



**Redwood Valley County Water District
Regular Meeting
AGENDA**

151 Laws Avenue ♦ Ukiah, CA 95482

To participate or view the virtual meeting, go to the following link: <https://us06web.zoom.us/j/81967367611>

Alternatively, you may view the meeting (without participating) by clicking on the date and name of the meeting at www.cityofukiah.com/meetings, then go to the media tab.

October 16, 2025 - 5:00 PM

1. CALL TO ORDER AND ROLL CALL

2. AUDIENCE COMMENTS ON NON-AGENDA ITEMS

The Ukiah Valley Water Authority (UVWA) - Redwood Valley County Water District members welcome input from the audience. In order for everyone to be heard, please limit your comments to three (3) minutes per person and not more than ten (10) minutes per subject. The Brown Act regulations do not allow action to be taken on audience comments on non-agenda items. If you wish to submit written comments, please provide information to the UVWA-Redwood Valley, located at 151 Laws Avenue, Ukiah, CA, 95482.

3. APPROVAL OF MINUTES

3.a. 2025-08-21 Redwood Valley CWD Minutes

Attachments:

1. 2025-08-21 Redwood Valley Minutes

4. FINANCIAL REPORTS

FINANCIAL REPORTS

4.a. Check Register August 2025

Attachments:

1. Redwood Check register August 2025

4.b. Check Register September 2025

Attachments:

1. Redwood Check register September 2025

5. ADMINISTRATIVE AND OPERATIONAL REPORTS

5.a. Presentation on Water Supply Updates.

6. UNFINISHED BUSINESS

6.a. Eel Russian Project Authority (ERPA) & IWPC

6.b. Ukiah Valley Water Authority (UVWA)

6.c. Annexation Efforts with Russian River Flood Control

6.d. Small Community Drought Relief Grant Program

Recommended Action: Recieve Opportunities and Constraints Report

Attachments:

1. Opportunities and Constraints Report

7. NEW BUSINESS

- 7.a. Consideration/Approval of Rate Study — Presentation by Mark Hildebrand

Recommended Action: Approve the rate study as submitted.

Attachments:

1. Redwood Valley 2025 Water Financial Plan 8.19.25

8. COMMITTEE MEMBER ANNOUNCEMENTS AND REPORTS

9. SET NEXT MEETING DATE

- 9.a. November 20, 2025

10. ADJOURNMENT

Please be advised that the Ukiah Valley Water Authority (UVWA)-Redwood Valley County Water District (RVCWD) needs to be notified 24 hours in advance of a meeting if any specific accommodations or interpreter services are needed in order for you to attend. UVWA-RVCWD complies with ADA requirements and will attempt to reasonably accommodate individuals with disabilities upon request. Materials related to an item on this Agenda submitted to the UVWA-RVCWD Board Members after distribution of the agenda packet are available for public inspection at the front counter at the Ukiah Civic Center, 300 Seminary Avenue, Ukiah, CA 95482, during normal business hours, Monday through Friday, 8:00 am to 5:00 pm. Any handouts or presentation materials from the public must be submitted to the clerk 48 hours in advance of the meeting; for handouts, please include 10 copies.

I hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda was posted on the bulletin board at the main entrance of the City of Ukiah City Hall, located at 300 Seminary Avenue, Ukiah, California; and at 2370 Webb Ranch Road, Redwood Valley, California; not less than 24 hours prior to the meeting set forth on this agenda.

Signed: Kim Saylor

Dated: October 9, 2025

**Ukiah Valley Water Authority
Redwood Valley County Water District
Regular Meeting
MINUTES
151 Laws Avenue Ukiah, CA 95482
<https://us06web.zoom.us/j/81967367611>
August 21, 2025**

1. **CALL TO ORDER**

The Redwood Valley County Water District held a Regular Meeting on July 14, 2025, the meeting was legally noticed on August 18, 2025. The meeting was held in person and at the following virtual link: <https://us06web.zoom.us/j/81967367611>. Chair A. Gaska called the meeting to order at 5:00 p.m. CHAIR A. GASKA PRESIDING.

ROLL CALL

Roll was taken with the following **Directors Present:** Ken Todd, Bree Klotter, Tom Schoeneman, , and Chair Adam Gaska. **Directors Absent:** Derek Dahlen. Staff Present: Kim Saylor, Deputy Clerk. GM Walker.

2. **AUDIENCE COMMENTS ON NON-AGENDA ITEMS**

No public comments were received.

3. **APPROVAL OF MINUTES**

Approval of the Minutes of 2025-07-17 Redwood Valley Minutes.

Motion/Second: Schoeneman/ Todd to approve the Minutes of June 19, 2025, a Regular Meeting. Motion **carried** by the following Roll Call votes: **AYES:** K. Todd, T. Schoeneman, B. Klotter, and Chair, A. Gaska. **NOES:** None. **ABSENT:** D. Dahlen. **ABSTAIN:** None.

4. **FINANICAL REPORT**

Quarterly Report. Informational. Olga Keough, Controller, City of Ukiah gave a presentation on how to read the financial statements.

5. **ADMINISTRATIVE AND OPERATIONAL REPORTS GENERAL**

MANAGEMENT REPORT:

GM Walker reported that the water sales report will be reversed and rebilled. Water usage is down overall.

OFFICE MANAGEMENT REPORT:

6. **UNFINISHED BUSINESS**

- a Small Community Drought Relief Grant Project.
 - i. Project conclusion date is end of December.
- b Report on Ukiah Valley Water Authority (UVWA) Next Meeting Sept 4, 2025, at 6:00pm.
- c Annexation Efforts with Russian River Flood Control District.
- d Eel Russian Project Authority (ERPA) & IWPC: Discussion and Possible Action to pay IWPC annual Invoices.

Motion/Second: Klotter/ Todd to approve paying half of the invoice now (50,000) and balance due by the end of the year. Motion **carried** by the following Roll Call votes: **AYES:** K. Todd, T. Schoeneman, B. Klotter, and Chair, A. Gaska. **NOES:** None. **ABSENT:** D. Dahlen. **ABSTAIN:** None.

7. **NEW BUSINESS**

- 8.a. Discuss the Rate and Fee study that (Mark Hildebrand) is doing regarding Budgeting for IWPC/NERF/ERPA and Incorporating it into our Rates. Information given.
- 8.b. Discussion and Possible Action Regarding a Public Workshop to Discuss RVCWD's Efforts and Status Regarding being Annexed into Russian River Flood Control District. A joint RVWD & MCRRFC & CID Meeting will be held on Monday September 8, 2025 at 5:30 at Barra Winery.

Motion/Second: Klotter/ Schoeneman to approve Public Workshop to Discuss RVCWD's Efforts and Status Regarding being Annexed into Russian River Flood Control District. Motion carried by the following Roll Call votes: **AYES:** K. Todd, T. Schoeneman, B. Klotter, and Chair, A. Gaska. **NOES:** None. **ABSENT:** D. Dahlen. **ABSTAIN:** None.

- 8.c. Comparison of how much water we are pumping from the Lake, going through the Intertie, and how much water we are billing for. Checking the System for Loss/Theft and whether we should consider a Water System Loss Audit. Information given.
- 8.d. Notice of Intent: Consideration of Well Water Main was awarded to Wipf.

Motion/Second: Klotter/ Todd to approve Notice of Intent: Consideration of Well Water Main was awarded to Wipf. Motion carried by the following Roll Call votes: **AYES:** K. Todd, T. Schoeneman, B. Klotter, and Chair, A. Gaska. **NOES:** None. **ABSENT:** D. Dahlen. **ABSTAIN:** None.

COMMITTEE MEMBER ANNOUNCEMENTS AND REPORTS

IWPC Meeting Monday July 23, 2025.

8. **SET NEXT MEETING DATE:** September 18, 2025

Presenter: Kim Saylor, Deputy Clerk

9. **ADJOURNMENT**

There being no further business, the meeting was adjourned at 7:02 p.m.

_____ Date: _____
Kim Saylor Deputy Clerk

Redwood Water District Check Register for August 2025

Vendor's Name	Invoice number	Description	Account description	Total amount
ALPHA ANALYTICAL LABORATORIES INC	5067525-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$110.00
ALPHA ANALYTICAL LABORATORIES INC	50748584-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$110.00
ALPHA ANALYTICAL LABORATORIES INC	5077173-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$110.00
ALPHA ANALYTICAL LABORATORIES INC	5078613-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$135.00
ALPHA ANALYTICAL LABORATORIES INC	5068402-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$135.00
ALPHA ANALYTICAL LABORATORIES INC	5074944-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$135.00
ALPHA ANALYTICAL LABORATORIES INC	5078449-RVCWD	MISC. LABORATORY WORK AS NEEDED	CONTRACTUAL SERVICES	\$657.00
AT&T	23816930	RVCWD ADMIN PHONE	TELEPHONE	\$439.64
AT&T MOBILITY	875108535X081425	VOICE & DATA CELL PHONES	TELEPHONE	\$18.41
BADGER METER INC	90065641	RETURN: BEACON MBL HOST UNIT, ORION CELL SERV UNIT	SOFTWARE	(\$135.87)
BADGER METER INC	80200335	BEACON MBL HOSTING SERV UNIT, ORION CELL SRV UNIT	SOFTWARE	\$135.87
BADGER METER INC	80203286	BEACON MBL HOSTING SERV UNIT, ORION CELL SRV UNIT	SOFTWARE	\$137.05
BADGER METER INC	80206310	ORION CELLULAR LTE SERV UNIT, HOSTING UNIT	SOFTWARE	\$137.16
CALPELLA COUNTY WATER DISTRICT	172	WATER TRANSFER CHARGE	ELECTRIC	\$1,471.10
CALPELLA COUNTY WATER DISTRICT	173	WATER TRANSFER CHARGE	ELECTRIC	\$1,506.22
CALPELLA COUNTY WATER DISTRICT	175	WATER TRANSFER CHARGE	ELECTRIC	\$1,685.98
CALPELLA COUNTY WATER DISTRICT	171	WATER TRANSFER CHARGE	ELECTRIC	\$1,932.46
COLLIN PHENICIE	1080	BACKFLOW TESTING, DEVICE REPAIR	CONTRACTUAL SERVICES	\$2,360.00
DEEP VALLEY SECURITY	23389	MONTHLY MONITORING-RVWD	CONTRACTUAL SERVICES	\$72.95
DEEP VALLEY SECURITY	25181	MONTHLY MONITORING-RVWD	CONTRACTUAL SERVICES	\$72.95
ENERGEA REDWOOD LLC	19	ELECTRIC POWER GENERATION	FEES	\$529.56
HAPPY CYCLING LLC	64653	INTERNET SERVICES	CONTRACTUAL SERVICES	\$110.00
HAPPY CYCLING LLC	65831	INTERNET SERVICES	CONTRACTUAL SERVICES	\$110.00
HAPPY CYCLING LLC	65325	INTERNET SERVICES	CONTRACTUAL SERVICES	\$115.00
HD SUPPLY INC	INV00770870	ELECTRODE STORAGE SOLUTION, TURBIDITY STANDARDS	SUPPLIES	\$940.82
INLAND WATER & POWER COMM	2025.5A.1	POTTER VALLEY PROJECT (RVCWD) PORTION	CONTRACTUAL SERVICES	\$36,544.00
JD GENERAL ENGINEERING CORP	RW-25-01	AC PATCH N STATE ST: RVWD	CONTRACTUAL SERVICES	\$2,500.00
LACO ASSOCIATES	54103	RVCWD: DWR GRANT PROJECT MANAGEMENT	CONTRACTUAL SERVICES	\$5,330.00
LARRY WALKER ASSOCIATES INC	00713.01-13	RVCWS NEW WATER SUPPLY	CONTRACTUAL SERVICES	\$180.75
LARRY WALKER ASSOCIATES INC	00713.01-14	RVCWD NEW WATER SUPPLY	CONTRACTUAL SERVICES	\$29,336.60
MCMaster-CARR SUPPLY CO	48426009	STRUT-MOUNT METAL ROUTING CLAMP	SUPPLIES	\$43.96
MCMaster-CARR SUPPLY CO	48128821	PVC PIPE FITTING WITH COLLAR FOR WATER, 90 ELBOW	SUPPLIES	\$186.69
MICHAEL A CELENTANO CPA	5820	AUDIT: REDWOOD VALLEY COUNTY WATER DISTRICT	CONTRACTUAL SERVICES	\$1,150.00
MINASIAN LAW LLP	9064 JUL 25	LEGAL SERVICES	LEGAL SERVICES/EXPENSES	\$333.75
MINASIAN LAW LLP	9064 MAR 25	LEGAL SERVICES	LEGAL SERVICES/EXPENSES	\$810.00
MINASIAN LAW LLP	9064 FEB 25	LEGAL SERVICES	LEGAL SERVICES/EXPENSES	\$1,113.75
PACE SUPPLY CORPORATION	210676115	4X 20 PVC C900 DR18 BLUE PIPE, ULTRA FLEX CPLG FOR	SUPPLIES	\$1,012.67
PACE SUPPLY CORPORATION	210681955	ULTRA FLEX CPLG FORD	SUPPLIES	\$1,070.75
PERFORMANCE PUMP SERVICE INC	8773	TRIP TO LAKE MENDO PUMP RESET BOWLS ON 3RD	CONTRACTUAL SERVICES	\$173.25
PG&E CO	7482-2 MAY 25	PACIFIC GAS & ELECTRIC	PG&E	\$594.29
PG&E CO	7482-8 APR 25	PACIFIC GAS & ELECTRIC	PG&E	\$782.99
PG&E CO	7482-8 MAR 25	PACIFIC GAS & ELECTRIC	PG&E	\$1,381.73

PG&E CO	7482-2 JAN 25	PACIFIC GAS & ELECTRIC	PG&E	\$1,655.40
PG&E CO	7482-8 FEB 25	PACIFIC GAS & ELECTRIC	PG&E	\$1,946.66
PG&E CO	7482-8 JUL 25	PACIFIC GAS & ELECTRIC	PG&E	\$2,270.44
PG&E CO	7362-5 JUL 25	PACIFIC GAS & ELECTRIC	PG&E	\$18.49
PG&E CO	6066-1 MAR 25	PACIFIC GAS & ELECTRIC	PG&E	\$38.09
PG&E CO	6066-1 APR 25	PACIFIC GAS & ELECTRIC	PG&E	\$94.52
PG&E CO	6066-1 JAN 25	PACIFIC GAS & ELECTRIC	PG&E	\$105.22
PG&E CO	6066-1 MAY	PACIFIC GAS & ELECTRIC	PG&E	\$108.54
PG&E CO	6066-1 FEB 25	PACIFIC GAS & ELECTRIC	PG&E	\$111.49
PG&E CO	6066-1 JUL 25	PACIFIC GAS & ELECTRIC	PG&E	\$217.40
PG&E CO	4689-3 APR 25	PACIFIC GAS & ELECTRIC	PG&E	\$330.01
PG&E CO	4689-3 JAN 25	PACIFIC GAS & ELECTRIC	PG&E	\$358.62
PG&E CO	4689-3 MAR 25	PACIFIC GAS & ELECTRIC	PG&E	\$363.60
PG&E CO	4689-3 JUL 25	PACIFIC GAS & ELECTRIC	PG&E	\$367.22
PG&E CO	4689-3 FEB 25	PACIFIC GAS & ELECTRIC	PG&E	\$372.23
PG&E CO	4689-3 MAY 25	PACIFIC GAS & ELECTRIC	PG&E	\$376.06
PG&E CO	2653-6 APR 25	PACIFIC GAS & ELECTRIC	PG&E	\$1,957.74
PG&E CO	2653-6 MAR 25	PACIFIC GAS & ELECTRIC	PG&E	\$2,057.11
PG&E CO	2653-6 JAN 25	PACIFIC GAS & ELECTRIC	PG&E	\$2,149.26
PG&E CO	2653-6 MAY 25	PACIFIC GAS & ELECTRIC	PG&E	\$2,307.57
PG&E CO	2653-6 FEB 25	PACIFIC GAS & ELECTRIC	PG&E	\$2,395.99
PG&E CO	2653-6 JUL 25	PACIFIC GAS & ELECTRIC	PG&E	\$3,197.25
PG&E CO	4919-0 FEB 25	PACIFIC GAS & ELECTRIC	PG&E	\$15,790.82
PG&E CO	4919-0 JAN 25	PACIFIC GAS & ELECTRIC	PG&E	\$16,546.30
PG&E CO	4919-0 MAR 25	PACIFIC GAS & ELECTRIC	PG&E	\$18,359.69
PG&E CO	4919-0 APR 25	PACIFIC GAS & ELECTRIC	PG&E	\$20,760.53
PG&E CO	4919-0 MAY 25	PACIFIC GAS & ELECTRIC	PG&E	\$40,494.46
PG&E CO	4919-0 JUL 25	PACIFIC GAS & ELECTRIC	PG&E	\$45,361.05
PUBLIC SERVICE DEPARTMENT		9204 WATER SERVICES: RVCWD	PERFORMANCE AGREEMENTS	\$3,637.15
PUBLIC SERVICE DEPARTMENT		9219 WATER SERVICES: RVCWD	PERFORMANCE AGREEMENTS	\$32,918.79
PUBLIC SERVICE DEPARTMENT	99946-001 JUL 25	WATER SERVICES: RVWD	WATER	\$11,627.80
REDWOOD WASTE SOLUTIONS INC	177037603U039	GARBAGE SERVICES: 2370 WEBB RANCH RD	CONTRACTUAL SERVICES	\$155.60
RESPECTECH		53105 PHONE SYSTEM SERVICES	TELEPHONE	\$108.00
RINEHART OIL INC	CL47473	FUEL CARD CHARGES AS NEEDED	FUEL & FLUIDS	\$442.60
RINEHART OIL INC	CL47625	FUEL CARD CHARGES AS NEEDED	FUEL & FLUIDS	\$457.44
RINEHART OIL INC	CL47764	FUEL CARD CHARGES AS NEEDED	FUEL & FLUIDS	\$600.53
TRI-CITIES ANSWERING SERVICE & CALL CENTER INC	8.72407E+11	ANSWERING SERVICES	TELEPHONE	\$90.00
TRI-CITIES ANSWERING SERVICE & CALL CENTER INC	8.72408E+11	ANSERING SERVICE: RVCWD	TELEPHONE	\$125.00
WEEKS DRILLING AND PUMP CO	1258113.1	555 KUNZLER RANCH RD DRILLING	CONTRACTUAL SERVICES	\$43,713.13
WEEKS DRILLING AND PUMP CO	1258113 1	555 KUNZLER RANCH ROAD PROJECT: RVCWD	CONTRACTUAL SERVICES	\$43,713.13
WILLOW COUNTY WATER DIST		1094 RVCWD: MISC BILLS	COMPUTER AND TECHNOLOGY	\$833.28
WILLOW COUNTY WATER DIST		1094 RVCWD: MISC BILLS	FEES	\$137.95
WILLOW COUNTY WATER DIST		1094 RVCWD: MISC BILLS	MEMBERSHIPS & SUBSCRIPTIOI	\$220.00
			Total for August	414,468.64

Redwood Water District Check Register for September 2025

Vendor's Name	Invoice number	Description	Account description	Total amount
ALPHA ANALYTICAL LABORATORIES INC	5084289-RVCWD	MISC. LABORATORY WORK AS NEEDE	CONTRACTUAL SERVICES	\$110.00
ALPHA ANALYTICAL LABORATORIES INC	5087333-RVCWD	MISC. LABORATORY WORK AS NEEDE	CONTRACTUAL SERVICES	\$110.00
ALPHA ANALYTICAL LABORATORIES INC	5086751-RVCWD	MISC. LABORATORY WORK AS NEEDE	CONTRACTUAL SERVICES	\$135.00
ALPHA ANALYTICAL LABORATORIES INC	5085941-RVCWD	MISC. LABORATORY WORK AS NEEDE	CONTRACTUAL SERVICES	\$657.00
ALPHA ANALYTICAL LABORATORIES INC	5088440-RVCWD	MISC. LABORATORY WORK AS NEEDE	CONTRACTUAL SERVICES	\$1,502.00
AT&T	23964707	ALARM LINES: REDWOOD VALLEY	UTILITIES	\$61.86
AT&T MOBILITY	875108535X091425	VOICE & DATA CELL PHONES	TELEPHONE	\$18.41
BADGER METER INC	80209362	ORION CELLULAR LTE SERV, BEACON MBL SERV UNIT	SOFTWARE	\$137.17
CALPELLA COUNTY WATER DISTRICT	25-Jul	WATER TRANSFER CHARGE	ELECTRIC	\$1,611.80
CALPELLA COUNTY WATER DISTRICT	25-Aug	WATER TRANSFER CHARGE	ELECTRIC	\$1,989.32
DEEP VALLEY SECURITY	26315	MONTHLY MONITORING: RVCWD	CONTRACTUAL SERVICES	\$72.95
FRIEDMANS HOME IMPROVEMENT	INV20531858	TWIST TOZZLE, HOSE COUPLER, JET NOZZLE, HOSE MNDR	SUPPLIES	\$68.60
HAPPY CYCLING LLC	66489	INTERNET SERVICES	CONTRACTUAL SERVICES	\$115.00
HILDEBRAND CONSULTING LLC	750	JOINT WATER UTILITIES RATE STU	CONTRACTUAL SERVICES	\$3,500.00
HILDEBRAND CONSULTING LLC	743	JOINT WATER UTILITIES RATE STU	CONTRACTUAL SERVICES	\$5,250.00
HOME DEPOT CREDIT SERVICES	4011507	24' ALUMINUM EXTENSION LADDER	SUPPLIES	\$325.54
INLAND WATER & POWER COMM	2025.5B	SW OVERHEAD EXP ON PV WATER RELIABILITY STUDY	CONTRACTUAL SERVICES	\$13,456.00
LACO ASSOCIATES	54170	RVCWD: DWR GRANT PROJECT MANAGEMENT	CONTRACTUAL SERVICES	\$13,930.60
LARRY WALKER ASSOCIATES INC	00713.01-15	RVCWD NEW WATER SUPPLY	CONTRACTUAL SERVICES	\$10,421.77
MENDOCINO COUNTY RUSSIAN RIVER FLOOD CONTROL	3291	RRFC GM ANNEXATION PREP: RVCWD	FEES	\$6,700.14
MICHAEL A CELENTANO CPA	5832	AUDIT: REDWOOD VALLEY COUNTY WATER DISTRICT	CONTRACTUAL SERVICES	\$1,600.00
PACE SUPPLY CORPORATION	210720761	NIPPLE PVC SCH CUT, PVC 80 SOC 90 ELL	SUPPLIES	\$43.30
PACE SUPPLY CORPORATION	29892881	16 CPLG HIMAX	SUPPLIES	\$4,075.34
PACE SUPPLY CORPORATION	210328463	CONN BADGER, UNDER LID INSTALL KIT	SUPPLIES	\$105,888.56
PG&E CO	7362-5 AUG 25	PACIFIC GAS & ELECTRIC	PG&E	\$20.77
PG&E CO	6066-1 AUG 25	PACIFIC GAS & ELECTRIC	PG&E	\$324.91
PG&E CO	4689-3 AUG 25	PACIFIC GAS & ELECTRIC	PG&E	\$377.36
PG&E CO	2653-6 AUG 25	PACIFIC GAS & ELECTRIC	PG&E	\$3,349.28
PUBLIC SERVICE DEPARTMENT	9440	WATER SERVICES: REDWOOD VALLEY	PERFORMANCE AGREEMENTS	\$3,637.15
PUBLIC SERVICE DEPARTMENT	9446	WATER SERVICES: REDWOOD VALLEY	PERFORMANCE AGREEMENTS	\$32,918.79
PUBLIC SERVICE DEPARTMENT	99946 AUG 25	CITY UTILITIES	WATER	\$14,349.10
RESPECTECH	53283	PHONE SYSTEM SERVICES	TELEPHONE	\$108.00
RESPECTECH	53463	PHONE SYSTEM SERVICES	TELEPHONE	\$108.00
RINEHART OIL INC	CL48055	FUEL CARD CHARGES AS NEEDED	FUEL & FLUIDS	\$441.77
RINEHART OIL INC	CL47909	FUEL CARD CHARGES AS NEEDED	FUEL & FLUIDS	\$533.41
ROBERTO MENDOZA	1164	RV TREATMENT PLANT: CONNECTED 2 CONTROL WIRES	CONTRACTUAL SERVICES	\$700.00
RYAN WADE	LAUGHLIN WAY RV	RVCWD: PROJECT LAUGHLIN WAY	CONTRACTUAL SERVICES	\$6,100.00
TRI-CITIES ANSWERING SERVICE & CALL CENTER INC	8.72409E+11	ANSWERING SERVICE: RWVCWD	TELEPHONE	\$80.70
WEEKS DRILLING AND PUMP CO	1258113 3	555 KUNZLER RANCH ROAD	CONTRACTUAL SERVICES	\$43,713.11
WEEKS DRILLING AND PUMP CO	1258113 2	555 KUNZLER RANCH ROAD	CONTRACTUAL SERVICES	\$43,713.13
WIPF CONSTRUCTION LLC	14738	RIDGEVIEW DRIVE WATER LINE: RVWD	CONTRACTUAL SERVICES	\$4,645.00
			Total for September	326,900.84

Opportunities and Constraints Report

Lake Mendocino Surface Water Intake Infrastructure Lowering

October 9, 2025

Prepared for:
Redwood Valley County Water District

Prepared By:
LACO Associates, Inc
21 W Fourth Street
Eureka, California 95501
707-443-5054

Project No. 8049.03

LACO

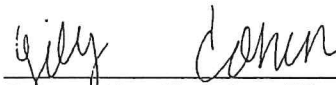
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Prepared by: Lily Cohen, EIT


Reviewed by: Rod Wilburn, PE

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1.0 INTRODUCTION

This report presents a preliminary evaluation of constraints, opportunities, and data gaps associated with lowering the elevation of the Redwood Valley County Water District (RVCWD) surface water intake infrastructure connected to the Lake Mendocino pump station. This report aims to explore potential infrastructure modifications that achieve RVCWD's stated goal of lowering the elevation of the surface water intake infrastructure to improve access to water during times of drought and present the opportunities and constraints of the identified options. This report will provide the RVCWD Board of Directors with information and context to determine appropriate next steps for evaluating the actual feasibility and constructability of lowering the intake infrastructure based on recent bathymetric data collected in 2014 from the U.S. Army Corps of Engineers, as-built documentation from 1977 of the water intake infrastructure, and a contextual analysis of the existing site conditions.

The Lake Mendocino pump station and intake infrastructure are located at the northwesternmost bend in the Lake, and the exact location can be found on the location map in Appendix 1. The lake intake lowering effort supports long-term water supply resilience for RVCWD customers. This report outlines potential alternatives for concept design development, funding acquisition strategies, and factors that require further consideration to determine the appropriate next steps.

2.0 BACKGROUND

2.1 RVCWD Services and Location

Redwood Valley is a census-designated place in Mendocino County, California, 9 miles north of the City of Ukiah. The community contains a population of approximately 2,117 people (US Census Bureau 2023). The RVCWD was established January 16, 1964, and began serving as a dual distribution system in 1979 for both irrigation and domestic water services. RVCWD's service area is roughly 15 square miles and serves a total of 1,105 equivalent dwelling units (EDU) and 197 agricultural customers (Russian River Flood Control & Water Conservation Improvement District 2025). According to the most recent RVCWD Sphere of Influence from 2016 (Mendocino LAFCo 2016), RVCWD has historically delivered approximately 750 acre-feet per year (AFY) for residential and commercial uses, and 1,450 AFY for agricultural purposes for a combined annual demand of 2,200 AFY. Due to uncertain supply, RVCWD is currently under a court-ordered moratorium for domestic connections and a board-initiated moratorium for irrigation connections (Mendocino LAFCo 2016). The June 2025 Redwood Valley Annexation Draft Plan explains that since 2021, RVCWD has implemented a limited municipal supply of 55 gallons per person per day (assuming 3 people per EDU), which equates to 204 AFY for domestic use, driven by physical limitations in the capacity of water distribution infrastructure, which interties RVCWD with neighboring districts. This represents a significant decline in residential and commercial uses compared to the standard service in 2016.

2.2 Existing Infrastructure

RVCWD's current primary water supply is sourced from a treated municipal intertie with Millview County Water District, a recent water purchase agreement with the Mendocino County Russian River Flood Control and Water Conservation District (RRFC), and surplus RRFC water delivered through RVCWD's own infrastructure, including the Lake Mendocino pump station which includes three separate pumps, Lake

Mendocino water intake infrastructure, a holding reservoir, and a nearby water treatment plant discussed in this memo.

The existing Lake Mendocino water intake infrastructure features three separate 500-horsepower (HP) pumps, each with intake pipes/screens, that exit the wet well of the cylindrical concrete structure at a 90-degree angle. The intake structures in the lake are stacked vertically at different depths. According to the review of the RVCWD discharge plans, dated 1977, the current intake system collects water from the three existing 42-inch intake barrels and discharges into the existing pump house via the three horizontal 16-inch lateral runs. The laterals then discharge the water into a water collection pool at the bottom of the pump house. The water is then pumped up to the top of the pump house, where the three existing pumps are located. The pumping of water to the top of the building creates a syphon for the 16-inch laterals to pull water from the elevations at which they were built. For the original 1977 full site plans of the Lake Mendocino pump house and intake infrastructure, see *Appendix 2*. For a plan view of the existing intake infrastructure placement, see *Appendix 3*. This existing infrastructure will pose limitations on the feasibility of alternative options and constructability.

2.3 Water Rights

RVCWD is burdened by limited access to reliable water due to water rights complexities and legal ownership of water stored within Lake Mendocino:

- RVCWD holds a largely unavailable right to divert up to 4,900 Acre-Feet (AF) per year from Lake Mendocino between November 1st and April 30th—but only when both flow and flood storage thresholds are met. These conditions typically do not occur in the vast majority of water years.
- RVCWD may purchase surplus water from RRFC per a 1980 court judgment, since only a minority of the RVCWD service area is encompassed by RRFC's jurisdictional boundary. This surplus water is not guaranteed, especially during droughts, and was entirely unavailable in 2021-2022, leaving agricultural users with no deliveries. This surplus water comes from the Lake Mendocino pumping station.
- In May 2025, RVCWD and RRFC entered a Uniform Water Supply & Purchase Agreement (UWS&PA) to provide 328.85 AF of water supply to serve the small overlap area for the two Districts. Should RRFC successfully modify its boundaries to include the entirety of RVCWD's service area, RVCWD can request to expand the contractual place of use of its entire service area to be supplied by water stored in Lake Mendocino.
- The Potter Valley Project decommissioning is expected to reduce future water availability by limiting trans-basin diversions from the Eel River into the Russian River system.

Moreover, climate-driven drought and lake level fluctuations have made RVCWD's current intake elevation unreliable. The intake has been unable to draw water during extended dry periods, despite theoretical access to storage.

With the modification of RRFC's boundary becoming a possibility and a more stable water rights framework becoming available through a UWS&PA, lowering the intake elevation could represent a complementary investment to facilitate year-round functionality and water supply reliability.

3.2 ALTERNATIVE 2: Floating Intake

For Alternative 2, involves the installation of a floating platform or pontoon raft anchored to the lakebed. The platform supports intake pipes with self-cleaning wedge-wire screens or velocity caps. Screens are typically fitted with self-cleaning systems to minimize fouling, but periodic inspections and manual cleaning may still be required under certain lake conditions. Intake pipes are suspended just below the surface, tracking reservoir level automatically as it rises and falls. Water flows through a flexible HDPE pipeline/hose from the floating intake platform back to the existing pump house. This alternative may require a supplemental pump or the relocation of an existing pump to the platform to deliver water to the existing pump house. The pipeline would be designed with weight and slack to accommodate vertical and horizontal movement. The platform and pipes would be anchored in place using cables, chains, or helical anchors and would be serviced via boat or walkway. Optional solar panels or floating conduits are necessary to provide power for the cleaning/monitoring equipment. See Figure 3 below for an example image of a floating lake water intake system.

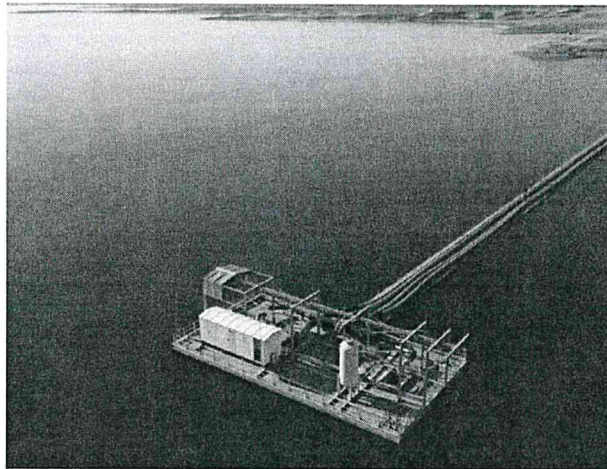


Figure 3: Example Floating Water Intake and Pump Station with Floating Bridge (HSB Marine)

3.3 ALTERNATIVE 3: Submerged Screened Manifold

This alternative would replace some or all of the existing 42-inch intake barrels with a large-diameter submerged manifold. The manifold would be installed horizontally on the lake bottom at a lower elevation, ballasted with concrete or anchors. For reference, the three existing intake barrels are located at elevations of 710, 700, and 690 feet. The new manifold elevation would likely be close to 674 feet in elevation. The manifold would have multiple intake ports utilizing self-cleaning wedge-wire screens or velocity caps to distribute withdrawal flow. Screens typically feature self-cleaning systems to minimize fouling; however, periodic inspections and manual cleaning may still be necessary, depending on the lake's conditions.

This alternative would connect the manifold to the three existing 16-inch pump laterals entering the pump house with a water-tight connection. The siphoning mechanism of the current system would likely have to be abandoned. This solution would collect water from deeper reservoir levels, ensuring supply even at low lake levels; however, the amount of raw water that could be pumped may be limited by the size of the existing infrastructure.

This alternative would also require a direct connection to the 16-inch intake laterals or add/replace with a new pump system connecting them to the 16-inch laterals. The existing pump configuration is likely insufficient in providing the necessary suction for the needed water intake; this is because the performance of the pump would be degraded by the additional length of pipe and additional static pressure at the greater depth.

See Figure 4 below for an example of a Submerged Screened Intake System.

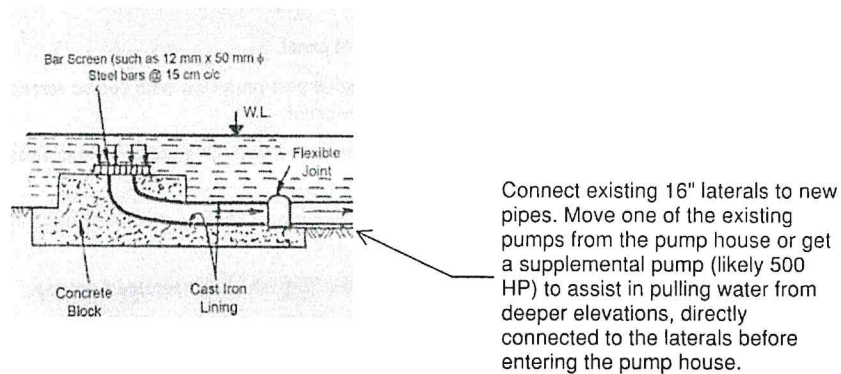


Figure 4: Example of a Submerged Screened Intake System (Civil Poriyaan)

4.0 OPPORTUNITIES

Each intake infrastructure alternative presents unique opportunities to improve the RVCWD's ability to reliably access water from Lake Mendocino under variable lake levels. Opportunities are framed in terms of operational resilience, cost efficiency, environmental performance, and long-term adaptability. They highlight how each option could extend infrastructure life, enhance water quality protection, reduce maintenance demands, or provide flexibility for future system modifications. By identifying these benefits, the District can better evaluate which solution aligns with both present and future supply needs.

4.1 Physical

- Existing pump house infrastructure reduces constructability needs but may need to be adapted for a new system.
- Three separate laterals provide flexibility in phasing or partial modification during construction.
- Options such as submerged manifolds or rigid extensions can be tailored to site bathymetry and hydraulic needs.
- Upgrades provide opportunities to install modern intake screens to meet state and federal fish protection standards.

4.2 Operational

- Maintain a reliable agricultural supply during extreme drought.
- Provide emergency backup for domestic service when intertie capacity is constrained.
- Reduce dependency on surplus-only purchasing arrangements.
- Improve capacity for frost protection water withdrawals in early spring.
- Access to previously unavailable water supply.

- Resilience to future water supply access due to climate change and Potter Valley Project decommissioning.
- Availability of durable, corrosion-resistant materials (e.g. HDPE, coated steel) can improve lifespan and reduce maintenance.

4.3 Regulatory and Institutional

- Aligns with RVCWD's future service capacity expansion under the Ukiah Valley Water Authority (UVWA).
- Supports broader SWRCB goals under the Safe and Affordable Funding for Equity and Resilience (SAFER) Program.
- Strengthens the case for full contractual use under RRFC License 13898 following potential annexation.

4.4 Alternative Specific Opportunities

Some alternatives include:

- Alternative 1: Extending Intake Laterals
 - Lowest estimated initial capital cost
 - Potentially preserves existing 42-inch water intake barrels or replaces them with new modern fish screens, depending on current condition
 - Can be staged in phases – lower one lateral at a time to reduce outage
 - Shorter design & fabrication lead time compared to full replacement options
 - Opportunity to add instrumentation at tie-in for monitoring
 - Lower design and fabrication complexity
- Alternative 2: Floating Intake
 - Adjustable to variable water levels
 - Easy access for maintenance – screens can be serviced from the floating platform
 - Easy to install from shore
 - Minimal lakebed disturbance – fewer impacts to benthic habitat during installation
 - Modular and potentially deployable faster than extensive lakebed work
 - Can implement automated debris-cleaning systems
 - Improved sampling & monitoring – sensors easily installed on the floating platform
- Alternative 3: Submerged Screened Manifold
 - Lowest exposure to debris and fish
 - Easier to protect intake with engineered scour protection and anchor design
 - Consolidates maintenance into one location – easier to manage flows and fouling control
 - Can locate intake deeper to avoid low reservoir levels/improve water quality intake
 - More flexible hydraulic control – integrated balancing valves, redundancy, and instrumentation
 - Flexible for future expansion or redundancy
 - Better ability to integrate fish/juvenile protection screens at the manifold
 - Can include remote-actuated valves & monitoring for operational flexibility

5.0 CONSTRAINTS

While each intake infrastructure alternative offers potential benefits, they also come with technical, financial, and operational constraints that must be carefully considered. Constraints include design and constructability challenges, maintenance access in submerged or remote conditions, compatibility with existing pumping systems, and potential permitting or environmental limitations. Identifying these limitations ensures that decision-making accounts for long-term feasibility, cost impacts, and regulatory compliance, helping the District weigh tradeoffs between immediate performance gains and future risks.

5.1 Physical

- Intake structural limits may require reinforcement or a separate anchoring system for pipe extensions.
- Hydraulic analysis of the existing pump to make sure that the pump's performance can handle lowering the intake elevation and avoid cavitation. A new pump may be required.
- Existing welded steel barrels may present welding and modification challenges in-water.
- Lower elevations are more prone to sediment accumulation, affecting intake performance and increasing O&M costs
- Lake bottom slopes and access logistics may limit construction timing to low-water windows or use of cofferdams/similar equipment
- Visual aesthetics might also be a factor in design constraints

5.2 Financial

- RVCWD is currently under cost pressure from aging infrastructure and a limited revenue base. While funding from DWR's Small Community Drought Relief Program is covering the cost of this opportunity and constraints analysis, additional funding would be needed for further analysis, design, permitting, and implementation of intake infrastructure modification.
- Lifecycle costs should include sediment removal, inspection/maintenance access, and power needs.
- As stated above, the three alternatives are listed from lowest to highest upfront capital costs:
 - Alternative 1 – Extending Intake Laterals
 - Alternative 2 – Floating Intake
 - Alternative 3 – Submerged Screened Manifold

A detailed cost estimate would require further analysis and is not included in the scope of this opportunities and constraints report.

5.3 Permitting/Environmental

- Project is likely to require clearance under the California Environmental Quality Act (CEQA) for in-lake modifications.
- Fish screens - if the existing 42-inch intake barrels are to be reused, the design team should confirm that they meet current fish screening requirements to prevent fish intake. If the existing barrels don't meet these requirements, then they will need to be replaced.
- Potential permits needed and not limited to:
 - USACE Section 404
 - CDFW Lake and Streambed Alteration Agreement

- o RWQCB 401 Certification
- o Army Corp of Engineers

5.4 Alternative Specific Constraints

- Alternative 1: Extending Intake Laterals
 - o Longer 16-inch runs add headloss; will likely need pump improvements or additions
 - o High sediment buildup can partially bury inlets – scour protection may be needed.
 - o Marine operations dependency – cofferdam/crane/barge/diver availability and weather windows
 - o Long-term maintenance is still required for barrels; re-use could increase lifecycle costs if the condition is poor
- Alternative 2: Floating Intake
 - o Pump operation improvements or additions are likely necessary
 - o Higher ongoing maintenance (biofouling, debris)
 - o Exposure to weather/boat traffic
 - o Higher lifecycle costs – replacement of mooring hardware and floats over time
 - o Insurance and liability for navigational hazards may increase operating costs
 - o Complex hydrodynamic & mooring engineering needed; increases design fees and inspection
 - o Mooring and navigation permitting complexity – may conflict with recreation and boating on the lake
 - o Security and vandalism risk – accessible structure requires theft/vandalism mitigation
- Alternative 3: Submerged Screened Manifold
 - o High upfront capital cost – custom manifold fabrication and large marine mobilization
 - o Pump system improvements or additions are likely necessary
 - o Large lakebed disturbance – anchoring, bed preparation, scour protection, complex permitting
 - o Requires an accurate lakebed survey and a stable substrate
 - o More complex initial install with barge/divers
 - o Ongoing inspection challenges – although centralized, manifold is still underwater and requires dive access or ROVs
 - o Higher permitting & stakeholder scrutiny
 - o Longer project schedule due to design, fabrication, environmental review, and procurement
 - o Costly scour protection and long-term monitoring may be required

6.0 DATA GAPS

Before deciding on an alternative, the following unknowns should be considered and resolved to best determine an alternative and confirm opportunities and constraints:

- **Survey Data Evaluation** - Bathymetric data was collected from the US Army Corps of Engineers and needs further evaluation to determine the viability of each alternative, particularly alternatives 1 and 3.
- **Existing Conditions Evaluation**– the current structural condition of the existing 42-inch water intake barrels, welded inlet assemblies, and connection details are essential if these barrels are to be

reused. Existing conditions of the 16-inch laterals and pumps are needed to know if replacement or maintenance is required.

- **Hydraulic analysis** – A hydraulic pump analysis is necessary to verify that the existing pumps can handle a new intake system without being replaced (current pump specs, net positive suction head [NPSH], suction losses, pump operating points). All alternatives will likely require a new pump arrangement (whether using existing pumps or new) to allow for better suction capabilities. It is also important to collect data on how the pumps are currently operating. Pump operations may occur in simultaneous, dual, or individual modes depending on system demand and control settings. Pump operation is triggered by sufficient water depth and may be continuous throughout the day or limited to designated operational time intervals.
- **Lake Foundation** – While not as critical as the first three unknowns, a geotechnical evaluation will be necessary to evaluate the foundation for any alternative, as each would require some form of anchoring. Understanding the lakebed soil type early will prevent issues arising during construction and planning.

7.0 FUNDING OPPORTUNITIES

While not the focus of this report, the following state and federal funding programs are potential options for future project funding needs.

- California State Water Resources Control Board (SWRCB) Safe and Affordable Drinking Water Program (SAFER)
- Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP)
- United States Department of Agriculture (USDA) Rural Development Water & Waste Disposal Grants
- United States Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Program
- Department of Water Resources (DWR) Integrated Regional Water Management (IRWM) Program
- United States Economic Development Administration (EDA) Disaster Supplemental Program

8.0 ANALYSIS OF FINDINGS

The current intake system is unable to provide the water needed for RVCWD during critical dry-weather years. To pull water from a deeper elevation, this would either require a supplemental pump system or a repositioning of one or two of the existing pumps (this would be determined based on a hydraulic analysis) to directly connect to the 16" laterals that extend outside of the pump house. Due to the current infrastructure setup, a completely new intake infrastructure system will probably need to be constructed and would provide an updated system utilizing current technology. This intake system may only come back with minimal water intake benefit for the overall cost of the system. Further study would be required to determine feasibility. Any of the listed alternatives will require a modification to the existing pump system to properly draw water into the pump house. Answering the unknowns in Section 6.0, such as the evaluation of the collected bathymetric data, hydraulic analysis of the existing pumps, and evaluating the current conditions of the intake infrastructure, will allow for better alternative selection and design. This information will also be helpful to bring to contractors for future detailed cost estimates.

9.0 RECOMMENDED NEXT STEPS

1. Perform a cost-benefit analysis: Analyze whether the amount of water being delivered due to new infrastructure is worth the new cost investment.
2. Address Unknowns: If alternative feasibility is decided to be pursued, fill in data gaps given in Section 6.0 in order to develop conceptual design plans and obtain preliminary cost estimates from contractors.
3. Prepare Preliminary Engineering Design: Advance conceptual design and site feasibility analysis for the best alternative.
4. Explore additional funding sources: Schedule a pre-application meeting with SWRCD for SAFER and any other funding considered.
5. Prepare a Permitting Roadmap: Begin outreach to regulatory agencies to determine timeline and documentation needs.
6. Perform a Lifecycle Analysis: Evaluate long-term O&M, sediment risks, and redundancy benefits for each intake option.

10.0 REFERENCES

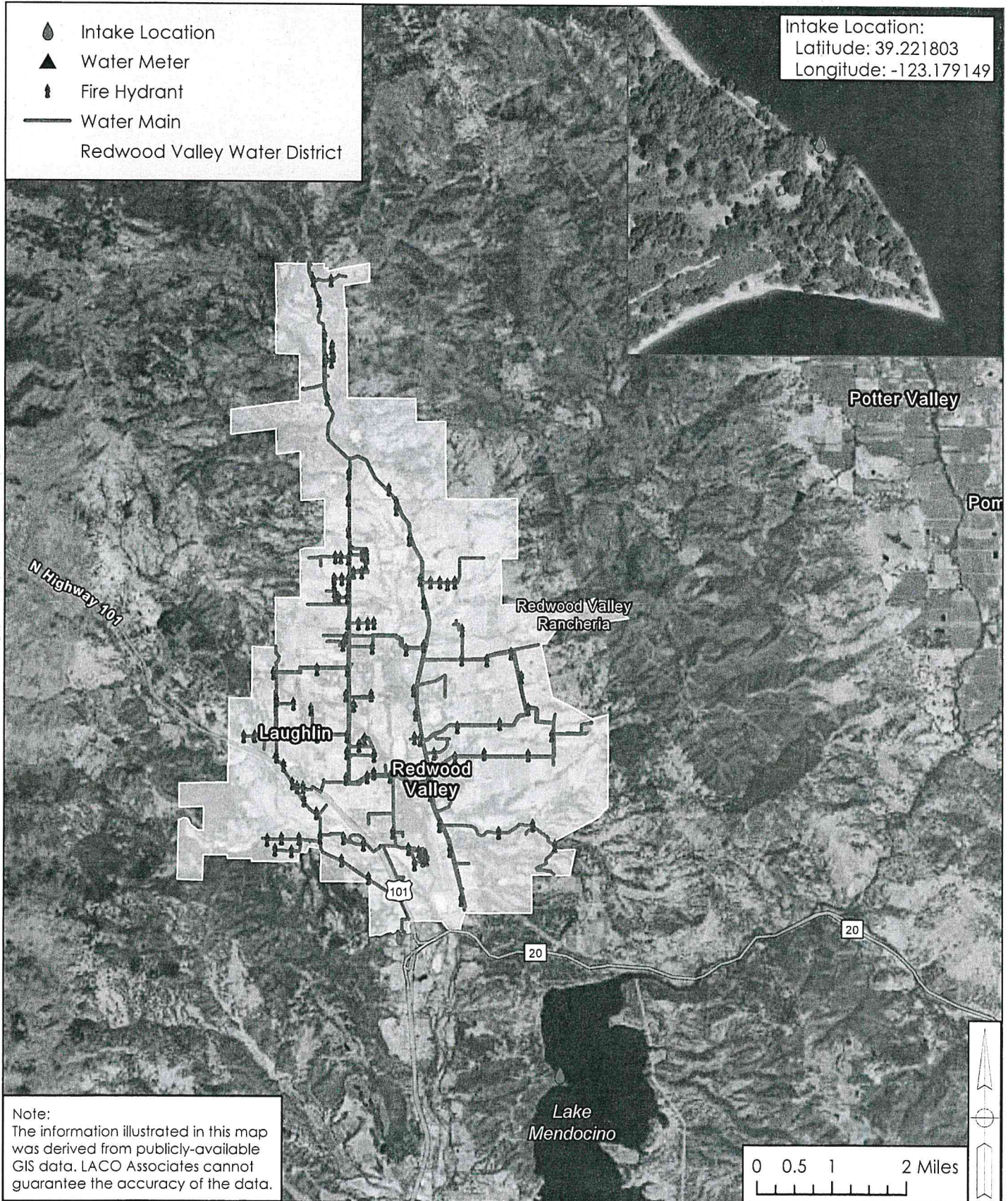
- Floating Pump Station and Floating Bridge* - HSB Marine. (n.d.). HSB Marine. Accessed on September 18, 2025. Available at: <https://www.hsbmarine.com/projects/floating-pump-station-and-floating-bridge>
- Intake Screen - Filson Filter*. (n.d.). Filson Filters. Accessed on September 18, 2025. Available at: <https://www.filsonfilters.com/intake-screen/>
- Intake Structures (Surface Water Sources) - Different Parts, Types, Intake Towers*. (n.d.). Civil Poriyaan. Accessed on September 18, 2025. Available at: <https://civil.poriyaan.in/topic/intake-structures--surface-water-sources--40175/>
- Mendocino LAFCo. 2016, February 1. *Redwood Valley County Water District Sphere of Influence Update*. Mendocino LAFCo. Available at: <https://www.mendolafco.org/files/8f56c4d2d/Redwood+Valley+CWD+SOI+Update+Adopted+2-1-15+w+Reso.pdf>
- Russian River Flood Control & Water Conservation Improvement District. 2025, June 18. *Annexation Plan for Services*. Russian River Flood Control & Water Conservation Improvement District. Available at: <https://www.rrfc.net/files/a6dc83a07/Proposed+Redwood+Valley+Annexation+DRAFT+Plan+for+Services+6-18-25.pdf>
- U.S. Census Bureau. 2023. *American Community Survey 5-year estimates*. Retrieved from *Census Reporter Profile page for Redwood Valley, CA*. Available at: <http://censusreporter.org/profiles/16000US0660214-redwood-valley-ca/>

APPENDIX 1

RVCWD Intake Infrastructure Location Map

PROJECT	Redwood Valley Intake Infrastructure	BY	MCH	FIGURE	1
CLIENT	Redwood Valley County Water District	CHECK	LAC	JOB NO.	8049.03
LOCATION	Redwood Valley, Mendocino, CA	DATE	9/16/2025		
	Lake Mendocino Intake Infrastructure Map				

REUSE OF DOCUMENTS: This document and the ideas and design incorporated herein, as an instrument of professional service, is the property of LACO Associates and shall not be reused in whole or part for any other project without LACO Associates express written authorization.



APPENDIX 2

1977 RVCWD Inlet and Intake Plans

48" Ø precast manhole rings w/ conc. grade rings & C.I. cover. Cover to be 6" min. above fin. grade

Traffic Force & cover, see Dwg. No. 502 for details

Begin surge or restor See Dwg. No. 217 for details.

End surge or restor

45" lateral - 24" x 24" x 12"

12" x 4" x 3" Thrust block w/ #4 @ 12" O.C. E.W.

20" x 14" reducer

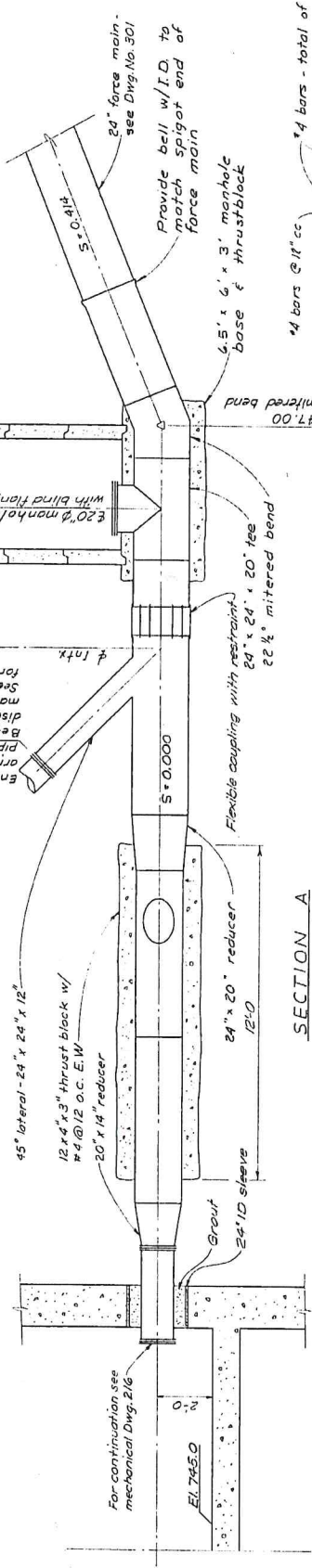
24" x 20" reducer

24" x 20" reducer

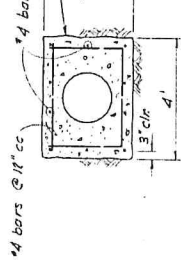
24" x 20" reducer

24" x 20" reducer

24" x 20" reducer



SECTION A
Scale: 1/4" = 1'-0"



SECTION B
Scale: 1/4" = 1'-0"

22 1/2" mitered bend

22 1/2" mitered bend

22 1/2" mitered bend

22 1/2" mitered bend

22 1/2" mitered bend

22 1/2" mitered bend

22 1/2" mitered bend

45" x 6" x 3" manhole base & thrust block

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Cast against undisturbed earth

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4 bars @ 18" cc

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Cast against undisturbed earth

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45" lateral - 20" x 20" x 14"

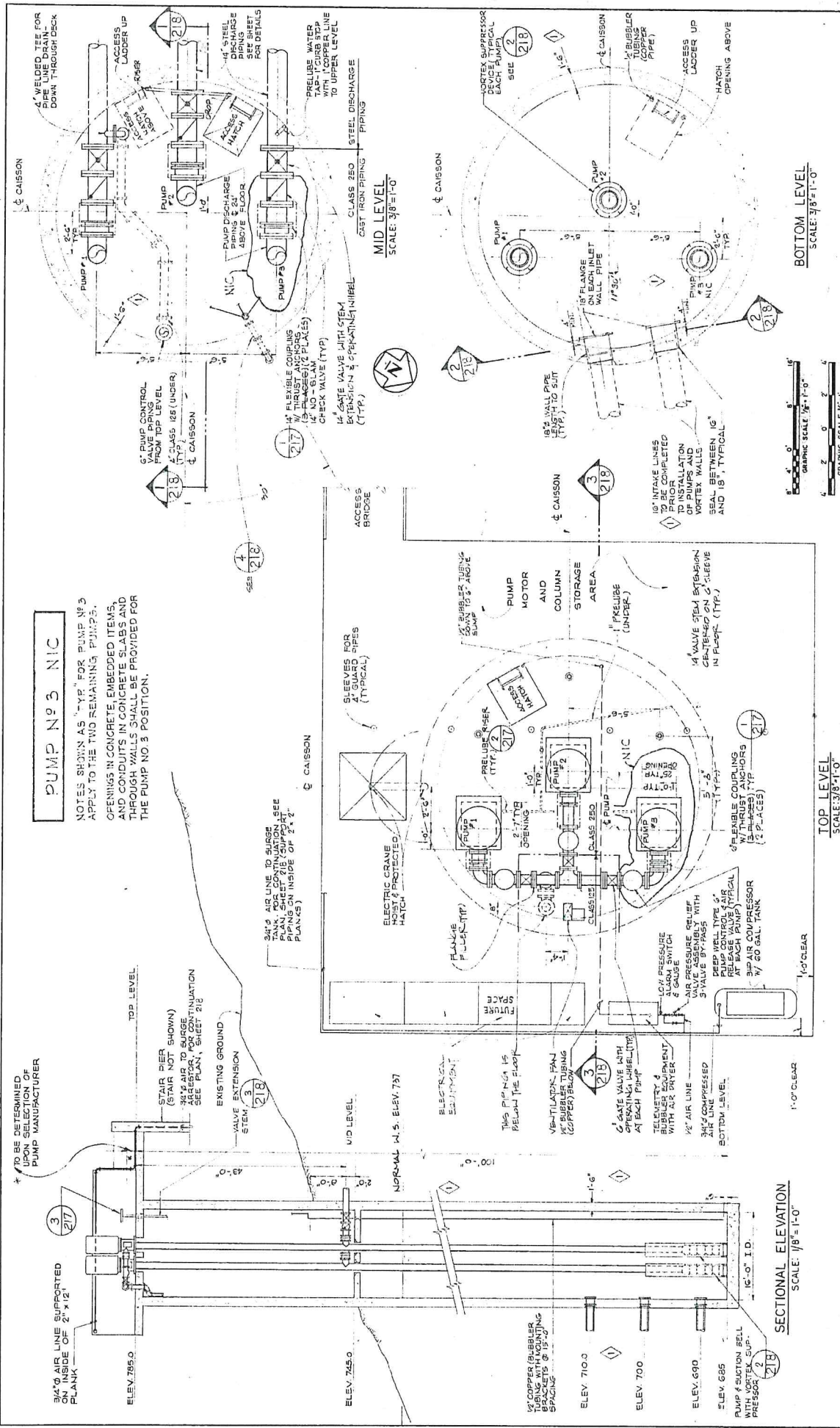
45" lateral - 20" x 20" x 14"

NOTE
Piping and restraints to be adequate for 250 psi.

PLAN
Scale: 1/4" = 1'-0"

Class 250 cast iron pipe - see Dwg. No. 216

DATE: 4-4-77	DRIVING NUMBER: 206-1	SHEET: 206-1
REDWOOD VALLEY COUNTY WATER DISTRICT	WATER DEVELOPMENT PROJECT	DISCHARGE MANIFOLD PLAN AND SECTIONS
CONSULTING ENGINEERS AND PLANNERS	CALIFORNIA	TUDOR ENGINEERING COMPANY
SAN FRANCISCO		
DESIGNED BY: G. PLOTNER	CHECKED BY: D. SCAPUZZI	APPROVED BY: R. N. JENSEN
DATE: 4-4-77	DATE: 4-4-77	DATE: 4-4-77
REV: 1	REV: 1	REV: 1
DATE: 4-4-77	DATE: 4-4-77	DATE: 4-4-77
DESCRIPTION: Steel discharge manifold		



PUMP NO. 3 NIC

NOTES SHOWN AS "YR" FOR PUMP NO. 3
 APPLY TO THE TWO REMAINING PUMPS.
 OPENINGS IN CONCRETE, EMBEDDED ITEMS,
 AND CONDUITS IN CONCRETE SLABS AND
 THROUGH WALLS SHALL BE PROVIDED FOR
 THE PUMP NO. 3 POSITION.

TOP LEVEL
 SCALE: 3/8"=1'-0"

MID LEVEL
 SCALE: 3/8"=1'-0"

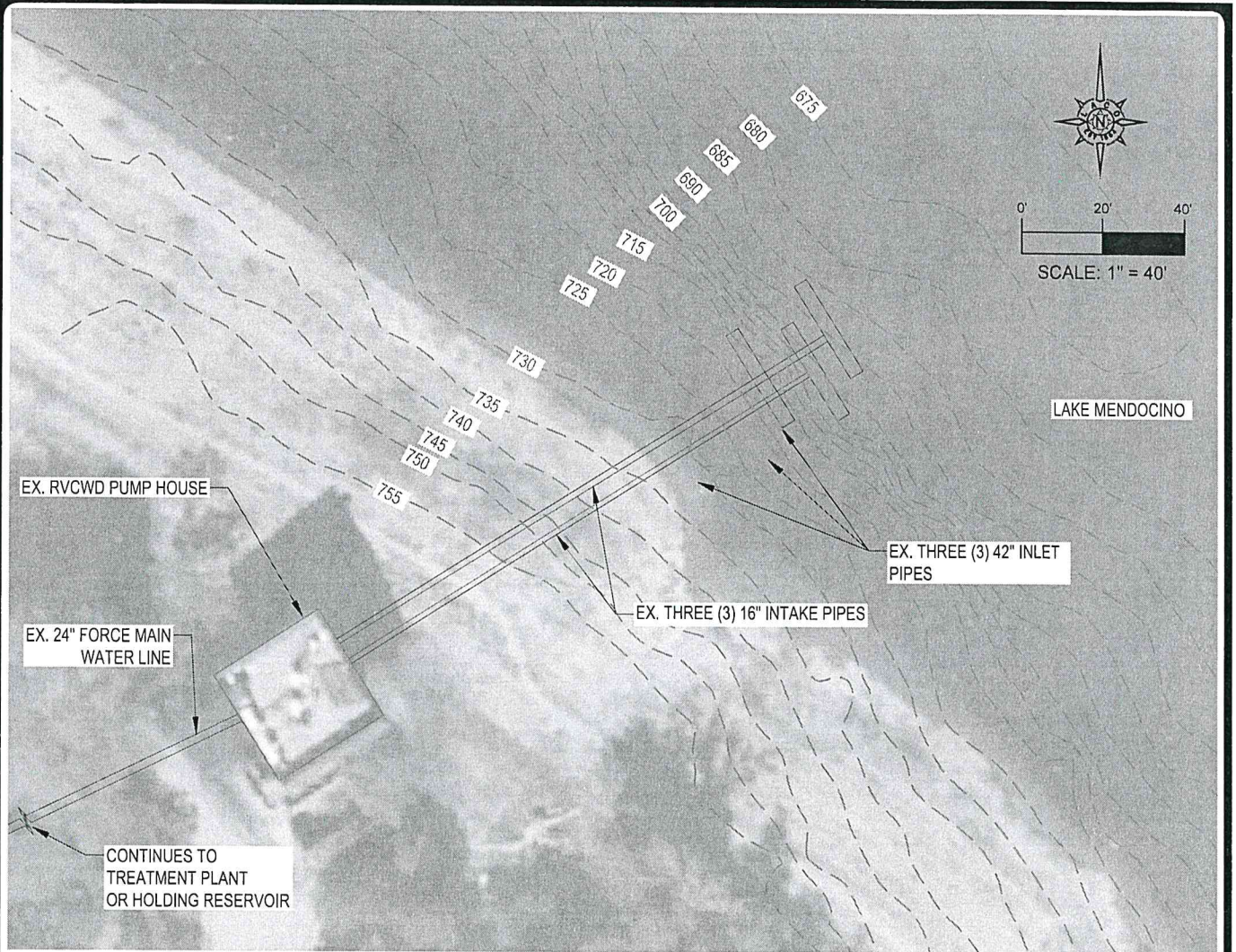
BOTTOM LEVEL
 SCALE: 3/8"=1'-0"

DATE: 4-4-77 DRAWING NUMBER: 210-2 SHEET: OF				REDWOOD VALLEY COUNTY WATER DISTRICT WATER DEVELOPMENT PROJECT MECHANICAL AND PIPING DETAILS			
DESIGNED BY: G. URBAN CHECKED BY: R. VALENCIA IN CHARGE BY: G. FULLERTON PROJECT MANAGER BY: G. KELLER				TUDOR ENGINEERING COMPANY SAN FRANCISCO, CALIFORNIA			
REV.	DATE	BY	DESCRIPTION	REV.	DATE	BY	DESCRIPTION
1	8-27-77	AW	CONFORMED				
2	1-23-77	UP	GF ADDED INTAKE PIPE AND REVISED ELEVATIONS				

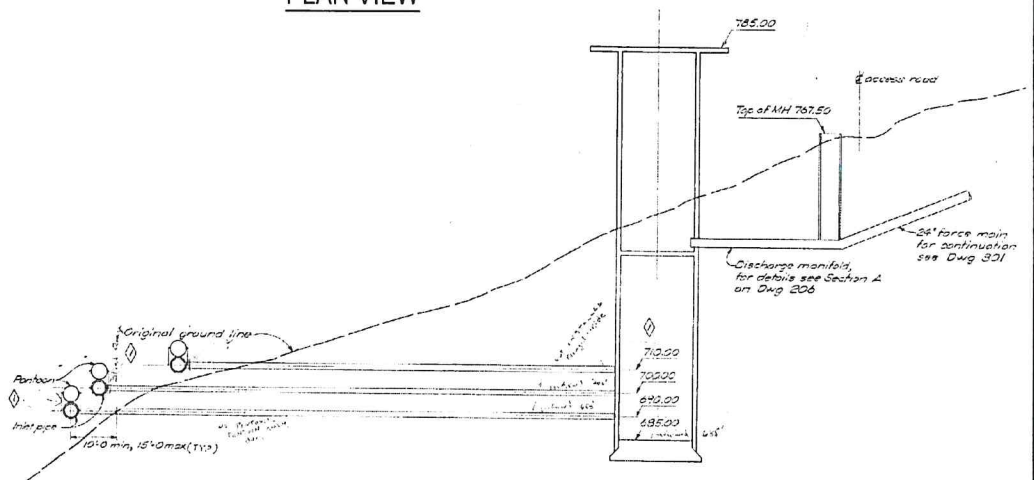
APPENDIX 3

Overhead Existing Intake Infrastructure Map

Note: Elevation data from the LACO made Existing Infrastructure Map is relative and is based on the spacing between intake barrels and elevations noted from the 1977 RVCWD Inlet and Intake Plans. The 2014 bathymetric data referenced in the CAD drawing shows that the actual elevations within the lake may have changed between 1977 and 2014 due to sediment movement. Elevation values from the plan set and the Existing Infrastructure Map are not the same.



PLAN VIEW



PROFILE VIEW

JOB NO. 8049.03
 DATE AUGUST 2025
 DESIGNER LAC
 CHECKED BD DRAWN LAC
 SHEET 1 of 1

RVCWD INTAKE LOWER CALPELLA, CALIFORNIA EXISTING CONDITIONS

LACO

SURVEYORS | ENGINEERS | PLANNERS | GRANT WRITERS

lacoassociates.com

Date: 04/10/2025, 12:55pm User: lcoast Date: 04/10/2025, 12:55pm User: lcoast
 File: J:\Shared\Projects\8049.03 RVCWD\CalPella\INTAKE\EXISTING\INTAKE-EXIST.dwg

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

Redwood Valley County Water District 2025 Water Utility Financial Plan Recommendations

October 16, 2025



HILDEBRAND
CONSULTING

Agenda

1. Ukiah Valley Water Authority
2. Rate Setting Process
3. Redwood Valley Financial Plan
4. Proposed Rates
5. Project Schedule

Ukiah Valley Water Authority

Joint Powers Authority (JPA) between 5 water utilities:

- City of Ukiah
- Calpella County Water District
- Millview County Water District
- Redwood Valley County Water District
- Willow County Water District

The City provides each member agency with operating and administrative services through a Joint Services Agreement (JSA).

For now, each utility will maintain a separate accounting of finances and reserves.

Calpella did not participate in the current rate study since a study was completed in 2024.

The Rate Setting Process

Revenue Requirements

Compares the revenues of the utility to its expenses to determine the overall level of rate adjustment



Cost-of-Service

Equitably allocates the revenue requirements between the various customer classes of service



Rate Design

Design rates for each class of service to meet the revenue needs of the utility, along with any other rate design goals and objectives

Legal Requirements for Setting Water Rates In California

Proposition 218 (Article XIID, Section 6 of California Constitution)

- Revenues shall not exceed funds required to provide service; nor used for another purpose
- Amount shall not exceed the proportional cost of the service attributable to the parcel
- Service must be actually used or immediately available
- Approval process includes 45-day notice, public hearing, and written majority protest. Does not require a voting process (unlike taxes).

Redwood Valley County Water District

Proposed Reserve Policies

In addition to protecting the District against unforeseen circumstances, these policies also contribute towards the District's credit rating.

Proposed **Operating Reserve** policy to maintain cash reserves of at least 25 percent of operating expenses (currently equal to about **\$400 thousand**).

Recommend a **Capital Reserve** policy based on the current condition and vulnerabilities of the system. This reserve will help the District absorb any spikes in capital spending or unforeseen infrastructure failure. District staff recommends a reserve target of **\$1.0 million** (consistent with the 2021 rate study).

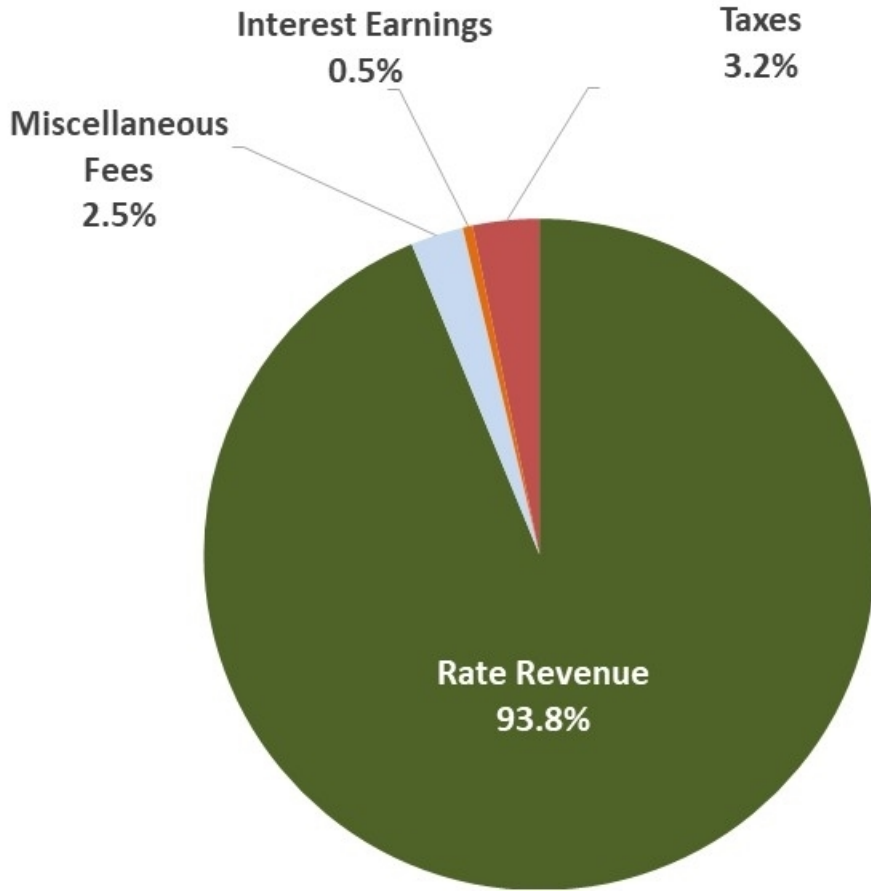
The District's reserves as of July 2024 were about **\$690 thousand**.

Redwood Valley County Water District

Revenue

FY2025/26 Budget

Rate Revenue	\$1,582,000
Non-Rate Revenue	
Miscellaneous Fees	\$43,000
Interest Earnings	\$8,000
Taxes	\$54,000
Total:	\$1,687,000



Allocation of Costs among Member Agencies

Expense Type	Allocation Method	Example Expenses
Shared operating costs	Primarily relative water usage*	Water utility salaries, general operations
Specific operating costs	Direct	Chemicals, electricity, treatment cost
City support services	Cost Allocation Plan	Billing, administration, purchasing, rent
Capital	Direct	Repairs of wells, pipes treatment plant, etc.
Debt	Direct	City and Millview only

* Sometimes number of accounts

Shared Asset Expenses

- Most assets are owned independently by each respective member agency
- Some assets will be shared by the member agencies
 - Vehicles
 - Buildings
 - Other?
 - For example, Willow currently owns a fleet of vehicles and a building, which will be sold to the City of Ukiah for shared use among all the member agencies
- It is proposed that these shared asset costs be shared among the member agencies based on annualized depreciation expense for each asset.

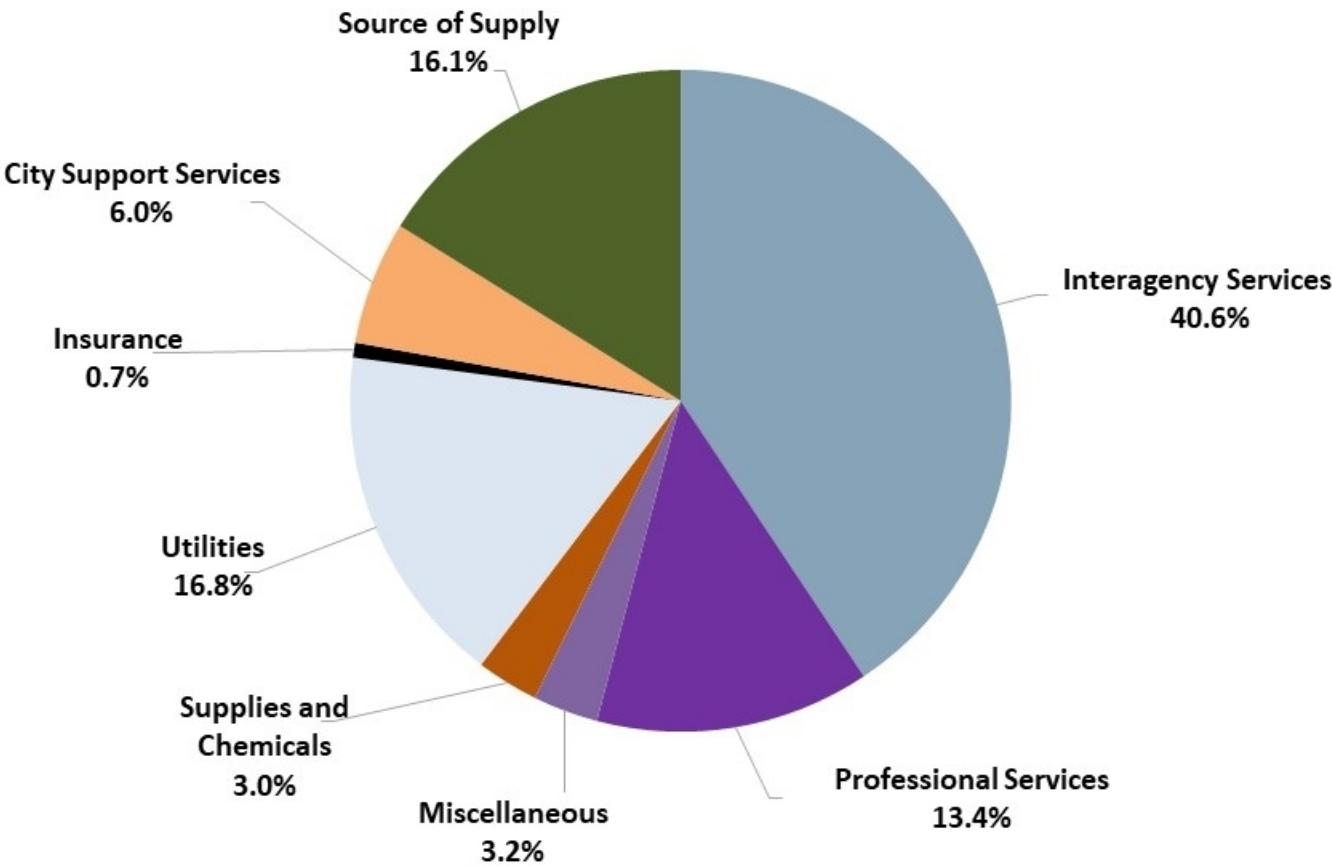
Redwood Valley County Water District

Operating and Debt Expenses

FY2025/26 Budget *

Interagency Services *	\$841,000
Professional Services	\$278,000
Miscellaneous	\$66,000
Supplies and Chemicals	\$63,000
Utilities	\$347,000
Insurance	\$15,000
City Support Services	\$125,000
Source of Supply	\$334,000
Total:	\$2,069,000

* For shared personnel and operations costs based on updated allocation.

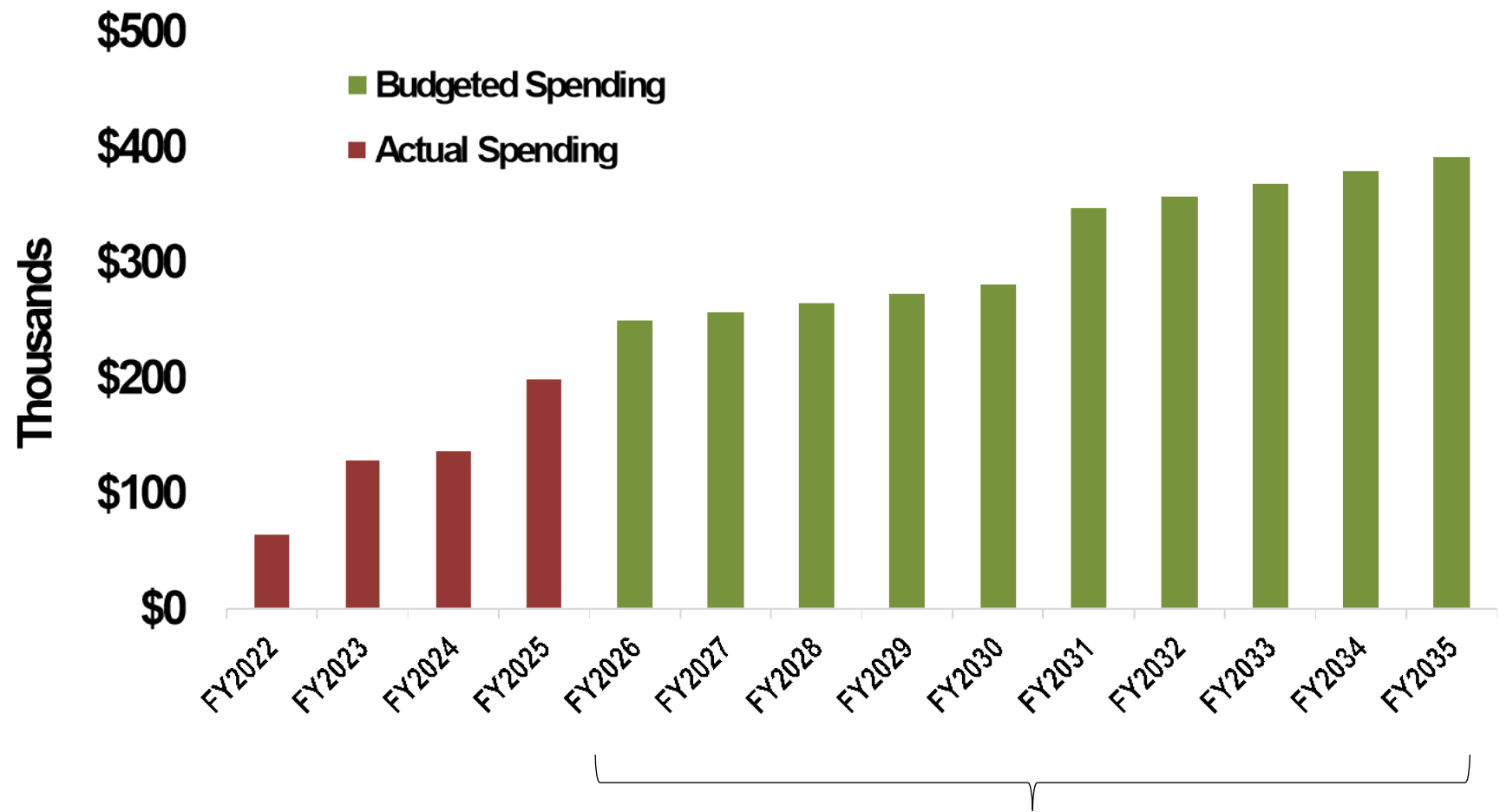


Annual Inflation Assumptions

Salaries and Benefits.....	5% per year
Insurance.....	7% per year
Utilities, fuel and chemicals.....	4% per year
All other.....	3% per year

Redwood Valley County Water District

Capital Spending

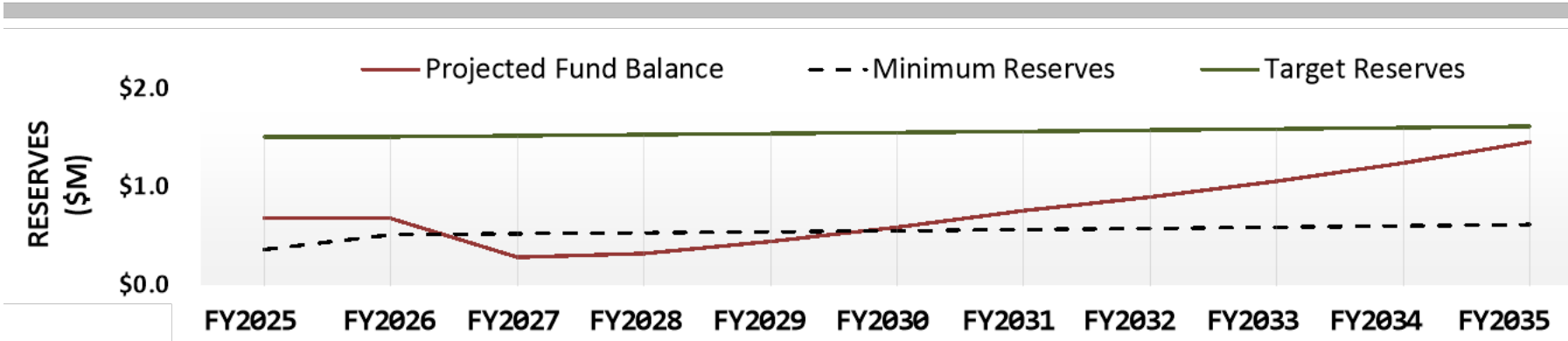
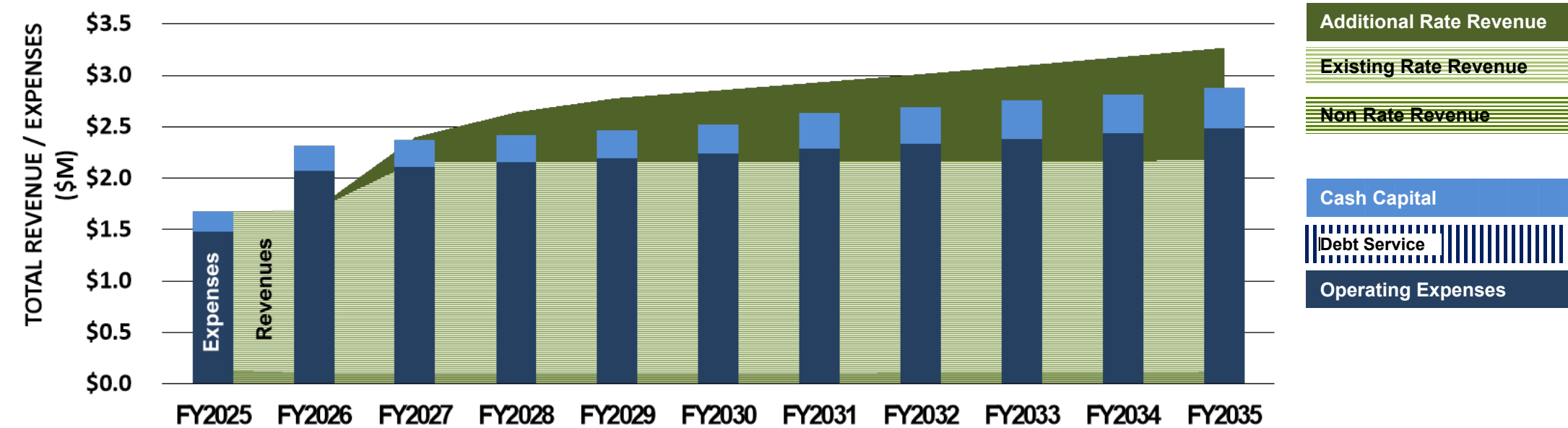


Proposed Average Annual Spending =
\$270 thousand for five years, then \$370 thousand for five years

Redwood Valley County Water District

Financial Forecast & Rate Revenue Increases

With proposed capital spending (\$270K per year, then \$370K per year)

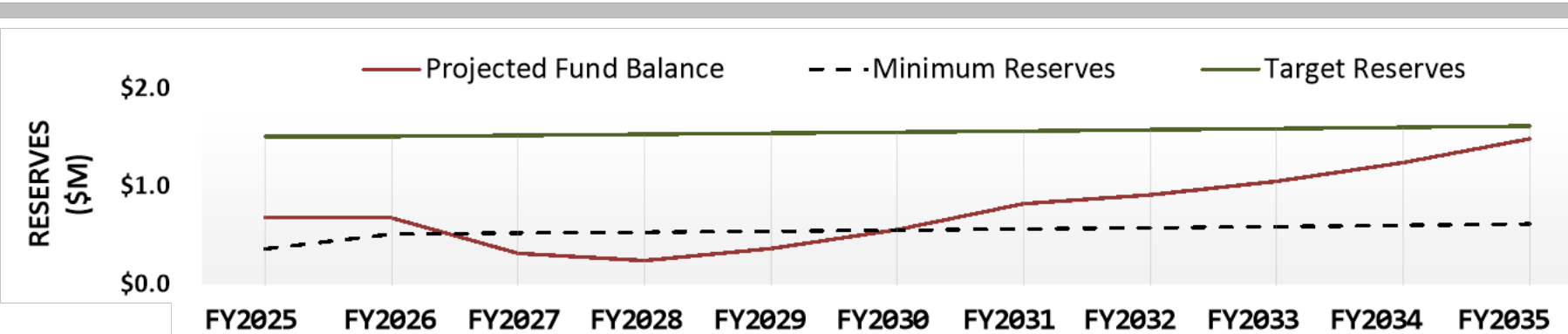
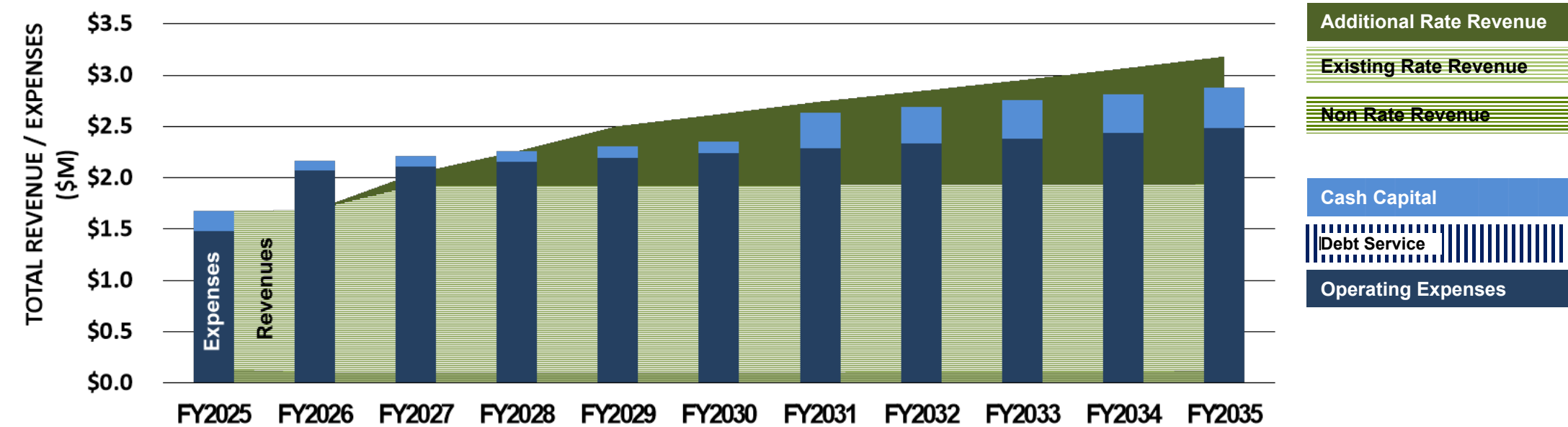


	Proposed					Forecasted				
Rate Revenue Increase:	30.0%	12.0%	6.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Redwood Valley County Water District

Financial Forecast & Rate Revenue Increases

With minimal capital spending (\$110K per year, then \$370K per year)



	Proposed					Forecasted				
Rate Revenue Increase:	15.0%	12.0%	12.0%	5.0%	5.0%	4.0%	4.0%	4.0%	4.0%	4.0%

Redwood Valley County Water District

Current & Proposed Water Rates

	Current ¹	January 1, 2026	July 2026	July 2027	July 2028	July 2029
Percent increase:		30.0%	12.0%	6.0%	3.0%	3.0%
Water Usage Rate (\$/TGAL)						
Domestic	\$6.91	\$8.98	\$10.06	\$10.66	\$10.98	\$11.31
Irrigation	\$0.92	\$1.20	\$1.34	\$1.42	\$1.46	\$1.50
Monthly Service Charge						
<u>Non-Potable Meters</u>						
2" Meter	\$59.43	\$77.26	\$86.53	\$91.72	\$94.47	\$97.30
4" Meter	\$180.94	\$235.22	\$263.45	\$279.26	\$287.64	\$296.27
6" Meter	\$359.62	\$467.51	\$523.61	\$555.03	\$571.68	\$588.83
<u>Domestic Meters</u>						
Residential Dwelling Units	\$28.08	\$36.50	\$40.88	\$43.33	\$44.63	\$45.97
3/4" and 1" Meters	\$28.08	\$36.50	\$40.88	\$43.33	\$44.63	\$45.97
2" Meter	\$84.90	\$110.37	\$123.61	\$131.03	\$134.96	\$139.01
3" Meter	\$167.57	\$217.84	\$243.98	\$258.62	\$266.38	\$274.37
4" Meter	\$260.57	\$338.74	\$379.39	\$402.15	\$414.21	\$426.64

¹ Effective July 2025

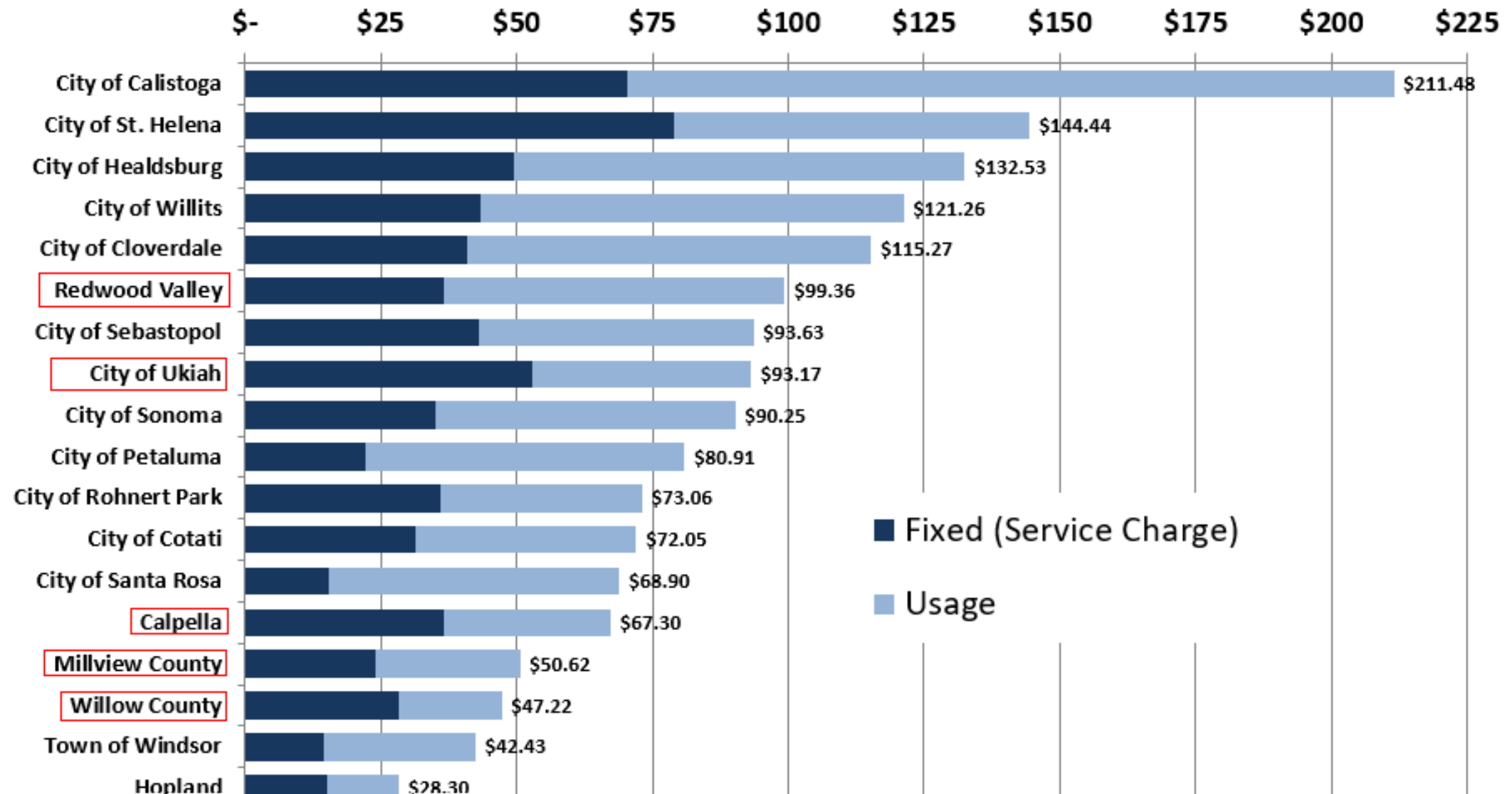
Summary of Proposed Water Rate Increases for UVWA member agencies

	January 1, 2026	July 2026	July 2027	July 2028	July 2029
City of Ukiah	3.0%	3.0%	4.0%	4.0%	4.0%
Millview	11.0%	11.0%	11.0%	11.0%	11.0%
Redwood Valley	30.0%	12.0%	6.0%	3.0%	3.0%
Willow	20.0%	20.0%	12.0%	12.0%	5.0%
Calpella *	14.0% ^{**}	14.0%	12.0%	10.0%	(TBD)

* Previously adopted
 ** Implemented in July 2025

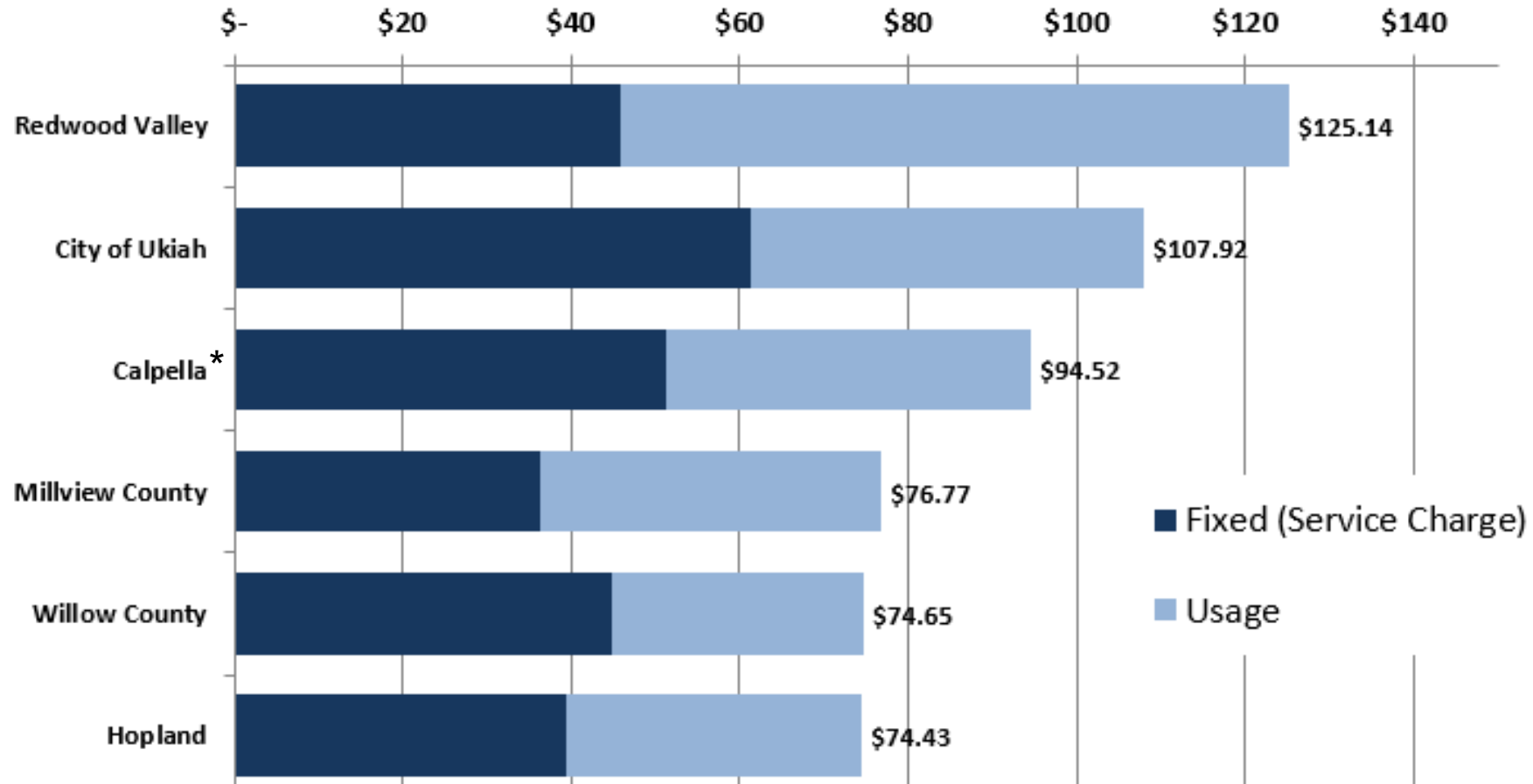
Proposed Year 1 Monthly water bill comparisons among selected regional water agencies

Single Family Homes with ¾" meter using 10,000 gallons per month



Proposed Year 5 Monthly water bill comparisons among selected regional water agencies

Single Family Homes with $\frac{3}{4}$ " meter using 10,000 gallons per month



* Year 4 rate because Year 5 rate is TBD

Next Steps

- Meeting with all member agencies
- Present findings to UVWA Executive Committee on Oct. XX
- Mail Prop 218 Notifications by Oct. 30
- Conduct Public Hearing on December 17
- Implement rates on January 1, 2026
 - Next increase will be on July 1, 2026

EXTRA SLIDES

Redwood Valley County Water District

Current & **Scenario 2** Water Rates

	Current ¹	January 1, 2026	July 2026	July 2027	July 2028	July 2029
Percent increase:		15.0%	12.0%	12.0%	5.0%	5.0%
Water Usage Rate (\$/TGAL)						
Domestic	\$6.91	\$7.95	\$8.90	\$9.97	\$10.47	\$10.99
Irrigation	\$0.92	\$1.06	\$1.19	\$1.33	\$1.40	\$1.47
Monthly Service Charge						
<u>Non-Potable Meters</u>						
2" Meter	\$59.43	\$68.34	\$76.54	\$85.72	\$90.01	\$94.51
4" Meter	\$180.94	\$208.08	\$233.05	\$261.02	\$274.07	\$287.77
6" Meter	\$359.62	\$413.56	\$463.19	\$518.77	\$544.71	\$571.95
<u>Domestic Meters</u>						
Residential Dwelling Units	\$28.08	\$32.29	\$36.16	\$40.50	\$42.53	\$44.66
3/4" and 1" Meters	\$28.08	\$32.29	\$36.16	\$40.50	\$42.53	\$44.66
2" Meter	\$84.90	\$97.64	\$109.36	\$122.48	\$128.60	\$135.03
3" Meter	\$167.57	\$192.71	\$215.84	\$241.74	\$253.83	\$266.52
4" Meter	\$260.57	\$299.66	\$335.62	\$375.89	\$394.68	\$414.41
¹ Effective July 2025						