



City Manager's Office

MEMORANDUM

DATE: 8/15/23

TO: Mayor and City Council

THROUGH: Doug Thornley, City Manager Approved Electronically

FROM: Trina Magoon, Director of Utility Services
Dustin Waters, Assistant Director of Utility Services
Joe Coudriet, Senior Civil Engineer

SUBJECT: Council Update on the Advanced Purified Water Facility at American Flat Project, including Project Funding, Environmental Permitting, Public Outreach and Key Milestones

Summary: The OneWater Nevada Advanced Purified Water Facility at American Flat (APWF) Project is a joint effort between the City of Reno (Reno) and the Truckee Meadows Water Authority (TMWA). This memo provides an update on key project elements as it has reached 30% design completion.

Project Update:

On December 8, 2021, Council approved an agreement with AECOM Technical Services, Inc. (AECOM), for 30% design of the APWF Project. The 30% design level has been reached. Further design phases of the project will be contracted through TMWA in accordance with the American Flat APWF interlocal agreement (ILA), approved by Council on November 10, 2021.

On April 27, 2022, Council approved the staff recommendation to implement the Construction Manager At Risk (CMAR) project delivery method, allowing the contractor to join the team early in the design process, providing value engineering and risk mitigation. Record Steel and Construction Inc. (RSCI) was selected as the CMAR in September 2022.

On January 25, 2023, a workshop was held at the Nevada Division of Environmental Protection (NDEP) with Reno, TMWA, and project Expert Panel staff to determine the preferred regulatory/permitting pathway. See "Appendix B – Environmental Permitting" for additional

details. Through the workshop it became evident that the City's initial plan to seek State Revolving Loan Funding (SRF) in the spring of 2023, would not be a viable option due to required Environmental Impact Statement (EIS) environmental permitting and associated public outreach requirements. See "Appendix C – Public Outreach" for additional details. SRF will now be pursued in the spring or summer of 2024. See "Appendix A – Project Funding" for additional details.

On February 3, 2023, Reno, TMWA and CMAR staff attended a field trip to Hampton Roads Sanitation District in Hampton Roads, Virginia to visit a similar "sister facility", foster collaboration, and help inform the APWF Project.

Key Milestones:

Key project milestones are outlined below with touchpoints for future Council briefings in **bold**:

- Now - Spring 2024: Environmental Permitting and Final Design
- Fall 2024: **CMAR Guaranteed Maximum Price (GMP) and Early Procurement**
- Spring 2025: Begin Construction Activity
- Fall 2027: Finish Construction
- Dec. 2027 to June 2028: Startup, commissioning, and six-month operational prove up period; sending advanced purified water to the American Flat farm for irrigation.
- Fall 2028: Project complete with all required NDEP permits and Advanced purified water injection into aquifer via A+ permit begins.

Attachments:

Appendix A – Project Funding

Appendix B – Environmental Permitting

Appendix C – Public Outreach

Appendix A – Project Funding

Currently the City/TMWA project team is seeking the following funding sources for construction of the project:

- On February 22, 2022 TMWA and the City completed and submitted a final feasibility study that was approved by the United States Bureau of Reclamation (USBR) for potential funding under the WaterSmart Title XVI program. TMWA filed the application on March 12, 2022, but was unsuccessful in obtaining grant funding during the 2022 funding year.
- TMWA and the City will re-apply for the 2023 USBR Title XVI grant funding opportunity for an amount up to \$30M. No funding has been awarded yet for this project under this program.
- Sewer Enterprise Funds will be used to fund the City's portion of the project construction costs. This amount could be reduced should the project team be successful in receiving grants for project construction costs.
- The City will continue to evaluate NDEP State Revolving Fund (SRF) Loan, Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA), or cash funding to partially fund the City's portion of the project construction costs. The target date for submitting the loan application(s) is summer to fall 2024.
- TMWA secured \$3M of federal funding on March 15, 2022 for the project that will be distributed through the EPA's Community Grant Program. The \$3M is anticipated to be used for project design costs and will be split in accordance with the project ILA.

Appendix B – Environmental Permitting

A Regulatory Roadmap has been created for this first-of-its-kind project in Nevada, that will guide the permitting process. The following permits will be required:

- A+ reclaimed water permit for the APWF Project's land application, storage and future groundwater injection and extraction of the reclaimed water. TMWA will be the permittee.
- Underground Injection Control (UIC) permit for groundwater injection, monitoring, and extraction phases. TMWA will be the permittee.
- Major modification of the RSWRF discharge permit will be required for the new discharge to the APWF. Reno will be the permittee.
- Washoe County Health Department (WCHD) Water Project approval for the extraction wells and connection to TMWA's water system. TMWA will be the permittee.
- The Project does not require, but will request a Bureau of Safe Drinking Water (BSDW) Water Project review for the APWF and polishing facility to demonstrate dedication to drinking water project standards. TMWA will be the permittee.

Appendix C – Public Outreach

Public outreach for this project has been underway for multiple years with the following activities:

- OneWater Nevada was formed in 2017 by member entities to develop innovative solutions to managing the region’s water resources.
- Various technical studies and public outreach efforts for advanced purified water projects have been underway since 2018.
- The National Water Research Institute (NWRI) assembled an expert panel in 2018 to provide independent review and recommendations of advanced purified water studies within our region. This panel continues to evaluate various aspects of the Advanced Purified Water Facility at American Flat and provides feedback on technical components and outreach to the public.
- Reports from these studies and evaluations have been presented in periodic public meetings to the Western Regional Water Commission (WRWC) and the Reno City Council.
- Outreach to and meetings with landowners near the American Flat site have been held while researching hydrological and geological studies in the area, in 2018.
- Various studies leading up to and involved with the project have been posted to the public website OneWaterNevada.com, since early 2019.
- Various collateral pieces have been prepared to inform community groups, WRWC, and city councils of Reno and Sparks.
- Presence of OneWater Nevada and the project on TMWA website.
- Description in TMWA 2020-2040 Water Resource Plan (pages 65, 66).
- Informational briefings with City and TMWA staff members (2022).
- Featured at Smart About Water Day 2022 and 2023 – with workshop and displays.
- Tours of existing facilities with elected officials and key project stakeholders (2023).
 - Jan 19 – Orange County Water District (OCWD), Albert Robles Center for Water Recycling and Environmental Learning (ARC)
 - Feb 16-17 – Silicon Valley Advanced Water Purification Center, Pure Water Soquel, Pure Water Monterey

Continued, more extensive, public outreach is planned for the project to obtain public acceptance and as required for environmental permitting as follows:

- Through the Public Outreach Plan (attached), the project team anticipates the following public outreach activities through Spring of 2024:
 - August 29, 2023, 6pm: Community meeting at Reno Stead Airport, Freedom Flight Terminal, Second Floor Conference Room

- October 5, 2023, 6pm: Community meeting at Reno Stead Airport, Freedom Flight Terminal, Second Floor Conference Room
 - November 16, 2023, 6pm: Community meeting, as required for project permitting. A 30-day public comment period will be provided.
 - A second outside expert panel evaluation, assembled by NWRI, is underway. Results will be made public.
 - Ongoing outreach efforts will be planned and coordinated with City staff in accordance with noticing requirements, to be responsive to public questions regarding the project, and to gather input from the public per environmental permitting requirements. A similar approach will be used in coordinating and meeting NDEP regulatory requirements.
 - Data Instincts is under contract with Western Regional Water Commission (WRWC) to provide Public Outreach strategic guidance in support of OneWater Nevada including the APWF Project, and is working closely with the City of Reno and TMWA.
 - Monthly OneWater Nevada email update, beginning March 2023.
 - Monthly updates in TMWA bill insert, beginning April 2023. (See attached example).
 - One-on-One Interviews with community leaders & influencers August/September 2023.
 - Smart About Water Day, Project Education Trailer, May 6, 2023.
 - Community Water Workshops; new dates to be scheduled.
 - Ongoing interagency communication team coordination in alignment with outreach plan.
 - Periodic updates to the WRWC, Reno City Council and TMWA Board of Directors.
- While the project team proposes public outreach in accordance with the overall project goals, extensive Public Outreach will also be required to obtain an A+ discharge permit. The more immediate focus will be on supporting the public process as the project navigates funding, NEPA compliance, and permitting efforts in 2023 and 2024. However, all aspects of the public outreach process are deeply interrelated and will require close coordination to achieve the most positive possible outcome for the project.
 - Anticipated Public Outreach audiences identified include:
 - Property/well owners near the American Flat Road/Project area
 - Stead and Lemmon Valley residents
 - Swan Lake area residents/interest groups
 - City of Reno and TMWA staff
 - Local community leaders and stakeholders
 - Environmental groups
 - Health professionals
 - TMWA customers
 - Program partners
 - State and federal regulatory agencies

- Media representatives

Description of OneWater Nevada's Communications/Outreach Framework

March 6, 2023

A Comprehensive Approach to Public Engagement

The communications strategy for the Advanced Purified Water Facility at American Flat has two primary objectives: fostering support for advanced purified water and facilitating the project's formal public processes. The Nevada Division of Environmental Protection's (NDEP) permitting process requires a public outreach effort for any advanced purified water projects. In addition to NDEP's permitting process, public outreach and education will occur prior to and parallel with federal funding (NEPA) requirements.

Public outreach and education efforts will be largely framed by the concept of "Comprehensive Water Resource Management." This idea will describe to the public and key stakeholders how advanced purified water fits into our overall water resource portfolio, and how it will benefit the long-term resiliency and sustainability of our water supply.

The second, and perhaps more immediate focus, will be on supporting the public process as the project navigates funding, NEPA compliance, and permitting efforts in 2023 and 2024. These efforts are deeply interrelated and will require close coordination to achieve the most positive possible outcome for the project.

OneWater Nevada communications will be led collaboratively by the Truckee Meadows Water Authority (TMWA), the City of Reno communications teams and Data Instincts, Public Outreach Consultants.

Though our communications planning contemplates the long-term scope and implications of advanced purified water programs, our *primary* focus for the next several years will be fostering public awareness, understanding and acceptance of the Advanced Purified Water Project at American Flat.

As the Project is a joint effort between the City of Reno and TMWA, the communications team will be working closely with the staffs of both organizations to develop consistent and coordinated messaging and outreach.

What Will That Approach Look Like?

The primary goals of the public outreach effort will be to engage identified audiences with clear information about the Project and its benefits.

As part of that approach, we will work to provide a positive introduction to the concept of augmenting the water supply in our region with Advanced Purified Water.

Identified Audiences—Who Are We Going to be Reaching Out to?

- Property/well owners near the American Flat Road/Project area
- Stead and Lemmon Valley residents
- Swan Lake area residents/interest groups
- City of Reno and TMWA staff
- Local community leaders and stakeholders
- Environmental groups
- Health professionals
- TMWA customers
- Program partners
- State and federal regulatory agencies
- Media representatives

We will also be working to identify key community influencers in various audience groups and engaging with them to gain their understanding and support for the project.

Key Messages Will Answer Questions Such As:

- What is the Project?
- Why are we doing this Project?
- What is the efficacy of the treatment process and the quality of the water it will produce?
- How will it improve the long-term resiliency and sustainability of our water supply?
- What is the Project's estimated cost and how will it be funded?
- What is the schedule for the American Flat Project?
- How does the American Flat Project fit into the overall Program and OneWater Nevada?

Communications Tools and Channels

How are we going to get our message out?

There are a variety of communications tools and channels that can be used to help address our various audiences.

These include:

- Public workshops
- Informational display boards for presentations and community meetings
- The Project website/regular website updates
- Regular email updates
- Fact sheets/FAQs
- Social media posts
- Articles in TMWA/Reno newsletters
- News releases
- Op-ed pieces
- TMWA bill inserts
- Speakers' bureau
- Presentation slides/materials
- Tours for electeds and key decision makers to similar projects in other states
- Tours of the project site when appropriate, for stakeholders and interested groups
- Community, neighborhood, and stakeholder meetings
- Periodic public opinion surveys / one-on-one interviews or focus groups
- A mobile educational trailer "wrapped" with graphics/content and interior displays and handouts, to bring messaging directly to schools, events, community meetings, etc.
- Message/talking points for elected officials and partner agencies
- Groundbreaking and ribbon cutting events, with associated collateral material

IN THIS ISSUE

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- Our Water System By the Numbers
- How Growth and New Water Service Work in Our Community
- The Truckee River System is Unique
- How TROA Works



SMART ABOUT WATER QUICK FACT:

ASSIGNED-DAY WATERING ALWAYS APPLIES

Remember: outdoor watering increases average residential water use by up to four times during dry summer months. Beyond its clear conservation benefit, our Assigned-Day Watering Program also helps level off peak system use during the high-demand season. See more information on TMWA's Assigned Day Watering Program at tmwa.com/adw.

ASSIGNED-DAY WATERING

ODD ADDRESSES:

- ✓ WEDNESDAYS
- ✓ FRIDAYS
- ✓ SUNDAYS



EVEN ADDRESSES:

- ✓ TUESDAYS
- ✓ THURSDAYS
- ✓ SATURDAYS

NO WATERING ON MONDAYS. DO NOT WATER BETWEEN NOON AND 6 P.M.

TMWA WATER SYSTEM BY THE NUMBERS:

Tanks: **97** (120-million-gallon capacity)

Wells: **98**

Pump Stations: **118**

Pressure Regulation Stations: **380**

Operational Treatment Plants: **3**

Total System Valves: **39,135**

Length of Pressurized Water Mains and Lines: **2,802 miles**

Customer Connections: **133,851**

Size of TMWA Retail Area: **170.92** square miles.

STATE OF THE WATER REPORT:

BY BILL HAUCK, WATER SUPPLY SUPERVISOR

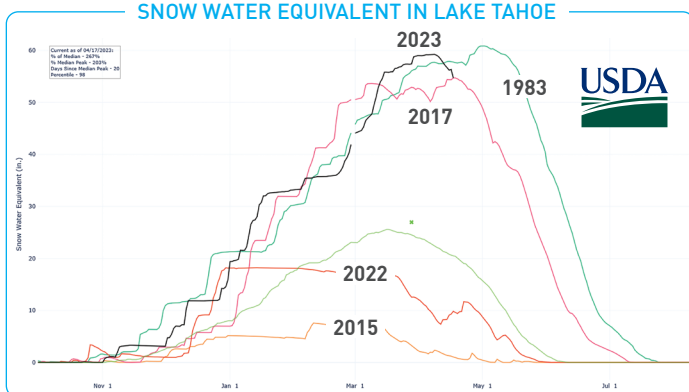
This winter brought one of the biggest snowpack years on record, and the water supply outlook for our region is excellent! Official April 1st snowpack measurements for the Lake Tahoe Basin came in at 242% of normal. With the big spring runoff, it is expected that all upstream reservoirs on the Truckee River system will fill this year.

Lake Tahoe, with its massive 744,600-acre foot storage capacity, should come very close to filling. (The top 6.1 ft. of storage above the lake's rim is used to provide river flows and drought reserves). This is a remarkable rebound for the lake which, in early December, was almost six inches below its natural rim. As of mid-April, Tahoe's elevation had already increased by almost three feet, and is projected to rise about three additional feet by August.

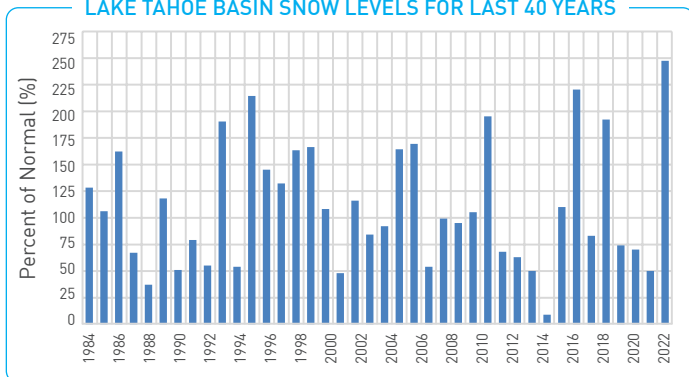
There will be a tremendous amount of carry-over storage in the upstream reservoirs this fall going into next winter. That's great news as Truckee River flows can be maintained for at least the next two or three years.

A big winter like this, where all the reservoirs are refilled in the springtime, basically resets the entire system. It highlights the fact that, under the right circumstances, the Truckee River can recover very quickly—sometimes in just one season. Our community is very fortunate to have such a unique water system and series of reservoirs available to help secure the future of our water supply.

SNOW WATER EQUIVALENT IN LAKE TAHOE



LAKE TAHOE BASIN SNOW LEVELS FOR LAST 40 YEARS



WATER AND NEW DEVELOPMENT: HOW DOES IT WORK?

The amount of water rights on the Truckee River system is permanently fixed. No new river water rights can ever be created. This number was appropriated and then capped by law at 225,000 acre-feet over 70 years ago by the Orr Ditch Decree. Yet, how this water is used has shifted significantly over time. For new development, water rights are converted from

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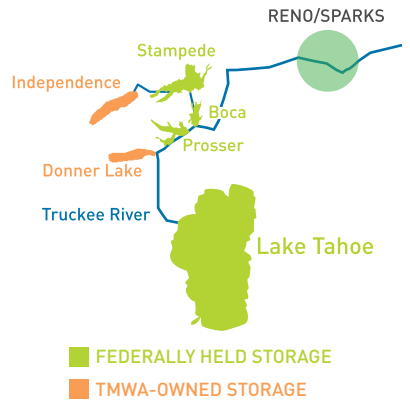
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agricultural use to meet the needs of homes and businesses. Water rights from our community’s finite supply must be purchased from willing sellers by builders, then dedicated to TMWA to establish new service. Every home or business, no matter how old or new, must have dedicated water rights to receive water service from TMWA.

In addition, for every acre-foot of water that’s required for service, an additional 11% must be dedicated for drought reserves; this water is held upstream in case it is needed. Also, developers are assessed hook-up fees and required to pay for any new infrastructure needed for their projects—from pipes to pumps to increased treatment capacity. This ensures existing customers do not pay for growth, which is a TMWA policy.

TRUCKEE RIVER WATER SYSTEM: A WATER STORAGE NETWORK THAT CREATES RESILIENCY FOR THE REGION

Unlike many other water systems, TMWA has an exceptional portfolio of water resources stored in groundwater aquifers and in six large, upstream reservoirs—two of which are fully owned by TMWA. This vast reservoir storage system provides a significant level of drought resiliency for our area. In addition, TMWA stores surface water in a number of underground basins located throughout our service territory. This water supply can be used to meet customer demands in times of drought or during peak-use periods in the summer. The existence of this extensive storage infrastructure is the outcome of generations of planning and decades of investments to help secure our community’s water future.



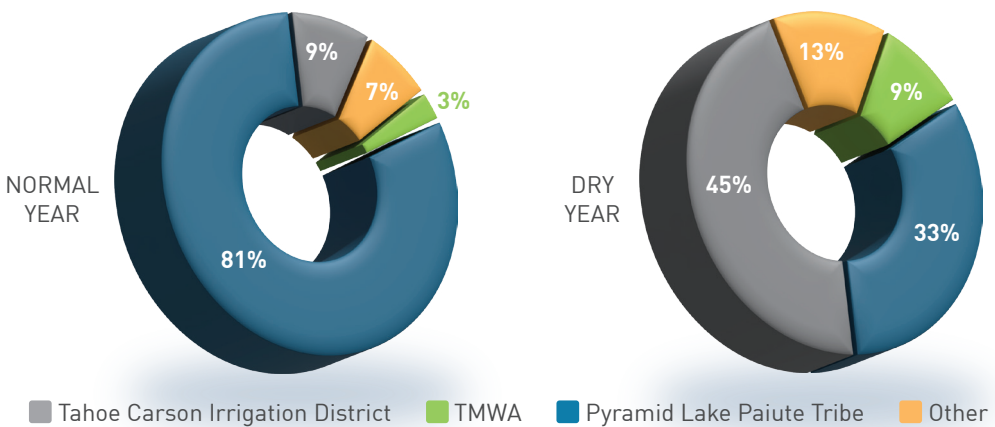
THE TRUCKEE RIVER OPERATING AGREEMENT: AN EXPANSION OF STORAGE OPTIONS WITH MORE FLEXIBILITY

Many river systems in the West are managed by a set of operating rules which dictate how water is released and managed. In our area, The Truckee River Operating Agreement (TROA), provides legal guidelines on how the Truckee River system is managed. TROA, which was implemented in 2015, is very important to TMWA and our community as it significantly improves our ability to build up and retain additional reservoir storage during times of drought.

When paired with additional reserves at Independence and Donner Lakes, TMWA is well prepared to meet the water demands of our customers during low water years. If drought persists, our stored water can carry over into succeeding years to increase our reserve storage even more.

The winter of 2022/23 has been great for all Truckee River users. Given the massive snowpack accumulation and subsequent runoff, the additional drought storage TMWA was holding upstream will be reallocated for fish and wildlife purposes downstream. Our water system and TROA purposefully recognizes the need for flexibility because drought is, and has always been, a reality for regional water planners. For more information on TROA, visit smartaboutwater.com.

TYPICAL DIVERSIONS OF THE TRUCKEE RIVER - WATER-USE PERCENTAGES IN NORMAL, AND DRY YEARS



Truckee Meadows Water Authority is a not-for-profit, community-owned water utility, overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County. TMWA employs a highly skilled team who ensure the treatment, delivery and availability of high-quality drinking water around the clock for more than 440,000 residents of the Truckee Meadows.

EVENTS AND PUBLIC MEETINGS FOR JUNE:

BOARD OF DIRECTORS MEETING
JUNE 21, 10:00 A.M. – NOON.

JUNETEENTH HOLIDAY
JUNE 19 - TMWA OFFICES CLOSED

FIND DETAILS FOR ALL WORKSHOPS AND MEETINGS AT TMWA.COM/MEETING

