

DROUGHT RESPONSE UPDATE & \$4.9M WATER REUSE GRANT ANNOUNCEMENT

DROUGHT RESPONSE UPDATE

Although Magna Water District's (MWD) ground water supplies continue to show more drought resilience than many of the state's large reservoirs, all water we conserve this irrigation season will put us in better position for next year's irrigation season if the drought continues. We want to extend a huge **THANK YOU** to all our customers for the extraordinary response to MWD's proactive move to Level 2 Mandatory Water Conservation back in June. MWD customers **saved 49.6 million gallons of water** in July alone! Total water use in July 2021 was 17% less than July 2020, even when you include all the new users that connected to the system over past the year and over 20% less excluding new users. Water savings in August are looking even better than July. Please keep up the great work!

\$4.9M WATER REUSE GRANT ANNOUNCEMENT

MWD is very excited to announce that we have been awarded a ***\$4.9-million-dollar grant from the US Bureau of Reclamation (USBR) as part of the WaterSMART Title XVI Program for a Water Reuse Project located at our existing Wastewater Treatment Plant (WWTP).*** WaterSMART grants are provided to local entities to assist in increasing sustainable water supply and drought resiliency. These grants are highly competitive and MWD is one of few agencies in Utah to have received a grant award through the Title XVI program.



Photo of MWD Trustees & Project Team with USBR Representatives at the August 2021 Board Meeting

These grant funds will be used to construct a new Water Reuse Facility at the WWTP with an estimated construction cost of \$10.0M (total estimated project cost of \$12.0M). The remainder of project costs will be funded by the District through a combination of impact fees & user rates. We anticipate a significant reduction of O&M costs associated with nutrient removal at the WWTP upon completion of the project. The District has been preparing for this important project for several years and is in good position to fund this project and improve our drought resiliency. Additional details about the Reuse Project can be found on the next page.

WATER REUSE PROJECT

SUMMARY

MWD plans on implementing a Water Reuse Project to supplement secondary water supplies. ***The Water Reuse Project will provide additional treatment processes at the WWTP allowing treated effluent to be beneficially used within the District's secondary water system to meet outdoor irrigation demands. The project will provide a reliable water source that will help ensure that MWD can efficiently and economically meet the current and future needs of our customers.***

NEED

MWD recently completed master plans of the facilities used to deliver water and provide sewer services to our customers. Both master plans identified the Water Reuse Project as a priority for the District. For efficient water delivery, the ***reuse project is a fundamental part of the District's future water supply.*** Moreover, the reuse project is an ***important component of the District's plans to meet nutrient removal requirements*** in our sewer system.

WATER QUALITY

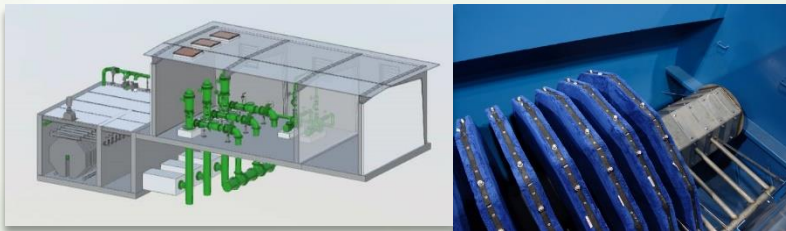
Secondary reuse water is filtered and disinfected effluent that will meet and exceed standards for Type I Reuse established by the Utah Division of Water Quality. ***Type I Reuse water is safe and can be used in areas where human contact is likely such as irrigation for residential landscapes, public parks, and golf courses.*** The quality of the reuse water will exceed the current secondary water source quality (canal water).



*Visual Comparison of Secondary Water Quality
39 – Untreated Effluent, 43 – Untreated Canal Water*

FEATURES

The Reuse Facility will be located at the existing WWTP and will include a ***tertiary filter system, chlorine disinfection, and pump station.*** The preliminary design of the tertiary filter system utilizes a cloth disk media to filter out residual particulates. A pump station will be constructed to convey the filtered reuse water into the existing secondary water distribution system. The WWTP's existing chlorination system will be used to disinfect the effluent prior to entering the distribution system. An existing storage reservoir will store excess reuse water to help meet peak irrigation demands.



Conceptual Rendering of Reuse Facility & Cloth Disk Filters

WHEN WILL REUSE WATER BE AVAILABLE?

Final design of the Reuse Project is just beginning. Following the final design period, construction is estimated to take 18-months. Thus, it is estimated that ***the Reuse Facility will be ready for start-up and testing for the 2024 Irrigation season and fully operational for the 2025 irrigation season.***

HOW CAN I LEARN MORE?

A final draft report of the ***Preliminary Engineering Report & Water Reuse Plan*** is available at the District's website (<https://www.magnawater.com/water-reuse>). You can provide comment via email to info@magnawater.com. Additional opportunities to provide input on the project will include a public hearing (date & time TBD). The public hearing will be advertised & customers with questions or concerns about water reuse will be encouraged to attend.