

TESTIMONY OF HECTOR GONZALEZ

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Before the

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Committee on Transportation and Infrastructure

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Good morning, Chairman Graves and members of the Sub-Committee. My name is Hector Gonzalez. I am the Government Affairs Manager for El Paso Water (EPWater). I also am a Board member of the Association of Regional Water Organizations (ARWO), which has a mission to support policies and infrastructure funding programs that will help regional water and wastewater systems to thrive and to provide services to unserved and underserved communities.

Thank you for the opportunity to share my insights on recommended infrastructure priorities based on perspectives from the West Texas area and from my involvement on the ARWO Board. I'd like to highlight two primary areas where I think infrastructure legislation could either fill gaps and/or spur innovation:

- 1) Prioritizing infrastructure programs that take a regionalized approach that would particularly benefit rural and other underserved communities that have been left behind from a water and wastewater service standpoint.
- 2) Incentivizing resource recovery from wastewater, stormwater and impaired waters. With drought and growing challenges from declining freshwater resources, it's important to invest in innovative projects and research that make use of these waste streams to meet fresh water needs.

Toward the end of my testimony, I'll also offer some additional recommendations.

El Paso: the unexpected leader in water innovation

As background, El Paso Water provides water, wastewater, reclaimed water, and stormwater services to the City of El Paso. Through various retail and wholesale water contracts, the City has been able to partner with the County and others to extend water service to about 97

percent of the County, or approximately 800,000 of the county's residents. Wastewater service has proved more challenging since there are more funding and financing opportunities for water projects.

EPWater also provides approximately 26 percent of the needed water supply to Fort Bliss and treats 100 percent of the military base's wastewater needs.

The El Paso region, known as the Borderplex, is comprised of two countries (U.S. and Mexico) and three states (Texas, New Mexico and Chihuahua, Mexico). We all share the same water resources with common aquifers and the river (Rio Grande). Jurisdictional issues are sometimes challenging as we each have an eye to the future and seek to ensure a water supply that enables economic growth while providing water security for future generations.

Just 30 years ago, water scarcity alarm bells were going off in El Paso with concerns over rapidly depleting aquifers. Urgency brought about ambitious and innovative water supply strategies that shaped a long-term diversified water plan. Culminating in the early 1990s, El Paso Water became a pioneer in water conservation, water reclamation and aquifer replenishment. Now, the City of El Paso and Fort Bliss have confidence in our long-term, sustainable water supply. Federal agencies, including the U.S. Army Corp of Engineers and the U.S. Bureau of Reclamation, have been, and continue to be, important partners in new innovations and infrastructure projects.

Priority 1: Regionalization approach to infrastructure planning and spending

As I mentioned at the outset, I serve on the Board of the Association of Regional Water Organizations (ARWO), which is a newly formed coalition supporting such efforts. Our group has been grappling with how best to help rural water systems and their customers receive better service and at a lower cost. Any support from federal agencies could help our efforts to address growing concerns.

There are nearly 52,000 community water systems across the country. Many of these touch the same watersheds with no coordinated planning. All but the largest have a difficult time accessing capital, posing particular challenges with infrastructure improvements. ARWO sees regionalization through both private-public partnerships and public-public partnerships as a solution to improve water resource planning and increase access to capital. While some communities have policies that restrict involvement in public-private partnerships, appropriate infrastructure funding incentives may help remove this barrier.

In the outlying areas beyond the El Paso city limits, we have unincorporated communities that are not connected to a public water or wastewater system. Regionally, these areas are referred to as "Colonias", and in Texas they are officially recognized by the state. On many occasions, El Paso Water has been asked to play a role in helping deliver services to these communities. While we are prohibited by law from using ratepayer money to help communities outside our service area, we have loaned expertise and have been a willing partner in many cases to help

identify federal funding, manage projects, or even take over existing systems in an effort to provide basic essential services.

A great deal of progress and success has been achieved in extending water service to the rural parts of El Paso County thanks to the U.S. Department of Agriculture among others. Challenges are particularly pronounced when it comes to wastewater service, since state revolving funds and many programs are limited to water services without regard to wastewater service.

Such has been the case in providing wastewater service to an area in El Paso County known as "Montana Vista". Due to partnership efforts with El Paso Water, most of the residents in this area are now connected to receive potable water service. However, the provision of wastewater treatment has not been possible. Homes in the area have failing septic systems that have been deemed a nuisance by the Texas Health Department.

Efforts to extend wastewater service have been a challenge since the closest wastewater line(s) are several miles away and cost estimates exceed \$30 million dollars in order to provide service to approximately 1200 households.

Efforts to secure federal funding have run into dead end after dead end. The U.S. Dept. of Agriculture (USDA) indicates that EPWater's financial portfolio renders the utility ineligible for funding to assist Montana Vista, yet the unincorporated community does not have sufficient resources to apply on their own.

The cost for providing wastewater service to many outlying areas within El Paso County continues to exceed grant funding thresholds.

Beyond just the Montana Vista example, current estimates show approximately 35,000 people within El Paso County are not connected to a public wastewater system, which represents a need for approximately \$500 million to provide such service. The residential connection cost ranges from a few thousand to hundreds of thousands of dollars per connection, and is affected by distance from existing services, low population density, and other obstacles.

This issue is not limited to our border town. There are hundreds and thousands of similar stories across rural America where communities are underserved by a threadbare utility or where they have no wastewater service at all and must rely on inadequate septic systems.

These challenges could be taken head on if the new infrastructure bill encouraged regionalization, and provided incentives for public-private partnerships and public-public partnerships to work on filling the many gaps in wastewater service across the country while spurring infrastructure investment. With a federal funding matching program, such partnerships could invest in needed infrastructure, which could result in economic benefits to local economies and the realization of new water resources for areas not currently served.

In contemplating the needs across rural areas and those unincorporated areas outside of El Paso, I am also concerned with proposed Administration budget cuts to EPA and USDA water program funding, since these agencies often provide what little funding is currently available to these rural areas. EPA and USDA could both play a role in the new infrastructure bill in helping fund water and wastewater projects that would improve the quality of life for many in rural communities, while also having positive environmental and economic benefits. Grant funding for rural and underserved areas is critically needed.

Priority 2: Incentivizing resource recovery from wastewater, impaired groundwater, and stormwater.

With the frequency of drought and growing challenges from declining freshwater resources, it is becoming increasingly important to invest in innovative projects and continue research that makes use of waste streams – to include wastewater, impaired groundwater and stormwater – to meet fresh water needs across the country.

Having faced water scarcity fears decades ago, El Paso has been a leader in water resources innovation. I'd like to touch on three areas of great promise.

Direct Potable Reuse: El Paso Water's most ambitious project to date is taking wastewater that has been reclaimed, treating it to drinking water standards, and putting it directly into the drinking water system. El Paso Water conducted a successful pilot program and has received a permit from the Texas Commission on Environmental Quality to move forward with our Advanced Water Purification project.

Currently in design, the project will be one of the largest direct potable reuse projects in the country at 10 million gallons per day (mgd). This project will be very expensive with construction costs likely to exceed \$100 million, but it is an important, drought-proof part of El Paso's diversified water supply strategy for the future. Many other communities are looking at advanced water purification projects to meet future water needs, but given the expense, such projects will only be realized if federal funding is made available.

In El Paso's case, we are working closely with the Bureau of Reclamation to make sure we meet criteria to qualify for Title XVI funding programs. We applaud congressional authorization of the Water Infrastructure Improvements for the Nation Act of 2016 or WIIN as it is referred to, since the funding program is dedicated to these type of reuse projects. However, national demand will outstrip the limited authorizations that were provided. Given this subcommittee's focus on wastewater, I would encourage a closer examination of water reuse infrastructure solutions to include providing the Bureau of Reclamation with the needed resources to adequately address the construction of significant reclamation and reuse projects.

Desalination: El Paso currently owns and operates the Kay Bailey Hutchison (KBH) Desalination Plant, the largest inland desalination plant in the world (27.5 mgd), which was opened in 2007, in part, with federal funding assistance from the U.S. EPA, which provided \$26 million for the

plant's \$100 million construction. The plant also sits on Fort Bliss property. The plant enables the utility to tap into vast brackish portions of one of our aquifers and it provides a drought-proof water supply for El Paso. Expansion of this plant is an important part of El Paso's future water supply strategy.

Inland desalination holds tremendous promise. But desalination plants like other conventional plants are expensive, and there are significant regulatory hurdles to overcome. As such, we are working with the Bureau of Reclamation and plan on exploring possible partnership opportunities with the Department of Defense in order to expand our desalination plant. But again, competition is stiff for very limited dollars. The infrastructure bill presents an opportunity to expand the WIIN program or provide other federal funding match opportunities that could lead to wider adoption of desalination, which would also help solve water scarcity challenges in some parts of the country.

Key barriers to greater adoption of inland desalination include: membrane technology limitations, the overall cost (compared to traditional water supply options drawn from freshwater), relatively high energy demands, and limited options for managing the brine concentrate.

El Paso Water has formed a partnership with a new company, Environmental Water Minerals (EWM), which will take the brine concentrate, extract salts and minerals, and return an additional two million gallons of potable water back to the utility. The salts and minerals are then processed into industrial grade commercial products that can be sold. This is a state of the art facility that is being looked at by communities across the country and is a model for resource recovery.

Aquifer Storage and Recovery (ASR): In considering resource recovery from wastewater, there is a tremendous opportunity to capture and treat stormwater or other wastewater streams for purposes of aquifer replenishment. El Paso has been cleaning wastewater to drinking water quality standards and using it to recharge a local aquifer for 30 years. We see the opportunity to significantly expand these efforts in the future with wastewater, stormwater or even river water. ASR has the potential to restore aquifer levels and meet fresh water needs for many utilities across the country.

Research: El Paso Water has also taken the lead in in conducting water related research in an effort to achieve efficiencies and save costs in our water reuse and other water resource initiatives. The research to date, for example, has allowed us to increase our water resources by extracting additional amounts of water from the salt concentrate. We have also found more efficient and less costly ways to replenish the aquifer and improved our water production processes to reduce chemical use. I would urge that the new water infrastructure legislation include some funding to continue to drive innovation and bring down costs.

Other Recommendations for Water/Wastewater Infrastructure Legislation

Beyond the specific areas outlined above, there are a series of recommendations that are worth considering with new infrastructure legislation.

As many of you have probably heard from your local water utilities, aging infrastructure is a problem across the country. In El Paso, the average age of our pipelines is 44 years old, and we expect that number to rise despite major rate-payer-funded investments in capital improvements.

According to our latest capital improvement plan, El Paso Water expects to spend well over a billion dollars during the next ten years to address its water and wastewater needs. Roughly half is expected to go to wastewater projects. The lion's share of wastewater investment will go to rehabilitation of infrastructure while only about a third will go to line expansions to serve growing parts of the city.

With rising infrastructure costs across the country, utilities will continue to raise rates, and you may hear from constituents about the rising costs of water and wastewater services. By authorizing funding to help with rehabilitation of water and wastewater projects, Congress can play a role in helping fund these needs and helping to manage the rate burden for customers.

Additional specific areas for consideration include the following:

- The U.S. Army Corp of Engineers should continue the oversight and maintenance of significant infrastructure to include dams, hydroelectric power, and flood control systems. New areas of focus could include the capture and treatment of stormwater for aquifer replenishment. The Corp should be given resources to more aggressively renew and replace canals, gates, valves, and related facilities.
- Infrastructure legislation should contemplate options to streamline regulatory requirements – especially related to water resource recovery – and simplify the bureaucratic processes to expedite federal funding opportunities. Excessive delays could be removed with a new “one-stop shop” clearinghouse where utilities can be pre-qualified based on a master application and a single comprehensive review, including documented regulatory compliance and a record of demonstrated success.
- Federal government financing for wastewater projects should factor into criteria or incentives for enhanced innovation and community benefit. Innovation could lead to energy efficiency improvements and improved leak detection systems that alert the utility and prevent major line breaks. A community benefits criteria could enable funding for odor control programs that often plague neighborhoods near wastewater facilities.
- Supporting partnerships between local water utilities and the Department of Defense (military installations) could ensure that military bases have diversified water resources in

place as part of the country's national security strategy and in collaboration with regional partners to ensure fully coordinated long-term water and wastewater planning strategies.

In closing, El Paso Water continues to be recognized as an innovative utility, but an essential component of our innovation success has been the ability to partner with the federal government and obtain funding assistance for major projects.

El Paso Water stands ready to be a resource for this Subcommittee if we can be of any further assistance.