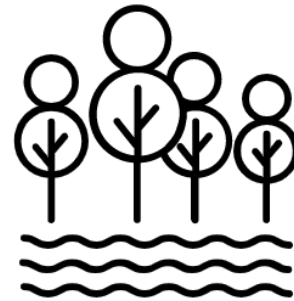


State of the
System



ACMWC

Your community water company



ACMWC

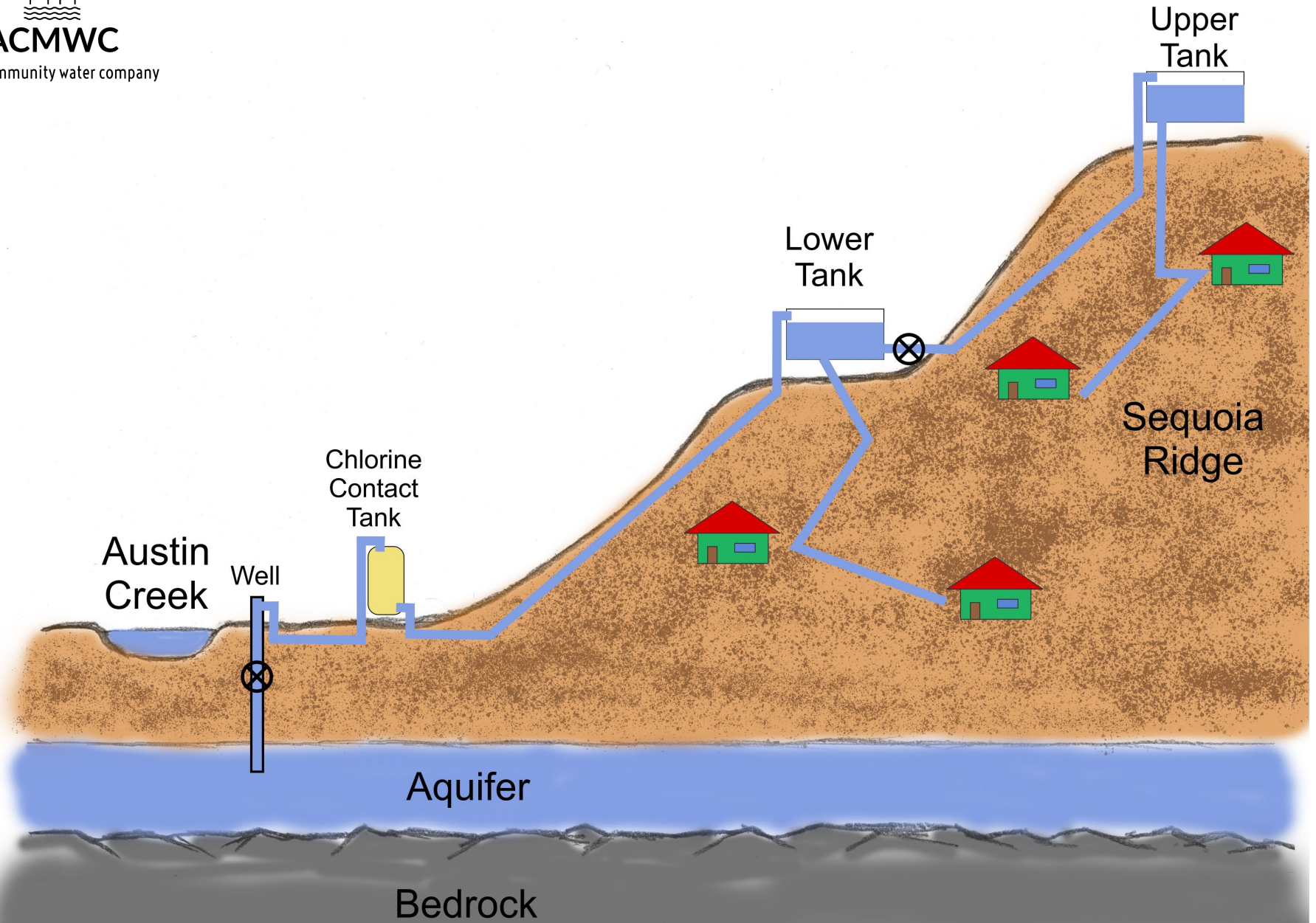
Your community water company

- Est. 1959
- Serves ~ 150 people
- 66 Shareholders
- Wells alongside creek
 - Main well (70')
~ 30 gpm
 - Backup well (50')
- 2 storage tanks
 - Lower 16K gal
 - Upper 12K gal
 - Booster pumps
- Chlorine added
- Backup generator
- Individual meters
- Proactive monitoring



ACMWC

Your community water company



Upper Tank

Lower Tank

Chlorine Contact Tank

Austin Creek

Well

Sequoia Ridge

Aquifer

Bedrock



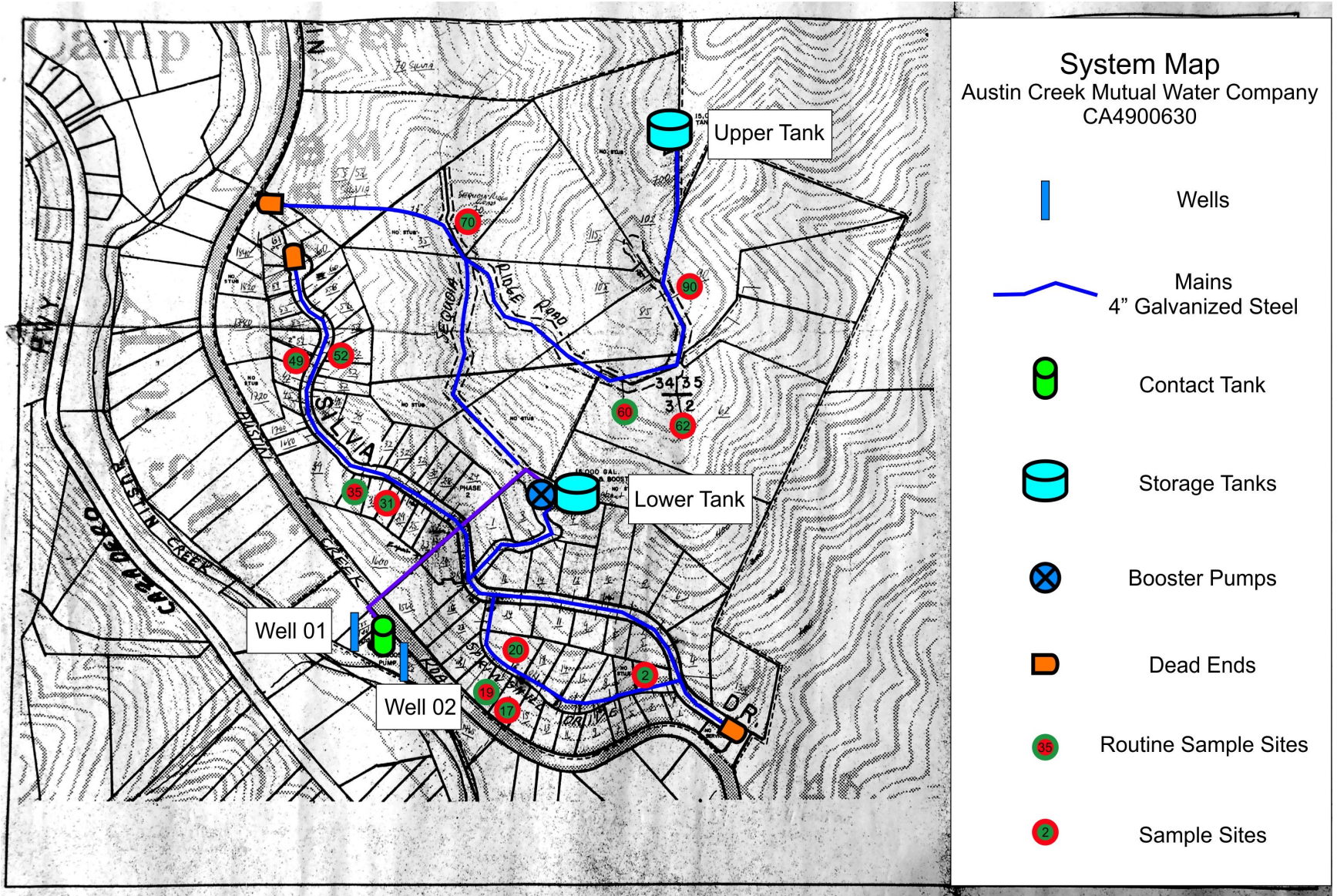
SALE

NO TRESPAS
VIOLATION OF THE
FEDERAL PROTECTIVE
ACT



ACMWC

Your community water company





ACMWC

Your community water company

Risks to our water system:

- Floods
- Fires
- Droughts
- Power Outages
- Earthquakes
- Leaks
- Equipment Failures
- Loss of System Pressure
- Contamination
- Age of the system components

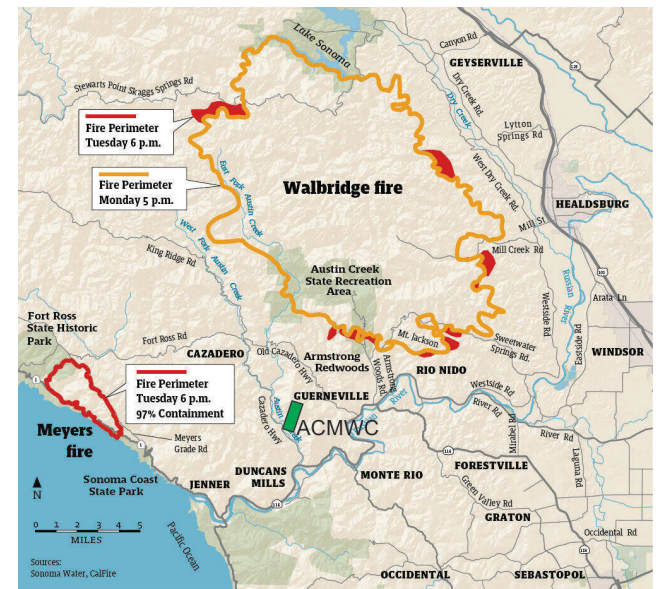


ACMWC

Your community water company

Recent events:

- February 2019 flood
- 2020 Walbridge fire
- March 2021 system failure
- October 2021 heavy rain





ACMWC

Your community water company

March 2021 system failure

- Main well pump failure
 - Didn't know until it was too late!
- Pump radio control system failure
- Loss of system pressure
- Collapse of water main
- Boil water notice
- Trucked-in water



ACMWC

Your community water company

March 2021 system failure





ACMWC

Your community water company

What we learned

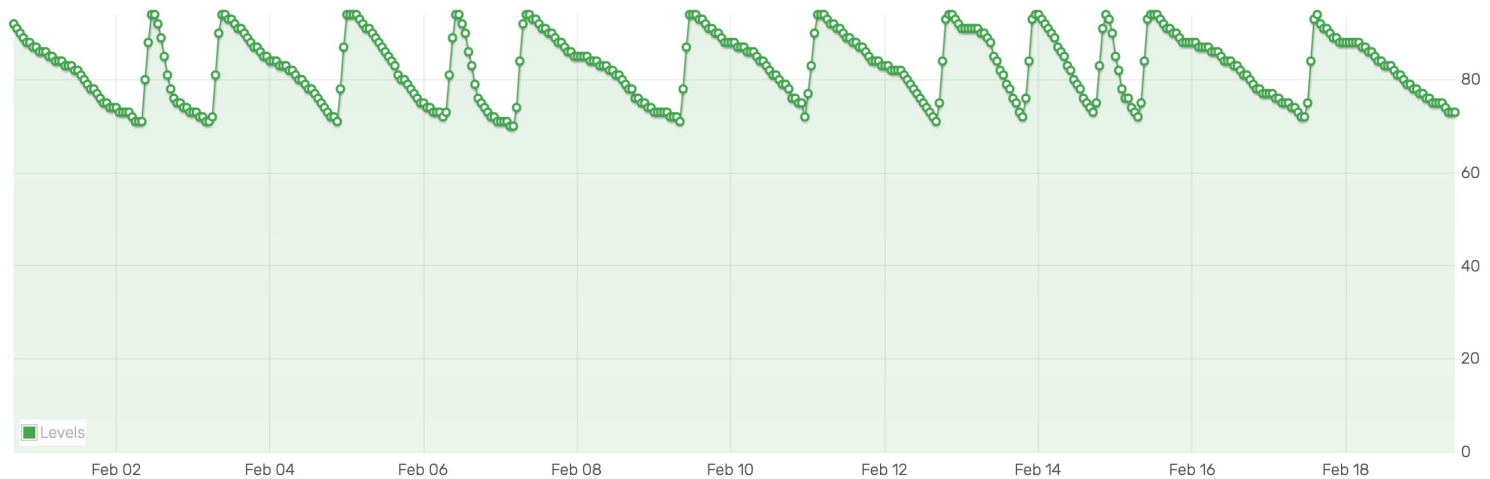
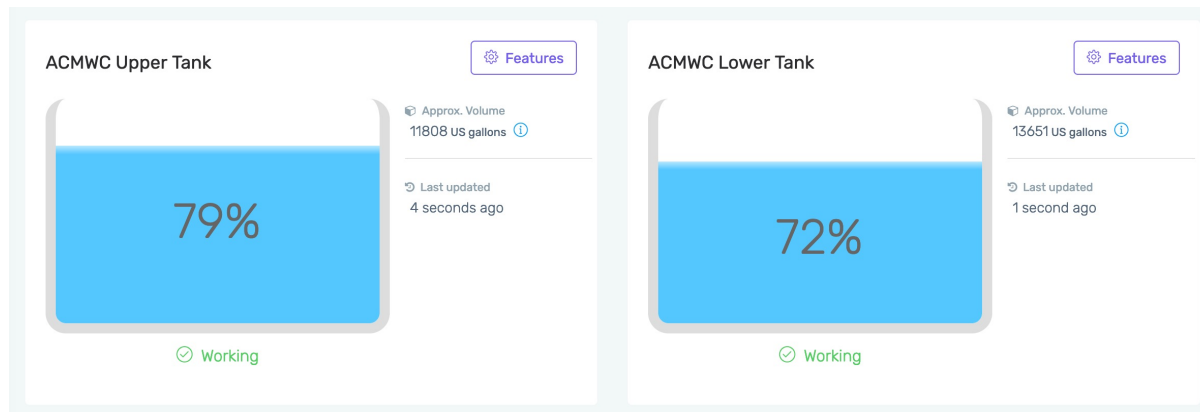
- Proactive monitoring is important
- Fix small problems before they become big problems
- Regular, proactive maintenance is important
- The community comes together to help
- ...but there's no substitute for professionals who know what they're doing!



ACMWC

Your community water company

Proactive water level monitoring sends alerts before system pressure drops





ACMWC

Your community water company

Things we've done (and are still doing) to make our system more robust:

- Backup power generator
- Proactive water level and power monitoring
- Electrical system repair/replacement
- Booster pump replacement
- Proactive leak-fixing
- Investigating grants and other funding sources for system improvement
- Contracted Russian River Utility

V. Water Rights and Restrictions

- “To get a right to groundwater, you simply extract the water and use it for a beneficial purpose. There is one exception, which applies to “subterranean streams flowing in known and definite channels.””
- Prior to 2005, ACMWC assumed our wells were extracting groundwater, and so we did not have a permit.
- However, California decided our source is the “Austin Creek Underflow”, *a subterranean stream flowing in a known and definite channel.*

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

APPLICATION 31567

PERMIT 21323

Permittee: Austin Creek Mutual Water Company
c/o Linda Petrulias
P.O. Box 86
Cazadero, CA 95421

Therefore, **Application 31567** filed on **March 17, 2005**, has been approved by the State Water Board SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

Approved Jan 14, 2013

1. Source of water

Source:
Austin Creek Underflow

Tributary to:
Russian River

Water Rights: Permit vs. License

Permit

What we have now, renewable until December 31, 2027

Allows us to develop a water-diversion and water-use “project”

License

Granted after project is completed (by 12/31/2027) and inspected

Water must have been used in compliance with all of the conditions in permit

If we have not used water beneficially or if we have used water “unreasonably”, we will receive a license for less water than our current permit allows

Conditions in our water permit:

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed **9,235 gallons per day at a rate of 0.17 cubic feet per second** to be diverted from **January 1 to December 31** of each year. The maximum amount diverted under this permit shall not exceed 10 acre-feet per year.

This permit is subject to prior rights. Permittee is put on notice that, during some years, water will not be available for diversion during portions or all of the season authorized herein. The annual variations in demands and hydrologic conditions in the Russian River Watershed are such that, in any year of water scarcity, the season of diversion authorized herein may be reduced or completely eliminated by order of the State Water Board, made after notice to interested parties and opportunity for hearing.

Construction work and complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by December 31, 2027.

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed **9,235 gallons per day at a rate of 0.17 cubic feet per second** to be diverted from **January 1 to December 31** of each year. The maximum amount diverted under this permit shall not exceed **10** acre-feet per year.

10 acre-feet (3,258,510 gallons) per year pumped from well

That's: 8,927 gallons/day

For 65 households:

137 gallons/day for each household

For 150 people

60 gallons/day for each person

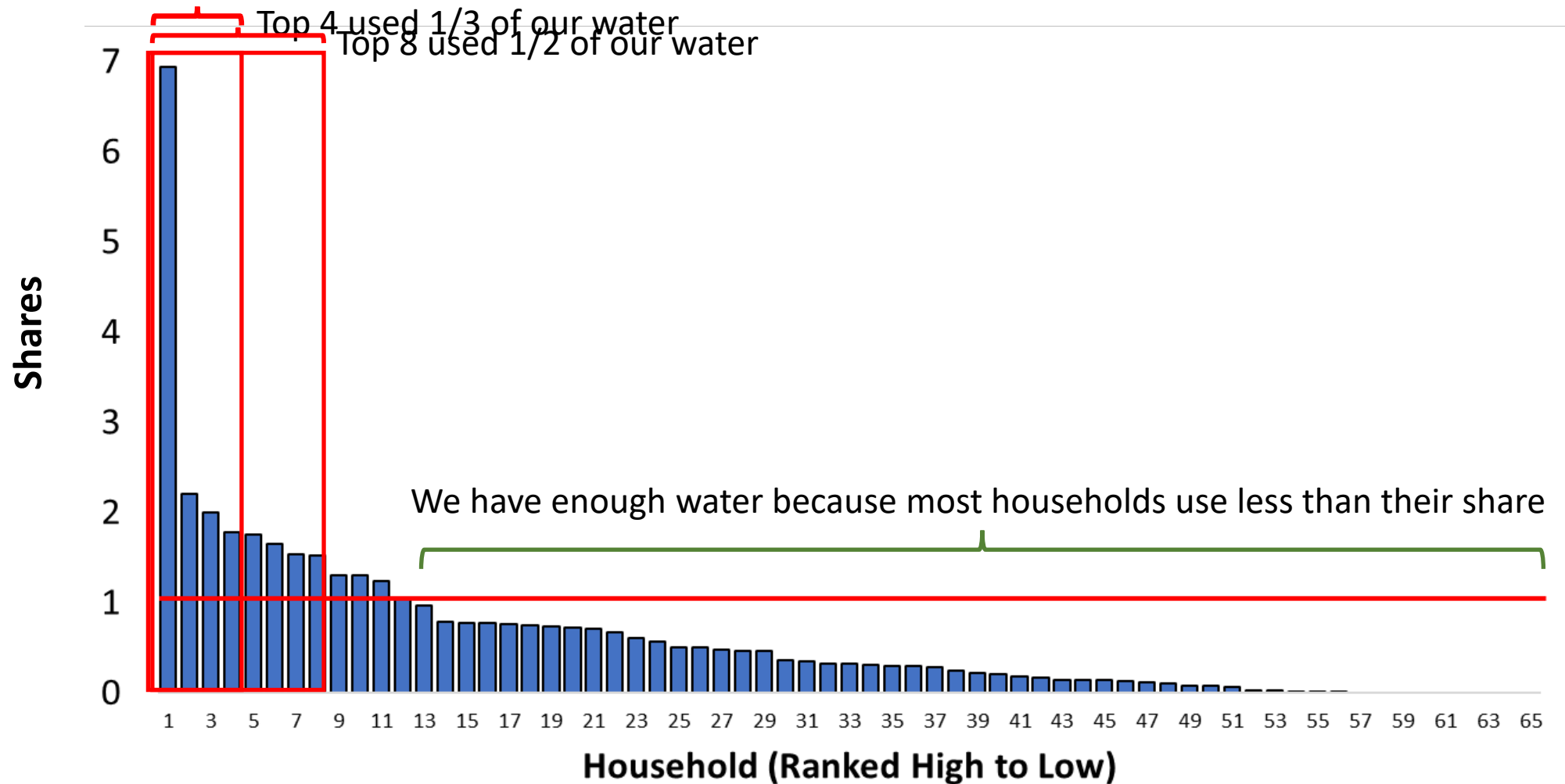
In the US average consumption is **80-100 gallons/day/person** just for indoor use

But...leaks take away some (too much) of our water

- Most water systems lose at least 20% to leaks
- Our water system has lost as much as 50% to leaks !

| <u>Leaks</u> | <u>GPD</u> | <u>Household</u> | <u>Person</u> |
|--------------|------------|------------------|---------------|
| 0% | 8,927 | 137 | 60 |
| 10% | 8,035 | 124 | 54 |
| 20% | 7,142 | 110 | 48 |
| 30% | 6,249 | 96 | 42 |
| 40% | 5,356 | 82 | 36 |
| 50% | 4,464 | 69 | 30 |

Amount of water used by each household in Q2 2021 in number of 137 gallon “shares” per day



This permit is subject to prior rights. Permittee is put on notice that, during some years, water will not be available for diversion during portions or all of the season authorized herein. The annual variations in demands and hydrologic conditions in the Russian River Watershed are such that, in any year of water scarcity, the season of diversion authorized herein may be reduced or completely eliminated by order of the State Water Board, made after notice to interested parties and opportunity for hearing.



GAVIN NEWSOM
GOVERNOR



JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

August 10, 2021

Water Right ID Login: [REDACTED]

Password: [REDACTED]

AUSTIN CREEK MUTUAL WATER COMPANY, C/O JOE NIGEL
PO BOX 86
CAZADERO, CA

ORDER TO CEASE DIVERSIONS PURSUANT TO PERMIT 21323

Enclosed with this letter is an Order directing AUSTIN CREEK MUTUAL WATER COMPANY to cease diversions under Permit 21323. The Order is being issued

Russian River Health and Safety Certification Form for A031567

Acknowledgement and Certification

Read and acknowledge each of the following statements. You must check all the boxes.

- I certify that not more than 55 gallons per person per day will be diverted 55 gpd x 150 people = 8,250 gpd
- I certify that the diversion is necessary to achieve the minimum amount of water necessary for human health and safety as defined in section 877.1, subdivision (g), after all other alternate sources of potable water have been used. To the extent other water sources are available, those sources will be used first and the total used

8/21/2021

- Information Order

Name of person signing: *

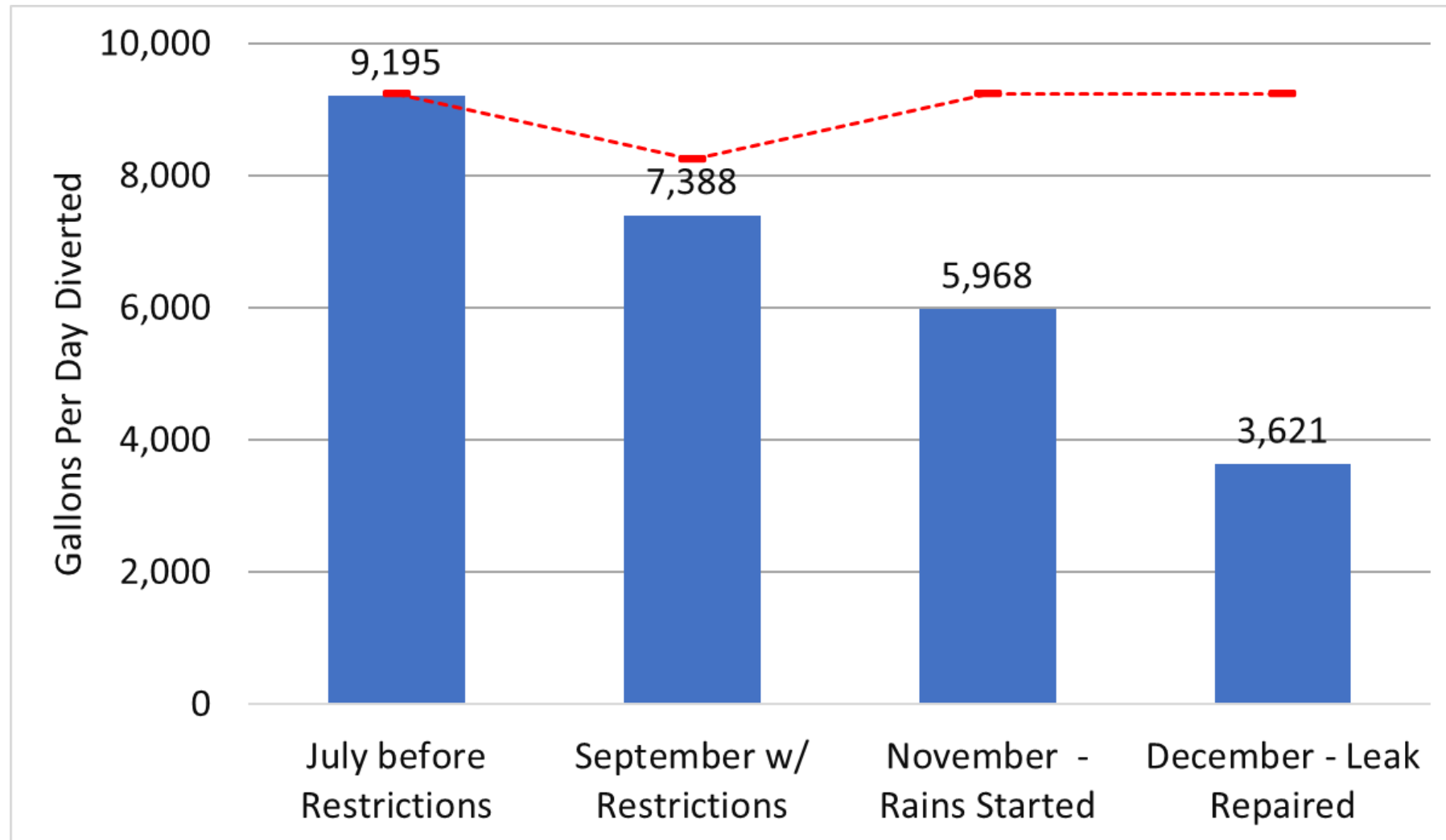
Joseph Neigel

Relationship to legal rightholder *

Vice President ACMWC

- I certify, under penalty of perjury, that all information entered into this form is true and correct to the best of my knowledge. *

Fixing a leak was more effective than restrictions



This leak was taking 26% of our water from us,
probably since 2017



Cost of Repair: \$4,939

Cost of violating our permit: \$1,000/day



What we learned from the 2021 drought

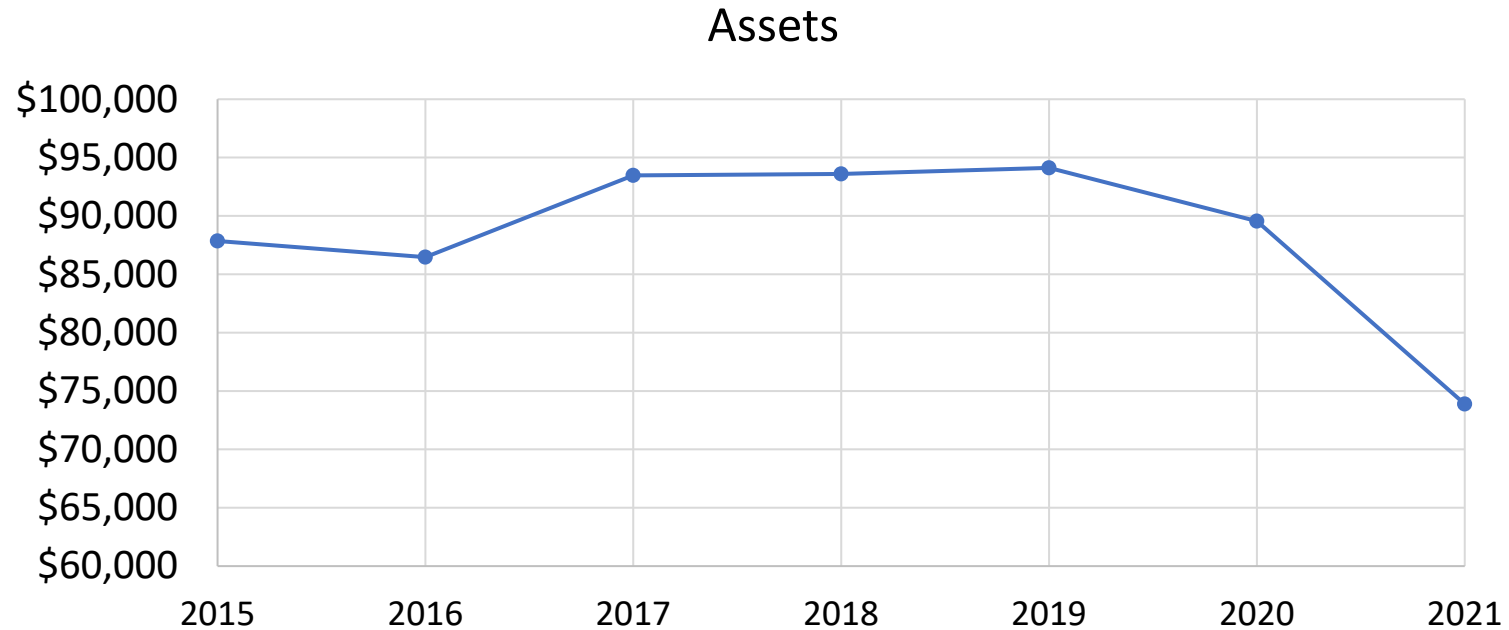
- **Outdoor watering** can put us over our permitted limit of 9,235 gpd.
- **Compliance** – when outdoor watering was not allowed, reduction of water drawn from well was only 56% of the reduction that occurred when rains started.
- **Leaks are the enemy** – our water diversion was reduced more (1.3X) by fixing the leak under Silvia Dr. than by a ban on outdoor watering.
- **We must continue to invest in leak reduction** – 3 major leaks were found and repaired last November/December – our aging pipes will continue to spring more leaks.

VI. Monthly Meter Readings and Billings

- Now being handled by Russian River Utilities
- Monthly Meter Readings
 - Catch leaks and excessive usage sooner
 - Provide timely feedback to households on their water consumption
- Monthly Billings
 - Avoid big surprises from 3 months of high use (or leaks)
 - Allows tiered rate structure to be adjusted during droughts

Expenses > Revenues for 2020 and 2021

We try to maintain a balance close to \$100,000...



...between January and August 2021 (before contract with RRU),
our assets decreased by \$14,300 (16%)

A new rate structure was urgently needed to...

- Balance budget with a projected \$15,000/year increase in fixed costs
- Start rebuilding our assets towards \$100K goal
- Base charges on the full costs of water consumption, including:
 - ✓ Delivering water from wells to homes
 - ✓ Meeting pumping, storage and delivery demands
 - ✓ Preventing breakdowns and costly emergency repairs
 - ✓ Complying with our water rights permit

Maintenance Fee (cover fixed costs)

Before November 1, 2021

- \$250 / year for lower tank members, billed quarterly (= \$20.83 / month)
- \$300 / year for upper tank members, billed quarterly (= \$25 / month)

After November 1, 2021

- \$40 / month for lower tank
- \$45 / month for upper tank

Increases revenue by \$15K / year, balances \$15K projected increase in fixed costs

Usage (Unit) charges based on:

- Direct costs of pumping water (e.g., PG&E kWh)
- Direct costs of water deliveries to prevent violation of our water-rights permit (\$75 per 1,000 gallons)
- Costs of wear and tear on infrastructure
- Allowing for 30% loss to leaks, one “share” of our permitted water is about 100 gpd for each household, or 3 units / month
- Tiered rate structure based on scenarios in which we need to have water delivered (\$75/unit) to prevent violations of our permit

Tiered Structure for Units

Before November 1, 2021

- \$5 / U up to 50 units per quarter
- \$10 / U for units over 50 per quarter
- (U = 1,000-gallon unit)

After November 1, 2021

Based on units per month

| Normal (non-drought) times | Restricted (drought) times |
|---|---|
| \$5/ U for first 1 st and 2 nd unit | \$5/ U for first 1 st and 2 nd unit |
| \$10 / U for 3 rd and 4 th unit | \$25 / U for 3 rd and 4 th unit |
| \$20 / U for 5 th and 6 th unit | \$100* / U for 5 th unit and above |
| \$40 / U for 7 th and 8 th unit | |
| \$75* / U for 9 th unit and above | |

*estimated cost of having water delivered by truck when we reach our permitted limit