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Chairman Huffman, Ranking Member Bentz, Representative Napolitano, and members of the subcommittee. Thank you for the opportunity to discuss how federal assistance can help Southern California pursue water recycling projects to ensure that scarce supplies are managed effectively and responsibly, not only for the good of the region but for the entire Southwest. The Metropolitan Water District of Southern California (Metropolitan) is the largest treated drinking water provider in the United States. We serve 26 member agencies with a combined 19 million residents in six counties. We import about half of Southern California's water supply from the Colorado River and Northern California via the State Water Project (SWP). Currently, most of our region's wastewater is not recycled and is discharged to the Pacific Ocean. This is a legacy of when urban communities and regulatory agencies considered sewage a waste rather than a precious resource central to the water portfolio. Our region is rapidly attempting to reshape this legacy into being the nation's leader in recycling water for potable consumption.

Metropolitan fully supports the Bureau of Reclamation's Title XVI Water Reclamation and Reuse grant program. This program provides vital funding for many local projects that help communities throughout the west provide secure and sustainable water supplies. However, the program was not designed to facilitate water recycling on the massive scale now needed to address the water challenges facing the South Western United States. We are looking to partner with the Bureau of Reclamation to build new drought-proof water supplies that will provide additional flexibility to federal, state, and local water managers. Large regional recycled water projects represent a paradigm shift in water development that can help transform the Southwest's water portfolio. Like the original Title XVI program, this new program will be highly leveraged

and local funding will greatly exceed the federal investment. Together these two programs can help create a new sustainable water future for the western United States.

Recycling – A New Frontier for Metropolitan

Since our inception in 1928, Metropolitan developed and managed imported supplies, first from the Colorado River starting in 1941 and then Northern California via the State Water Project beginning in 1972. We developed a vast network of pipelines, storage facilities, and water treatment plants to move these supplies throughout Southern California. In fact, the replacement cost of our system today is valued at more than $23 billion. In the early 1980s, we turned our focus towards helping our member agencies develop their own local supplies within the region to augment our imported supplies. These local supplies reduce the strain on our imported water system and help increase the region's supply reliability. We don't own any of these local projects, but we help finance them with programs designed to defray the costs once the projects are operating. For Metropolitan, these incentives have been a way to help our member agencies develop more than 100 local supply projects that are rarely at a scale that would make sense for Metropolitan to develop as a regional agency. Metropolitan has never advanced a proposal to build our own local recycled supply that we would own and operate. Until now.

Last year Metropolitan's Board authorized environmental review for a proposal to create the Regional Recycled Water Program (RRWP). At full buildout, the RRWP would be the largest wastewater purification facility in the United States and could help transform the reliability of supplies in a region far beyond Southern California. This shift in approach acknowledges the steep new challenges facing our water industry. Climate change, water quality degradation, increasing salinity, and regulatory impacts all threaten our supply reliability. In the face of these challenges, we now know that the treatment technologies exist to be able to purify wastewater for largescale potable use. The scale of this endeavor matches the regional capabilities that Metropolitan has developed and would leverage the infrastructure we already have in place to serve Southern California.

Project Overview

The RRWP represents a recycling partnership between Metropolitan and the Los Angeles County Sanitation Districts, which operates the Joint Water Pollution Control Plant (JWPCP), the region's largest wastewater facility. Currently, the facility discharges treated wastewater into the Pacific Ocean. Our proposal, over time, would transform this ocean discharge into a highly purified supply for use throughout our region (see Figure 1).

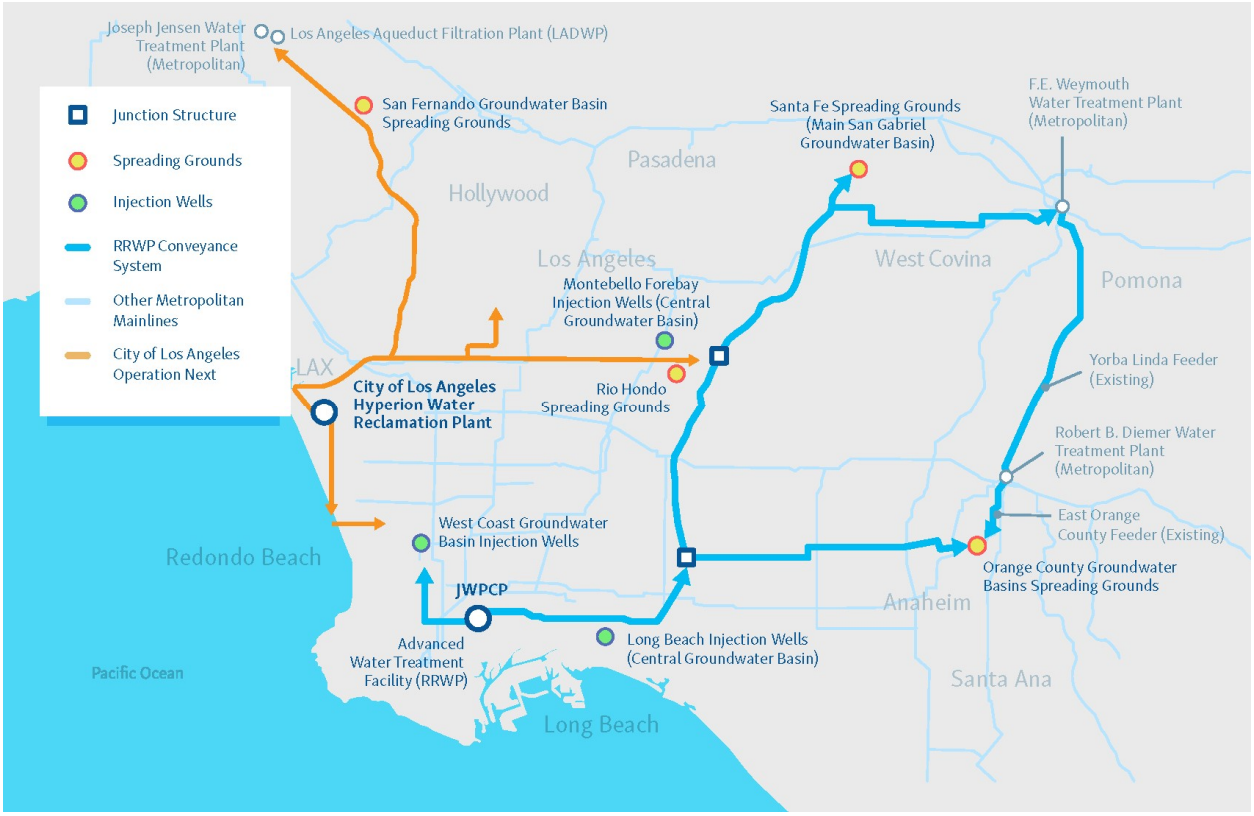

Figure 1. Schematic of the Regional Recycled Water Program and its Potential Integration with the City of Los Angeles' Operation Next

The RRWP is currently planned to deliver up to 150 million gallons per day (mgd), or approximately 168,000 acre feet (AF) per year (AFY), of purified water from a new advanced water treatment (AWT) facility located at the Sanitation Districts' JWPCP. This supply roughly matches the needs of approximately half a million Southern California families.

The RRWP includes 65 miles of large-diameter conveyance infrastructure constructed through our urban core. These pipelines would deliver purified water to groundwater basins within Metropolitan's service area for indirect potable reuse (IPR) and potentially to two Metropolitan treatment plants for direct potable reuse (DPR). By connecting to our treatment plants, this system leverages the delivery infrastructure we already have in place, allowing purified water to flow through a giant system we have already developed and maintain. It is anticipated that construction would be phased to ensure that the production of purified water closely matches the anticipated demands by our member agencies.

Momentum for this project has been building over the past years. We have already constructed a major demonstration facility, validating various treatment processes as an important step in the regulatory approval process. Depending on the pace of progress, Metropolitan and LACSD may be poised to decide whether to proceed with construction as early as 2024.

This program follows in the successful footsteps laid down by water leaders in Orange County. Years ago, the Orange County Water District partnered with the Orange County Sanitation District to take their coastal treated wastewater discharge and purify those supplies to recharge the groundwater aquifer. While Orange County's largest coastal wastewater facility is already recycling a large portion of its supply, the largest wastewater plants in Los Angeles and San Diego counties are not yet.

Our program would recycle much of the wastewater stream that the Los Angeles County Sanitation Districts are discharging. In parallel, the City of Los Angeles is advancing its own recycling project for its facility near Los Angeles International Airport (LAX). Known as Operation Next, the City of Los Angeles project would purify wastewater from the Hyperion wastewater facility. And the City of San Diego is beginning construction on the first phase of its Pure Water project, which would purify and recycle ocean discharge from the Point Loma wastewater facility. While other projects are also advancing throughout our service area, converting Southern California's four largest ocean discharge wastewater facilities into sustainable sources of water supply would be a remarkable expansion of recycling unmatched

anywhere in the United States. Yet the cost is significant, estimated to be greater than $15 billion.

It is important to note that projects of this scale require significant coordination and commitment across many agencies. In this regard, Metropolitan and the City of Los Angeles are working closely together to develop our respective water purification plans. In fact, Metropolitan's RRWP is uniquely positioned to provide large-diameter pipeline infrastructure that could interconnect these two projects to important recycled water delivery points. The graphic above shows how both Metropolitan's RRWP and the City of Los Angeles' Operation Next program can interlink in a way that provides a regional purification network with a great degree of operational flexibility.

Potential Partnerships with Southern Nevada and Arizona

On May 25th, John Entsminger of the Southern Nevada Water Authority testified before this committee on drought conditions in the Western United States. In that testimony, he described how the Colorado River provides a vital and irreplaceable resource to 40 million people across the seven Basin States and the Republic of Mexico. The ongoing drought has placed the Basin States in new and ominous territory, with a first-ever shortage condition for the Lower Basin a virtual certainty for next year.

Augmenting supplies and forging new partnerships will be the cornerstones of the long-term solutions to bring supplies and demands into balance on the Colorado River. Southern Nevada is helping to fund Metropolitan's planning efforts for the RRWP with an eye towards a potential exchange of supplies on the Colorado River in return for an investment in the full-scale program. Arizona has approved similar funding as well for the planning, and Metropolitan's Board will consider this offer in the coming months.

Figure 2 shows how Metropolitan's infrastructure uniquely connects two of the most critical watersheds in the Western U.S.: the Colorado River watershed fed by the Rocky Mountains and the Sacramento-San Joaquin River watershed fed by the Western Sierra Nevadas. Metropolitan's recycling proposal has emerged as a template for this next generation

of water management solutions. Recycling water in Southern California can advance water supply reliability in far-away communities in Las Vegas, Phoenix, and Tucson through the power of partnerships and exchanges. Further, this recycling facility can help shore-up similar climate and drought risks to the region from the Sacramento-San Joaquin River watershed.

Figure 2. Metropolitan's Conveyance System and the Regional Recycled Water Program Connect Two Critical Watersheds

Federal Recycling Assistance Helps Both the Colorado River and the Bay-Delta

Today, the Colorado River operates using Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead (the Guidelines) that were approved in 2007 and expire in 2026. These Guidelines allowed Metropolitan to store up to 1.5 million acre-feet of Intentionally Created Surplus water behind Hoover Dam, reserves that helped delay the onset of shortage on the river. Negotiations to update these Guidelines are at their beginning stages.

Metropolitan's entitlement to Colorado River water and its partnerships with California's other rights holders gives Southern California a strong, long-term, and reliable source of supply. The potential partnership for this recycling program with Southern Nevada and Arizona provides a much-needed incentive for all Lower Basin partners to find common ground and make historically tough choices to continue managing the Colorado River in a future with less available water.

For example, if Southern Nevada and Arizona eventually invest in a portion of our recycling program, Metropolitan can leave that amount of its own Colorado supply in Lake Mead behind Hoover Dam. From there, Southern Nevada and Arizona could withdraw a like amount of supply for their own use. With this type of exchange, these two states do not have to build some lengthy new pipeline to access Southern California's recycled water. Through existing and new agreements on the Colorado River, three states can improve their reliability through a single project. And this helps all seven states in the United States that depend on the Colorado River, as well as two states within the Republic of Mexico. This potential partnership reflects how expanded federal assistance is not only in the national interest, it is in the interest of two countries.

Metropolitan faces many challenges to meet the anticipated demands of its member agencies, including long-term drought in both the Northern California and Colorado River watersheds, climate change, regulatory and environmental restrictions, changing hydrological and biological conditions in the Delta, and unresolved issues with the development of a Delta Conveyance initiative. These challenges can result in variable and severe water delivery restrictions through California's SWP. The Delta is the largest and most important estuary in the northern hemisphere, a gateway for iconic fish species such as salmon, and the host of countless bird species along the Pacific Flyway.

Because Metropolitan's existing infrastructure connects the watersheds of the Colorado River and the Delta, large-scale recycling in Southern California can also return benefits to both watersheds. The RRWP project would initially help communities in Southern California that rely heavily on imported supplies from Northern California and the Delta via the SWP. The RRWP

would directly augment the groundwater supply in areas of the San Gabriel Valley, for example, which are heavily dependent on the SWP supply. Once the RRWP is developed, the dependence on SWP deliveries will immediately be reduced, allowing those SWP supplies to be used in other areas. This includes potential supply exchanges with other contractors on the SWP system. The imported water could also be freed up to go into storage for future emergency or drought needs for Southern California.

Advancing this recycling program in Southern California has a direct positive impact on our ability to successfully manage the Delta moving forward and to reduce the region's reliance on that source. It is another example of how an expanded federal role in assisting new recycling projects in Southern California is in the national and international interest.

Federal Funding Assistance is Needed

Preparing for the future will come at a significant but necessary cost. In our most recent look at this coming decade, Metropolitan will essentially be facing inflation-level water rate increases to simply maintain our existing system, through necessary rehabilitation projects and baseline increases in the costs of products and labor. Additional investments to battle climate change, improve supply reliability, and provide additional ecosystem benefits are likely to add to this rate burden. The RRWP, as one example, could come close to doubling Metropolitan's existing debt load. Full buildout of the RRWP, San Diego and Los Angeles projects is likely to cost more than $15 billion. Southern California has made extraordinary water investments in prior generations to prepare for the decades ahead, and undoubtedly the region will rise to the occasion again. But given the scale of what the region is facing with these necessary investments, and the federal benefits of advancing recycling projects, such as the RRWP, federal participation and support would provide the necessary incentive to maintain momentum on these projects.

A New Federal Program for Large Recycling Projects

As stated before, the existing Title XVI program is a successful, ongoing effort to advance local recycling projects that benefit from the maximum $20 million federal grant.

Metropolitan fully supports this program and seeks to prevent a federal investment strategy that would disadvantage smaller recycling projects over larger ones. The Large-Scale Water Recycling Investment Act creates a separate federal program for large recycled water projects with anticipated constructions costs greater than $500 million. Federal investment in these large projects will have a catalytic effect on the development of new western water supplies and provide additional flexibility to federal water managers. As we work to drought-proof our water supply and prepare for climate change, we need new federal financing tools to help advance visionary multi-benefit projects like the RRWP along with robust Title XVI funding for smaller local projects. Now is the time to increase the federal investment in recycled water projects of all sizes.

The overwhelming body of scientific evidence points to a future of greater weather variability for Southern California and the Southwest, with periods of more intense drought and precipitation. For Metropolitan, collaboration along with new investments will help Southern California manage the risks to both Colorado River and Northern California supplies. More efficient water use, sustainable imported supplies, and a greater baseline of local resources will create a resilient water portfolio that would have reliability benefits far beyond our borders. We are a modest part of a much larger system, but we see much broader benefits if our region makes the most of our recycling opportunities. The benefits are not confined to water reliability and climate change adaptation. Our water purification program advances federal efforts to assist disadvantaged communities, protect water quality and create local jobs. Approximately half of our service area is classified as economically disadvantaged and the RRWP will help provide sustainable supplies while creating an estimated 50,000 direct and indirect jobs during the construction and operation of this program.

The federal-local partnership proposed in H.R. 4099, as a percentage basis of federal participation, is consistent—even modest—compared to long-standing initiatives in flood control and other infrastructure projects. Yet when it comes to recycling, it would be both as historic as it is helpful and necessary. A future Southern California that uses its water supply again and again and again would have a positive impact on Southwest water management.

These benefits are not implied: they can be solidified through direct exchanges of water to augment supplies on the Colorado River, as is shown in Figure 2. We will be working with our partners in both Nevada and Arizona to accomplish this. We urge this committee to explore ways to seize this window of opportunity. Metropolitan supports both H.R. 1015, the Water Recycling Investment and Improvement Act, as well as H.R. 4099, the Large-Scale Water Recycling Project Investment Act. I know that Metropolitan is among the many water stakeholders in the Southwest who stand ready to work with you and support enacting these legislative proposals into law during this Congress. Thank you very much for the opportunity to speak to all of you today.