



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT

15160 Jackson Road, Rancho Murieta, CA 95683

Office - 916-354-3700 \* Fax - 916-354-2082

### **IMPROVEMENTS COMMITTEE**

*(Directors Randy Jenco and John Merchant)*

Regular Meeting

January 7, 2025 at 8:00 a.m.

### **AGENDA**

1. **Call to Order**
2. **Improvements Staff Report**
  - A. *Discussion Item* **15066 Fuente De Paz Water Intrusion**
  - B. *Discussion Item* **Bathymetric Study of Clementia Reservoir**
  - C. *Discussion Item* **Emergency Water Supply: One Year Water Supply**
  - D. *Discussion Item* **Gound Water Test Well/Site Selection/Guidelines for Location**
  - E. *Discussion Item* **Update Sacramento County Water Agency (SCWA) as a Water Source/Written Scope of Work**
  - F. *Discussion Item* **Monthly Water Inventory and Production Report**
  - G. *Discussion Item* **Seepage and Evaporation Report**
  - H. *Discussion Item* **Updated Drought Plan/Policy 90-2**
  - I. *Discussion Item* **Physical Measuring Inventory in Each Reservoir**
  - J. *Discussion Item* **Draft Integrated Water Master Plan Peer/Technical Review**
  - K. *Discussion Item* **Murieta Village Water/Sewer Connection Line Preliminary Design and Cost of Standard Pressure Valves**
  - L. *Discussion Item* **Steel Pipe to Calero Reservoir**
  - M. *Discussion Item* **RFP Results for SCADA**



N. *Discussion Item* List of CIP Projects FY25-26, Including Add-On's to Recent Reserve Analysis

O. *Discussion Item* District Administration Office Beautification

**3. Comments from the Public**

**4. Director and Staff Comments/Suggestions**

**5. Adjournment**

In compliance with the Americans with Disabilities Act if you are an individual with a disability and you need a disability-related modification or accommodation to participate in this meeting or need assistance to participate in this teleconference meeting, please contact the District Office at 916-354-3700 or [awilder@rmcsd.com](mailto:awilder@rmcsd.com). Requests must be made as soon as possible.

Note: This agenda is posted pursuant to the provisions of the Government Code commencing at Section 54950. Posting location is District Office. The date and time of this posting is January 2, 2025 at 4:45 p.m.

## MEMORANDUM

Date: January 7, 2025  
To: Improvements Committee  
From: Eric Houston- Director of Operations  
Subject: Monthly Improvements Committee Updates

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**A. 15066 Fuente De Paz Water Intrusion**

Please see attachments 15066 Fuente De Paz.

**B. Bathymetric Survey of Clementia Reservoir**

Staff have reached out through email to CDM Smith, WCS, and West Yost waiting on replies regarding the cost of services.

**C. Emergency Water Supply- One Year Water Supply**

Staff has requested our contracted lab to deliver a cost analysis for all Title 22 required drinking water testing so that we have useful information on the water quality in Clementia. Please see the attached Lab Pricing.

**D. Groundwater Test Well/Site Selection/Guidelines for location**

Staff would recommend that locations for wells be on CSD owned property and near current raw and treated water connections. This allows the flexibility of the type of usage for the water that is found. Current ideas for land acquisition possibilities will be discussed.

**E. Update Sacramento County Water Agency (SCWA) as a Water Source/Written Scope of Work**

There has been no new development information to report back on. This is a multi-year project that would require various hurdles in the way such as changing water rights and other issues.

**F. Monthly Water Inventory and Production Report**

Please see the attached State Water Resources Control Board Safer Clearinghouse Drought Reporting Attachment

**G. Seepage and Evaporation Report for 2024**

Please see the attached Seepage Report for 2024.

**H. Updated Drought Plan/Policy 90-2**

Please see the attachments drought contingency plan and policy 90-2.

**I. Physical Measuring Inventory in Each Reservoir**

Staff utilizes automation and equipment as well as staff gauges to measure the elevation in each reservoir. Using the elevation tables, we are then able to determine the volume of a reservoir at that exact moment. Evaporation and rain data is used from the California Data Exchange Center (CDEC) website using Folsom Reservoir Data for Evaporation and Rain totals. See attached report.

**J. Draft Integrated Water Master Plan Peer/Technical Review**

Please see the attached original scope of work that was sent to firms for a cost of services quote. One quote was provided by WSC.

**K. Murieta Village Water/Sewer Connection Line Preliminary Design and Cost of Standard Pressure Valves**

See attached contract with Domenichelli & Associates.

**L. Steel Pipe to Calero Reservoir**

Direction on whether an analysis of the pipe is warranted. See attachment for possibilities of assessment.

**M. RFP Results for SCADA CIP**

<i>Master RFP Scoring Matrix for SCADA Server Replacement</i>							
		Respondents (Score Respondants 0-10)					
		Telstar Instruments		Arayna		W. M. Lyles Co.	
Criteria	Criteria Weight	Score	Total	Score	Total	Score	Total
1. Understanding of Scope of Work & Project Objectives	10	8	8	7	7	10	10
2. Project Approach	20	19	19	16	16	20	20
3. Quality of Overall Work Plan	5	5	5	4	4	5	5
4. Proposed Project Schedule for Timely Completion of Work	5	5	5	5	5	5	5
5. Company Experience Completing Similar Projects	10	9	9	8	8	10	10
6. Individual Team Member Experience Completing Similar Projects	10	9	9	9	9	10	10
7. Reference Quality - <i>to be scored by one reviewer</i>	5	5	5	3	3	5	5
8. Pricing - <i>to be ranked after items #1-7 are complete and fitted between 0-10 based on highest to lowest pricing.</i>	10	8	8	10	10	9	9
		Totals:	68	Totals:	64		
Rank		2		3		1	

**N. List of CIP Projects FY25-26, Including Add-On's to Recent Reserve Analysis**

Development of CIP project list begins during the budget cycle which begins typically in March of any given year. Currently there is no list developed.

**O. District Administration Office Beautification**

Direction on what beautification projects the Committee would like Staff to pursue is requested.

Noor Mitchell

City Water Conservation

10/16/2024 | 26 Photos



# Cause & Origin Report



## **Claim Location: 15066 Fuente De Paz Dr, Rancho Murieta, CA 95683**

Upon arrival, I met with the insured and obtained verbal authorization to perform my inspection. They stated there was water damage to the wood flooring, baseboard, and sheetrock. I confirmed water damage to these areas and found moisture and thermal readings present in the wood flooring, baseboard, and sheetrock.

I pressure-tested the domestic plumbing system and found the lines held pressure.

The home is either not equipped with a pressure-regulating valve (PRV), or I could not locate one during my inspection.

**Static PSI:** 40

### **Area of Concern: Downstairs Hallway and Bedroom**

I began by flow-testing the nearby sink and shower and found no leaks in these areas. Upon closely inspecting the plumbing system, I found no leaks from the drains or water supply. I then shut off the water to the house but found water constantly pooling in the downstairs hall area. I inspected the exterior of the house and noticed continuous water on both the front and backside. Additionally, there is a lake across the street from the home, which I believe is causing groundwater to seep into the house.

## Cause of Leak

The cause of the leak is likely groundwater intrusion seeping up from the nearby lake.

## Duration of Leak

The duration appears to be less than two weeks, based on the size of the leak and the extent of the damage.

All estimated durations are based on hands-on experience.

After testing, I used a moisture meter and detected elevated readings.

I also used a thermal camera, which revealed increased thermal readings.

I could not mitigate the leak.

The leak appears to be causing damage to the wood flooring, baseboard, and sheetrock.

The leak is **active**, occurring constantly.

The water is migrating from the concrete slab and affecting the wood flooring, sheetrock, and baseboards.

## **Recommendation**

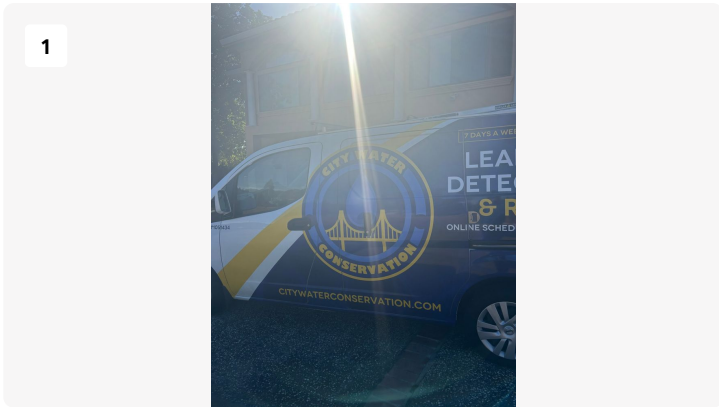
We recommend that a licensed professional assess the foundation and the area around the house to make proper repairs to stop groundwater from intruding into the home.

**Affected area room measurements are provided via attached photos.**

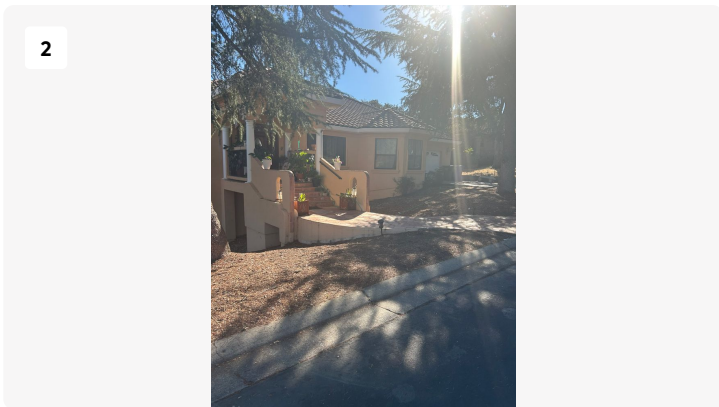
## **Additional Observations**

I inspected all areas under the house adjacent to the area of concern and found no leaks. This part of the house is about 6 feet higher than the area of concern on the other side of the house. This explains why there is no water intrusion on that side of the house compared to the area of concern. The groundwater appears to be the cause of the leak.





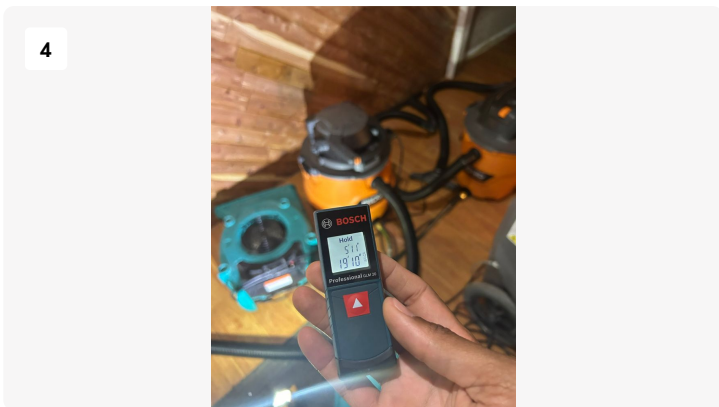
Project: 1005-95-1095  
Date: 10/16/2024, 3:23pm  
Creator: Noor Mitchell



Project: 1005-95-1095  
Date: 10/16/2024, 3:23pm  
Creator: Noor Mitchell

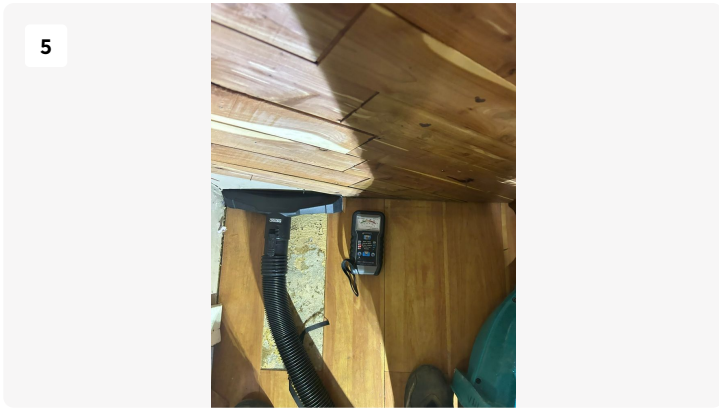


Project: 1005-95-1095  
Date: 10/16/2024, 3:24pm  
Creator: Noor Mitchell



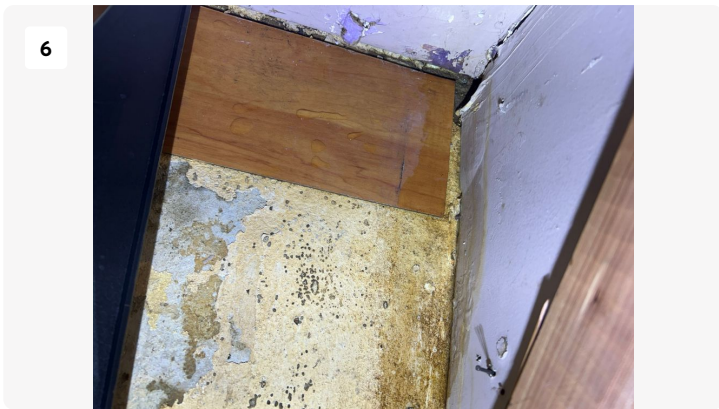
### Measurements of hall area

Project: 1005-95-1095  
Date: 10/16/2024, 3:44pm  
Creator: Noor Mitchell



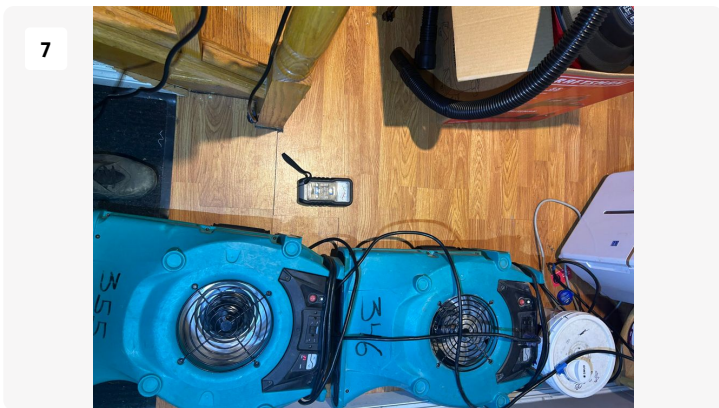
Moisture reading of wood flooring

Project: 1005-95-1095  
Date: 10/16/2024, 3:44pm  
Creator: Noor Mitchell



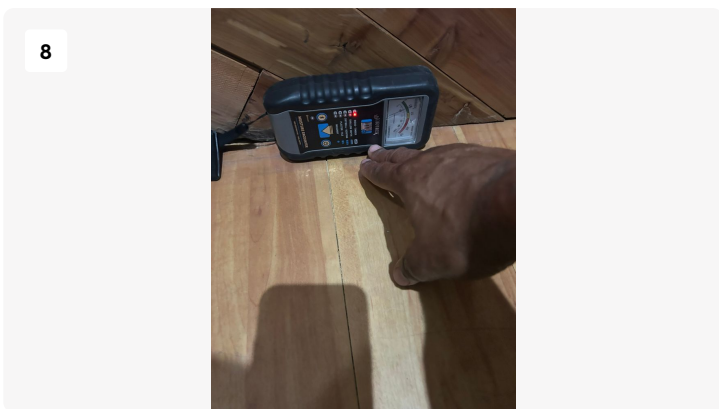
Picture of damaged area in hall area

Project: 1005-95-1095  
Date: 10/16/2024, 3:44pm  
Creator: Noor Mitchell



Moisture reading of wood flooring in hall area

Project: 1005-95-1095  
Date: 10/16/2024, 3:46pm  
Creator: Noor Mitchell



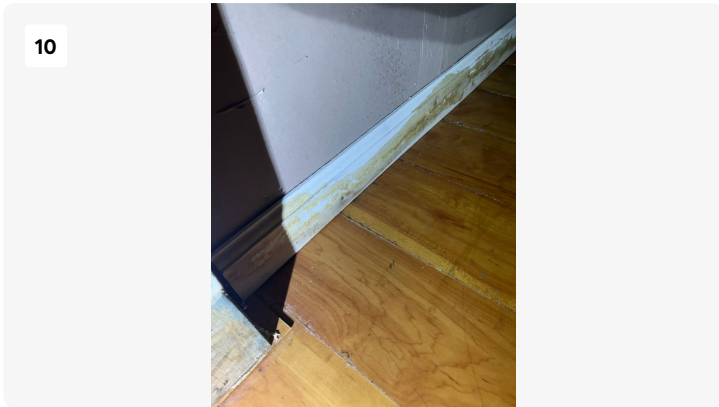
Moisture reading of baseboard

Project: 1005-95-1095  
Date: 10/16/2024, 3:48pm  
Creator: Noor Mitchell



Moisture reading of wood and second area in hallway

Project: 1005-95-1095  
Date: 10/16/2024, 3:48pm  
Creator: Noor Mitchell



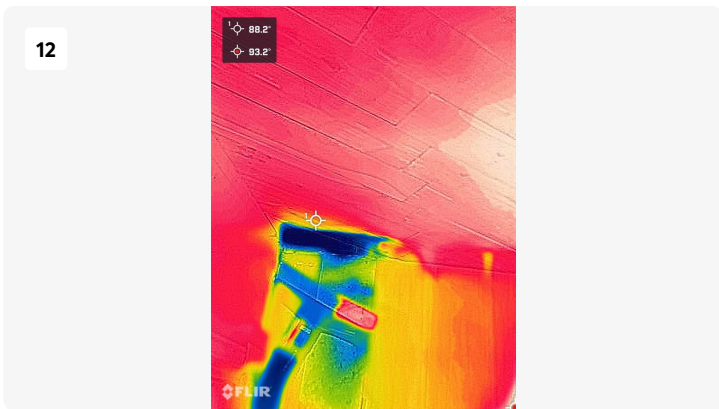
Baseboard damage from ground water

Project: 1005-95-1095  
Date: 10/16/2024, 3:48pm  
Creator: Noor Mitchell



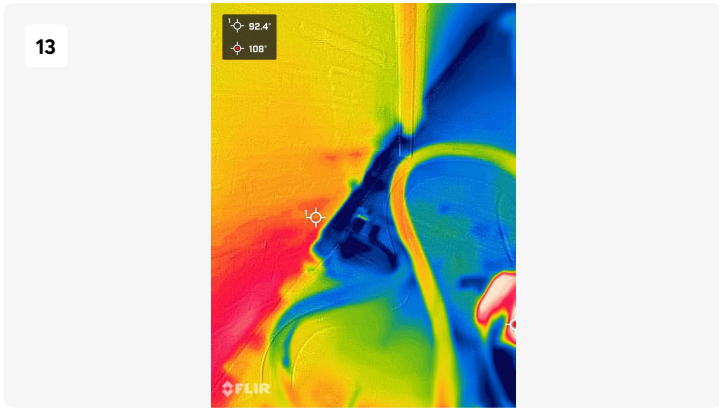
Baseboard moisture reading

Project: 1005-95-1095  
Date: 10/16/2024, 3:48pm  
Creator: Noor Mitchell



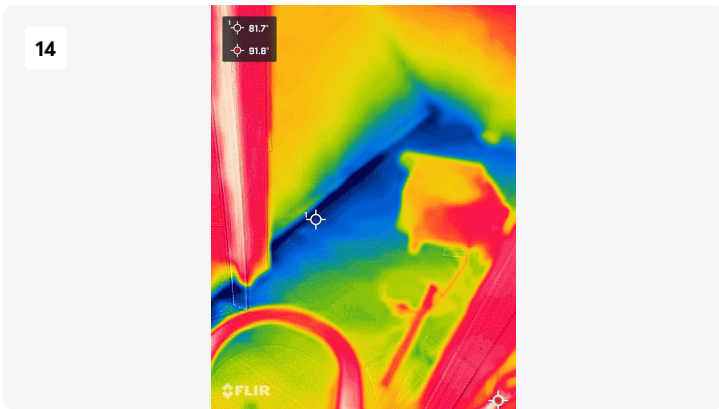
Thermal of hall area with ground water, pulling from slab

Project: 1005-95-1095  
Date: 10/16/2024, 3:50pm  
Creator: Noor Mitchell



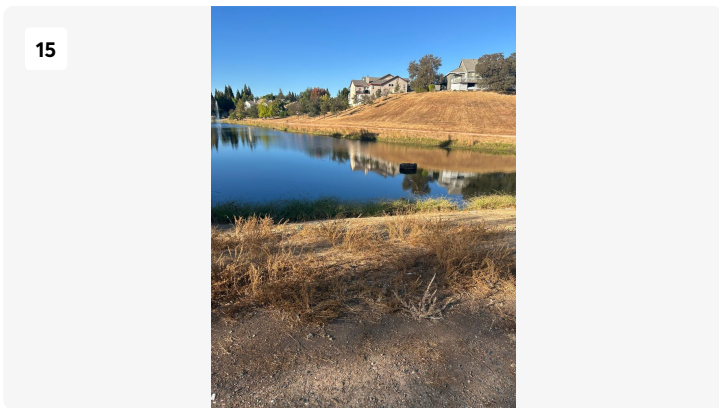
Thermal image of second area, pulling up ground water

Project: 1005-95-1095  
Date: 10/16/2024, 3:50pm  
Creator: Noor Mitchell



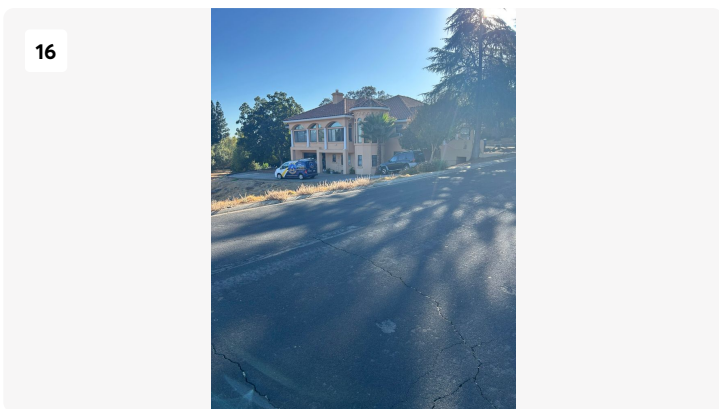
Thermal imaging under stairs with moisture on wall and sheet rock

Project: 1005-95-1095  
Date: 10/16/2024, 3:51pm  
Creator: Noor Mitchell



Picture of lake across the street from house

Project: 1005-95-1095  
Date: 10/16/2024, 4:25pm  
Creator: Noor Mitchell



Picture of house at ground level with the same level as lake on other side of house

Project: 1005-95-1095  
Date: 10/16/2024, 4:25pm  
Creator: Noor Mitchell



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Moisture area near front of house on end of house where bedroom has water moisture as well

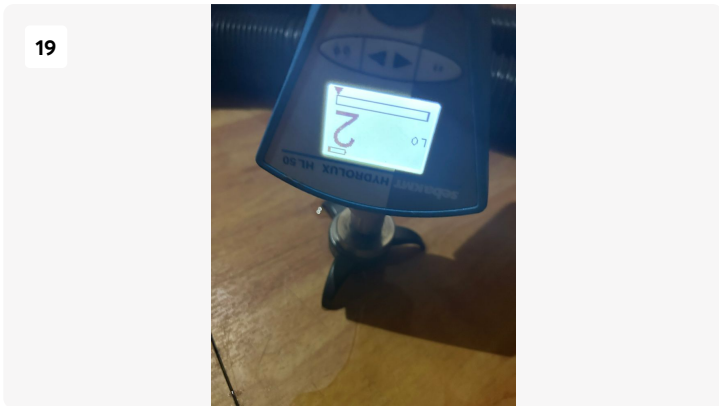
Project: 1005-95-1095  
Date: 10/16/2024, 4:25pm  
Creator: Noor Mitchell



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Water moisture in soil on back side of house directly in line with area of concern inside hall way

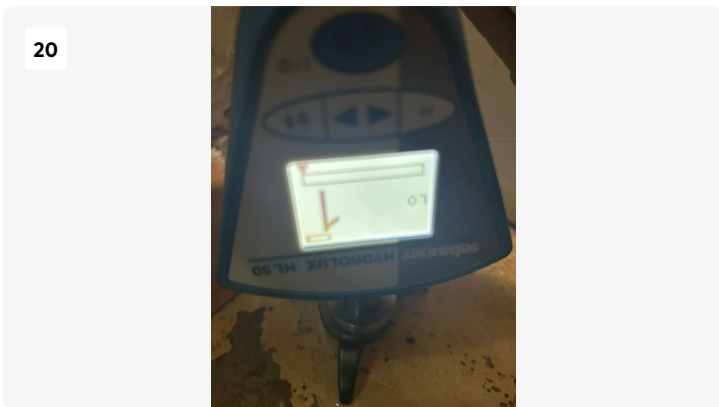
Project: 1005-95-1095  
Date: 10/16/2024, 4:26pm  
Creator: Noor Mitchell



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Point read with sound equipment with no movement

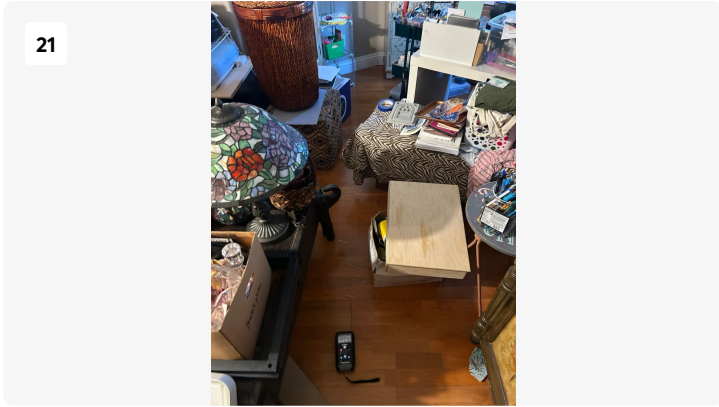
Project: 1005-95-1095  
Date: 10/16/2024, 4:34pm  
Creator: Noor Mitchell



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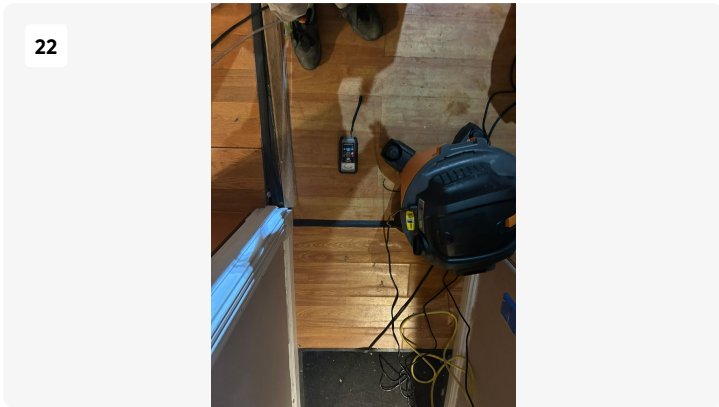
Point read of sound equipment with the raised levels

Project: 1005-95-1095  
Date: 10/16/2024, 4:34pm  
Creator: Noor Mitchell



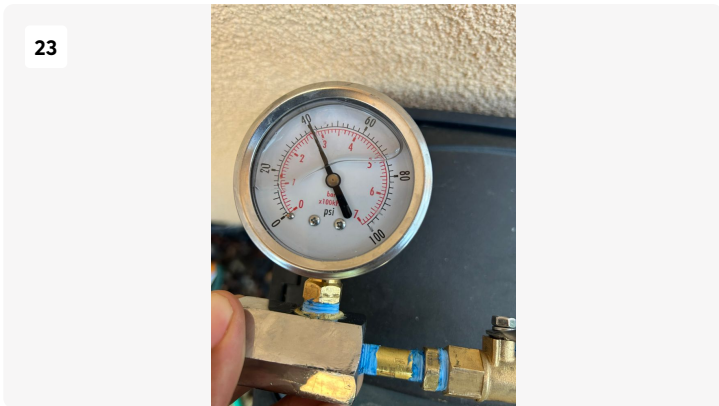
Moisture reading of downstairs bedroom floor

Project: 1005-95-1095  
Date: 10/16/2024, 4:37pm  
Creator: Noor Mitchell



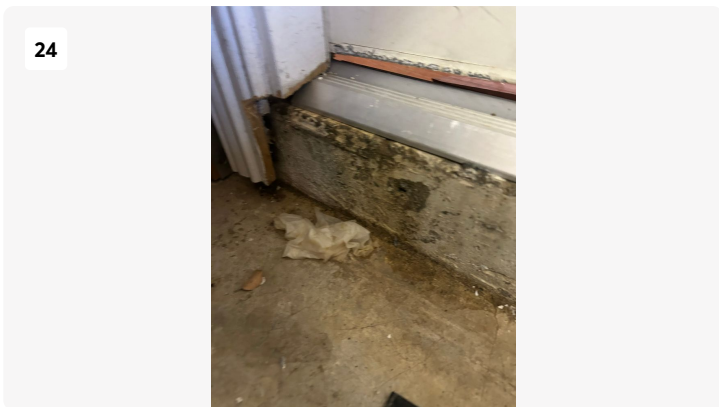
Moisture reading of downstairs bedroom

Project: 1005-95-1095  
Date: 10/16/2024, 4:38pm  
Creator: Noor Mitchell



Pressure test still holding after shutting off water to main house

Project: 1005-95-1095  
Date: 10/16/2024, 4:41pm  
Creator: Noor Mitchell



Ground water damage to garage concrete

Project: 1005-95-1095  
Date: 10/16/2024, 4:49pm  
Creator: Noor Mitchell

25



### Groundwater damage to baseboards in garage

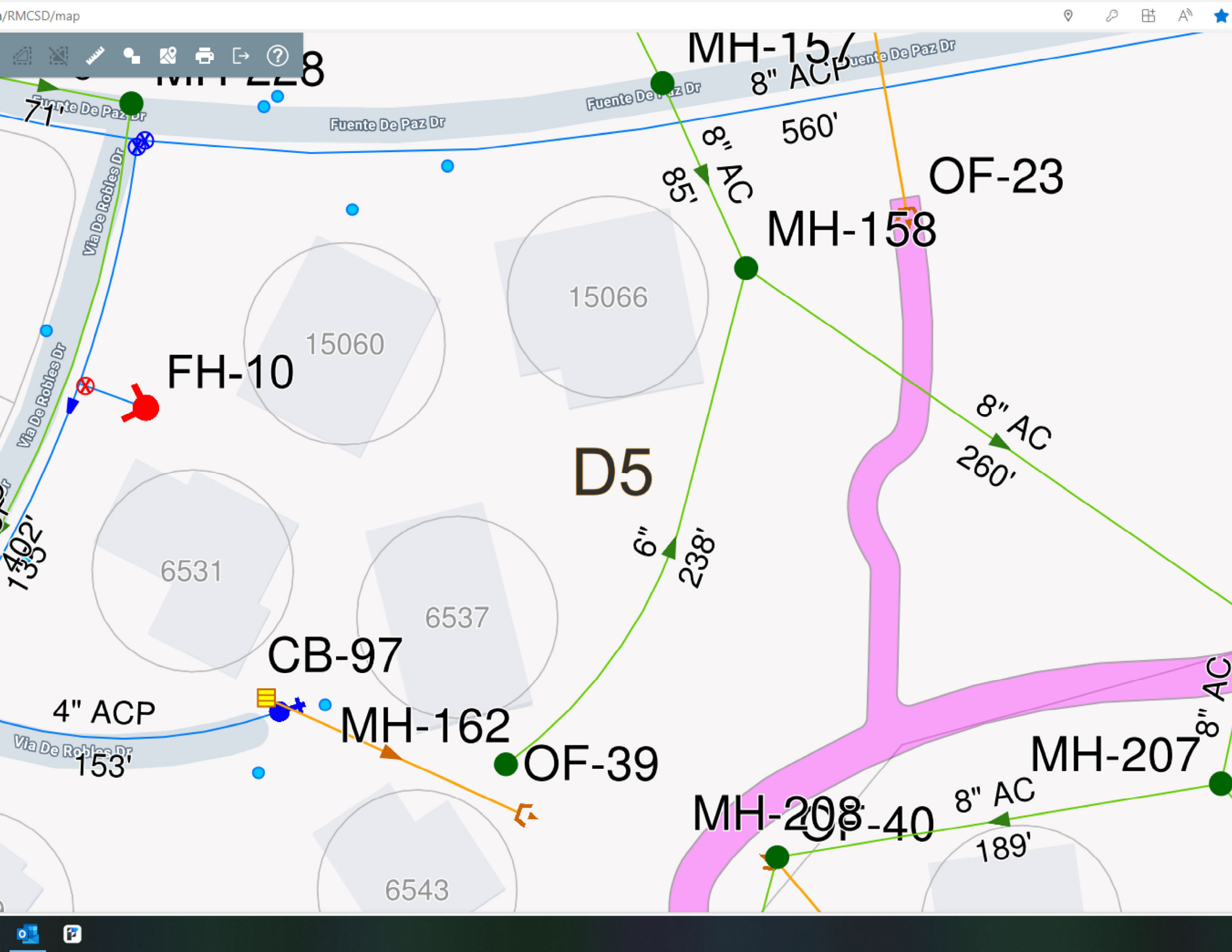
Project: 1005-95-1095  
Date: 10/16/2024, 4:49pm  
Creator: Noor Mitchell

26



### Groundwater damage to door frame in garage

Project: 1005-95-1095  
Date: 10/16/2024, 4:49pm  
Creator: Noor Mitchell



MH-157

OF-23

MH-158

FH-10

D5

CB-97

MH-162

OF-39

MH-207

MH-208-40

8

Fuente De Paz Dr

Fuente De Paz Dr

8" ACP

560'

8" AC  
85'

8" AC  
260'

6" 238'

4" ACP  
153'

8" AC  
189'

15060

15066

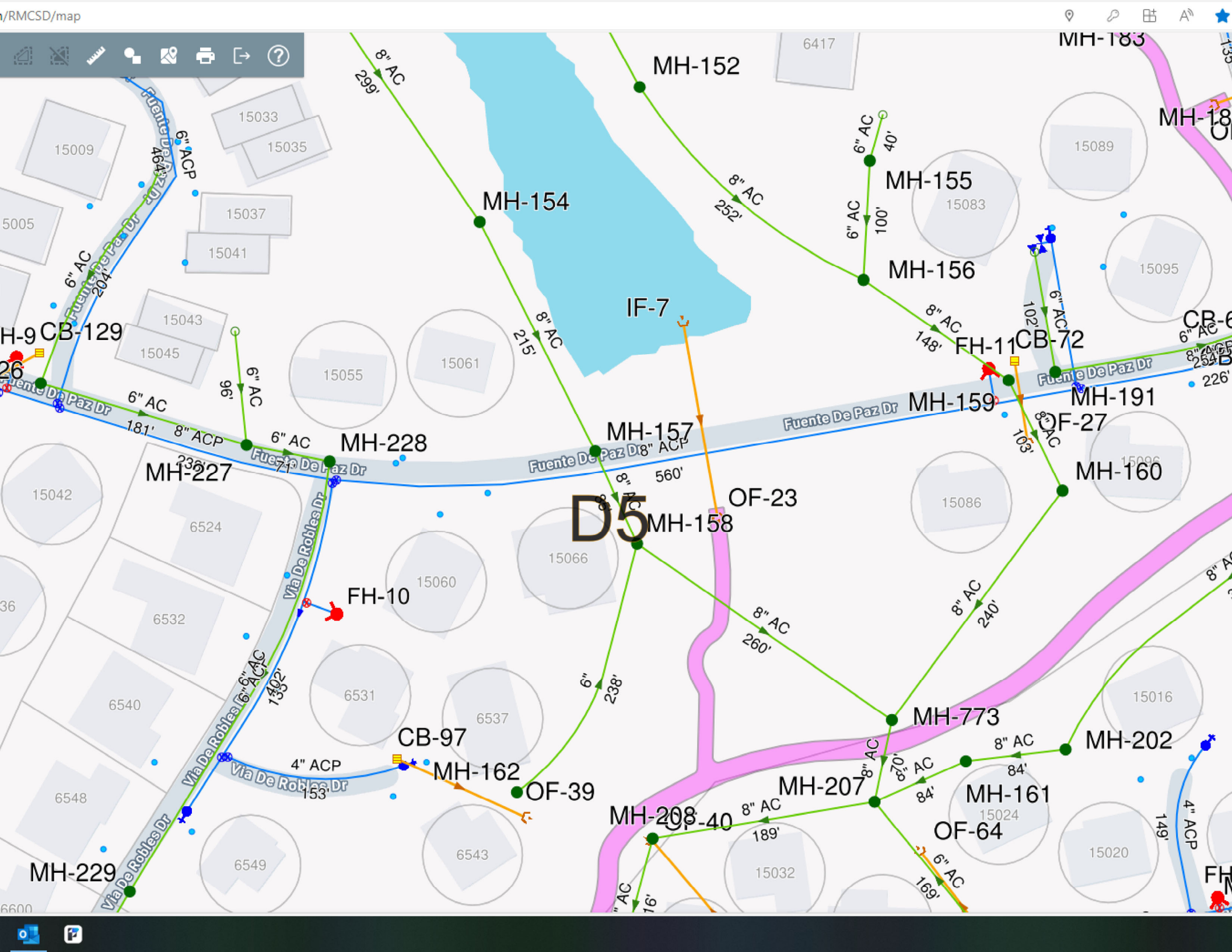
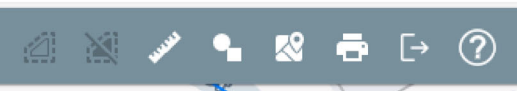
6531

6537

6543







D5



# CALIFORNIA LABORATORY SERVICES

*Committed. Responsive. Flexible.*

## QUOTE REQUEST

Date: January 01, 2025

RMCS-2025

Name: Rancho Murieta Community Services District  
Project Name: Water & Wastewater General Pricing  
Project Manager: Travis Bohannon

Rancho Murieta, CA  
1/1/2025  
12/31/2025

QC Level: 1

Parameter	Method	Matrix	TAT	QTY	Price
Alkalinity	SM2320B	W	5	TBD	\$32.00
Ammonia	SM4500-NH3-1997	W	5	TBD	\$45.00
BOD	SM5210B	W	5	TBD	\$46.00
Coliform (15 Tube)	SM9221	W	5	TBD	\$47.00
Coliform (P/A)	SM9223	W	5	TBD	\$34.00
HPC	SMSM9215	W	5	TBD	\$45.00
Formaldehyde	EPA 8315	W	5	TBD	\$238.00
HAA5	EPA 552	W	6-8	TBD	\$125.00
Hardness	SM2340B	W	5	TBD	\$38.00
Mercury (LL)	EPA 1631	W	10-12	TBD	TBD
Mercury (Std.)	EPA 245.1	W	5	TBD	\$42.00
Metals	EPA 200 Series	W	5	TBD	\$20.00
Metals, DW Series	EPA 200 Series	W	5	TBD	\$190.00
Nitrate (as N)	EPA 300	W	5	TBD	\$21.00
Nitrite (as N)	EPA 300	W	5	TBD	\$21.00
NO <sub>2</sub> +NO <sub>3</sub> - N	EPA 300	W	5	TBD	\$23.00
Phosphorus	SM4500-P	W	5	TBD	\$48.00
SUVA	STDM/EPA	W	5	TBD	\$68.00
TDS	SM2540C	W	5	TBD	\$31.00
TKN	SM4500-NH3-1997	W	5	TBD	\$56.00
TOC	SM5310B	W	5	TBD	\$48.00
Total Nitrogen	STDM/EPA	W	5	TBD	\$25.00

TSS	SM2540D	W	5	TBD	\$37.00
TTHM	EPA 524.2	W	5	TBD	\$110.00
VOC	EPA 524.2	W	5	TBD	\$135.00
Chrypto/Giardia (F.Filtered)	EPA 1623.1	W	10	TBD	\$906.00
Chrypto/Giardia	EPA 1623.1	W	10	TBD	\$1,110.00
Dirty Sample (Crypto)	EPA 1623.1	W	10	TBD	\$150.00
State Write-On	CA	W	10	TBD	\$16.00/Report
Disposal (Non Coliform)	CLS	W	60 Days	TBD	\$5.00
<b>TOTAL</b>					<b>TBD</b>

**TAT: 1 Day = 2X (100%); 2 Day = 1.6X (60%); 3 Day = 1.3X (30%) & 4 Day 1.15X (15%)**

**Pricing Not Found - Please refer to CLS Price Schedule**

Warmest regards,

*Scott Furnas*

Scott Furnas  
President



*Quality Service - Fast Turnaround-Reasonable Rates*  
Client Services: [scottf@californialab.com](mailto:scottf@californialab.com)

# California State Water Resources Control Board

## DROUGHT REPORT

**PWSID:** CA3410005

**Water System Name:** RANCHO MURIETA COMMUNITY SERVI

**Reporting Period:** 11/01/2024 - 11/30/2024

**Reporting Due Date:** 01/31/2025

**Report Created Date:** 12/17/2024

### WATER SHORTAGE

**Experiencing a severe water shortage:** No

**Estimated date of when a severe water shortage may begin:** Severe water shortage not expected

**Do you have a Water Shortage Contingency Plan (or Drought Planning Elements)?:** Yes

**Website link to Water Shortage Contingency Plan:** Water Shortage Contingency Plan Not Available Online

**Upload Water Shortage Contingency Plan:** water shortage contingency plan 09-2012 final.pdf

**Adoption date of Plan:** 09/01/2012

**What equivalent level percent source reduction of your Water Shortage Contingency Plan have you invoked?:** No Shortage Level Invoked

**Comments:**

### SOURCE REPORTING

#### LAKE CHESBRO (CONSUMNES RIVER)

**Source Information:**

- **Facility ID:** 001
- **Facility Type:** Intake
- **Water Type:** Surface Water
- **Facility Availability:** Permanent
- **Activity Status:** Active
- **Intake Pump NPSHR (feet):** 30
- **Water Source Type:** Lake
- **Ability to lower or extend your intake:** No

- **Water Rights ID:** A023416

**Did you utilize this source during the reporting period?:** Yes

**Water Level (feet from surface water bottom):** 40

**Date Measured:** 11/27/2024

**Intake Level (feet from surface water bottom):** 6

**Intake Level (feet from surface water bottom) Date Measured:** 11/30/2024

**Potable Amount Produced During Reporting Period:** 33.35400000

**Potable Amount Produced During Reporting Period Date Measured:** 11/30/2024

**Potable Amount Produced During Reporting Period Unit of Measure:** Million Gallons (MG)

**Total Pump Hours During Reporting Period:** 680.00000000

**Instant Flow Rate:** 1,107.00000000

**Instant Flow Rate Date Measured:** 11/08/2024

**Instant Flow Rate Unit of Measure:** Gallons per Minute (GPM)

**Was this source under curtailment at any point within the reporting period from the State Water Board Division of Water Rights?:** No

**Comments:**

**TOTAL PRODUCTION DURING REPORTING PERIOD (gallons):** 33,354,000.00

## SUPPLY & DEMAND

### ABOUT

Does your system supply or deliver non-potable water to customers or other water systems?: No

Does your system supply or deliver recycled water to customers or other water systems?: Yes

### POTABLE SUPPLY

Unit of Measure: Gallons (G)

#### POTABLE SELF-PRODUCED

Surface Water Production	TOTAL Potable Self-Produced	Preliminary Estimate?
33,354,000	33,354,000	No

#### POTABLE EXTERNALLY-SOURCED

Bottled Water Reliance	TOTAL Potable Externally-Sourced	Preliminary Estimate?
No	0	No

#### TOTAL POTABLE SUPPLY

TOTAL Potable Supply	Preliminary Estimate?
33,354,000	No

#### POTABLE SUPPLY COMMENTS:

### POTABLE DEMAND

Do you meter the volume of potable water delivered to your individual customers?: Yes

Unit of Measure: Gallons (G)

**POTABLE RESIDENTIAL DEMAND**

Residential Single-Family	Residential Multi-Family	TOTAL Residential Demand	Population Served	Residential Gallons per Capita per Day (R-GPCD)	Preliminary Estimate?
29,219,124	0	29,219,124	5,874	171.53	No

**POTABLE NON-RESIDENTIAL DEMAND**

Commercial & Institutional	Metered Irrigation of Commercial, Industrial, or Institutional Landscapes	Industrial	Agriculture	Other Non-Residential Demand	Total Non-Residential Demand	Preliminary Estimate?
2,066,724	1,869,252	0	0	0	3,935,976	No

**POTABLE WATER DELIVERED TO OTHER WATER SYSTEM (S)**

Volume Sold or Delivered to Other Water System(s)	Sold or Delivered To (Water Systems Only)	Preliminary Estimate?
0		No

**TOTAL POTABLE DEMAND**

TOTAL Potable Demand	Preliminary Estimate?
33,155,100	No

**POTABLE DEMAND COMMENTS:**

**NON-POTABLE SUPPLY**

**Unit of Measure:** Gallons (G)

**NON-POTABLE SELF-PRODUCED SUPPLY**

Recycled Water Self-Produced	Non-Potable Water Produced (not recycled; i.e., agriculture well)	TOTAL Non-Potable Water Self-Produced	Preliminary Estimate?
0	0	0	No

**NON-POTABLE SUPPLY EXTERNALLY-SOURCED**

Recycled Water Obtained	Recycled Water Obtained From (Water Systems Only)	Obtained Non-Potable Hauled Water	Other Non-Potable Water Obtained From Another Water System	Non-Potable Obtained Water Sources (Water Systems Only)	TOTAL Non-Potable Water Externally Sourced	Preliminary Estimate?
0			0		0	No

**TOTAL NON-POTABLE SUPPLY**

TOTAL Non-Potable Supply	Preliminary Estimate?
0	No

**NON-POTABLE SUPPLY COMMENTS:**

**NON-POTABLE DEMAND**

Do you meter the volume of potable water delivered to your individual customers?: Yes

Unit of Measure: Gallons (G)

**RESIDENTIAL NON-POTABLE DEMAND**

Residential Recycled Water Demand	Residential Non-Potable Demand (non-recycled)	TOTAL Residential Non-Potable Demand	Metered Non-Potable Residential Landscape Irrigation Demand	Preliminary Estimate?
0	0	0	0	No

**NON-RESIDENTIAL NON-POTABLE DEMAND**

Non-Residential Recycled Water Demand	Non-Residential Non-Potable Demand (non-recycled)	TOTAL Non-Residential Non-Potable Demand	Metered Non-Potable, Non-Residential Irrigation Demand for Commercial, Industrial, or Institutional Landscapes	Preliminary Estimate?
0	0	0	0	No

**NON-POTABLE WATER DELIVERED TO OTHER WATER SYSTEM(S)**

Volume Non-Potable Sold or Delivered to Other Water System(s)	Non-Potable Sold or Delivered To (Water Systems Only)	Preliminary Estimate?
0		No

**TOTAL NON-POTABLE DEMAND**

TOTAL Non-Potable Demand	Preliminary Estimate?
0	No

**NON-POTABLE DEMAND COMMENTS:**



## TOTAL REPORT SUMMARY

### POTABLE SUPPLY & DEMAND (IN GALLONS)

TOTAL Potable Supply	TOTAL Potable Demand	Preliminary Supply Estimate?	Preliminary Demand Estimate?	Potable Supply and Demand Difference
33,354,000	33,155,100	No	No	198,900

### POTABLE SUPPLY & DEMAND COMMENTS:

### NON-POTABLE SUPPLY & DEMAND (IN GALLONS)

TOTAL Non-Potable Supply	TOTAL Non Potable Demand	Preliminary Non-Potable Supply Estimate?	Preliminary Non-Potable Demand Estimate?	Non-Potable Supply and Demand Difference
0	0	No	No	0

### NON-POTABLE SUPPLY & DEMAND COMMENTS:

### ESTIMATED POTABLE WATER LOSS

Estimated Potable Water Loss (in gallons)
198,900

### ESTIMATED POTABLE WATER LOSS COMMENTS:

### ESTIMATED NON-POTABLE WATER LOSS

Estimated Non-Potable Water Loss (in gallons)
0

### ESTIMATED NON-POTABLE WATER LOSS COMMENTS:

### MAXIMUM DAY DEMAND (MDD)

Estimated Maximum Day Demand (in gallons): 1,667,700

Maximum Day Demand (in gallons): 1,594,000

Maximum Day Demand Date: 11/08/2024

### MAXIMUM DAY DEMAND (MDD) COMMENTS:

**ANNUAL SUPPLY (IN GALLONS)**

Month	Surface Water Production	TOTAL Potable Supply
January	23,903,000	23,903,000
February	20,516,000	20,516,000
March	25,975,000	25,975,000
April	30,033,000	30,033,000
May	52,115,000	52,115,000
June	66,464,000	66,464,000
July	77,949,000	77,949,000
August	72,988,000	72,988,000
September	62,661,000	62,661,000
October	58,010,000	58,010,000
November	33,354,000	33,354,000
December		0
TOTAL	523,968,000	523,968,000

Month	Recycled Water Self-Produced	Non-Potable Water Produced (not recycled; i.e., AGRICULTURE well)	Recycled Water Obtained	Other Non-Potable Water Obtained From Another Water System	TOTAL Non-Potable Supply	TOTAL Supply
January						23,903,000
February						20,516,000
March						25,975,000
April	0	0	0	0	0	30,033,000
May	19,478,000	0	0	0	19,478,000	71,593,000
June	40,877,000	0	0	0	40,877,000	107,341,000
July	39,823,000	0	0	0	39,823,000	117,772,000
August	23,626,000	0	0	0	23,626,000	96,614,000
September	16,732,000	0	0	0	16,732,000	79,393,000
October	18,672,000	0	0	0	18,672,000	76,682,000
November	0	0	0	0	0	33,354,000
December						0
TOTAL	159,208,000	0	0	0	159,208,000	683,176,000

**ANNUAL DEMAND (IN GALLONS)**

Month	Residential Single-Family	Residential Multi-Family	Commercial & Institutional	Metered Irrigation of Commercial, Industrial, or Institutional Landscapes	Industrial	Agriculture	Other Non-Residential Demand	Volume Sold or Delivered to Other Water System(s)	TOTAL Potable Demand
January	15,962,320	0	1,268,608	684,420	0	0	0	0	17,915,348
February	12,551,440	0	1,222,980	438,328	0	0	0	0	14,212,748
March	14,041,590	0	1,494,504	356,796	0	0	0	0	15,892,890
April	21,134,792	0	1,939,564	1,296,284	0	0	0	0	24,370,640
May	31,805,304	0	2,736,184	3,191,716	0	0	0	0	37,733,204
June	53,113,984	0	4,336,904	4,336,904	0	0	0	0	61,787,792
July	59,471,984	0	5,049,000	6,339,300	0	0	0	0	70,860,284
August	58,777,840	0	5,255,448	7,030,452	0	0	0	0	71,063,740
September	53,235,908	0	3,892,592	4,865,740	0	0	0	0	61,994,240
October	50,944,993	0	8,500,272	4,069,868	0	0	0	0	63,515,133
November	29,219,124	0	2,066,724	1,869,252	0	0	0	0	33,155,100
December									
TOTAL	400,259,279	0	37,762,780	34,479,060	0	0	0	0	472,501,119

Month	Residential Recycled Water Demand	Residential Non-Potable Demand (non-recycled)	Non-Residential Recycled Water Demand	Non-Residential Non-Potable Demand (non-recycled)	Volume Non-Potable Sold or Delivered to Other Water System(s)	Metered Non-Potable Residential Landscape Irrigation Demand	Metered Non-Potable, Non-Residential Irrigation Demand for Commercial, Industrial, or Institutional Landscapes	TOTAL Non-Potable Demand	TOTAL Demand
January									17,915,348
February									14,212,748
March									15,892,890
April	0	0	0	0	0	0	0	0	24,370,640
May	0	0	15,547,000	0	0	0	0	15,547,000	53,280,204
June	0	0	36,099,000	0	0	0	0	36,099,000	97,886,792
July	0	0	35,953,000	0	0	0	0	35,953,000	106,813,284
August	0	0	21,027,000	0	0	0	0	21,027,000	92,090,740
September	0	0	13,506,000	0	0	0	0	13,506,000	75,500,240
October	0	0	18,672,000	0	0	0	0	18,672,000	82,187,133
November	0	0	0	0	0	0	0	0	33,155,100
December									0
TOTAL	0	0	140,804,000	0	0	0	0	140,804,000	613,305,119

**ATTEST**

I certify that the information provided is true and accurate under penalty of perjury.

**Travis Bohannon**

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**12/17/2024**

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# **RANCHO MURIETA COMMUNITY SERVICES DISTRICT**

## **WATER SHORTAGE CONTINGENCY PLAN**

September 14, 2012

The purpose of this Water Shortage Contingency Plan (Plan) is to provide direction on specific actions to be taken by the Rancho Murieta Community Services District (District) staff and customers in response to increasingly severe water supply shortage conditions. **In case of water system failure or water quality issues requiring immediate response and action refer to the District's Emergency Operations Procedures (see Attachment A).**

The District intends to use this Plan to meet the requirements of the California Water Code, Section 10632 (see Attachment B). A water shortage contingency analysis based on the historic driest three-years on record was previously prepared as part of the Integrated Water Master Plan (Brown and Caldwell, 2010). The current IWMP Update presents water supply demands and drought responses for the minimum available supply based on existing (2,504) and approved lots.

In an effort to provide a uniform basis for requesting cutbacks in consumption due to cutbacks in supply from minor to emergency conditions, the District has a program of four (4) stages of actions based on the severity of the water shortage. The District previously adopted shortage mitigation measures, which are included in District Code Chapter 14 - Water Code, updated most recently in 2012.

This Plan is consistent with District Policies, District Codes and the District's Integrated Water Master Plan Update (Brown and Caldwell, 2010). The names for stages in this Plan are consistent with other water purveyors in the Sacramento region.

This Plan is applicable to a range of short and long term emergency conditions when supply volume or system delivery capability is impaired, including but not limited to:

- Main break or other distribution system failure
- Water treatment plant failure
- Natural disaster (flood, earthquake, wind damage, etc.)
- Water quality issue with supply reservoirs or system contamination
- Drought conditions

### **IMPLEMENTATION OF THE PLAN**

The District has three (3) main objectives when faced with water shortage conditions as described below. This Plan specifically addresses the first objective related to monitoring and addressing shortage conditions through tracking supply conditions and, when projecting shortfalls, the means to invoke customer responses to reduce demand. Given the changing conditions of fiscal needs

and latest information on water savings technologies, the District plans to further prepare for longer duration droughts by completing a Drought Financial Plan and Drought Communications and Education Plan when shortages appear imminent.

1. Monitoring and Declaration of Water Shortages/Drought
  - a. Drought indicators
  - b. Index for trigger levels
  - c. Staged actions for reducing customer demands
2. Drought Financial Plan
  - a. Sustainability of funding for District operations
  - b. Tiered pricing implementation to achieve reductions in demand and provide revenues to cover cost of service in times of shortage
3. Drought Communication Outreach and Education Plan
  - a. Media response
  - b. Water use by lot categories
  - c. Drought checklist for customer actions

## **RESPONSE TO IMPAIRED TREATMENT AND DISTRIBUTION SYSTEM CONDITIONS**

Short-term supply interruptions may invoke the need for District staff to alert customers of any stage of shortage, listed further below in this document, as conditions warrant. This determination will be made by the General Manager. The appropriate stage of action will be determined based on the severity and projected duration of the shortage. In other words, an emergency condition where more than 50% of the supply is unavailable may warrant an alert for Stage 4 – Water Emergency. This message would be broadcasted as an alert out to the entire community (using the District’s CodeRED auto-dialer messaging system) and notices would be issued via written notice (letter or door hangers) and other means to advise customers of the water shortage and anticipated duration of the shortage. All customers will then be noticed when the shortage is resolved.

## **RESPONSE TO LONG TERM SUPPLY SHORTAGE DUE TO DROUGHT CONDITIONS**

The drought actions called for are based on the current water supply capacity (including Clementia Reservoir) and estimates for demands needed in times of drought based on the 3,274 approved connections, of which 2,504 currently exist. As the District monitors accomplishments in reaching the 20% reduction in water use by 2020 goal of 238 gallons per capita per day (gpcd), as called for in District Policy 2011-05, the District will update this Plan. The baseline 10-year average (as defined in Senate Bill SB X7-7) is 298 gpcd stated in the 2020 Compliance Plan (Brown and Caldwell, 2010).

The expected demand cutback by stages included within this Plan does not currently include consideration of the 20% reduction goal given it has not yet been achieved. At minimum, it is anticipated that this Plan will be updated when the community achieves 50% of its reduction goal to 268 gpcd or 10% reduction in gross per capita per day demand.

Overall drought preparedness actions to be taken by the District include:

- Understand and comply with legal and regulatory requirements for drought preparedness.
- Review and update Water Shortage Contingency Plan at a minimum of every 5 years or as needed based on new monitoring data, new supply, operational changes, or change in expected water demands.
- Provide education and outreach to customers on efficient and reasonable uses of water and best ways to save, with increased intensity in messaging during times of drought.
- Continue District water loss management procedures (leak identification and repair).
- Enforce prohibition of wasted water per the District Code – Chapter 14 – Water Code, Section 13.
- Continue conservation policies and water-efficient plumbing codes.
- On an as needed basis and at a minimum of every 5 years, review and refine the rate stabilization policy relating to drought impacts.
- Update educational materials on an as needed basis.

## **DISTRICT DROUGHT MONITORING**

Every year the climate varies and the District monitors potential flood and drought conditions. The District's water rights permit allows for pumping between November 1 and May 31 each year. In normal water years at our current number of water connections, the District typically starts pumping to fill the supply reservoirs in February. When forecasted water supply conditions are indicating a dry year, it may prompt the District to take action for changes in pumping operations and/or notifying customers to cut back on demand.

To check on water supply forecasts, the District tracks both State resources and local metrics to best inform and assist in their decision-making on calling for implementation of each drought stage. One such resource is the Department of Water Resources (DWR), State Climatologist, who does careful monitoring of the predicted water supply and flood management forecasts using real time weather monitoring stations throughout the Central Valley. Also, there are two (2) primary climate monitoring station indices tracked for California: Sacramento River 8-Station Index and San Joaquin River 5 Station Index. The District will primarily monitor the San Joaquin River Index which includes monitoring that encompasses the Cosumnes River watershed. Information on the drought status is posted online through the California Data Exchange Center and updated regularly based on the most recent weather station data available (including National Weather Service resources).

Another metric is the standard scale for severity of drought that has been defined by the National Drought Mitigation Center's Drought Monitor (<http://droughtmonitor.unl.edu>) and DWR has adapted this scale for use in California as shown below:



Percentile	Drought Monitor Category	
0.00 - 0.02	<b>D4</b>	Drought - Exceptional
0.02 - 0.05	<b>D3</b>	Drought - Extreme
0.05 - 0.10	<b>D2</b>	Drought - Severe
0.10 - 0.20	<b>D1</b>	Drought - Moderate
0.20 - 0.30	<b>D0</b>	Abnormally Dry
0.30 +	<b>N</b>	Normal
Source: Department of Water Resources, 2012 <a href="http://cdec.water.ca.gov/cdecapp/drought/get5SI.action">http://cdec.water.ca.gov/cdecapp/drought/get5SI.action</a>		

The District will monitor DWR’s California Data Exchange Center’s (CDEC) provided information to determine when droughts may be imminent or occurring and review forecasts based on predictions by DWR weather models. The DWR provided information for the San Joaquin River watershed is posted online at: <http://cdec.water.ca.gov/cdecapp/drought/get5SI.action>.

The District also has the ability to perform local monitoring for the flows on the Cosumnes River with the USGS gage station data at Michigan Bar. An index based on historical range of flows for any given month between November and June is available to aid the District in determining when below average flows are present and indicate potential issues with water supply availability. The District will closely track flows in dry years due to the probability of impacts on the District’s ability to pump to the reservoir system. In addition, once a drought has been declared and the necessary drought stage is set, the District has the ability to closely monitor water usage with its automatic meter reading system to validate if the expected demand response in needed cutbacks is occurring within the District’s service area. If demand cutbacks are not occurring or the supply conditions are worsening, then the District will need to move to the next stage of shortage response measures.

## STAGES OF ACTION

The stage determination and declaration shall be made by the General Manager. One of five (5) stages shall always be in effect; given the initial Stage “Normal” is targeting everyday conservation.

A change of stage requires that the Board of Directors be notified and a public notice be posted at District headquarters. Written notification will be provided to all customers at least 10 days prior to a Stage 2 - Water Warning with mandatory measures going into effect **and any higher Stages 3 and 4 will also be notified in writing to customers** Below is a summary table of stages and shortage mitigation actions that will serve as a guideline based water supply conditions. Given that water supply conditions may change rapidly due to decreasing river flows being observed through District monitoring (which project potential restrictions on pumping and supply shortages), some stages may be skipped if conditions warrant the need for faster reductions in demands to respond to the shortage conditions.

Table 1. Water Shortage Contingency Plan Summary

Water Supply Conditions	Shortage Stage	Objective	Response actions	Key Water Savings Opportunities
None 0% Total Supply Reduction	Normal - Ongoing conservation measures; Prohibition of Wasted Water in effect.	Public awareness	Normal actions	<ul style="list-style-type: none"> <li>• Use everyday water conserving behaviors (i.e., stop off taps when not using water, avoid wasting water).</li> <li>• Check for and repair all leaks</li> <li>• Change to more water efficient using appliances and fixtures.</li> <li>• Maintain and adjust irrigation systems</li> <li>• Plant more native and water efficient plants.</li> </ul>
Slightly Restricted Water Supplies (below normal) Up to XX% Total Supply Reduction	Shortage Stage 1 - Water Alert	Initiate public awareness of predicted water shortage and encourage conservation	Encourage voluntary measures to decrease "normal" demand up to 10%	<ul style="list-style-type: none"> <li>• Use sacrificial water scarcity behaviors (i.e., shorter showers, etc.)</li> <li>• More aggressively check for and repair all leaks (instead of seasonally or monthly, perform weekly)</li> <li>• Reduce irrigation times on controllers</li> <li>• Consider fixture and appliance changes</li> <li>• Wash cars in recycled water facility</li> </ul>
Moderately Restricted Water Supplies Up to XX% Total Supply Reduction	Shortage Stage 2 – Water Warning	Increase public understanding of worsening water supply conditions, move to initial mandatory shortage mitigation measures	Encourage voluntary measures to decrease "normal" demand up to 25%	<ul style="list-style-type: none"> <li>• Continue to look for all ways to reduce water use (increasingly shorter showers, less toilet flushing, etc.)</li> <li>• Cutback on watering times and days</li> <li>• Consider alternative sources of supply, like implementing a graywater system for reusing water outdoors.</li> <li>• Consider if certain plants may not need to be watered at all or as much (e.g. deficit irrigate lawns).</li> </ul>
Severely Restricted Water Supplies Up to XX% Total Supply Reduction	Shortage Stage 3 – Water Crisis (severe prohibitions) on use	Ensure that water use is limited to essential uses only	Enforce extensive restrictions on water use and implement water rationing to decrease demand up to 50%	<ul style="list-style-type: none"> <li>• Implement all possible ways to reduce water use (increasingly shorter showers, less toilet flushing, etc.)</li> <li>• Further cut back on watering times and days</li> <li>• Consider if certain plants may not need to be watered at all (e.g. stop irrigating lawns).</li> <li>• Make more challenging upgrades to more efficient appliances and fixtures</li> </ul>
Extremely Restricted Water Supplies More than % Total Supply Reduction	Shortage Stage 4 – Water Emergency (increasing severe prohibitions with mandatory restrictions on use)	Ensure that water use is limited to health and safety purposes.	Enforce extensive restrictions on water use and implement water rationing to decrease demand on the order of 50%	<ul style="list-style-type: none"> <li>• Use water for only essential domestic sanitation needs.</li> <li>• No outdoor watering (or alternatively a water rationing scheme)</li> <li>• Extreme water sacrificing behaviors (limit all behavioral uses of water (i.e., fewer showers)</li> <li>• Maximize on-site reuse of water (graywater, rainwater capture, etc.) as appropriate for uses while maintaining health and sanitation needs.</li> </ul>

## STAGE “NORMAL” - NORMAL SUPPLY AND ON-GOING CONSERVATION

The District’s supply or distribution system is able to meet all the water demands of its customers in the near future. Based on the 2020 Compliance Plan Update (Brown and Caldwell, 2010), the District calls for efficient and reasonable use and District staff implementation of conservation measures will continue as planned.

<b>Triggering Mechanism</b>	<b>Normal water year conditions forecasted by Department of Water Resources, Office of State Climatologist and/or U.S. Bureau of Reclamation.</b> Full storage anticipated in all lakes and ability to provide full water supply to all customers.
<b>Consumption Limits</b>	<b>Service area-wide target for reduction:</b> 0.5-1% reduction per year for 10 years per the District’s 2020 Compliance Plan. Voluntary conservation encouraged and participation in the District’s water conservation program.
<b>District Actions</b>	During Stage “Normal”, all normal conservation programs would continue.
<b>Requested Consumer Action</b>	Follow the basic conservation measures set forth in under Normal Supply Conditions of the four-stage conservation program described herein.
<b>Penalties</b>	For the first and subsequent water waste violations, penalties will be issued according to District Water Code – Chapter 14, Section 13.

## STAGE 1 - WATER ALERT

There is a probability that the District’s supply or distribution system will not be able to meet all the water demands of its customers.

<b>Triggering Mechanism</b>	Any short-term water system operational issues deemed by the General Manager to warrant calling this stage based on a minor shortage targeting the need for a 5-10% cutback in demand. For long-term supply conditions, evidence of an abnormally dry water year conditions forecasted for the San Joaquin River by Department of Water Resources, Office of State Climatologist and/or U.S. Bureau of Reclamation. Less than full storage is anticipated in all lakes and there may be inability to provide full water supply to all customers.
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**Consumption Limits** All customers would be encouraged to reduce consumption by 5 - 10% for the duration of the water alert.

**District Actions** Continue the basic conservation program elements, and initiate public information campaign. Explain the supply condition to the public. Request voluntary drought curtailment of water use through customer changing to more water efficient behaviors (trim water times, take shorter showers, etc.).

**Requested Consumer Actions** Customers will be asked to implement Stage 1 shortage mitigation measures and adhere to the District Water Code – Chapter 14, Section 10.02, Water Waste.

**Penalties** For the first and subsequent water waste violations, penalties will be issued according to District Water Code – Chapter 14, Section 13.

## Stage 2 - WATER WARNING

The District's supply or distribution system will not be able to meet all the water demands of its customers.

**Triggering Mechanism** Any short-term water system operational issues deemed by the General Manager to warrant calling this stage based on a moderate shortage targeting the need for an 11-25% cutback in demand. For long-term supply conditions, evidence of more severe drought conditions are forecasted by the Department of Water Resources, and/or goal of 10% demand cutbacks in Stage 1 is not achieved, and/or low flow conditions are predicted for the Cosumnes River that may impact pumping capability.

**Consumption Limits** **Service area-wide target for reduction: 11 - 25%.** Customers will be educated by the District on ways to achieve reduced consumption based on their own home or business unique opportunities to save for the duration of the water warning condition.

**District Actions** Continue conservation program and District actions listed through Stage 1, mandate compliance to Stage 2 Shortage mitigation measures of the District's Four Stage Plan. Continue with a more rigorous public information campaign. Explain supply shortage and disseminate technical information as needed.

**Requested Customer Actions** Customers will be notified in writing and through other media (e.g. District web site, etc.) at least 10 business days in advance that Stage 2 shortage mitigation measures are in effect and compliance will be required.

**Penalties** For the first and subsequent water waste violations, penalties will be issued according to District Water Code – Chapter 14, Section 13.

### STAGE 3 - WATER CRISIS

The District’s supply or distribution system is not able to meet all the water demands of its customers under Stage 2 - Water Warning requirements.

**Triggering Mechanism** Any short-term water system operational issues deemed by the General Manager to warrant calling this stage based on a severe shortage targeting the need for a 26-50% cutback in demand. For long-term supply conditions, evidence of increasingly severe or persistent drought conditions are occurring or forecasted by the Department of Water Resources, and/or goal of 25% demand cutbacks in Stage 2 is not achieved, and/or low flow conditions for the Cosumnes are impacting pumping capability.

**Consumption Limits** **Service area-wide target for reduction: 26 - 50%.** Customers will be educated by the District on ways to achieve reduced consumption based on their own home or business unique opportunities to save for the duration of the water crisis condition until the water crisis has been declared over.

**District Actions** Continue all conservation program and District action elements through Stage 2, and mandate adherence to all shortage mitigation measures required under Stage 3 of the District’s Four Stage Shortage Mitigation Measures. Institute a rationing program through an allocation.

**Requested Customer Actions** Customers will be requested to comply with all Stage 3 shortage mitigation measures listed in the Five (5) Stage Shortage mitigation measures.

**Penalties:** For the first and subsequent water waste violations, penalties will be issued according to District Water Code – Chapter 14, Section 13.

## STAGE 4 - WATER EMERGENCY

The District is experiencing a major failure of a supply, storage or distribution facility.

### **Triggering Mechanism**

Any short-term water system operational issues deemed by the General Manager to warrant calling this stage based on an extreme shortage targeting the need for a more than 50% cutback in demand. For long-term supply conditions, evidence of exceptional, extreme or persistently severe drought conditions are occurring or forecasted by the Department of Water Resources, and/or goals for demand cutbacks in Stage 3 are not being achieved, and/or low flow conditions for the Cosumnes are severely impacting pumping capability.

### **Consumption Limits**

*Conditions that would lead to a Stage 4 drought are highly unlikely. **Service area-wide target for reduction: Greater than 50%.***

Customers will be educated by the District on ways to achieve reduced consumption based on their own home or business unique opportunities to save for the duration of the water crisis condition. All customers may be required to restrict consumption to 50% (or more) of normal demands for the duration of the water emergency. If conditions warrant, the District may implement a rationing program for an indefinite period of time to ensure, to the extent possible, that there is adequate water for essential uses.

### **District Actions**

Continue all conservation programs and District action elements through Stage 3, and mandate that all Stage 4 shortage mitigation measures be implemented immediately and strictly enforced.

Intensify media outreach program with regular updates on the state of the emergency.

### **Requested Customer Actions**

Customers will be required to comply with all Stage 4 shortage mitigation measures.

### **Penalties**

For the first and subsequent water waste violations, penalties will be issued according to District Water Code – Chapter 14, Section 13. Written notice shall be issued to customers using more than their customer category allocation (defined as more than 20% above allowable use)

and without a District approved variance (i.e., medical need). While maintaining adequate minimum fire flows for those homes with fire sprinklers, the District may install a flow restrictor on the service line if customer average daily usage is not reduced to within the allocation threshold after 10 days from the date of the written notice, a flow restrictor may be installed for a minimum of 10 days. The flow restrictor may remain in place during the irrigation season until December 1<sup>st</sup> or the District may suspend service temporarily until the cause of the violation is corrected. The flow restrictor may be removed based on the General Manager's approval and payment of all outstanding penalty and water service charges have been paid. A minimum of a reconnection fee will be charged as defined in District Water Code - Chapter 14. A customer may appeal one (1) time to the District Board of Directors.

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## WATER CONSERVATION MEASURES STAGE DEFINITIONS

### **“Normal” – Normal Water Supply and On-going Conservation**

The District’s supply or distribution system is able to meet all water demands of its customers in the immediate future. All customers are being encouraged to use water for beneficial and reasonable uses. District customer demands are being monitored for meeting 20% reduction by 2020.

### **Stage One – Water Alert**

There is a probability that the District’s supply or distribution system will not be able to meet all the water demands of its customers and the District’s ability to pump to reservoirs system may be impacted.

### **Stage Two – Water Warning**

The District’s supply or distribution system is forecasted to not be able to meet all the water demands of its customers and District ability to pump to reservoirs system is forecasted to be or is actively being impacted.

### **Stage Three – Water Crisis**

The District’s supply or distribution system is projected to not be able to meet all the water demands of its customers under **Stage 2 - Water Warning** requirements and District ability to pump to reservoirs system predicted to be or actually being impacted

### **Stage Four – Water Emergency**

The District is projecting an imminent failure of a water supply, storage, or distribution facility based on an estimate of supply remaining.



# **RANCHO MURIETA COMMUNITY SERVICES DISTRICT**

## **WATER CONSERVATION MEASURES**

### **“Normal” Supply and On-going Conservation Requested of Every Household or Business**

1. Water will be used for beneficial uses; all unnecessary and wasteful uses of water are prohibited as described in District Code – Chapter 14 Water Code. Take advantage of the free information available from the District on how to use water efficiently, read a water meter, repair leaks, and irrigate efficiently. Up to date information is provided through the District’s web site.
2. Use water efficiently. Water shall be confined to the consumer’s property and shall not be allowed to run off to adjoining property or to the gutter. Care shall be taken not to water past the point of soil saturation. Customers are encouraged to report observed water waste. Two (2) to three (3) days per week using cycle and soak methods is sufficient for landscapes in the Rancho Murieta Community.
3. Prohibit free-flowing hoses for all uses including vehicle and equipment washing, ponds, and evaporative coolers. Use a hose and bucket method for washing and attach automatic shut-off devices on any hose or filling apparatus in use.
4. Regularly check and maintain irrigation systems, repair leaks, and adjust spray heads to provide optimum coverage and eliminate avoidable over-spray. Reduce minutes of run-time for each irrigation valve if water run-off (gutter flooding) is occurring.
5. Automatic sprinkler system timers shall be set to operate during cool evening hours and early morning hours when evaporation rates are low and on off-peak electrical hours (ideally between 3 a.m. and 6:00 a.m.). Customers are encouraged to reduce scheduled watering minutes.
6. Repair all leaks promptly. Leaking consumer pipes or faulty sprinklers shall be repaired within seven (7) days or less if warranted by the severity of the problem and subject to penalties as described in District Code – Chapter 14, Water Code, Section 13.03.
7. Properly maintain all pools, spas, and ornamental fountains/ponds to avoid drain and refill. All water features and pools shall be equipped with a recirculating pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations. Customer requests must be substantiated in writing by a pool consultant and approved by the District.
8. Avoid washing of streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes. Use a high efficiency pressurized water broom for these purposes and not a conventional pressure washer or hose with a shut-off nozzle.

9. U.S. Environmental Protection Agency (EPA) WaterSense labeled water efficient plumbing fixtures, water efficient appliances, and high efficiency irrigation techniques, such as drip, are encouraged, as described in District Code – Chapter 14 – Water Code, Section 11 and found online at: [www.epa.gov/watersense](http://www.epa.gov/watersense).

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## WATER SHORTAGE MEASURES STAGE DEFINITIONS

### Stage One - Water Alert

#### Goal is 10% Reduction per Average Household or Business

1. All Stage “Normal” actions remain in force; unless revised herein.
2. All customers are encouraged to report observed water waste. The District’s Security Officers will be notifying District operations of any observed water waste for follow-up action.
3. Prohibit washing of streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes. High efficiency pressurized water brooms are required for these purposes, conventional pressure washers or hoses with shut-off nozzles are not allowed.
4. Landscape irrigation shall be watered efficiently, preferably with a weather based irrigation controller or hose timer. If a weather based controller is not installed, change the minutes of run-time for irrigation valves consistent with fluctuations in weather as determined by evapotranspiration data provided by the District/Regional Water Authority.
5. Watering is limited to a maximum of **three (3) days per week** if and when necessary and no watering schedule (e.g., additional minutes) increases are permissible on designated watering days. Three (3) days per week water is sufficient for landscapes in the Rancho Murieta Community. Customers are to use cycle and soak watering with up to three (3) short watering cycles. Watering days need to be based on the following schedule.
  - ◆ Customers in Watering Group A may irrigate only on **Monday, Wednesday and Friday.**
  - ◆ Customers in Watering Group B may irrigate only on **Tuesday, Thursday and Saturday.**
  - ◆ **Sunday irrigation is not allowed.**
6. Residents are encouraged to reduce indoor water use by limiting showers. Washing full clothes washer and dishwasher loads.
7. Restaurants shall serve water only upon specific request.

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## WATER SHORTAGE MEASURES STAGE DEFINITIONS

### Stage Two - Water Warning

**Goal is 25% Reduction per Average Household or Business**

1. All Stage “Normal” and Stage 1 actions remain in force; unless revised herein.
2. Landscape irrigation shall be limited to a maximum of **two (2) days per week** when necessary and no watering schedule (e.g., additional minutes) increases are permissible on designated watering days. Two (2) days per week water is sufficient for landscapes in the Rancho Murieta Community. Customers are to use cycle and soak watering with up to three short watering cycles. Watering shall be based on the following schedule.
  - a. Customers in Watering Group A may irrigate only on **Tuesdays and Saturdays**.
  - b. Customers in Watering Group B may irrigate only on **Wednesdays and Sundays**.
  - c. Watering times will be between the hours of 8:00 p.m. to 8:00 a.m. only.
3. Restaurants shall serve water only upon specific request.
4. Residents are strongly encouraged to reduce indoor water use by limiting showers, clothes washing and dish washing.
5. Tiered rate pricing will be instituted at this stage to promote more equitable and efficient water use and in an effort to meet demand cutback goals. A drought surcharge may also be included as needed to maintain revenue stability and/or assist with achieving demand reduction goals as needed based on approved District policies and District Code – Chapter 14 – Water Code.

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## WATER SHORTAGE MEASURES STAGE DEFINITIONS

### Stage Three - Water Crisis

#### Goal is 25-50% Reduction per Average Household or Business

1. All Stage “Normal,” 1 and 2 actions remain in force; unless revised herein.
2. All customers are encouraged to report observed water waste. District security will be notifying District operations of any observed water waste for follow-up action.
3. Landscape irrigation shall be limited to a maximum of **one (1) day per week** when necessary and no watering schedule (e.g., additional minutes) increases are permissible on designated watering days. One (1) day per week water is sufficient for landscapes in the Rancho Murieta Community. Customers are to use cycle and soak watering with up to three short watering cycles. The schedule shall be based on the following **water day** schedule based on the following schedule.
  - ◆ Customers in Watering Group A may irrigate only on **Saturdays**.
  - ◆ Customers in Watering Group B may irrigate only on **Sundays**.
4. No irrigation is permitted on **Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays**.
5. No watering of new turf grass or replacement turf grass.
6. Vegetable garden may be hand watered.
7. No potable water from the District’s system shall be used to fill or refill new swimming pools, artificial lakes, ponds, or streams or other water feature until the **Water Crisis** has been declared over.
8. Prohibit water use for all ornamental water features (i.e. ponds and fountains).
9. No washing of automobiles or equipment shall be permitted unless done at a commercial establishment that uses recycled or reclaimed water.
10. Tiered pricing will be implemented to ensure drought mitigation goals are met. A drought surcharge may also be included as needed to maintain revenue stability based on approved District policies and District Water Code.

11. Cleaning of sewers, streets or flushing fire hydrants is restricted by any party other than emergency personnel or District employees and subject to District approval.
12. While maintaining adequate minimum fire flows for those homes with fire sprinklers, flow restrictors may be installed for excessive users persistently exceeding their water use above District defined rationing allocation for their customer category. Flow restrictors shall be one (1) gallon per minute (gpm) or less which is adequate for domestic sanitation needs.

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## WATER SHORTAGE MEASURES STAGE DEFINITIONS

### Stage Four - Water Emergency

**Goal is 50+% Reduction per Average Household or Business**

1. All Stage "Normal," 1, 2, and 3 actions remain in force, unless revised herein.
2. All customers are encouraged to report observed water waste. Aggressive enforcement of water waste and no landscape irrigation shall include penalties up to mandatory misdemeanor citations with fines as noted in Section 13 of the Districts Water Code.
3. Landscape and garden irrigation shall not be allowed unless taken from a bucket from indoor water graywater sources (e.g., bath or clothes washer rinse water).
4. Cleaning of sewers, streets or flushing of fire hydrants is prohibited except in case of emergency and for essential operations.
5. No potable water from the District's system shall be used for construction purposes such as dust control, compaction, or trench jetting.
6. No new or replacement landscaping of any kind can be installed.
7. Tiered pricing with drought surcharges will be in effect.
8. All uses of potable water from a fire hydrant are prohibited except for: fighting fires, District-approved human consumption essential water quality flushing, and toxic clean-up purposes.
9. While maintaining adequate minimum flows per regulatory requirements, flow restrictors will be installed for excessive users persistently exceeding their water use above District defined rationing allocation for their customer category. Flow restrictors shall be one (1) gallon per minute (gpm) or less which is adequate for domestic sanitation needs.

**ATTACHMENT A**

**EMERGENCY OPERATING PROCEDURES DUE TO CATASTROPHIC FAILURE**



## ATTACHMENT B

Excerpt from the California Water Code, Urban Water Management Planning Act:  
[www.leginfo.ca.gov](http://www.leginfo.ca.gov)

10632. (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

(1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.

(2) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

(3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

(4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(6) Penalties or charges for excessive use, where applicable.

(7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

(8) A draft water shortage contingency resolution or ordinance.

(9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

(b) Commencing with the urban water management plan update due December 31, 2015, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

<b>Category:</b>	Water	Policy □ 90-2
<b>Title:</b>	District Water Supply	

## PURPOSE

The Rancho Murieta Community Services District Board of Directors, having received and filed the February 9, 1990 report titled **□ RANCHO MURIETA WATER SUPPLY: Planning for Future Droughts** □ prepared by Giberson □ Associates, hereby adopts the following as the **Water Supply Policy**:

## FINDINGS

- 1) The District's raw water supply is a rare and precious resource that shall be managed in a prudent and responsible manner.
- 2) The District's Water Supply Reliability Standard shall be as follows:
 

The District's water supply system shall be designed to:

  - a) Provide normal annual water demands during a water year similar to 1924 without conservation.
  - b) Provide annual water demands during a water year similar to 1977 with a maximum conservation rate of 50□.
- 3) The District's existing raw water supply system, on July 18, 1990, has the capability of serving only 3,951 Equivalent Dwelling Units (EDU).
- 4) The Rancho Murieta Planned Unit Development (P.U.D.) allows for approximately 5,968 EDU consisting of not more than 5,189 residential DU and approximately 779 EDU of commercial, industrial and institutional uses.
- 5) The volume of water stored in the District's existing raw water storage reservoirs will be:
  - a) Significantly reduced upon development of 3,951 EDU during normal water years□
  - b) Nearly depleted upon development of 3,951 EDU during a water year similar to 1924□and,
  - c) Totally depleted upon development of 3,951 EDU during a water year similar to 1977.
- 6) The September 19, 1986 Acquisition and Services Agreement requires the lands encumbered by the Agreement to pay the cost of developing additional water sources and storage facilities to serve the Rancho Murieta P.U.D.

**POLICIES**

- 1) The District will take reasonable and timely steps to plan and develop additional raw water sources and storage capacity to serve the full buildout of the Rancho Murieta P.U.D. (5,968 EDU or such lesser number to which owners of undeveloped land within the District may commit to limit their development) in accordance with contractual and legal obligations.
- 2) Prior to the District making any additional commitment to serve, any applicant whose property is subject to the September 19, 1986 Acquisition and Services Agreement, will be required to participate in a funding mechanism to expand the District's raw water supply system to serve the development.
- 3) The District will give first priority to domestic water needs within the community in the event of a water shortage.
- 4) In the event of a water shortage, the District will give lowest priority water uses such as to:
  - a) Customers that waste water.
  - b) Maintenance of the level of water in the community's lakes for aesthetic purposes.
  - c) Irrigation of landscaped areas.
  - d) Irrigation of agricultural lands, golf courses, etc.
- 5) The District will enforce water conservation measures during a water shortage to reduce customer demands as follows:

<u>DROUGHT EVENT</u>	<u>LEVEL OF CONSERVATION</u>
1924	0%
1977	50%

- 6) The District will provide reclaimed waste water for the irrigation of golf courses in accordance with contractual and legal obligations.
- 7) The District will encourage water conservation programs, including the use of efficient landscape irrigation practices.
- 8) The District will develop a "Drought Contingency Plan" to be instituted by the District during a water shortage.
- 9) In order to preserve the District's water supply, the District may implement other reasonable and prudent measures as deemed necessary by the District Board from time to time.
- 10) The District will enforce the provisions of the September 19, 1986 "Acquisition and Services Agreement" requiring the lands encumbered by the agreement to pay the cost of developing additional water sources and storage facilities to serve the Rancho Murieta P.U.D.

- 11) As the District Board solely deems reasonable and appropriate, this policy may be amended to increase or decrease the allowed issuance of "will-serve" entitlements, depending on the adequacy and reliability of the District's water supply and the willingness of an applicant to participate in the District's water supply augmentation program. However, the beneficial results of water conservation programs will not be converted into water "will-serve" entitlements for new development except as required by contractual and legal obligations.
- 12) This policy shall be subject to periodic review and modification by the District Board as deemed necessary from time to time.
- 13) Nothing contained within this policy is intended to modify and/or alter the content or meaning of any provision of any contractual or legal obligation of the District.

<b>Approved by CSD Board of Directors</b>	July 18, 1990
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# SALES INVOICE

Ranch Murieta Community Service District  
PO Box 1050  
SLOUGHHOUSE CA 95683  
UNITED STATES

**Invoice Date**  
Nov 3, 2023

Outpost Central Corporation  
(trading as wildeye)

**Invoice Number**  
SI-00001880

PO Box 26341  
Fresno CA 93729

**Reference**  
PO# C31112 Chesbro Lake

USA  
Phone: (559) 290-7915

**Outpost Central Corp**  
xxx-xx-2779

OK TO PAY  
ACCT# 200-5550-02  
INITIALS TB  
DATE 12/21/23

Item	Description	Quantity	Unit Price	Amount USD
	WILD-M-R-NACS-NACS - wildeye Enterprise rechargeable Cat-M (4G) datalogger with 2 input cables: cable #1: M12 cable type (N), with analogue 4-20 mA (A), counter(C) input, and SDI12 (S) inputs cable #2: M12 cable type (N), with analogue 4-20 mA (A), counter(C) input, and SDI12 (S) inputs External antenna. [USA]	1.00	1,086.73	1,086.73
	ACC-ANT-EXTER-700-3DB-5M - 700MHz 4G Antenna, waterproof, with r/a bracket and 5m cable, SMA connector with rubber boot [USA]	1.00	105.08	105.08
	LAB-INS-RESERVOIR - Install well screen into pond, materials including well screen PVC, blank PVC, mounting brackets. Install depth sensor into the well screen with PVC pipe: includes parts, labor and mileage.	1.00	1,750.00	1,750.00
	SUBS-ADV-12M 1Ch 1+ - Wildeye Annual Subscription for 1+ units with 1 Channel	1.00	199.39	199.39
	ACC-SEN-LVL-STNDRD-V-D66F-C230F - Dwyer SBLT2 sensor, 66F (20M) H2O range, 230F (70M) cable, Vented, 4-20mA	1.00	1,488.94	1,488.94
	ACC-SOLBRACKET-NP-5W.2 - Completely assembled 5W panel with full fixed angle mounting bracket and power plug for Wildeye datalogger	1.00	203.81	203.81
Invoice Comments: CRM ID: 1924				
1x WILD-M-R-NACS-NACS 1x ACC-SEN-LVL-STNDRD-V-D66F-C230F *tested 08-24-23*				
			Subtotal	4,833.95
			<b>TOTAL USD</b>	<b>4,833.95</b>

ENTERED ON: 12/21/23  
BY: Shelby G.



# Rancho Murieta Community Services District

15160 Jackson Road • P.O. Box 1050 Rancho Murieta, CA 95683 • 916-354-3700 • Fax 916-354-2082

Visit our website [www.rmscd.com](http://www.rmscd.com)

## Technical Review of IWMP

(Created 11/6/2024)

### Scope of Work

The Scope of Services is based on achieving the following goals for the IWMP:

- Reviewing and validating, the science-based methodology that was used for water supply and demand forecast for water resources, facilities, system treatment and delivery infrastructure including reclaimed water, and current and projected development supply and demand to confirm the accuracy and reliability of the plan.
- Reviewing the water supply augmentation scenarios that meet the varied demands, to validate their feasibility and cost estimations.
- Reviewing and providing guidance on whether the plan is sustainable, flexible, and reusable as a planning document to respond to customer account growth and future supply and demand uncertainties.

*Serving the Community for over 30 years*

Board of Directors: Tim Maybee, President • Martin Pohll, Vice-President • Randy Jenco • Linda Butler • Martin Pohll • Stephen Booth  
General Manager • Mimi Morris



## Proposal for Technical Review of the Integrated Water Master Plan

**December 16, 2024**

### Ranch Murieta CSD

Eric Houston  
Director of Operations  
15160 Jackson Road  
Rancho Murieta, CA

### Folsom Office

1150 Iron Point Rd.,  
Suite 125  
Folsom, CA 95630

### Stephanie Ard

P: (425) 829-6947  
E: [sard@wsc-inc.com](mailto:sard@wsc-inc.com)

Dear Eric Houston,

I am pleased to submit our proposed scope and fee for the technical review of the Rancho Murieta CSD Integrated Water Master Plan (IWMP).

**By partnering with WSC, your organization will receive:**

**Technical Expertise.** With a proven track record in integrated water resource planning and technical reviews, our approach focuses on a thorough evaluation of the Master Plan's methodologies, assumptions, and recommendations.

**A fresh perspective.** We will objectively revisit the previous work and provide our perspective, including assessment of the analysis and additional ideas and recommendations to align IWMP with current and potential future conditions.

**Local planning experience.** Drawing from our work on recent regional plans, such as San Juan Water District's Wholesale and Retail Master Plans and the City of Folsom's Water Vision project, we can ensure your plan aligns with other regional planning documents.

We are committed to delivering a comprehensive review that not only meets your expectations, but also adds tangible value to the Master Plan's outcomes. To do this, we recommend starting with a technical review of the draft IWMP. From this review we can highlight areas we believe could be enhanced, then recommend additional tasks for specific evaluations such as the storage evaluation, supply evaluation, and hydraulic model.

Thank you for considering our proposal. We look forward to the opportunity to support Rancho Murieta in this important endeavor. Please feel free to contact me at (425) 829-6947 or [sard@wsc-inc.com](mailto:sard@wsc-inc.com) if you have any questions or would like to discuss our proposal further.

Sincerely,

**Water Systems Consulting, Inc.**

A handwritten signature in black ink that reads "Stephanie Ard".

**Stephanie Ard**  
Project Manager

A handwritten signature in black ink that reads "Jeff Lawrence".

**Jeff Lawrence**  
Principal in Charge

# Scope of Work

## Task 1 Project Management

Optional description of task.

### 1.1 Project Administration

- Prepare and submit monthly progress reports summarizing activities completed, upcoming work, budget status, and challenges, if any.
- Submit monthly invoices with detailed descriptions of the work completed during the billing period.

### 1.2 Meetings and Coordination

- Conduct a Kick-Off Meeting to review project goals, deliverables, and schedules. Meetings will be an hour in duration and attended by up to two WSC employees.
- Additional coordination as necessary for the project

#### **Deliverables:**

- (1) Monthly progress reports, including summaries of work completed, upcoming tasks, and general status of the project schedule and budget.
- (2) Monthly invoices.
- (3) Kick-Off Meeting agenda and minutes to ensure clear communication and documentation of decisions and action items.

#### **Assumptions:**

- (1) Project duration is 2 months.
- (2) Meetings will be virtual unless otherwise specified.

## Task 2 Review of Integrated Water Master Plan

This task involves a comprehensive review of the Integrated Water Master Plan (IWMP).

### 2.1 Review Integrated Water Master Plan

- Evaluate the methodologies used in the IWMP and provide our profession opinion of completeness and that they are appropriate to meet project's goals.
- Review the assumptions and recommendations made in the IWMP to verify their validity and alignment with local and regional water resource practices. This involves examining the underlying assumptions about water demand, supply projections, storage assessment, and growth forecasts, as well as evaluating the feasibility and effectiveness of the proposed recommendations.



- Summarize review comments in a letter format and provide a PDF copy of the IWMP with embedded review comments.
- Provide a list of sections recommended for additional analysis to optimize the plan.

**Deliverables:**

- (1) Review comments summarized in letter format.
- (2) PDF copy of IWMP with review comments embedded in document.

**Assumptions:**

- (1) Review will be based on the latest version of the IWMP provided by the District.

## Fee Estimate

Task No.	Task Description	PIC & QA/QC Manager	Project Manager	Project Admin	WSC Labor Hours	WSC Labor Fee	WSC Fee
		Jeffery Lawrence	Stephanie Ard				
<i>Billing rates, \$/hr</i>		\$310	\$205	\$158			
<b>1</b>	<b>Project Management</b>						
1.1	Project Administration		2	4	6	\$1,042	\$1,042
1.2	Meetings and Coordination	1	3		4	\$925	\$925
<b>SUBTOTAL</b>		<b>1</b>	<b>5</b>	<b>4</b>	<b>10</b>	<b>\$1,967</b>	<b>\$1,967</b>
<b>2</b>	<b>Review of IWMP</b>						
2.1	Review IWMP	4	13		17	\$3,905	\$3,905
<b>SUBTOTAL</b>		<b>4</b>	<b>13</b>	<b>0</b>	<b>17</b>	<b>\$3,905</b>	<b>\$3,905</b>
<b>COLUMN TOTALS</b>		<b>5</b>	<b>18</b>	<b>4</b>	<b>27</b>	<b>\$5,872</b>	<b>\$5,872</b>



Mimi Morris  
General Manager  
Rancho Murieta Community Services District (RMCS D)  
PO Box 1050  
Rancho Murieta, CA 95683

December 3, 2024

**Subject: RM-052 Murieta Village Preliminary Water and Sewer Design**

Dear Mimi,

Per our Master Services Agreement dated 10-16-24, between Rancho Murieta Community Services District and Domenicelli & Associates Inc, we are requesting authorization to proceed on the following Task Order.

This letter represents our estimated scope and budget for a Preliminary Design Report for the Rancho Murieta Village Water and Wastewater improvements projects. We understand that the District would like to replace all backyard water mains and re-connect the services to new water mains located in the streets. In addition, the project will provide individual wastewater services for each home (where practical) to be re-connected to the existing manholes and new wastewater collection mains (and manholes) located in the streets. D&A will make every effort to separate all sewer services, however there may be locations where routing services separately in a tight corridor or lengthy run, will make separation impractical. The predesign scope of services will incorporate the following desired results:

- Establish alignments in the existing streets for new water mains and sewer collection mains.
- Provide approximate alignments for new water services to new meters and sewer services to new cleanouts.
- Show approximate alignments for in-tract connections to homes at current or new connection points at the units.
- Establish pipe materials and sizes and all appurtenances required for the pipeline replacements.
- Determine quantities of pipelines, appurtenances and surface restoration to complete the project.
- Provide an opinion of probable costs for entire project.
- Lay out phasing of the project based on the estimated costs and anticipated annual budget available from District funding.
- Submittal of a Technical Memorandum summarizing the project approach, criteria, findings and results accompanied by a conceptual (approximate 30%) set of design drawings.



Not included in the scope of services are: 1) design level topographic and utility surveying, 2) geotechnical investigations or report, 3) right of way or easement acquisition, and 4) environmental documentation or permit processing. All of these services will be provided during the final design for the initial Phase of construction.

The following is a detailed scope of services to complete the project as described above.

### **Scope of Services:**

#### **Task 1 Gather & Review Information:**

- a. **Obtain Current Design Data:** Obtain system maps, as-built plans, development masterplan data, current flow data if available and homeowner contact information. D&A will also work with the District to conduct a one-day walk through to review the pertinent facilities data and flow data to compile criteria for system sizing upgrades and for preliminary layouts of new water and wastewater pipeline facilities.
- b. **Topographic and Utility Surveying:** D&A will sub-consult with CenterPoint Engineering Inc. (CE) to provide a rectified aerial photo map of the project area (Via low elevation Lidar equipped drone) for use in base mapping. CE will also locate and dip all mainline sewer manholes and located all mainline water valves within the street right-of-ways.

**Task 2 Establish Mainline Sewer Pipe Alignments:** From data collected in Task 1, D&A will lay-out mainline sewer pipe alignments within the streets and establish sewer-line profiles based on existing manhole depths and future extensions of the sewer mains to provide all new sewer mains within the existing streets. This task assumes re-use of existing manholes as much as possible. This effort will establish design criteria and a new mainline backbone sewer collection system.

**Task 3 Establish Mainline Water Pipe Alignments:** From data collected in Task 1, D&A will lay-out mainline water pipe alignments within the streets to replace all of the existing in-street AC transite water mains and all backyard and below unit mains. These preliminary plan alignment layouts will take into consideration District design criteria and DDW separation requirements from other utilities.

**Task 4 Establish Typical Private Service Connections for Sewer & Water:** The D&A team will work with the District to visit several private residences to determine typical re-connection details for various home layouts for both water and sewer service connections. This will build on the one-day site visit in Task 1. Preliminary service connection lines will be added to the preliminary design plans for the water and sewer mains created in Task 2 & 3.



**Task 5. Estimate Quantities and Opinions of Probable Construction Costs:** Construction quantities and costs will be estimated based on the preliminary designs and recent bids and engineer's estimates completed by D&A on several recent similar design projects. Cost estimates will also include non-construction costs such as engineering, administration, construction management and permitting.

**Task 6 - Preliminary Design Report (PDR) and Drawings:** D&A will assemble a Draft PDR in the form of a technical memorandum and Preliminary Design Drawings for review by the District. A review workshop will be conducted by D&A to discuss District comments and establish a presentation for a subsequent Board meeting. In the workshop, potential funding options will be presented by District staff, and a phasing plan of the project improvements will be determined based on available funding and anticipated schedule (to be provided by D&A) to complete construction phases. After the review workshop, D&A will provide responses to all comments and questions prior to completion of the final PDR. We anticipate that revisions to Tasks 2 through 5 may be necessary to address the District's review and to complete the Final Report and Drawings.

***Deliverables: PDF version of the Draft Pre-Design Report, Review Workshop Agenda and Responses to Comments, PDF version and two hard copies of the Final Report Technical Memorandum. Draft and Final Phased Preliminary Design Plans in PDF form. One hard copy for the Draft submittal and 2 hard copies for the Final submittal.***

### **Project Timeline:**

The following shows anticipated durations and milestones for completing the project tasks.

<b>Milestone/Task description</b>	<b>Duration</b>
Gather & Review Information (Task 1)	4 weeks
Establish Sewer & Water Main Alignments (Task 2 & 3)	5-weeks
Establish Private Services for Sewer & Water (Task 4)	4-weeks
Estimate Quantities & Opinions of Probable Costs (Task 5)	3-weeks
Draft PDR and District Review (Task 6)	6-weeks
Final PDR Technical Memorandum (Task 6)	3-weeks
<b>Total Project Duration</b>	<b>25 Weeks</b>



# DOMENICHELLI AND ASSOCIATES, INC.

## CIVIL ENGINEERING

### Project Fees

Rancho Murieta Community Services District							<b>Fee Estimate</b>		
Murieta Village Preliminary Water and Sewer Design							Dec-3-2024		
Tasks	Labor				Total Hours	Total Labor Costs	Subs	ODCs	Total
	QA/QC	Project Manager 1	Project Engineer 1	Project Engineer 2			Surveying	ODCs	Total Fee
	Joe Domenichelli	Daryl Heigher	Matt Domenichelli	Alex Mendoza			CenterPoint Engineering		
<b>Task 1: Gather &amp; Review Information</b>									
1.a Obtain Current Design Data	8	12	8	8	36	\$6,288		\$150	\$6,438
1.b Surveying & Base Maps	2	4		8	14	\$2,292	\$8,030	\$50	\$10,372
Subtotal Task 1:	10	16	8	16	50	\$8,580	\$8,030	\$200	\$16,810
<b>Task 2: Establish Mainline Sewers</b>									
2.a Layout 30% Sewer Design Alignments	8	12	48	4	72	\$11,888		\$50	\$11,938
Subtotal Task 2:	8	12	48	4	72	\$11,888	\$0	\$50	\$11,938
<b>Task 3: Establish Mainline Water Pipe</b>									
3.a Layout 30% Water Design Alignments	6	12	4	40	62	\$9,732		\$50	\$9,782
Subtotal Task 3:	6	12	4	40	62	\$9,732	\$0	\$50	\$9,782
<b>Task 4: Establish Private Service Connections Water &amp; Sewer</b>									
4.a Site Visit and Service Line Layouts	8	16	24	40	88	\$13,984		\$150	\$14,134
Subtotal Task 4:	8	16	24	40	88	\$13,984	\$0	\$150	\$14,134
<b>Task 5: Estimate of Opinion of Probable Costs</b>									
5.a Estimate Quantities & Probable Costs	8	12	32	16	68	\$11,104			\$11,104
Subtotal Task 5:	8	12	32	16	68	\$11,104	\$0	\$0	\$11,104
<b>Task 6: Preliminary Design Report &amp; Drawings</b>									
6.a Draft Design Report & Plans	8	16	16	20	60	\$9,952			\$9,952
6.b Review Workshop & Respond to Comments	4	8		4	16	\$2,904		\$150	\$3,054
6.c Final Pre-Design Report & Plans	4	12		8	24	\$4,216		\$200	\$4,416
Subtotal Task 6:	16	36	16	32	100	\$17,072	\$0	\$350	\$17,422
<b>TOTAL</b>	<b>88</b>	<b>104</b>	<b>132</b>	<b>148</b>	<b>440</b>	<b>\$72,360</b>	<b>\$8,030</b>	<b>\$800</b>	<b>\$81,190</b>

Please give me a call if you have any questions.

Sincerely,

Joe Domenichelli  
Domenichelli & Associates, Inc.

Authorization to Proceed by,

Rancho Murieta CSD

Eric Houston

12/16/2024

Date