The 2021 water year ended on September 30 and was logged as the fifth driest year on record using the San Joaquin Valley Water Year Type Index. Coming on the heels of a “Dry” 2020, 2021 was classified as a “Critical” water year type. Water supply conditions prompted MID to reduce the 2021 irrigation allocation to 36 inches to ensure that adequate supply remained in Don Pedro Reservoir in the event we get a third dry year in 2022. For the 2021 rainfall year (July 1 – June 30), the City of Modesto received 9.4 inches and the Tuolumne River Watershed received an average of 18.1 inches of rain, which is 77% and 53% of the historical average, respectively.

You also may have heard the National Weather Service’s Climate Prediction Center estimating an 87% chance for a second La Nina year in 2022. La Nina is characterized by cooler-than-average water beneath the surface of the Pacific Ocean near the equator creating a certain circulation response in the atmosphere. Historically, La Nina years tend to bring dryer and warmer conditions to Southern California and wetter and cooler conditions to the Pacific Northwest. However, for Central California and the Central Valley, there isn’t a strong correlation between La Nina and either a wetter or dryer year.

There has been a glimmer of hope for this rain season though. Between October 19 and 26, a series of low pressure systems and atmospheric rivers (AR) developed over the Northeast Pacific Ocean and impacted the Pacific Northwest and California coast in rapid succession. A total of 8 AR’s made landfall with the strongest one, classified as a Category 5 AR, hitting just north of San Francisco and continuing inland causing record rainfall, flooding and mud and rockslides throughout Northern California. Modesto received over 3 inches of rain and the Tuolumne River Watershed collected over 6 inches. While not enough rainfall to make a significant dent in declining reservoir levels, the runoff from these storms added more than 127,000 acre-feet of inflow to Don Pedro Reservoir and the upper Tuolumne reservoirs.

The Plan is required by the Sustainable Groundwater Management Act of 2014 and a final version must be submitted to the California Department of Water Resources by January 31, 2022. The groundwater aquifers in the Modesto Subbasin are currently being overdrafted and can’t sustain the amount of pumping that has occurred historically without causing undesirable results. The Plan describes the current groundwater conditions and proposes a host of projects and management actions that, if implemented, will correct the overdrafting and keep the basin sustainable for future generations.

We encourage our growers to review the plan and submit comments to the GSA by December 15, 2021. Comments can be emailed to strgba@mid.org.
REGULATORY PROCESSES

TUOLUMNE RIVER VOLUNTARY AGREEMENT

Five years ago, our communities rallied and pleaded for a change in how the State approached updating its Bay-Delta Water Quality Control Plan which demanded between 30% and 50% unimpaired flow from the Tuolumne River for the alleged benefit of fish. When the State Water Board ultimately adopted Phase 1 of its plan in December 2018 they left open an opportunity to continue work to advance our Tuolumne River Voluntary Agreement as an alternative to the unimpaired flows plan.

Since that time, Modesto Irrigation District (MID) and Turlock Irrigation District (TID) have actively participated in voluntary agreement negotiations and worked collaboratively with State officials, various agencies and an array of stakeholders including other public water agencies and environmental conservation groups to advance a package of voluntary agreements as an alternative for the State Water Boards’ Bay-Delta unimpaired flows plan. MID and TID, with our partner San Francisco Public Utilities Commission, stood ready to immediately provide increased river flows strategically managed to meet the biological cues of the fishery and invest $132 million of our own money in habitat restoration.

In October 2021, MID and TID received an unexpected and disappointing letter from the State informing us that they are walking away from the Tuolumne River Voluntary Agreement process and instead are moving forward with implementation of their flawed Phase 1 Bay-Delta Water Quality Control Plan. The Districts have negotiated in good faith for years and, by walking away, the State has rejected the collaborative process we’ve built.

The State Water Board plans to hold an information-only hearing on December 8 to provide a summary of the next steps in implementing the Bay-Delta Water Quality Control Plan.

MID and TID have repeatedly expressed our commitment to continue voluntary agreement discussions and to implement our comprehensive, science-based plan to improve the ecology of the Tuolumne River. The Districts have invested heavily in studying and truly understanding the Tuolumne River, the species and industries that depend on it and developing a realistic and sustainable voluntary agreement. We believe that a voluntary agreement is the only resolution that will provide water supply certainty for our region.

Parallel to the voluntary agreement discussions, MID and TID filed lawsuits against the State Water Board’s Bay-Delta Plan and we continue to move forward in those processes.

BENEFITS OF TUOLUMNE RIVER VOLUNTARY AGREEMENT

- Manageable Flows
- Habitat Funding
- Predation Suppression
- Early Implementation
Curtailments

On August 20, 2021 the State Water Board issued emergency drought curtailment regulation and orders to 4,500 water rights holders in California. These orders were applied to pre- and post-1914 water right holders and in short, required parties to halt diversion flows from various rivers in California – including the Tuolumne River.

Due to the drought conditions, the stated purpose of the State Water Board’s curtailment orders is to (1) protect drinking water supplies, (2) prevent salinity intrusion into the Delta and (3) minimize impacts to fisheries and the environment.

MID and our partner on the Tuolumne River, Turlock Irrigation District, are already meeting the State’s noted purpose of the orders. We’ve always managed our systems to ensure water supply, drinking water access and protection of the fishery. The Districts are also meeting the required minimum (and sometimes exceeding) instream flows for fish and will continue to do so in the future.

Although the curtailments orders didn’t affect our water deliveries this year, they could have a substantial impact on our available water in 2022 and beyond, depending on when this current curtailment is lifted. MID and TID have raised concerns regarding the vague process for the State Water Board lifting curtailment orders and how the process will impact our ability to store water in our locally-owned and operated Don Pedro Reservoir.

In good news, the State Water Board did temporarily lift the orders during the October storms and we were able to capture runoff in Don Pedro Reservoir. The State Water Board updates curtailment status every Friday and as of November 19, curtailment orders on the Tuolumne River remain lifed. If you’re interested, you can check the Delta Watershed Curtailment Status List (waterboards.ca.gov/drought/delta) for curtailment statuses.

While we’re certainly sensitive to the challenges presented by the current drought, we want to ensure that the State’s emergency curtailment regulations are consistent with the law and the State Water Board’s authority, particularly in regard to the California water rights system.

MID as a member of the San Joaquin Tributaries Authority – including TID, Oakdale Irrigation District, South San Joaquin Irrigation District and the City and County of San Francisco – is challenging the State Water Resources Control Board’s adoption of the emergency drought curtailment regulations. We believe there are numerous areas in which the State Water Board acted outside of their authority and their approach with the curtailment regulation is flawed and unlawful.

Many of the arguments we have raised are the same that were successfully brought against the State Water Board’s curtailment effort in 2015. We’ll continue to advocate for science-based, local control and management of our reservoir and water supply.
2021 IRRIGATION SEASON RECAP

DELIVERIES - Through the end of irrigation season, 123,388 acre-feet of water was supplied to irrigators. This is just 341 acre-feet (0.3%) above the planned deliveries for the season, meaning our internal forecasts were accurate and irrigators utilized water consistent with historic usage.

AQUATIC WEEDS - For the second year, MID implemented the aquatic herbicide program reliant exclusively on Endothall products. This significantly decreases risk to applicators and the community at large. Drought conditions caused explosive growth of aquatic weeds and filamentous algae in some isolated areas, which required a rigorous herbicide application and mechanical removal schedule.

In effort to address these areas of concern, we made adjustments to the applications and we saw significant improvement as a result. Next year we will have additional products to utilize which will give us more flexibility and the ability to treat these areas more aggressively should challenges arise again.

MCR OPERATIONS - The new control and algorithms attributable to the Main Canal Reservoir (MCR) allowed for increased efficiency in downstream canal operations.