, our highly rated agency could issue a tax-exempt bonds at around 3.8%, almost a full percentage point higher. The real life translation of this is a net cost savings of as much as \$18 million. But you need to factor in the extended repayment terms of up to 35 years, the ability to repay at

any time, the subordination of the assistance to other OCWD issued debt (with a bankruptcy exception), funding flexibility in the use of the loan, and the opportunity to use the loan with other assistance like the SRF for the remaining 51% of the project's cost. Each of these elements enhanced the project's viability. It is fair to say that WIFIA's savings made it much easier to paint a financial picture to proceed with the project. If WIFIA had not been available, it is unclear how we would have proceeded with the project's financing given the oversubscription of California's SRF. It is highly likely we would have proceeded, but the costs of the project would have grown, putting pressures on the ratepayers.

In short, WIFIA is creating a savings for the ratepayers and the federal government is receiving a return on its investment through loan repayment and the dividends created in the development of a sustainable water supply that will support robust economic growth and improved public health.

We have always maintained that WIFIA is a tool in the proverbial toolbox. OCWD is firmly committed to the preservation and expansion of the Clean Water and Safe Drinking Water Act's SRF program. While not within the committee's jurisdiction, we appreciate the committee's actions in WIIN that brought about the first real update in more than two decades to the U.S. Bureau of Reclamation's program that supports water recycling projects. The submission of project requests under the WIIN competitive grants program illustrates how vital it is to continue the federal partnership with local agencies through multiple programs.

The committee recently approved, unanimously, the America's Water Infrastructure Act (S. 2800). This bill represents an important statement on how to respond to our nation's escalating water infrastructure needs.

Since the inception of the SRF program, Congress has provided billions of dollars in capitalization grants to the states to establish and maintain state water infrastructure assistance to communities. OCWD, along with other public stakeholders, has consistently urged Congress to increase funding to the SRF. These calls have resulted in incremental increases in annual appropriations; however, the funding levels do not approach the levels seen in the 1970s and early 1980s, despite the fact that the current needs far exceed those of past decades. In addition, the allocation formula that determines how much SRF assistance is allocated to each state has not been updated since the 1980s. So we are faced with the challenges of insufficient SRF funding levels compounded by the fact that the mechanism guiding resources to each state inadequately addresses the needs of each state.

We recognize that under current budgetary constraints, the reality of justifiable increases in the SRF is a difficult goal, but not impossible, to realize. At the same time, the notion of updating the allocation formula to better account for state needs is a zero sum game that for now appears unlikely to be addressed. However, we do continue to call upon Congress to reassess the formula to ensure that resources are equitably provided to the states.

This leaves us with one overriding question: How can Congress continue to ensure a meaningful federal partnership to improve our vital water infrastructure and avoid delays in constructing such projects?

One approach, embodied in S. 2800, represents an important step in responding to this need. Under S. 2800, a guiding principle is to preserve the SRF and its funding as the key to meet our immediate and long-term needs. We support this mandate. However, the reality of overwhelming demands placed on SRFs, as illustrated in California's instance with billions in project needs identified, does lend credence to the demand for supplemental approaches if we are unable to return to an era of billions in grants assistance. WIFIA clearly put in place one tool that has proven valuable to a select number of projects, including OCWD. The priority for going forward is how can we build upon the lessons learned.

S. 2800 would establish a new program of assistance to support the individual states' SRF programs. Under this program, a state could work with USEPA to secure leveraged financial assistance at WIFIA-like rates that the state could then use to support the backlog of priority projects on Intended Use Plan or Priority List. We believe that this approach is the catalyst that states can use to deliver projects that otherwise cannot be met by the current SRF program. For those that have concern over the impact of annual funding of the traditional SRF, S. 2800's mandate to fund the SRF at fiscal year 2018 levels prior to any funding of the new SRF-WIN. As we noted, every tool in the toolbox needs to be available to support public agencies' needs, but the primacy of the SRF must be preserved in any given year. The mandate to preclude funding

is an appropriate approach to ensure the long-term viability. And we would urge the committee that as the bill proceeds through Congress that this commitment be re-enforced to ensure that no “wiggle” room exists that might, in later years, undermine the SRF.

Some have questioned how enhanced subsidization using below-market interest rates would work within an SRF-WIN approach and whether it is too costly. We believe that if a community is unable to secure assistance under the traditional SRF program or WIFIA because of its ability to pay, then there must be a mechanism in place to assist a community to comply with federal, state and local environmental and public health mandates. These are the real costs of not providing a mechanism to help such communities. Short of providing distressed communities with direct, targeted grants assistance in meaningful amounts, we believe that the SRF-WIN approach is an appropriate means to address unmet needs that otherwise might not be financed. SRF-WIN would impose a reasonable contribution from such a community without imposing undue burdens. And in the case of communities that have the ability to meet the financial conditions to borrow under an SRF-WIN Treasury rated security, the program could serve as a bridge to help reduce the project backlog that continues to increase annually.

Mr. Chairman, OCWD commends the approach of S. 2800. It protects the core SRF program. It offers a supplemental financing approach that offers another tool in the toolbox. It establishes a means to address project backlogs. It offers affordable financing to financially disadvantaged communities. It serves as a means to advance promising innovative water supply projects such as OCWD’s GWRS. And lastly, it ensures that the federal commitments made under the Clean

Water Act in the 1970s and subsequent reauthorizations and the Safe Drinking Water Act to support the development of improved water infrastructure to protect human health and the environment is preserved.

In closing, allow me to restate one simple fact. OCWD was able to move its landmark water project to construction because of the multiple federal programs of assistance that helped to reduce costs and delays associated with the project. The ongoing Final Expansion would not have proceeded as smoothly absent WIFIA and other federal assistance.

Again, thank you for allowing OCWD to appear before you. I would be happy to answer any questions you or the other committee members may have.