

# BEHIND THE METER



ORO VALLEY WATER UTILITY NEWSLETTER

SUMMER 2024

## A MESSAGE FROM OUR DIRECTOR



Peter Abraham, P.E.  
Water Utility Director

When the summertime temperatures begin to soar across Southern Arizona, so do the demands placed on the Utility's water system. The demands placed on the water system are directly proportional to the daytime temperature, the hotter the day, the more water that is consumed and vice versa.

Thanks to our commitment to perpetually invest in the rehabilitation of our existing infrastructure our water system is able to meet the demands placed on it.

In addition to maintaining a robust water system it is equally important to continually invest in our ability to access the water resources necessary to support our communities water resource needs.

To ensure that the Utility can support the future water resource needs of the community, as well as to further reduce our reliance on groundwater, the Town of Oro Valley has partnered with the Metropolitan Domestic Water Improvement District and the Town of Marana to construct a project known as the Northwest Recharge, Recovery and Delivery System (NWRDRS).

The construction phase of the NWRDRS has begun and is the result of over a decade of work involving the conceptualization, planning, designing, permitting and funding of the project. Construction of the NWRDRS provides the necessary infrastructure to access and deliver additional Central Arizona Project (CAP) water resources located in Avra Valley, West of Interstate 10, to our service area.

The Utility currently delivers approximately 25% of its annual CAP allocation. By the end of 2026 when the NWRDRS is commissioned into service the Utility will have the capability to deliver up to 65% of its annual CAP allocation. In addition to the increased CAP deliveries, the NWRDRS provides a means for the Utility to recover and deliver decades worth of CAP water stored in underground aquifer storage facilities in Avra Valley, if needed in the future.

Once completed the NWRDRS infrastructure will have taken over a dozen years to go from a concept to a fully functional water recovery and conveyance system and will have cost over \$100 million of which \$50 million is paid for by the Oro Valley Water Utility. The Utility is paying for the NWRDRS from two revenue sources. Development impact fees, paid for by new development, is funding 60% of the project and groundwater preservation fees, paid for by existing customers, is funding the remaining 40%. The Utility projects that \$18 million in borrowing will be necessary. The debt service will be paid by both impact fees and groundwater preservation fees.

Water Utility staff continuously look for ways to reduce the cost of water infrastructure to the community. In fact, the Utility's recent \$1.64 million Water Conservation Grant Fund awarded by the Water Infrastructure Financing Authority will be applied towards the NWRDRS project and will reduce the debt service burden on water utility customers.

In closing, the NWRDRS project is an important part of the Utility's water infrastructure that will ensure our community's water resource sustainability into the future by delivering additional CAP water supplies while at the same time reducing groundwater pumping to preserve and protect this resource.

Looking forward,

Peter A. Abraham, P.E. | Water Utility Director

## WATER RESOURCES

Take a closer look into what it takes to deliver sustainable, high quality drinking water to the Oro Valley community.



“La Cañada Monsoon” by Charlie Alolkoy

Water resources are the backbone of any water utility, serving as the essential supply that enables us to provide safe, reliable, and high-quality water to the community.

These resources, which include surface water from rivers and lakes, as well as groundwater from aquifers, are meticulously managed to ensure their sustainability and quality. Effective management and protection of these water sources are crucial not only for meeting current demands but also for securing water for future generations.

The importance of water resources to a water utility cannot be overstated, as they are the foundation upon which the health, well-being, and prosperity of our community are built. The utility’s role includes not only sourcing water but also ensuring the sustainability of these natural reserves through careful monitoring and conservation practices.



Earth contains huge quantities of water in its oceans, lakes, rivers, the atmosphere, and even in the rocks of the inner Earth. Over millions of years, much of this water is recycled between the inner Earth, the oceans and rivers, and the atmosphere. There is no new water and the only thing that changes are the form that water takes as it travels through the hydrologic water cycle.

### DID YOU KNOW?

Because of the way this water cycle has always circulated our planet, there is indeed a chance that the water in your glass is the same water that thirsty dinosaurs were drinking about 65 million years ago!



OVWU utilizes several water resources to build water sustainability for the community. Potable, or drinking water resources include Central Arizona Project (CAP) water, which is sourced from the Colorado River, and Groundwater that is pumped directly from the aquifer.

In 2023, the utility delivered 3.1 billion gallons of potable, or drinking water, to 21,300 customers which consisted of 4,925 acre-feet of groundwater and 2,573 acre-feet of CAP water.

Treated effluent wastewater, or reclaimed water, is the non-potable source used for turf irrigation and other non-potable applications, which the utility delivered 1,880 acre-feet in 2023

Water resources are the essential foundation that enables utilities like OVWU to provide safe, reliable, and high-quality water to the community they serve. These resources are crucial for the health, well-being, and prosperity of the Town of Oro Valley. By utilizing a combination of these water resources, OVWU can ensure a diverse and resilient water supply that is necessary for meeting current demands and for securing water for future generations.