

#### AUGUST 2021- THE BIG TOPICS ISSUE

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# **DID YOU KNOW?**

Due to improved metering and conservation programs, our residential per-capita use today is 30% lower than it was fifteen years ago!

An important contributor to this success is Assigned-Day Watering. It has been this community's standard for responsible water use since the early 1980s. In fact, Assigned-Day Watering was part of the region's very first drought management plan and has been ongoing since.

To prevent loss from evaporation and wind, TMWA has expanded no-watering hours from 11 a.m. to 7 p.m. In non-drought years, hours are from 12 p.m. to 6 p.m.

### **ABOUT TURF REMOVAL**

For some water utility companies, turf removal programs are possible because the water conserved can be resold. This provides the funding to incentivize those who volunteer to remove turf at their home or business. Locally, TMWA does not resell residential conserved water, as that water is already dedicated or is used for drought storage. Ultimately this helps protect our water supply, because the water we conserve during drought is stored upstream if the drought continues.

### TRUCKEE RIVER WATER SYSTEM:

NETWORK OF WATER RESOURCES CREATES RESILIENCY FOR THE REGION

Unlike many other drinking water systems, Truckee Meadows Water Authority has a resilient and redundant portfolio of water resources stored in groundwater aquifers and six upstream reservoirs—two of which are fully owned by TMWA.

The existence of this reservoir storage provides the Truckee River and its ecosystem more resiliency against drought and flooding than

Stampede Independence

Prosser

Donner Lake

Truckee River

Lake Tahoe

FEDERALLY HELD STORAGE

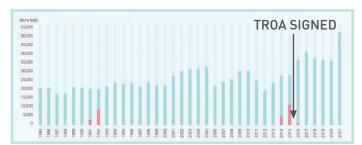
TMWA-OWNED STORAGE

it would otherwise have. Additionally, groundwater aquifers located throughout the Truckee Meadows can be utilized for drinking water storage. The existence of this extensive storage infrastructure is the outcome of generations of planning and investing in our community's water future.

# DROUGHT AND THE TRUCKEE RIVER OPERATING AGREEMENT (TROA): AN EXPANSION OF STORAGE OPTIONS WITH MORE FLEXIBILITY

After over 20 years of complex negotiations, community and regional leaders finalized TROA in 2015. It cannot be understated how important the agreement was and continues to be, particularly during dry years like this.

During drought, TROA changes how upstream storage is managed. It allows TMWA to store more Truckee River water in federal reservoirs. When paired with our reserves at Independence and Donner Lakes, TMWA is substantially more resilient against the effects of drought. If drought continues, stored water can carry over into succeeding years to increase our reserves even more—an option that was not possible prior to TROA.



TMWA's reserves on July 15th were 52,413 AF. Red bars show the five years drought reserves have been used. See current storage at reserves.smartaboutwater.com.

When the Truckee River no longer meets the minimum flow rate required by TROA, drought reserves may be used to supplement our water supply. Use of drought reserves has happened only five times over the past 35 years. The advantage of TROA is clear when one compares current drought storage levels to those of 2015:

	2015	2021
TMWA'S RESERVES	28,586 AF	<b>52,413 AF</b> (as of July 15th, 2021)
RESERVES USED	11,701 AF	TBD

# **ASKING, AND ANSWERING, BIG QUESTIONS:**

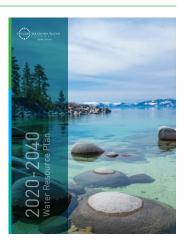
# A CONSISTENT ASPECT OF TMWA'S PLANNING

When nature fails to produce a big snowpack, it's natural to ask big questions about the future of water in our region. The concern is understandable, but this isn't the first drought year our community has experienced, and it certainly won't be the last.

The good news is that TMWA plans ahead to manage these types of years. In fact, every year TMWA forecasts water supplies for the next 20+ years to prepare for what the future may bring.

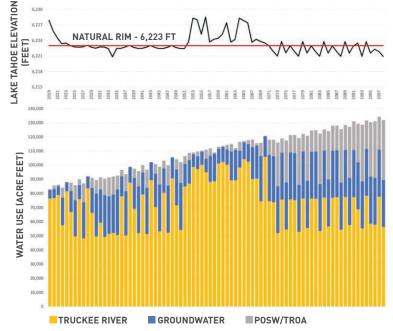
Then every five years, TMWA's formal Water Resource Plan (WRP) is published using the most accurate long-range projections available, some of which look 80-100 years into the future.

Customers can see the full 2020-2040 Water Resource Plan at www.twma.com/wrp2020. We've redesigned it with you in mind.



# **SERVING WATER TO A GROWING POPULATION**

While we can't predict snowpack, hydrologic models that extend to the year 2097 show our region's water supply is very resilient—even in extreme drought conditions.



Graph: Lake Tahoe elevation and TMWA annual projected sources of drinking water with no shortage forecasted through 2098 under historical scenario.

For example, one model (see graph) uses the *highest population* growth rate projected in the Truckee Meadows for the next 80 years, with a perpetual cycle of the worst historic drought from over 120 years of hydrologic record keeping.

Using the *highest forecasted water demand* in this scenario, the model shows that TMWA's water supply portfolio is more than adequate to serve our growing community for decades to come.

To see all models used for planning, go to Chapter 3 of the 2020-2040 Water Resource Plan, which includes reference to all independent sources of data used for these

projections.



### WATER AND NEW DEVELOPMENT: HOW DOES IT HAPPEN?

Over 70 years ago, Truckee River water rights were set at 225,000 acre feet. By law, that amount cannot change. Yet, how this water is used has shifted significantly over time, mainly through the conversion of agricultural use to serving homes and businesses. There are no "new" water rights.

When new developments are approved by the cities or county, water rights from this pool must be purchased 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.

For every acre-foot of water that's required for service, an additional 10% must be dedicated for drought protection. 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 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.

FIND LOCATIONS AND DETAILS FOR ALL WORKSHOPS AND MEETINGS HERE: TMWA.COM/MEETING/







