



**OneWater Nevada**  
Our Sustainable Water Future

## On the Path to Our Water Future – Advanced Purified Water Demonstration Project and UNR OneWater Center

As a high-desert community, we have a deep and enduring appreciation for the value of water in the Truckee Meadows and surrounding region. This appreciation and understanding guided us into sustainable water management practices — conserving, recycling, and storing water for the future. Developing innovative solutions to manage water for tomorrow’s generations while serving today’s needs has become a hallmark of our community’s approach to water leadership and water resource management. These two projects are prime examples of this approach.

### Advanced Purified Water Demonstration Project

#### What is the Project?

The Advanced Purified Water Demonstration Project (APWD Project) will help to evaluate and determine if the State of Nevada’s Category A+ reclaimed water quality (advanced purified water) offers regional long-range water supply benefits. The project will do this by building a demonstration project to test the feasibility and operational aspects of aquifer storage and recovery using advanced purified water.



The APWD Project is envisioned to be a field-scale (potentially 1-2 million gallons per day) groundwater-recharge demonstration project. It would involve upgraded treatment facilities at the Reno-Stead Water Reclamation Facility (RSWRF), an advanced purified water facility to be built offsite or at the RSWRF site, conveyance pipelines, pump station improvements, and injection and extraction wells. Advanced purified water stored in the aquifer would initially be extracted and utilized for irrigation of the American Flat site.

### The University of Nevada, Reno’s OneWater Center

#### What is the Project?

The OneWater Center is a collaboration between the University of Nevada, Reno, and local city and county governments. The work of the Center will explore how to meet water demands of today and the future, while improving the socio-ecological resilience and sustainability of water sources.



A critical objective of the Center is to train a workforce (including veterans, disadvantaged youth, underrepresented groups, and university/college students) to investigate and apply cutting-edge water purification technologies and developments.



## Project Benefits

The potential benefits from an advanced purified water system within the Truckee Meadows service area could include:

- Providing a local, reliable, drought-proof water source
- Reducing reliance on the Truckee River water supply
- Enhancing the region's water supply resiliency to help address future uncertainties of climate change, such as longer growing season, snowpack changes and water runoff timing



## Project Status

The project partners continue to evaluate responsibilities, staffing and cost sharing agreements that would be developed to achieve:

- Ongoing research and development efforts
- Infrastructure planning, design, finance and construction of upgraded treatment facilities, pipes, pumps, advanced purified water systems, and recharge and recovery well facilities
- Staffing needs, including long-term management, operations and maintenance
- Future water resources, water rights management and potential water rights sales

## Project Benefits

The OneWater Center will support programs for water-use optimization linked to economic growth and environmental protection – helping to create a link between the water research and water technology sectors. Furthermore, the Center will provide leadership in meeting water demand while improving the socio-ecological resilience of water sources. A key desired outcome of the OneWater Center is to develop the technical workforce needed to address water sector opportunities and attract industry to the region. Advances made by the Center would be scalable to other watersheds in the west and throughout the country.

## Project Status

Funding efforts are now underway to realize this innovative project. Project parameters, scope, and design elements are being considered, along with scoping of the educational and workforce development goals.



*Dr. Krishna Pagilla, Director, Nevada Water Innovation Institute, stands outside pilot study trailer.*

# The Advanced Purified Water Demonstration Project and the OneWater Center – a Water Connection that Makes Sense

These two projects share the vision of sustainable water management, while providing for economic growth and enrichment of the natural water environment. The new OneWater Center and its activities will benefit from proximity to the actual operating water purification infrastructure that will be part of the APWD Project. UNR students and other participants will gain practical skills and applications while providing support to new advanced purified water systems.

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