Mammoth Community Water District
Year End Report 2021-22
Water is Our Future







MISSION STATEMENT

MCWD is committed to carefully and effectively managing and maintaining our local water resources. We are committed to our customers and the environment in which we live.

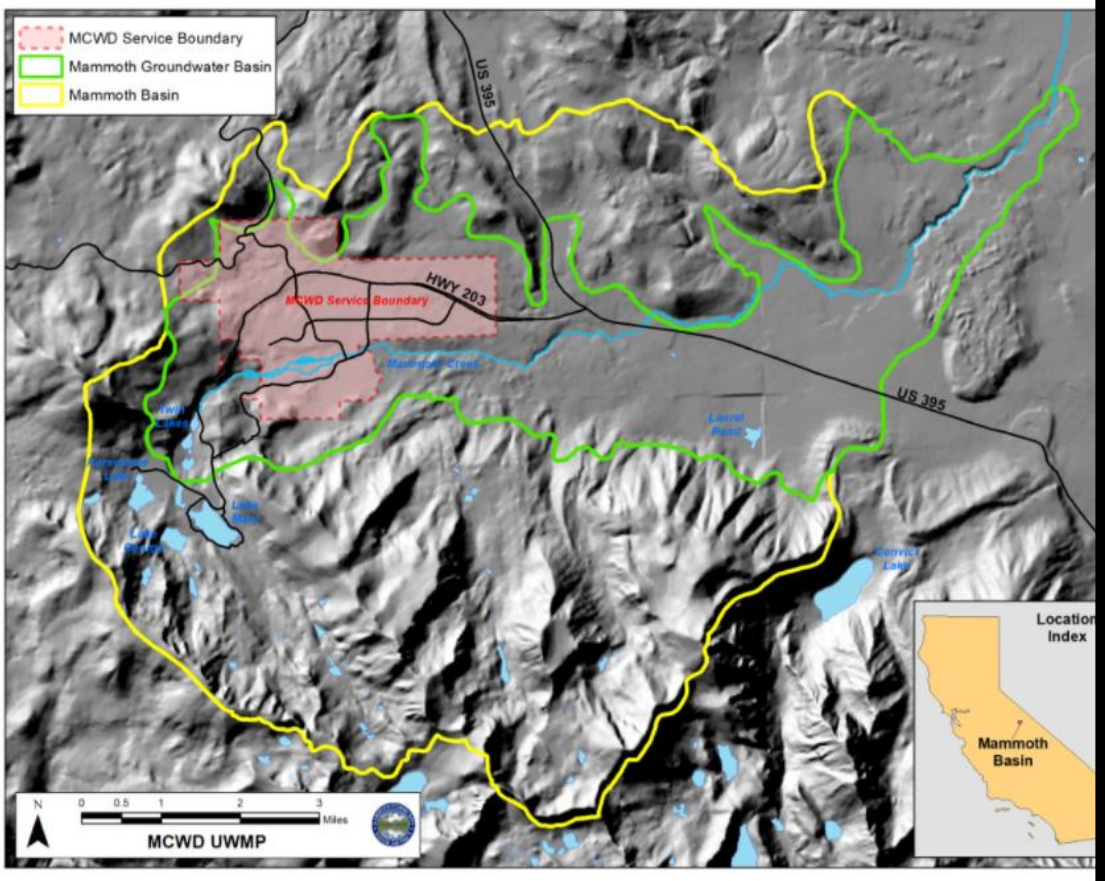


Message from the General Manager…

Mammoth Community Water District's past fiscal year, April 1, 2021 through March 31, 2022 was filled with many challenges and achievements. As General Manager, it was my pleasure to continue working with the community and to support the many achievements accomplished by the very capable and knowledgeable District staff, which has several new members who bring a fresh perspective to MCWD and the community. Within this report, you'll learn about long-term water supply assessment efforts to evaluate historical surface water and groundwater supplies which will be utilized in the development of the District's next Urban Water Management Plan. This annual report also highlights improvements to the District's software operating systems, wastewater processing facilities, groundwater monitoring capabilities, as well as conservation efforts on many fronts. All of these accomplishments were made possible by the support of our Board of Directors, ratepayers, and a very talented District team. I look forward to continuing to build on the positive relationships with staff and our community, working towards common goals. Looking to the future, we will continue to innovate and improve the District's water and wastewater systems while maintaining strategic planning efforts and initiatives that reflect our commitment to delivering the highest quality water and reliable services to our customers for the present and future.

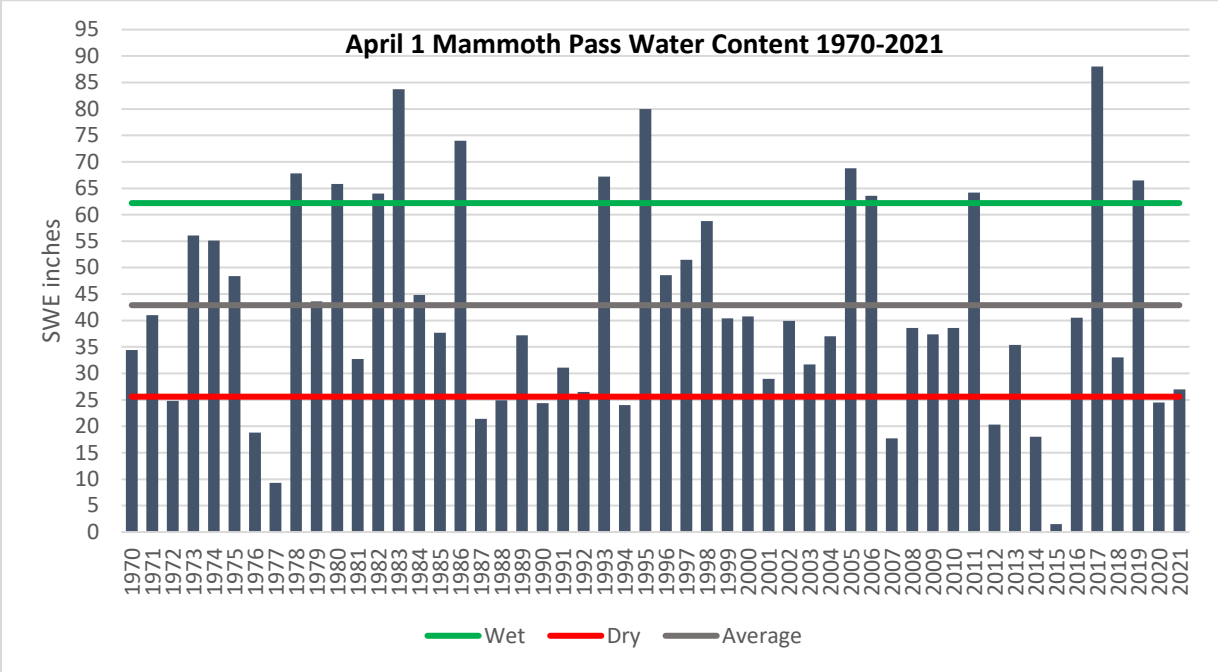
MCWD at a Glance

The Mammoth Community Water District was formed in 1957 to provide water and wastewater services to the community of Mammoth Lakes in Mono County, California. All of MCWD's water resources are located in the Mammoth Basin. Sources of water include surface water, groundwater, and recycled water. There is no water imported into the service area. Potable treated water is stored in ten distribution system storage reservoirs with a total storage capacity of 8.2 million gallons (MG) or 25.2 acre-feet. Approximately 2 million gallons of storage is available for reclaimed water stored prior to distribution for golf course irrigation. The water distribution system also includes 81 miles of pipelines, seven booster pump stations, twelve pressure zones within an elevation range between 7,520 and 8,620 feet, and 9 production wells.



MCWD 2020 Urban Water Management Plan

The Mammoth Community Water District's (MCWD) 2020 Urban Water Management Plan (UWMP) was prepared in 2021. The UWMP assesses water resources and plans for current and future water demands to avoid future emergency shortfalls of water supplies. MCWD's 2020 UWMP serves as a guide for the District's strategic planning to ensure long-term water supply reliability for the Town of Mammoth Lakes.



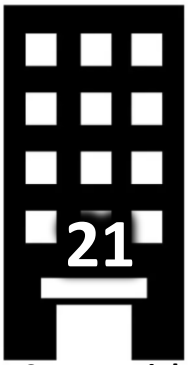
Estimating future population is challenging in a transient community where visitation can be impacted by weather/snow and economic conditions. In response, the District prepared its analysis assuming the community's buildout is achieved in 2040. With a heavy reliance on snowpack for water supply, the District remains flexible and dynamic to adjust for the variations in annual snowfall. The graph above displays the significant fluctuations in snowfall that occur regularly. MCWD has developed effective demand management measures to be prepared in times of water supply shortage. The UWMP is a resource for the public, MCWD staff, and elected officials to understand MCWD's past, current, and future water supply conditions and management needs.

Community Development

The Town of Mammoth Lakes continued to experience growth in 2021. All development that occurs within the District's service boundary receives water and wastewater services from the District. Tracking demand created by community development is an integral part of MCWD's strategic planning to ensure that the District remains prepared to supply water to the community's expanding demand.

New Homes

New Multi-Family Units



Commercial Upgrades

Anticipated Future Development Highlights:

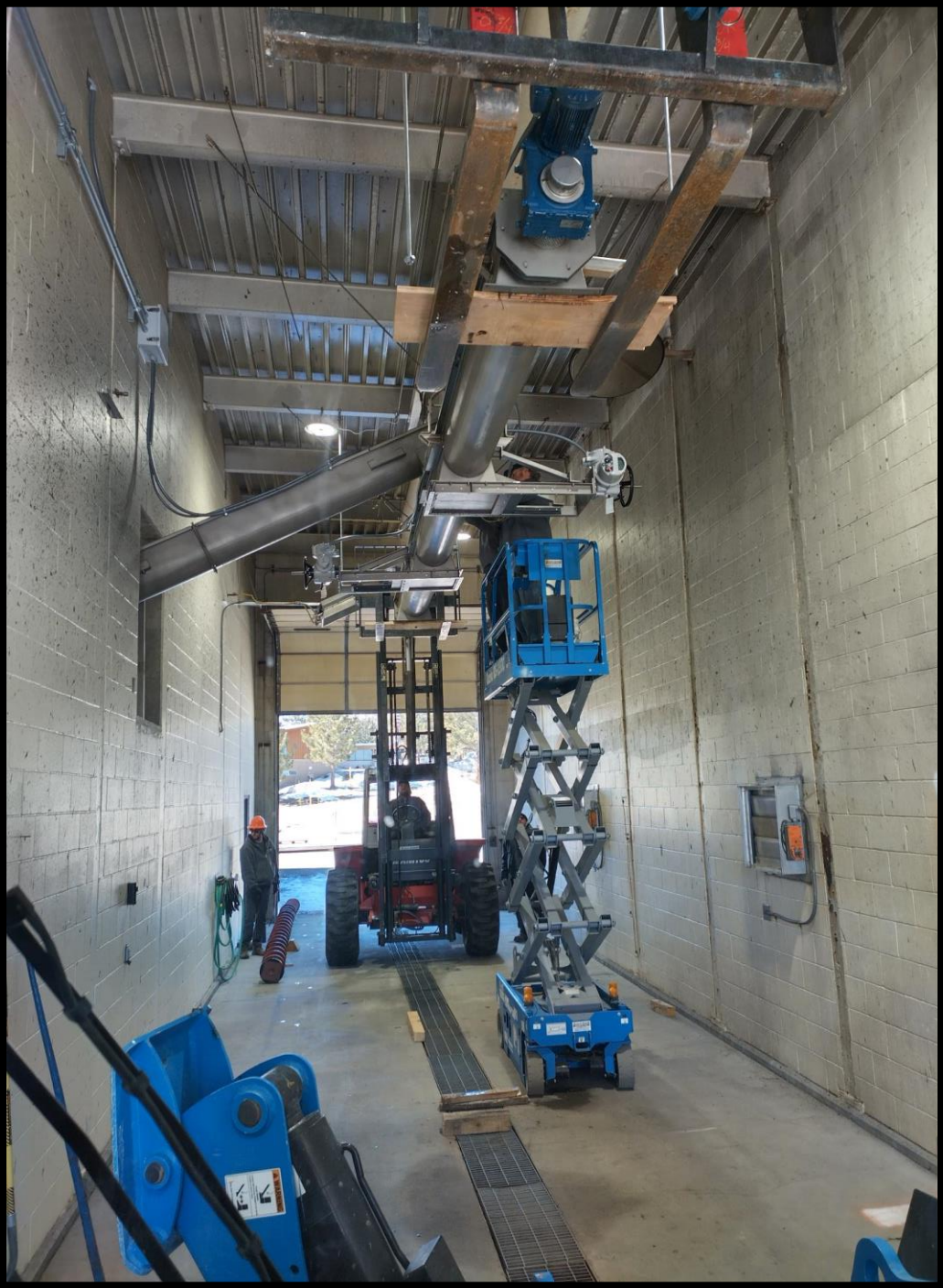
- **Mammoth Hotel – 164 rooms**
- **Limelight Hotel – 151 rooms**
- **Residence Inn – 101 rooms**
- **Sierra Nevada Resort Redevelopment**
- **Yotelpad Mammoth – 177 units**
- **The Parcel – 450 affordable housing units**

Projects and Programs Completed in 2021-22

Maintaining existing infrastructure and continuing to build a resilient and innovated system is a top priority for MCWD.

Screw Conveyor Project

To prepare for the closure of the Benton Crossing Landfill, the District made a significant investment to upgrade the sludge dewatering and hauling systems over the last few years. Installation of the sludge conveyance system and the trailer scales were the final components to this multi-year project. The new conveyance system automatically transports sludge from the dewatering equipment into a large trailer for disposal transport. Scales were installed and integrated into the conveyance system. The conveyor now loads the trailer based on scale readings and distributes the sludge from four separate gates, to allow even weight distribution and to prevent overloading of the trailer. All work was completed in-house by MCWD staff.



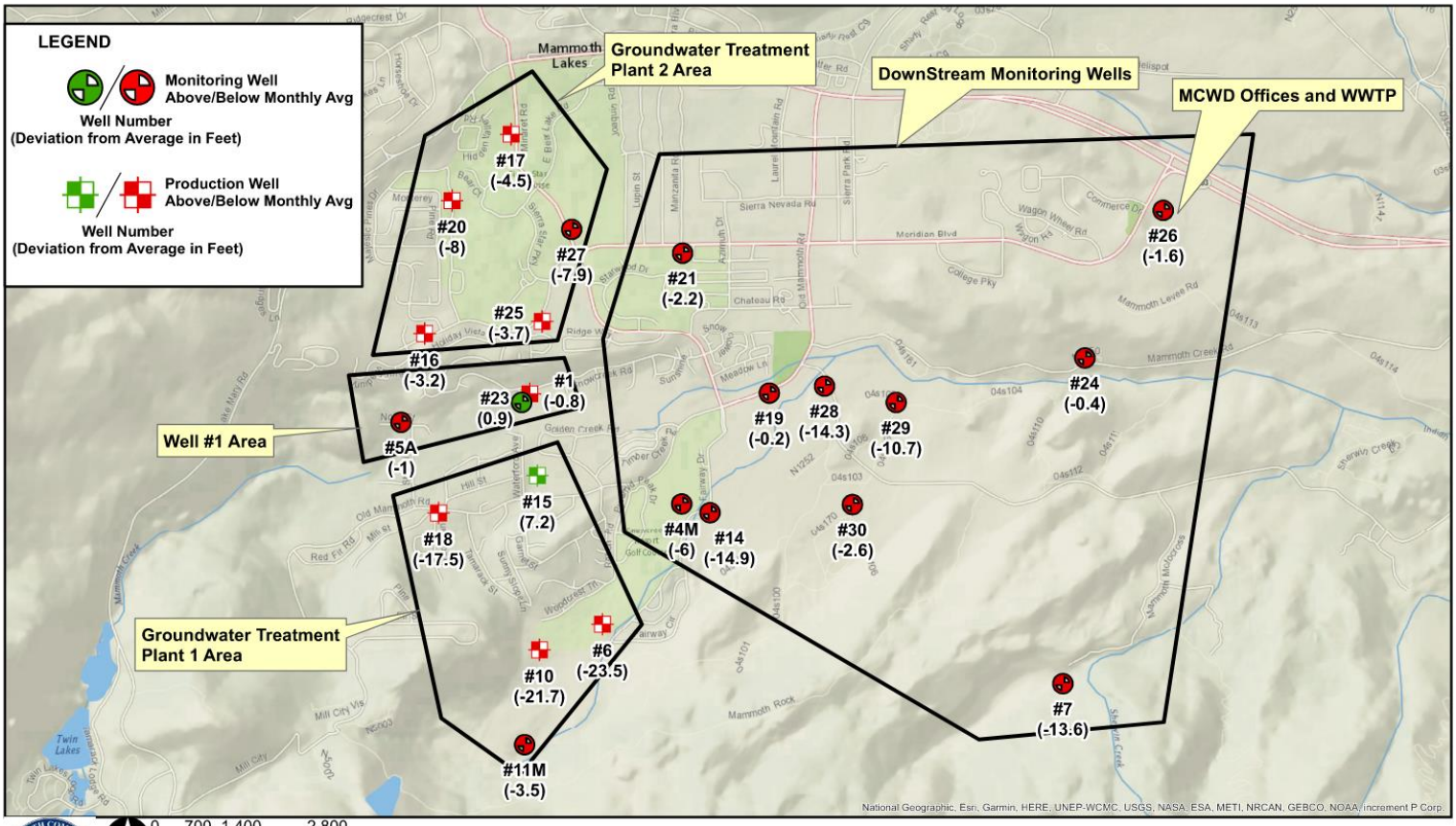
New Software

The MCWD Finance and Information Services Departments completed a District-wide Enterprise Resource Planning (ERP) software implementation over the past year. The new Tyler Incode software handles all financial and human resource activity for the District, while the Tyler EnerGov platform manages all engineering permit activity. Additionally, the entire agency upgraded to Office 365 as a productivity software platform. Several District-wide cybersecurity initiatives were also implemented for adherence to latest water industry security standards. Staff continually monitors the very dynamic cyber environment.

tyler technologies

Groundwater Assessment

This year, internal staff performed a thorough statistical evaluation of historical groundwater, precipitation, and pumping data to quantify the health of the groundwater basin as Mammoth enters a third year of drought. Continued development in town and predictions of more severe droughts mean groundwater is likely to play an increasingly critical role in water production for the District. This work is the start of an on-going project that will help the District make informed decisions about sustainable groundwater supply management. Preliminary results of the statistical analysis are shown in the map below, which provides a snapshot of groundwater conditions in the basin as of January/February 2022. The symbol shape identifies the well as a production or monitoring well, and the symbol color (red or green) indicates whether groundwater levels are below or above the historical monthly average for that location. The deviation from average, in feet, is in parenthesis. As shown, groundwater levels in February 2022 are below average throughout the basin, with Wells #15 and #23 being the only exceptions. These preliminary results indicate that while the above average precipitation in the winters of 2017 and 2019 increased groundwater levels in the basin, three years of subsequent drought, compounded by lingering effects of the 2012-2016 drought, have significantly impacted groundwater levels in the basin.



New Laurel Pond Monitoring Wells

MCWD discharges treated wastewater to Laurel Pond, a naturally occurring terminal pond located on United States Forest Service (USFS) land approximately 4 miles southeast of the MCWD wastewater treatment plant. Discharges to Laurel Pond are regulated by the Lahontan Regional Water Quality Control Board (LRWQCB) and require regular analysis of groundwater samples per the Waste Discharge Requirements (WDRs). However, the four 40-year-old monitoring wells were too shallow to provide reliable and representative samples. MCWD abandoned the old wells and installed four new monitoring wells strategically around Laurel Pond in July and August 2021. The depths range from 60 to 120 feet below ground surface. This project required coordination with LRWQCB and the USFS to identify locations that would allow for the best monitoring with the least amount of disruption to wildlife, land, and archeology.

Conservation

REBATE PROGRAM

- 36 Clothes Washers
- 42 Dishwashers
- 320 Toilets
- 1,828,174 gallons saved

LEAK DETECTION PROGRAM

Over **500** customers were alerted of leaks on their property in **2021**

NEW Turf Replacement Program

In March of 2022 the District approved a program to pay property owners up to $2.00 per square foot for turf that is removed and replaced with approved materials.

MCWD's Solar Array in 2021

4,000 Solar Panels produced...

1,827,516 kWh

Enough Power to Run a Chair Lift for 10 Ski Seasons

MCWD Staff

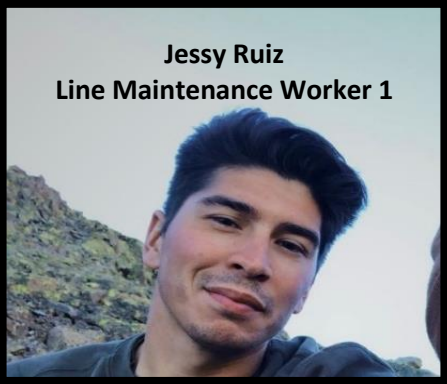
MCWD has 42 full time employees and hires a small seasonal construction crew for special projects every summer. In 2021 four long-time employees retired from MCWD. This amounted to 100 years of combined talent serving the community of Mammoth Lakes. Annually, MCWD recognizes staff for their longevity (in increments of 5 years). In 2021 seven employees were celebrated with a cumulative 90 years of service at the District.

MCWD Welcomes New Staff to the Team

Kyle Burnett
Water/Wastewater Treatment Operator III

Paige Borges
Assistant Engineer

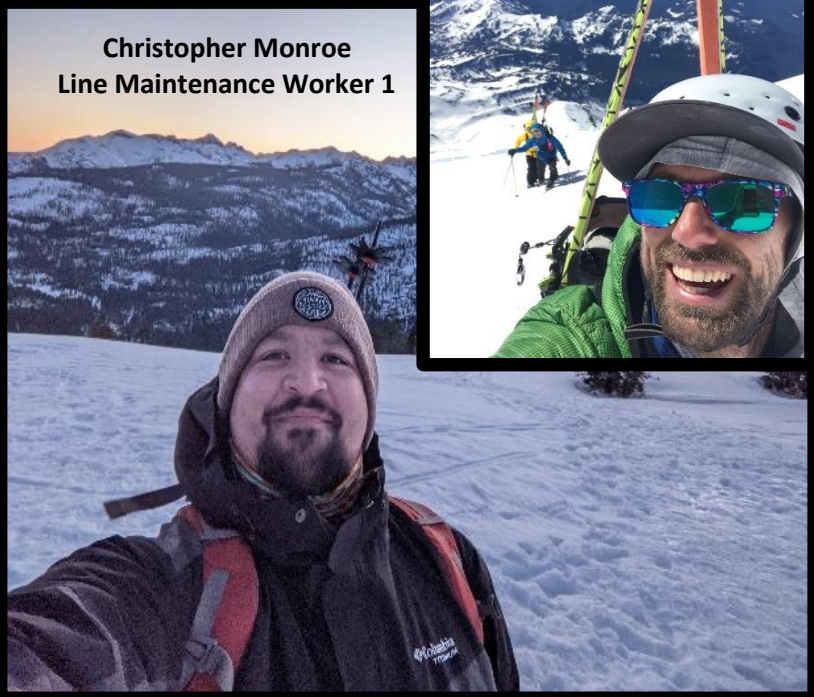
Jessy Ruiz
Line Maintenance Worker 1



Leanna Block
Administrative Analyst

Jacob Trauscht
Associate Engineer

Christopher Monroe
Line Maintenance Worker 1



Amy Campbell
Administrative Assistant

Andrew Hoit
Line Maintenance Worker 1