



Town of Yountville

6550 Yount Street
Yountville, CA 94599

Staff Report

Agenda Item #: {{section.number}}B

Yountville Town Council Staff Report

DATE: July 19, 2022

TO: Mayor and Town Council

FROM: John Ferons, Public Works Director

PREPARED BY: John Ferons, Public Works Director

SUBJECT:

Water Conservation Update and Council Consideration to Adopt Resolution Number 22-4139 Modifying Existing Phase 2 Water Shortage Emergency Regulations.

DISCUSSION/BACKGROUND

Droughtlook

As we report out for the month of June 2022, the last reportable month for Fiscal Year 2021 to 2022, the following drought conditions are currently present in Napa County:

- 100% of Napa County is in a D2 Severe Drought.
- 136,484 people in Napa County are affected by drought. No change since last week. No change since last month.
- 100% of people in Napa County are affected by drought. No change since last week. No change since last month.
- This was the 36th wettest June on record, over the past 128 years. Up 0.02 inches from normal.
- This is the driest year to date over the past 128 years. Down 15.89 inches of rainfall from normal.

Conservation Report

All of which does not bode well as we look to the near future which brings the traditional hot, dry months of the calendar year. Now let's look at the recent past and see where the month of June ended up, then further into the past and look at the entire fiscal year. As a reminder the goal of using 400 Acre-Feet from Rector Reservoir is still being tracked by comparing current FY 21-22 water use to FY 20-21 water use on a month-to-month and running total basis to the end of the fiscal year.

June 2022

This fiscal year:

- Rector Water = 35.38 Acre-Feet.
- Napa Water = 0.00 Acre-Feet
- Municipal Well Water = 0.00 Acre-Feet
- Total Water Consumed = 35.38 Acre-Feet

Last Fiscal Year:

- Rector Water = 52.90 Acre-Feet.
- Napa Water = 4.11 Acre-Feet.
- Municipal Well Water = 0.00 Acre-Feet

- Total Water Consumed = 57.00 Acre-Feet

Total Water Conservation = 21.62 Acre-Feet
Total Water Conservation Percentage = 37.93%

Fiscal Year 2021-2022

This fiscal year:

- Rector Water = 361.91 Acre-Feet.
- Napa Water = 5.86 Acre-Feet
- Municipal Well Water = 56.03 Acre-Feet
- Total Water Consumed = 423.80 Acre-Feet

Last Fiscal Year:

- Rector Water = 557.73 Acre-Feet.
- Napa Water = 6.46 Acre-Feet.
- Municipal Well Water = 0.00 Acre-Feet
- Total Water Consumed = 564.19 Acre-Feet

Total Water Conservation = 140.39 Acre-Feet
Total Water Conservation Percentage = 24.88%

Water Conservation Goal & Safe Yield

Reflecting on the data above from the last fiscal year, it becomes apparent that the 20% conservation goal, while admirable and exceeded by the Town, it does not meet the goal of water conservation to the safe yield Yountville's water supply. The 20% goal was based on two things, the mandate issued by the State and the CalVET Water Allocation of 400 acre-feet. While the 20% mandate from the State is a worthy target, there is a problem with the 20% reduction goal triggered by the CalVET allocation.

That problem being the 20% CalVET Rector Water goal was based the reducing the "contract" amount of 500 ac-ft down to the "allocation" amount of 400 acre-feet when the Town's "historical" water use well exceeds the 500-acre-foot starting point. For example, the prior fiscal year 20-21, the Town used +/- 558 acre-feet from Rector plus +/-6 acre-feet from the Napa connection for a total of +/- 564 acre-feet. If you consider the "safe yield" of the Town's water supply as the reliable 400 acre-feet from Rector, the goal to reduce from historic last year's +/-564 acre-feet of use down to 400 acre-feet becomes +/- 29%.

This is not to say that the Town did not collectively conserve a considerable amount of water. For the fiscal year that just ended, FY 21-22, when you combine all three water sources the Town consumed a total of +/- 424 acre-feet. When compared to the prior fiscal year FY 20-21 combined water use of +/-564 acre-feet the total conservation reduction was +/- 25%. Again, this is an excellent accomplishment, but not quite the 29% needed to get to the 400 acre-foot "safe yield" mark.

That said, the Town currently has three water sources, the 400 acre-feet from Rector, 25 acre-feet from Napa and an unknown amount from Municipal Well No.1. At the present time, the City of Napa connection is turned off due to piping infrastructure issues and Municipal Well No. 1 is non-functioning due to failed pump controls. While each is being addressed by upcoming capital improvement projects, the remaining reliable water source remains Rector Reservoir. Therefore, it seems like the Town should consider the 400 acre-feet as the safe yield of the Town's water supply and set that as the conservation goal.

The hard work of education to achieve changed behavior has brought the Town's total consumption to +/- 424 acre-feet but it relied on two other water supplies to get there. This coming fiscal year the goal should be to maintain the conservation we have achieved and also reduce those 424 acre-feet by another 6% to meet the 400-acre-foot safe yield of the water supply.

Phase II Water Regulations

To meet the on-going challenges of the drought and achieve water conservation, Town Council adopted Resolution 22-4118 at their regularly scheduled meeting May 3, 2022, renewing the Phase II Water Shortage

Emergency Regulations consistent with Chapter 13.24 of the Town's Municipal Code with slight revisions. Included in the adopted resolution there are two regulations that have drawn the most attention, the 2-day irrigation limitation allowing for irrigation only 2-days a week based on address and the 450 gallon per day maximum for a single-family residence. Some residential water customers have expressed frustration with the complexity of the two-day watering schedule and also the daily maximum being too restrictive which has resulted in on-going considerations to perhaps revise those two restrictions. As such staff is requesting council feedback and direction regarding possible changes to the current water restrictions to revise the daily maximum to a weekly average and thus allow irrigation any day of the week, lifting the 2-day a week restriction.

Proposed revisions to those two regulations could include:

- Revising the 450-gallon per day maximum to a weekly average.
- Lifting the 2-day restriction on irrigation for single family residences.

Information to consider for the proposed revisions:

- Removing the per day restriction and allowing a weekly average while using 450 gallons per day would result in a total of 3,150 gallons per week per residential water customer. Applying this to the 607 single family residence water customers could result in +/- 305 acre-feet per year, or 76% of the 400 acre-feet.
- Using a more practical weekly average number of 2,000 gallons per week per residential water customer would result in a maximum +/- 194 acre-feet per year, or 48% of the 400 acre-feet.
- A household of four people typically consumes +/- 185 gallons per day living their daily lives with showers, restroom, dishwashing, and laundry. Households with less people will use less water. The balance of the weekly average would then remain available for use at the discretion of the owner and could be applied to external irrigation.
- Monitoring, education, and enforcement of this model would consist of a single-family residence water customer exceeding their weekly average allowance of 2,000 gallons per week as one violation of the regulation. As opposed to the current model in which monitoring, education and enforcement consists of a single-family residence exceeding the daily maximum as one violation and a second violation for a single-family residence that is irrigating on the wrong day when combined results in two violations.

If the Council determines to revise the two regulations a new resolution would be presented for consideration at the next Council meeting in August. That resolution could include the following revised regulations:

- In no event shall residential users exceed the following average gallons per week per meter:
 - Residential meter serving one unit: Average 2,000 gallons per week;
 - Residential meter serving two units: Average 3,000 gallons per week;
 - Master meter serving more than two units, no separate irrigation meter: Average 1,110 gallons per week per occupied unit plus an irrigation allotment totaling 40 gallons per day for each 1,000 square feet of landscaping.
 - Master meter serving more than two units, with separate irrigation meter: Average 1,110 gallons per week per occupied unit.
- Regardless of water source for all water users EXCEPT residential and multi-residential users even numbered addresses shall irrigate only on Monday and Thursday, odd numbered addresses shall irrigate only on Tuesday and Friday. There shall be no irrigation on Saturday, Sunday, and Wednesday.

Alternatively, Town Council could discuss the current regulations and any proposed revisions and provide direction at their discretion.

ENVIRONMENTAL REVIEW

Not Applicable

FISCAL IMPACT

Is there a Fiscal Impact? No

Is it Currently Budgeted? N/A

Where is it Budgeted? N/A

Is it Mandatory or Discretionary? Discretionary

Is there a Staff Resource Impact? Nominal

STRATEGIC PLAN GOAL

Is item Identified in Strategic Plan? Yes

If yes, Identify Strategic Goal and Objective. **Exceptional Town Services and Staff:** The Town supports its talented staff who deliver high quality municipal programs and services while maintaining public infrastructure for the benefit of the community. **Visionary Leadership:** The Town's leadership maintains an open-minded, forward-thinking decision-making process. We value engagement and participation from all members of the community as we work together to create policies and plan for the future.

Briefly Explain Relationship to Strategic Plan Goal and Objective. Water conservation is a collective effort by town staff, our residents, and our business partners. The Town is seeking to maintain our quality water delivery via the public infrastructure while engaging the Town's water customers as we work together to save our collective water resource.

RECOMMENDATION

Receive Informational Report and direct questions to staff.

Receive Public Comment.

Conduct Council discussion.

Adopt Resolution Number 22-4139 Modifying Existing Phase 2 Water Shortage Emergency Regulations.