



## NOTICE OF THE BOARD OF DIRECTORS' REGULAR BI-MONTHLY MEETING

Tuesday, April 15, 2025 at 6:30 PM

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### AGENDA

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#### LOCATIONS:

**Open Session to start at or after 6:30 p.m.**

Marin Water Board Room – 220 Nellen Avenue, Corte Madera, CA 94925

#### Public Participation:

The public may attend this meeting in-person or remotely using one of the following methods:

On a computer or smart device, go to: <https://marinwater.zoom.us/j/88134852296>

By phone, dial: **1-669-444-9171** and use Webinar ID: **881 3485 2296**

#### HOW TO PROVIDE PUBLIC COMMENT:

**During the Meeting:** Typically, you will have 3 minutes to make your public comment, however, the board president may shorten the amount of time for public comment due to a large number of attendees. Furthermore, pursuant to Government Code, section 54954.2 (the Brown Act), the Board may not take action or discuss any item that does not appear on the agenda.

-- **In-Person Attendee:** Fill out a speaker card and provide to the board secretary. List the number/letter (ex: 6a) of the agenda item(s), for which you would like to provide a comment. Once you're called, proceed to the lectern to make your comment.

-- **Remote Attendee:** Use the "raise hand" button on the bottom of the Zoom screen. If you are joining by phone and would like to comment, press \*9. The board secretary will use the last four digits of your phone number to call on you (dial \*6 to mute/unmute).

**In Advance of the Meeting:** Submit your comments by email in advance of the meeting to [boardcomment@marinwater.org](mailto:boardcomment@marinwater.org). To ensure that your comment is provided to the Board of Directors prior to the meeting, please email your comment 24 hours in advance of the meeting start time. Comments received after this cut off time will be sent to the Board after the meeting. Please do not include personal information in your comment such as phone numbers and home addresses.

## AGENDA ITEMS:

1. **Call to Order and Roll Call**
2. **Adoption of Agenda**
3. **Announcement of Closed Session Item(s); Public Comments on Closed Session Item(s) - None.**
4. **Reconvene to Open Session; Closed Session Report Out - Not applicable.**
5. **Public Comment on Non-Agenda Matters**

This is the time when any person may address the Board of Directors on matters not listed on this agenda, but which are within the subject matter jurisdiction of the Board.

6. **Directors' and General Manager's Announcements (6:35 p.m. – Time Approximate)**
7. **Board Committee Reports - None.**
8. **Consent Items (6:45 p.m. – Time Approximate)**

All Consent Items will be enacted by a single action of the Board, unless specific items are pulled from Consent by the Board during adoption of the agenda for separate discussion and action.

a. April 1, 2025 Board Meeting Minutes

**RECOMMENDATION:** Approve the minutes of the Board of Directors' Regular Bi-Monthly Meeting on April 1, 2025

b. General Manager's Report March 2025

**RECOMMENDATION:** Approve Report

c. Award of Contract No. 2035 San Geronimo Treatment Plant Roof Replacement Project (D21034) to Best Contracting Services, Inc.

**RECOMMENDATION:** Approve a resolution authorizing award of Contract No. 2035, San Geronimo Treatment Plant Roof Replacement Project, to Best Contracting Services, Inc. in the amount of \$1,495,740

d. Approval of Professional Services with TJC and Associates for the San Geronimo Treatment Plant Clearwell Structural Evaluation and Condition Assessment

**RECOMMENDATION:** Authorize the General Manager to execute a professional services agreement with TJCAA for the San Geronimo Treatment Plant Clearwell Structural Evaluation and Condition Assessment in an amount not to exceed One Hundred Sixteen Thousand Four Hundred and Eight Dollars (\$116,408)

e. SAP Software Maintenance Renewal and Support Reinstatement

**RECOMMENDATION:** Authorize the General Manager to execute a software license and maintenance renewal agreement with SAP retroactively reinstating and renewing SAP ERP software maintenance and support through December 31<sup>st</sup>, 2025 in an amount not to exceed \$217,771.37

9. **Regular Items (6:50 p.m. – Time Approximate)**

a. Approve a Professional Services Agreement with Carollo Engineers for Engineering Design of Atmospheric River Capture Project

**RECOMMENDATION:** Approve a Professional Services Agreement with Carollo Engineers not to exceed \$9,699,235 to provide engineering services for the preliminary and final design package and bidding support services for the Atmospheric River Capture (ARC) and authorize the General Manager to negotiate and execute the contract

**10. Future Board and Committee Meetings and Upcoming Agenda Items**

This schedule lists upcoming board and committee meetings as well as upcoming agenda items for the next month, which may include Board interest in adding future meeting items. The schedule is tentative and subject to change pending final publication and posting of the meeting agendas.

**a.** Upcoming Meetings

**11. Announcement of Closed Session Item(s); Public Comments on Closed Session Item(s) - None.**

**12. Reconvene to Open Session; Closed Session Report Out - Not applicable.**

**13. Adjournment (8:00 p.m. – Time Approximate)**

**ADA NOTICE AND HEARING-IMPAIRED PROVISIONS**

In accordance with the Americans with Disabilities Act (ADA) and California Law, it is Marin Water's policy to offer its public programs, services, and meetings in a manner that is readily accessible to everyone, including those with disabilities. If you are an individual with a disability and require a copy of a public hearing notice, an agenda, and/or agenda packet in an appropriate alternative format, or if you require other accommodations, please contact the Board Secretary/ADA Coordinator at 415.945.1448, at least two business days in advance of the meeting. Advance notification will enable Marin Water to make reasonable arrangements to ensure accessibility.

*Information agendas are available for review at the Civic Center Library, Corte Madera Library, Fairfax Library, Mill Valley Library, Marin Water Administration Building, and [marinwater.org](http://marinwater.org).*

Posted: 04-11-2025



# STAFF REPORT

**Meeting Type:** Board of Directors  
**Title:** April 1, 2025 Board Meeting Minutes  
**From:** Terrie Gillen, Board Secretary  
**Through:** Ben Horenstein, General Manager  
**Meeting Date:** April 15, 2025

**TYPE OF ITEM:** X Action Information

**RECOMMENDATION:** Approve the minutes of the Board of Directors' Regular Bi-Monthly Meeting on April 1, 2025

**SUMMARY:** The Board of Directors held their regular bi-monthly meeting on April 1, 2025. The minutes of that meeting are attached for your approval.

**DISCUSSION:** None.

**ENVIRONMENTAL REVIEW:** Not applicable.

**FISCAL IMPACT:** None.

**ATTACHMENT(S):**

1. Draft April 1, 2025 Meeting Minutes

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Communications & Public Affairs Department	 Terrie Gillen Board Secretary	 Ben Horenstein General Manager





## NOTICE OF THE BOARD OF DIRECTORS' REGULAR BI-MONTHLY MEETING

Tuesday, April 01, 2025 at 5:30 PM

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### MINUTES

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#### LOCATIONS:

##### **Open Session to start at or after 6:30 p.m.**

Marin Water Board Room – 220 Nellen Avenue, Corte Madera, CA 94925

##### **Closed Session begins at 5:30 p.m.**

Marin Water Mt. Tam Conference Room, 220 Nellen Avenue, Corte Madera, CA 94925

#### **Public Participation:**

The public attended this meeting in-person or remotely using one of the following methods: on a computer or smart device, go to: <https://marinwater.zoom.us/j/88134852296>, or by phone, 1-669-444-9171 using Webinar ID #: 881 3485 2296.

#### **AGENDA ITEMS:**

##### **1. Call to Order and Roll Call**

President Matt Samson called the meeting to order at 5:30 p.m.

##### **DIRECTORS PRESENT**

Larry Russell (*arrived at 5:38 p.m.*)

Ranjiv Khush

Diana Maier

Jed Smith

Matt Samson

**2. Adoption of Agenda**

Vice President Smith made the motion to adopt the agenda. Director Khush seconded the motion.

There were no public comments.

Voting Yea: Directors Smith, Khush, Maier, and Samson

**3. Announcement of Closed Session Item(s); Public Comments on Closed Session Item(s)**

There were no public comments.

The Board convened to Closed Session at 5:31 p.m. and went to the Mt. Tam Conference Room.

Director Russell arrived.

- a. Conference with Legal Counsel - Anticipated Litigation**  
(Significant Exposure to Litigation pursuant to §54956.9(b))

Number of Potential Cases: Unknown

- b. Conference with Labor Negotiators**  
(California Government Code §54957.6)

**Agency Designated Representative:** Ben Horenstein, General Manager

**Employee Organizations:** Service Employees International Union, Local 1021; Unrepresented Employees

The Board adjourned Closed Session and went back to the Board Room.

**4. Reconvene to Open Session; Closed Session Report Out**

The Board reconvened to Open Session at 6:31 p.m. President Samson stated that no reportable action was taken.

**5. Public Comment on Non-Agenda Matters**

There were three (3) public comments.

**6. Directors' and General Manager's Announcements**

- Vice President Smith mentioned that he attended the Lagunitas Technical Advisory Committee (TAC), acknowledged District staff and participants at that event, and reported highlights of what were discussed.
- President Samson thanked Watershed staff for their engagement with students at Lagunitas Creek. He also reported that he attended the California Wildfire and Forest Resilience Task Force's Spring Regional Meeting and Field Tours, and shared how outside agencies were impressed with staff's work in mitigating wildfire risk on the watershed. Furthermore, he

reported that he attended the Lagunitas TAC meeting and thanked staff for their continued efforts to improve and maintain fish habitat on the watershed.

7. Board Committee Reports

The Watershed Committee, Planning Committee, and Finance & Administration Committee chairs provided reports of what were discussed at their meetings last month.

8. Consent Items

- a. March 18, 2025 Board Meeting Minutes  
**RECOMMENDATION:** Approve the minutes of the Board of Directors’ Regular Bi-Monthly Meeting on March 18, 2025
- b. Watershed Facilities Assessment and Conceptual Plan  
**RECOMMENDATION:** Approve a grant award of \$200,000 from the Mt. Tamalpais Watershed Fund to advance a Watershed Facilities Assessment and Conceptual Plan
- c. Second Amendment to Agreement No. 5757 with Athens Administrators for Workers' Compensation Claims Administration Services  
**RECOMMENDATION:** Authorize the General Manager to extend an agreement with Athens Administrators, the District’s current Workers’ Compensation Third Party Administrator, for a two-year term through June 2027, with an expected amount not to exceed \$130,000
- d. Agreements for Temporary Staffing Support  
**RECOMMENDATION:** Authorize the General Manager to enter into agreements with Express Employment Professionals and Gary D. Nelson Associates, Inc. dba (Nelson Connects), for temporary staffing support

Director Khush made the motion to approve the Consent items. Vice President Smith seconded the motion.

There were no public comments.

Voting Yea: Directors Russell, Khush, Maier, Smith, and Samson

9. Regular Items

- a. Azalea Hill Trail Restoration Project Revisions  
**RECOMMENDATION:** Approve the project revisions pursuant to an addendum prepared in compliance with the California Environmental Quality Act

Watershed Resources Director Shaun Horne presented this item.

Discussion followed.

There was one (1) public comment.

Vice President Smith made the motion to approve the revisions. Director Khush seconded the motion.

Voting Yea: Directors Russell, Khush, Maier, Smith, and Samson

b. Recycled Water System Update

**RECOMMENDATION:** Receive staff update on capacity of recycled water system

Water Resources Director Paul Sellier introduced this item, and Water Quality Manager Lucy Croy provided the update.

There was discussion throughout between the directors and staff.

There were three (3) public comments.

This was an information update. No formal action was taken.

**10. Future Board and Committee Meetings and Upcoming Agenda Items**

a. Upcoming Meetings

Internal and external meetings scheduled between April 4 and April 24 were provided to the Board.

**11. Announcement of Closed Session Item(s); Public Comments on Closed Session Item(s) - None.**

**12. Reconvene to Open Session; Closed Session Report Out - Not applicable.**

**13. Adjournment**

There being no further business, the Board of Directors adjourned their meeting on April 1, 2025, at 7:51 p.m.

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Board Secretary



# STAFF REPORT

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**Meeting Type:** Board of Directors  
**Title:** General Manager's Report March 2025  
**From:** Ben Horenstein, General Manager  
**Meeting Date:** April 15, 2025

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**TYPE OF ITEM:** X Action Information

**RECOMMENDATION:** Approve Report

## SUMMARY:

### A. HIGHLIGHTS:

- The daily average net production for the month of March 2025 was 14.3 MGD compared to 13.8 MGD for the month of March 2024. Typical usage for March is 18.1 MGD.
- Staff conducted outreach meetings with regulatory agencies, Lagunitas TAC and Nicasio Landowners Association for early engagement in support of the Nicasio Spillway Modifications Project.
- In support of the Districts effort to include electric vehicles in the fleet, staff issued a request for proposals to start the electrical vehicle charging station project that has been identified in the 2-year capital program. This will include performing an electrical load study at Sky Oaks, Corporation Yard and Administration building to determine existing electrical load capacities and additional electrical loads needed to accommodate full EV charging station buildout. This will allow the District to further reduce its carbon footprint into the future.
- Staff received proposals for the San Geronimo Treatment Plant Clearwell structural and condition assessment evaluation. This will provide a detailed look at structural repairs that need to be made to the clearwells to extend the useful life and to determine the structural capacity to install solar panels to help offset electrical use by approximately 10% at the SGTP. This will allow the District to further reduce its carbon footprint and providing a higher degree of energy independence.
- Staff responded to 979 underground service alert tickets and marked out approximately 26,755 feet of pipe in the month of March, helping to ensure that District underground infrastructure is not damaged by contractors or homeowners during excavation work.
- Staff replaced an eight inch gate valve at Federal Works Pump Station in Corte Madera. The original valve located on the discharge side of pump number two, leaked water through when in the closed position preventing the Mechanical and Electrical department from performing

maintenance on the pump. The new valve will ensure a tight seal and allow for pump maintenance to be performed in the future.

- Visited East Bay Municipal Utility District (EBMUD). Staff toured their apprenticeship program and got to see the training that is involved. This visit showed how another utility company prepares and trains their new employees.
- The District continued with Year 6 of the BFFIP plan through March 2025. March vegetation work focused on Broom removal primarily in the Phoenix Lake watershed. Broom work is split roughly 50/50 between maintenance of existing management units, and new or initial broom treatments.
- Pile burning work continued at West Peak. Across 8 days of pile burning the District burned approximately 560 piles. The District continues to work with Forster & Kroeger, Bay Area Tree Specialists, Conservation Corps North Bay, and others to complete Cal-Fire and Wildlife Conservation Board grant funded projects across multiple locations on the Watershed.
- Staff attended the 'Prescribed Fire Convening' at the Jasper Ridge Preserve hosted by Stanford University. Presentations mostly covered the effects of forestry pile burning treatments on soil, air, water and biological resources.
- Trail Stewardship event on March 1st engaged 6 volunteers on the south side of the mountain to cut back vegetation along Hoo Koo E Koo Trail.
- Turtle Observer training on March 1st brought together 37 volunteers over zoom and to Lake Lagunitas. On March 31 we led an additional online training for 8 College of Marin students. Watershed Stewards Program (WSP) AmeriCorps co-manages this community science program.
- Frog Docent training on March 8th brought together 20 volunteers over zoom and a hike to Little Carson Falls.
- Bald Hill Broom Bust on March 15th is an annual event held in partnership with Marin County Parks. 26 volunteers pulled mostly mature broom which extended the fuel break on the top of the ridge by 50 feet. Ranger chili and a nature hike offered upon conclusion!
- WSP led a habitat restoration event on Corte Madera Creek on March 16th with 28 volunteers to remove invasive, sheet mulch and plant native wetland plants.
- Trout in the Classroom kicks off the last week of March, 1100 students are scheduled to visit the stream flowing into Bon Tempe Reservoir over two weeks.
- Annual salmon surveys wrapped up for the year, with record high numbers of both Coho and Chinook Salmon in the Lagunitas Creek watershed. Fisheries staff installed the Lagunitas Creek smolt trap near Point Reyes Station and began daily operation, which will continue through early June.

MARIN WATER GRANT STATUS

PROJECT DETAILS						REQUIREMENTS		BUDGET	
OPPORTUNITY	FUNDER	FUNDER PRIORITIES	AGREEMENT /APPLICATION DATE	MATCHING PROJECT	DESCRIPTION	STATUS	PREREQUISITE	FUNDS REQUESTED	MATCH REQUIREMENT %
CURRENT GRANTS									
Prop.1, Round 2 IRWM Disadvantaged Community Forestry Corps	DWR CCNB	Water Infrastructure Vegetation Management	12/1/22 Jan 2023	Marin City/San Rafael Infrastructure Ongoing Forestry work	Replacing aging transmission lines and laterals in Marin City and San Rafael's Canal District Workforce development, state funding directly to CCNB to fund crews working on the watershed	Funded Funded	IRWM CC Approval Corps Partnership	\$6,500,000 \$500,000	0 0
Fisheries Restoration Grant Program	CDFW	Fisheries	4/20/23	Lagunitas Creek Restoration	Funding for Phase II site design and CEQA	Funded	30% designs	\$600,000	50%
Lagunitas Creek Salmonid Spawning Gnevel Improvement Project	DWR Riverline	Fisheries	11/1/22	Lagunitas Creek Restoration	Gnevel augmentation for Lagunitas Creek	Funded	None	\$590,000	0
Lagunitas Creek Salmonid Spawning Gnevel Improvement Project	USBR Environmental Restoration Project	Fisheries	8/17/23	Lagunitas Creek Restoration	Gnevel augmentation for Lagunitas Creek Sites 1-3	Funded	CEQA	\$1,400,000	39.39%
Rain Water Harvesting Project	MCSTOPP	Conservation	Unknown	Conservation	Barrels for customers	Funded	None	\$15,032	0
Urban Multi-Benefit Drought Relief	DWR	Water Resources	3/19/22	SWSA	Strategic Water Supply	Funded	None	\$2,000,000	0
Water Conservation	USBR WEEG	Conservation		Conservation		Funded		\$722,925	
Water Conservation	DWR IRWMP	Conservation		Conservation		Funded		\$222,477	
Prop 1, Fisheries Restoration	CDFW	Fisheries	7/1/23	Lagunitas Creek Restoration	Lagunitas Creek Restoration Sites 1-6	Funded	60% designs	\$4,600,000	0
CA Division of Boating & Waterways	NRA	Water Quality	7/1/23	Reservoir Water Quality	Monitor and prevent infestation of quagga and zebra mussels	Funded	NA	\$86,800	0
Azaalee Hill Trail Restoration	State Parks	Trail Restoration	2/1/20	Watershed	Azaalee Hill Restoration	Funded	None	\$952,657	0
One Tam Forest Health Strategy	CA WCB	Forestry Restoration	11/2/123	BFFIP Implementation	BFFIP Implementation for 2-3 years	Funded	CEQA	\$2,800,000	0
WaterSMART Applied Science	USBR	Water Resource	10/15/2023	Advanced Weather Modeling	Funding for weather modeling to inform water resources management	Funded	TBD	\$150,626.00	50%
One Tam Forest Health Phase II	Cal Fire	Forestry Restoration	1/15/2024	BFFIP Implementation	BFFIP Implementation for 2-3 years	Notice of Award	CEQA	\$3,000,000	TBD
TOTAL FUNDED:								\$24,140,519	
Desal Feasibility Study	USBR	Desalination	2/28/23	Desalination	Exploring new brackish desal in Petaluma	Open	None	\$200,000	50
Hazard Mitigation Program	CalOES/ FEMA	Natural Hazards	Aug-24	Treatment Plant Clarifiers	Funds to address seismic hazards in water treatment facilities	Open	NOI APPROVAL	\$22,000,000.00	25%
WaterSmart Energy Efficiency	USBR	Conservation	2/22/2024	AMI	Funding to expend AMI	Open	Environmental Compliance	\$1,000,000	50%
WaterSMART Planning & Design	USBR	Water Supply	5/20/2024	Water Supply Planning	Water Supply - Nicasio Spillway	Open	TBD	\$400,000.00	
Environmental Resources Grant	USBR	Forest Health	6/24/2024	BFFIP Implementation	BFFIP Implementation for 2-3 years	Open	TBD	\$3,000,000.00	
CDFW Environmental Enhancement Fund	CDFW	Fisheries	9/11/2024	Lagunitas Creek Restoration	Phase II	Not Funded	TBD	\$3,457,044.00	0%
USBR Drought Resiliency Program	USBR	Water Supply	10/7/2024	Water Supply Planning	Water Supply - Nicasio Spillway	Open	TBD	\$3,000,000.00	50%
Dam Safety & Climate Resilience Local Assistance	DWR	Infrastructure	10/21/24	Phoenix and Lagunitas Valves & Actuator Replacement	Dam Safety	Open	TBD	\$2,000,000.00	50%
TOTAL OPEN:								\$29,600,000	
UPCOMING APPLICATIONS									
USBR WaterSmart & Energy Efficiency (WEEG)	USBR	Conservation	11/13/2024	AMI Expansion	AMI Expansion	Open	TBD	\$3,500,000.00	50%
LONG TERM OPPORTUNITIES (ongoing development)									
2024 Water Bond	State of CA	Water supply projects	Fall 2024	SWSA Water Supply Projects	Currently in Legislature	In legislature	Voter approval, District participation	TBD	
Water Resources Development Act	Army Corps of Engineers	Water supply projects	FY 2024	SWSA Water Supply Projects	Pursuing for No Regrets and regional projects	In appropriations	Authorization (secured 2022)	\$28,000,000.00	
Small Storage Program	USBR	Water Supply	Fall 2024	Phoenix Lake	Funding for new water supply projects	TBD	Approved Feasibility Study	TBD	
United States Department of Fish and Wildlife	USFWS	Water Supply	Unknown	Phoenix Lake	Habitat Conservation Planning	TBD	Habitat Conservation PI	TBD	

**DISCUSSION:****B. SUMMARY:**

AF = Acre Feet

Mg/L = milligrams per liter

MPN = most probable number

MPY = mils per year

MG = million gallons

NTU = nephelometric turbidity units

**1. Water Production:**

	FY 2024/25		FY 2023/24	
	(million gallons)	(acre-feet)	(million gallons)	(acre-feet)
<b>Potable</b>				
Total production this FY	5,314	16,309	5,176	15,885
Monthly production, March	444	1,363	428	1,313
Daily average, March	14.33	43.96	13.80	42.34
<b>Recycled</b>				
Total production this FY	185.89	570.46	179.32	550.33
Monthly production, March	9.70	29.77	7.22	22.16
Daily average, March	0.31	0.96	0.23	0.71
<b>Raw Water</b>				
Total production this FY	61.56	188.92	43.84	134.54
Monthly production, March	0.00	0.00	5.00	15.34
Daily average, March	0.00	0.00	0.16	0.49
<b>Imported Water</b>				
Total imported this FY	1,451	4,453	1,707	5,239
Monthly imported, March	8	25	5	15
<b>Reservoir Storage</b>				
Total storage, March	25,925	79,560	25,927	79,566
Storage change during March	5	14	0	0
<b>Stream Releases</b>				
Total releases this FY	2,215	6,799	2,150	6,599
Monthly releases, March	209	643	74	228



2. <u>Precipitation:</u>	<u>FY 2024/25 (in.)</u>	<u>FY 2023/24 (in.)</u>
ALPINE	49.21	46.59
BON TEMPE	46.31	40.94
KENT	53.41	48.19
LAGUNITAS	49.80	48.73
NICASIO	36.47	33.28
PHOENIX	51.52	46.96
SOULAJULE	39.71	32.19
Average to date =46.66 inches		

3. Water Quality:

<u>Laboratory</u>	<u>FY 2024/25</u>	<u>FY 2023/24</u>
Water Quality Complaints:		
Month of Record	8	3
Fiscal Year to Date	159	61
Water Quality Information Phone Calls:		
Month of Record	12	4
Fiscal Year to Date	105	43

The WQ lab ensured that the water supplied met or surpassed water quality regulations by collecting and analyzing 1,670 analyses on treatment plants and distribution system samples.

Mild steel corrosion rates averaged 2.01 (1.13 – 3.2) MPY. The AWWA has recommended an operating level of <5 MPY with a goal of <1 MPY.

Complaint Flushing: One flushing event was performed at 150 Calumet Ave. in San Anselmo to ensure water quality for this month on record.

Disinfection Program: 6,553’ of new pipelines were disinfected during the month of March. Performed chlorination on 8 water storage tanks to ensure compliance with bacteriological water quality regulations.

Tank Water Quality Monitoring Program: Performed 42 water quality-monitoring events on storage tanks for various water quality parameters this month to help ensure compliance with bacteriological water quality regulations.

Summary:

The lab analyzed 1,670 treatment plant and distribution water samples, and the water quality department treated 8 tanks for low chlorine and checked an additional 42 tanks for low chlorine residual in March 2025.

4. Water Treatment:

<u>Treatment Results</u>	<u>San Geronimo</u>		<u>Bon Tempe</u>		<u>Ignacio</u>	
	Average	Monthly	Average	Monthly	Average	Monthly
	Goal		Goal		Goal	
Turbidity (NTU)	0.06	≤ 0.10	0.04	≤ 0.10	0.06	≤ 0.10
Chlorine residual (mg/Lv)	2.76	2.75 *	2.73	2.75 *	2.87	2.75 *
Color (units)	0.5	≤ 15	0.4	≤ 15	0.0	≤ 15
pH (units)	7.8	7.8*	7.8	7.8*	8.0	8.1**

- \* Set monthly by Water Quality Lab
- \*\* pH to Ignacio is controlled by SCWA

5. Capital Improvement:

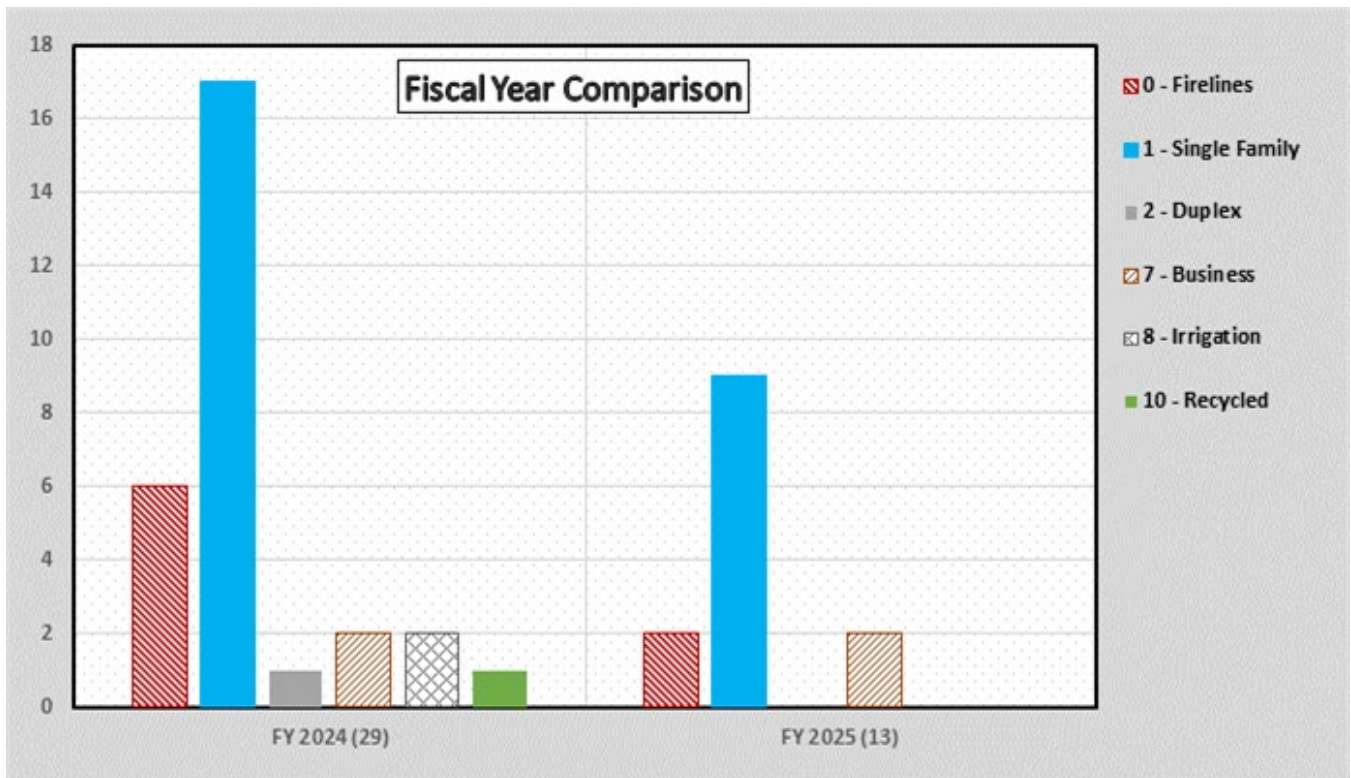
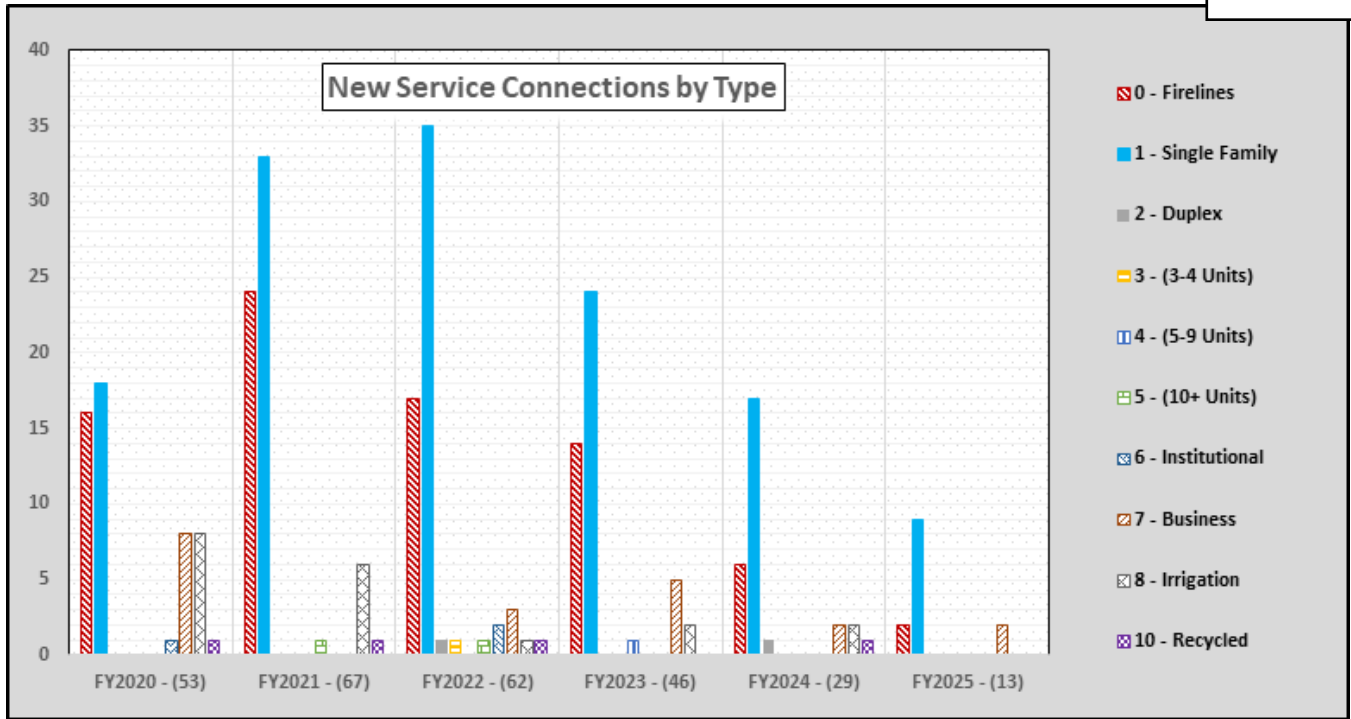
- a. Pine Mountain Tank Phase 2 – New Water Tanks Project (D21043): The Pine Mountain Tunnel Tanks Replacement Project is a multi-year two-phased project that will replace the existing Pine Mountain Tunnel. The current project (Phase 2) will construct two 90-foot inside diameter pre-stressed concrete potable water storage tanks, will install yard piping and control systems, and will then complete final site grading.
  - Project Budget: \$19,142,500
  - Monthly Activities: The District’s team is reviewing submittals and communicating with the Contractor on those in advance of start of construction August 1, 2025.

- b. Wolfback Ridge Tanks Rehabilitation Project (D20009): This project will replace the roof and recoat both the interior and exterior of each tank at Wolfback Ridge in Sausalito.
- Project Budget: \$950,000
  - Monthly Activities: The Contractor completed removal of containment on the first tank and it has since been refilled, now awaiting test results to put back into service. Project estimated completion is April 2025.
- c. Granada Drive Pipeline Replacement Project (D23020): This project will install approximately 10,230 linear feet of welded steel pipe to replace old, leak-prone, and seismic-deficient piping in the Town of Corte Madera. The District coordinated with the Town to incorporate the Town's road reconstruction work into the District's project to minimize construction impacts to the community.
- Project Budget: \$5,564,384
  - Monthly Activities: The project has reached substantial completion with the exception of final roadway paving, which will be performed pending acceptable weather conditions. Paving is anticipated to be performed in April 2025.
- d. Tiburon Pipeline Replacement Project (D23018): The 2024 Tiburon Pipeline Replacement Project is a component of the District's Capital Improvement Program and Fire flow Improvement Program. The project includes the installation of approximately 3,490 linear feet of 8-inch, 6-inch, and 4-inch welded steel potable water pipe with valves, fittings, laterals, and appurtenances in the Town of Tiburon. This project replaces 102 year old, leak-prone, cast iron pipe with new reliable, seismically resilient welded steel pipe.
- Project Budget: \$3,112,285
  - Monthly Activities: The project has been fully completed in the field and the closeout punch list process is underway. Looking to be complete in April 2025.
- e. Rock Ridge Pipeline Replacement Project (F22001): The Rock Ridge Pipeline Replacement Project (Project) is a component of the Fire Flow Improvement Program. This Project will install approximately 7,590 feet of new 8" and 6" welded steel and polyvinyl chlorine (PVC) pipe to replace the old, leak prone fire flow deficient piping installed as early as 1934.
- Project Budget: \$3,928,105
  - Monthly Activities: The Contractor has completed approximately 7,100 linear feet of pipe installation and is finishing tie-ins on Oak Manor Drive. Contractor will begin installing mainline pipe on Scenic Dr in Fairfax. The project is expected to be completed May 2025.
- f. Marin City Phase I Pipeline Replacement Project (GC25005): The Marin City Phase I Pipeline Replacement Project is a component of the District's Capital Improvement Program. This Project will install approximately 9,200 linear feet of 8, 6 and 4-inch welded steel pipe to replace the old, leak prone, seismic deficient pipe installed as early as 1959.
- Project Budget: \$4,069,592.20
  - Monthly Activities: The Contractor is completing mainline pipe installation and should be completed with all mainline in April. To date, the Contractor has installed approximately 5,400 linear feet of 8-inch welded steel pipe and 3,600 linear feet of 6-

inch welded steel pipe to date. The project is expected to be completed ahead of the October 2025 completion date.

#### 6. Other:

<u>Pipeline Installation</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Pipe installed during March (feet)	5,202	0
Total pipe installed this fiscal year (feet)	26,901	1,439
Total miles of pipeline within the District	908*	908*
<i>* Reflects adjustment for abandoned pipelines</i>		
<u>Pipe Locates (979 Responses)</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Month of March (feet)	26,755	29,566
Total this fiscal year (feet)	323,030	255,990
<u>Main Line Leaks Repaired:</u>	<u>FY2024/25</u>	
<u>FY2023/24</u>		
Month of March	10	10
Total this fiscal year (7/1/24-5/31/25)	113	97
<u>Services:</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Service upgrades during March	11	9
Total service upgrades this FY	139	137
Service connections installed during March	3	3
Total active services as of March 31st, 2025	60,585	60,578
(Total Including firelines)	61,972	61,961



## **7. Recruitments and Hires**

The District is currently recruiting for the following positions:

1. Associate Engineer (2 Positions)
2. Mechanical and Electrical Worker III/IV
3. Watershed Aide

The District recently hired new employees for the following positions:

1. Principal Grants and Legislative Analyst

## 8. Demand Management:

	Mar-25	FY 24/25 TOTAL	FY 23/24 TOTAL	FY 22/23 TOTAL
<b>WATER-EFFICIENCY PROGRAMS</b>				
<b>Water-Use Site Surveys</b>				
Conservation Assistance Program (CAP) Consultations				
Residential properties resi 1-2 (single-family)	76	496	404	291
Residential properties resi 3-5 (multi-family units)	1	8	6	3
Non-residential properties resi 6-7 (commercial)	0	0	0	3
Dedicated irrigation accounts resi 8-10 (large landscape)	3	7	0	0
Marin Master Gardeners' Marin-Friendly Garden Walks				
Residential garden walks	10	87	173	72
<b>Public Outreach, Education, Customer Service</b>				
Public outreach events (number of people attending)	1	3501	7022	17775
Public education events (number of participants)	40	265	425	328
Department customer calls/emails	352	4817	4485	4150
Outreach to new Marin Water customers (letters sent)	182	1134	1908	0
<b>School Education</b>				
School assemblies				
Number of activities	3	9	19	0
Number of students reached	1183	3744	21850	0
Field trips				
Number of activities	4	14	16	15
Number of students reached	86	290	343	307
Classroom presentations				
Number of activities	2	9	14	17
Number of students reached	84	276	457	531
Other (e.g. Earth Day booth events, school gardens)				
Number of activities	0	0	3	1
Number of students reached	0	0	400	480
<b>Incentives</b>				
Number of HECWs approved	0	2	98	103
Rain Barrel/Cisterns approved	1	14	9	15
Rain Barrel/Cisterns gallons	275	5560	0	0
Rain Barrel Give-a-way (Gallons)	2100	24760	4840	0
"Cash for Grass" Lawn Replacements approved	9	55	61	116
"Cash for Grass" (Best Practices) square ft. lawn replaced	0	3362	0	0
"Cash for Grass" (Standard) square ft. lawn replaced	6453	59521	0	0
Number of Laundry-to-Landscape Systems (kits) approved	0	0	1	7
Hot water recirculating system rebates	0	3	11	30
Pool Cover rebates	1	22	35	27
HET rebates	0	4	17	22
Number of Smart Home Water Monitor "Flume Direct Distribution" redeemed	24	404	544	271
Number of Smart Controllers MW rebates approved	1	21	49	35
Number of Smart Controllers "RainBird compatible w/Flume" approved	1	44	131	0
Number of Smart Controllers "Rachio Direct Distribution" approved	1	114	219	77
<b>Advanced Metering Infrastructure (AMI)</b>				
AMI leak letters sent to customers (>200 GPD)	84	965	1330	1168
<b>ORDINANCES</b>				
<b>Water Waste Prevention</b>				
Water Waste Reports Received	3	130	224	392
Water Waste Notifications Sent	0	25	49	81
<b>Landscape Plan Review</b>				
Plans submitted	8	61	117	88
Plans exempt	1	7	23	5
Plans completed	1	16	30	20
Plans in workflow (pass & fail)	15	99	172	145
<b>Tier 4 Exemption</b>				
Inspections that resulted in a pass	0	1	2	1

9. Watershed Protection:

**Ranger Hosts “Newts and Roots” Nature Hike**

On Sunday, March 2nd, Marin Water Ranger John McConneloug led a guided, family-friendly hike around Lake Lagunitas, exploring the plants and animals of the Mt. Tam Watershed. Over 15 families attended this event.



This is the 3<sup>rd</sup> in a series of Ranger-led events. Saturday, November 30th, Senior Ranger Matt Cerkel led a hike to the site of a Navy airplane that crashed during World War 2. On Sunday, December 8th, Senior Ranger Phil Johnson led a “Bird Walk” around Lake Lagunitas. In January, Ranger Mike Faus hosted a “Fishing with a Ranger” event. On Thursday, April 10th, Ranger Faus will host a second “Fishing with a Ranger” event.

**Medical Aid Calls**

Rangers responded to five medical aid calls on the watershed. Four hikers with ankle, knee, or head injuries were involved, and three were transported to the hospital. The fifth was a mountain biker with a knee injury. First aid was provided.

**Lost Hikers**

There were two lost hiker incidents involving hikers taking wrong turns. Two hikers and their dogs hiked to Carson Falls. After hours and in the dark, the hikers ended up 4 miles away from their destination. The standby ranger responded and retrieved the cold and tired hikers.

Incidents and Events	834
Visitor Assists	302
Warnings	184
Citations	97
Dam Checks	85
Assist Maintenance	59
Fish and Game checks	27
Misc. Law Enforcement Calls	18
Vandalism	17
Illegal Trail Work	9
Preventive Search and Rescue	7
Fire Service	6
Medical Aid	5
Illegal Dumping	3
Disturbance/Dispute	3
Search and Rescue	2
Misc. Calls for service	2
Humane/Animal Call	1
Suspicious Circumstance	1
Outreach and Interpretation	1
Citizen Complaint Illegal Bike Use	1
Citizen Complaint: Vehicle Speed	1
Assist Fire/EMS	1
Found Property	1
Assist Other MMWD Work Group	1

Citations Issued	97
Nonpayment of Parking Fees	76
Obstructing Traffic/6 ft of Center	19
Parking After Sunset	2

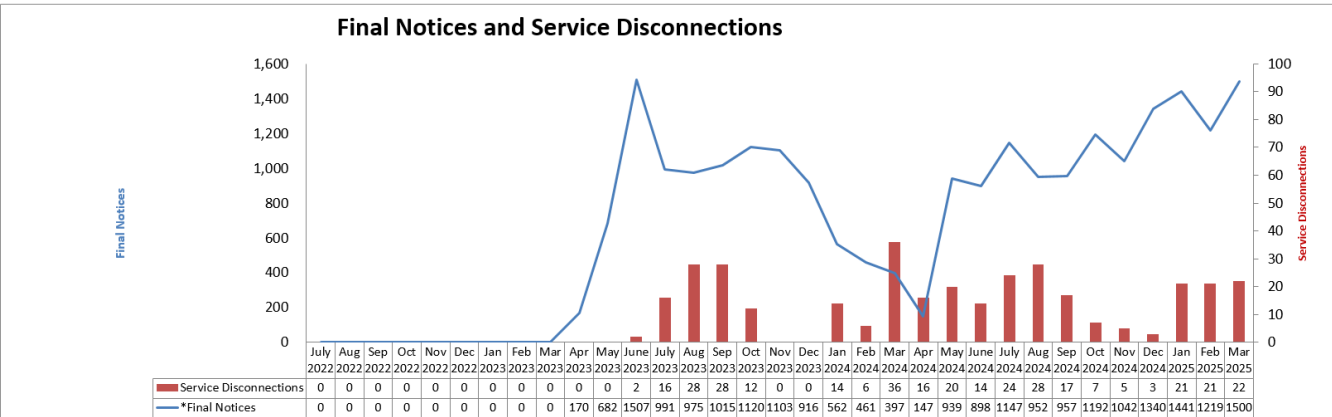
Type of Patrol	
Foot	85
Bike	85






10. Shutoff Notices and Disconnections:

*Final Notices
Service Disconnections
* Includes 10 day and final notices



**FISCAL IMPACT:** None.

**ATTACHMENT(S):** None.

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Office of the General Manager	<hr/>	
	<b>Ben Horenstein</b> General Manager	<b>Ben Horenstein</b> General Manager



# STAFF REPORT

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**Meeting Type:** Board of Directors  
**Title:** Award of Contract No. 2035 San Geronimo Treatment Plant Roof Replacement Project (D21034) to Best Contracting Services, Inc.  
**From:** Alex Anaya, Director of Engineering  
**Through:** Ben Horenstein, General Manager  
**Meeting Date:** April 15, 2025

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**TYPE OF ITEM:**        X        Action                    Information

**RECOMMENDATION:** Approve a resolution authorizing award of Contract No. 2035, San Geronimo Treatment Plant Roof Replacement Project, to Best Contracting Services, Inc. in the amount of \$1,495,740

**SUMMARY:** This item was reviewed by the District's Planning Committee on February 13, 2025, and was referred to the Board for contract award. The San Geronimo Treatment Plant Roof Replacement Project (Project) will replace the existing leak prone roof membrane with a new Class A Fire Rated Thermoplastic Polyolefin (TPO) roofing membrane and add fall protection at the San Geronimo Treatment Plant in the unincorporated area of Woodacre.

**DISCUSSION:** The San Geronimo Treatment Plant Roof Replacement Project is a component of the District's Capital Improvement Program. This project will replace the existing roof which is 21 years old and was last replaced in 2004. The TPO roof had an original fifteen-year (15) warranty and is past its useful life. See Attachment 2 for the map provided for this project.

This Project aims to address critical issues including leaks, fire protection and the presence of localized dry rot at the facility, all of which compromise the integrity of the structure. To address these concerns, the District has selected a Class A Fire Rated roofing TPO membrane, ensuring improved fire protection and long-term durability, including a twenty-five (25) year warranty. The roof will incorporate a cover board beneath the membrane, which will allow for potential future installation of solar panels. All new roofing materials will be installed on the existing fire proof concrete and metal roof deck. In addition to the necessary roof replacement, the project scope includes the installation of guardrails around the perimeter of the roof at the treatment plant and North Marin Line Pump Station. These guardrails will enhance safety by providing fall protection for personnel working in this area.

On April 3, 2025, the District opened two (2) bids for the San Geronimo Treatment Plant Roof Replacement Project, as shown in Table 1. Best Contracting Services, Inc. submitted the lowest

responsive and responsible bid in the amount of \$1,495,740. Therefore, staff recommends that the Board of Directors approve a resolution awarding Contract No. 2035 to Best Contracting Services, Inc. in the amount of \$1,495,740 and authorizing the General Manager to execute any necessary amendments to Contract No. 2035, which do not exceed \$225,000.

**Table 1**  
**Bid Results**

**San Geronimo Treatment Plant Roof Replacement Project**

<b>Bid Rank</b>	<b>Contractor Name</b>	<b>Bid Amount</b>
1.	Best Contracting Services, Inc.	\$1,495,740
2.	Roofing Contractor Inc. dba Western Roofing Services	Non-Responsive

Engineer's Estimate: \$1,500,000

Summaries of the estimated Project costs and schedule are provided below.

**Budget:**

Contract Amount:	\$1,495,740
Contingency (15%):	\$225,000
Professional Fees:	\$98,000
District Labor/Inspection:	\$125,000
Total Budget:	\$1,943,740
Budget Category:	A1A04

**Project Implementation:**

Project Advertisement:	February 18, 2025
Bid Opening:	April 3, 2025
Project Award:	April 15, 2025
Estimated Completion Date:	October 12, 2025
Duration:	180 days

**ENVIRONMENTAL REVIEW:** The Director of Engineering has determined that the Project is Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15301(b), Existing Facilities and 15302(c), Replacement or Reconstruction. The project qualifies for exemptions pursuant to Section 15301(b) inasmuch as it is a repair and maintenance activity on an existing facility and 15302(c) inasmuch as it is the replacement of existing roof involving negligible or no expansion of capacity.

**FISCAL IMPACT:** The total cost to complete the San Geronimo Treatment Plant Roof Replacement Project is estimated at \$1,943,740.

**ATTACHMENT(S):**

1. Resolution
2. Site Map
3. Draft Notice of Exemption

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Engineering	 Alex Anaya Engineering Director	 Ben Horenstein General Manager

**MARIN MUNICIPAL WATER DISTRICT****RESOLUTION NO.****A RESOLUTION OF THE BOARD OF THE MARIN MUNICIPAL WATER DISTRICT  
APPROVING AWARD OF CONSTRUCTION CONTRACT NO. 2035 TO BEST  
CONTRACTING SERVICES, INC. FOR THE SAN GERONIMO TREATMENT PLANT ROOF  
REPLACEMENT PROJECT**

**WHEREAS**, on February 18, 2025, the District advertised Contract No. 2035, San Geronimo Treatment Plant Roof Replacement Project (D21034), which will replace the existing leak prone roof membrane and add fall protection; and

**WHEREAS**, the District received and publicly opened two (2) bids on April 3, 2025, of which Best Contracting Services, Inc. bid of \$1,495,740 was the lowest responsive and responsible bid.

**NOW, THEREFORE, THE BOARD OF DIRECTORS RESOLVES** that:

1. The bid of \$1,495,740 submitted by the Best Contracting Services, Inc. for the Roof Replacement Project under Contract No. 2035 ("Contract") was the lowest responsive and responsible bid submitted therefor, and said bid is hereby accepted.
2. A Contract for this project be awarded to said low bidder, and the General Manager is authorized and directed to execute said Contract on behalf of the District upon receipt of a performance bond, payment bond, proof of insurance, and the executed contract for the work from said bidder.
3. The General Manager is authorized to execute any and all future amendments to the Contract, which he deems necessary, without further Board approval, so long as those amendments to the Contract do not exceed \$225,000.
4. Upon complete execution of said Contract, the bonds and/or checks of the other bidders are to be returned to said other bidders, and all bids other than that of the Best Contracting Services, Inc. are to be rejected.

5. The project is Categorically Exempt from review under Section 15301(b) inasmuch as it is a repair and maintenance activity on an existing facility and Section 15302(c) of the CEQA Guidelines inasmuch as it is the replacement of existing water pipeline involving negligible or no expansion of capacity.

**PASSED AND ADOPTED** this 15th day of April, 2025, by the following vote of the Board of Directors.

**AYES:**

**NOES:**

**ABSENT:**

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**Matt Samson**  
**President, Board of Directors**

**ATTEST:**

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**Terrie Gillen,**  
**Board Secretary**





# SAN GERONIMO TREATMENT PLANT ROOF REPLACEMENT PROJECT WOODACRE, CA

Section 8. Item #c.

Attachment 2

SIR FRANCIS DRAKE BLVD

PROJECT SITE

PROJECT SITE



0 45 90 180 Feet

MarinMap, County of Marin, Golden Gate National Parks Conserva

# Notice of Exemption

## Attachment 3



Filing Requested By and When Filed Return To:

Marin Municipal Water District  
220 Nellen Ave  
Corte Madera, CA 94925  
Attn: Alex Anaya, Director of Engineering

**Project Title:** San Geronimo Treatment Plant Roof Replacement Project (D21034)

**Project Location:** Unincorporated Woodacre

**Project Location – County:** Marin

**Project Description:** This Project will replace the existing leak prone roof membrane with a new Class A fire Rated Thermoplastic Polyolefin (TPO) roofing membrane as part of the District's Capital Improvement Program.

The project site is shown in Figure 1:

**Public Agency Approving Project:** Marin Municipal Water District

**Name of Person or Agency Carrying Out Project:** Marin Municipal Water District

**CEQA Exemption Status:** Categorical Exemption Section 15301(b), Existing Facility and Section 15302(c), Replacement or Reconstruction.

**Reason for Exemption:** This project qualifies for exemption pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15301(b), Existing Facilities and 15302(c), Replacement or Reconstruction. The project qualifies for exemptions pursuant to Section 15301(b) inasmuch as it is a repair and maintenance activity on an existing facility and 15302(c) inasmuch as it is the replacement of existing roof involving negligible or no expansion of Capacity.

**Project Approval:** The Marin Municipal Water District Board of Directors approved the award of a contract for project construction, which represents project approval as defined by Section 15352 of the Guidelines for Implementation of the California Environmental Quality Act, at their regularly scheduled meeting on April 15, 2025.

**Lead Agency Contact Person:** Alex Anaya, Marin Municipal Water District

**Telephone:** (415) 945-1588

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Alex Anaya, Director of Engineering

Date



Figure 1: San Geronimo Treatment Plant Roof Replacement Project



SOURCE: MMWD 2025



# STAFF REPORT

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**Meeting Type:** Board of Directors

**Title:** Approval of Professional Services with TJC and Associates for the San Geronimo Treatment Plant Clearwell Structural Evaluation and Condition Assessment

**From:** Alex Anaya, Director of Engineering

**Through:** Ben Horenstein, General Manager

**Meeting Date:** April 15, 2025

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**TYPE OF ITEM:** X      Approve      Information

**RECOMMENDATION:** Authorize the General Manager to execute a professional services agreement with TJCAA for the San Geronimo Treatment Plant Clearwell Structural Evaluation and Condition Assessment in an amount not to exceed One Hundred Sixteen Thousand Four Hundred and Eight Dollars (\$116,408)

**SUMMARY:** Staff presented this item at the March 25, 2025 Planning Committee Meeting sharing staff's proposal to perform the San Geronimo Treatment Plant (SGTP) Clearwell Structural Evaluation and Condition Assessment project. Staff went through a competitive request for proposal (RFP) process to solicit proposals from structural engineering firms to perform a seismic structural evaluation, provide recommendations for repairs as needed, and to perform a structural analysis for the installation of solar panels on top of the existing clearwells. Staff reached out to eight professional engineering firms, and conducted a site visit at the SGTP in January of 2025 to discuss the project objectives. After conducting a thorough interview process, staff selected TJCAA to perform the work.

**DISCUSSION:** The District is in the early stages of the San Geronimo Treatment Plant (SGTP) Clearwell structural evaluation and condition assessment project which aligns with the Five-Year Strategic Plan to improve the resilience of Marin Water's infrastructure and reduce the District's carbon footprint.

The SGTP is the District's largest energy consuming facility, accounting for roughly 25% of the District's annual electricity demands. The District's renewable energy analysis identified an action to further investigate the feasibility of installing solar panels on top of the existing clearwells in order to reduce the SGTP annual electrical demands. If solar panels were installed on top of the two clearwells, the District is estimated to reduce its PG&E demand at the plant by approximately 10%, equating to an annual savings of roughly \$100,000.

The SGTP has two circular partially buried concrete clearwells. Clearwell No. 1 was constructed in 1962 when the treatment plant was first commissioned, and Clearwell No. 2 was constructed in 1995. Clearwell No. 2 is critical to the District’s treatment process due to its outer ring configuration whereby the production of chloramines is achieved to satisfy surface water treatment regulation requirements. Chloraminated water from Clearwell No. 2 enters Clearwell No. 1 and is then pumped through the North Marin Line into the distribution system.

In 2024, Potable Divers Inc. entered the clearwells to perform routine inspections and tank cleaning. During these inspections, divers found evidence of standing water from the clearwell roofs infiltrating through cracks, and areas of spalled concrete, some of which was located around the perimeter of the roof and shell connection of Clearwell No. 1. Potable Divers Inc. recommended the District conduct additional structural assessment by a structural engineering firm to evaluate the extent of the damage and develop a repair plan and design.

Staff issued an RFP to solicit proposals from structural engineering firms to perform a seismic structural evaluation, provide recommendations for repairs for items identified, and to perform a structural feasibility analysis for the installation of solar panels on top of the existing clearwells. Staff reached out to eight consulting firms, and on January 25th conducted a site visit at the treatment plant to discuss the project and answer any questions. All eight consulting firms were present for the site visit. Staff performed a thorough interview process which ultimately led to the preferred selection of TJC and Associates, Inc. (TJCAA) to perform the work.

TJCAA is a local firm specializing in structural analysis and condition assessments of concrete water storage structures. TJCAA’s related work experience, project management approach, budget and schedule were the leading factors which scored their proposal above the other engineering consultant firms. This contract will allow the District to consult with subject matter experts in structural evaluations and condition assessments to determine useful remaining service life of the clearwells, perform seismic structural evaluations, receive engineered repair details, and determine any structural improvements necessary to install solar panels on top of the existing clearwells.

Staff is recommending that the Board approve a professional services agreement with TJC and Associated and authorize the General Manager to execute the contract award for the San Geronimo Treatment Plant Clearwell Structural Evaluation & Condition Assessment project in an amount not to exceed One Hundred Sixteen Thousand Four Hundred and Eight Dollars (\$116,408).

**BUDGET:**  
Professional Services Agreement:     \$116,408  
Total Budget:                             \$116,408  
Budget Category:                         A1A04

**ENVIRONMENTAL REVIEW:** Not Applicable.

**FISCAL IMPACT:** Funding for this contract is identified in the adopted budget for Fiscal Year 2025 and 2026 under the A1A04 Treatment Plant fund center

**ATTACHMENT(S):** None.

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Engineering	 Alex Anaya Engineering Director	 Ben Horenstein General Manager



# STAFF REPORT

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**Meeting Type:** Board of Directors  
**Title:** SAP Software Maintenance Renewal and Support Reinstatement  
**From:** Bret Uppendahl, Finance Director  
**Through:** Ben Horenstein, General Manager  
**Meeting Date:** April 15, 2025

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**TYPE OF ITEM:**      X      Action                      Information

**RECOMMENDATION:** Authorize the General Manager to execute a software license and maintenance renewal agreement with SAP retroactively reinstating and renewing SAP ERP software maintenance and support through December 31<sup>st</sup>, 2025 in an amount not to exceed \$217,771.37

**SUMMARY:** The District's Enterprise Resource Planning (ERP) solution is published by SAP and the current version in production is known as "SAP ERP Central Component" (SAP ECC) version 6. The SAP ECC solution supports operations in and across all of the District's divisions and business units and is utilized to enable business processes across the entire organization. This software maintenance agreement reinstates SAP software maintenance retroactively and continues ongoing software maintenance and licensing for the remainder of the current calendar year. This will entitle the District to software and security updates released for all licensed SAP ECC modules while the software maintenance contract remains current and will provide District staff access to technical support services from SAP during this term.

**DISCUSSION:** Software maintenance is essential to keeping the District's ERP systems stable and secure and access to SAP technical support is essential to keeping the District's ERP systems running smoothly. On September 15, 2023, the Board approved the reinstatement of SAP ECC software support services. The District deferred this expense and instead negotiated more favorable terms with the software vendor for a subsequent term extension. With this proposed extension, the SAP Support Schedule will be retroactively reinstated and will be renewed for the following calendar year at the annual cost provided below.

Staff recommends that the Board authorize the General Manager to execute the proposed software maintenance agreement through December 31<sup>st</sup>, 2025 with SAP for a total amount of \$217,771.37.

**ENVIRONMENTAL REVIEW:** Not Applicable.

**FISCAL IMPACT:** Funding for the expenditures described above is available within the Information Technology Department's Operational budget for FY 2025. As detailed in the attachments, this proposed reinstatement includes a one-time support fee of \$98,340, an annual maintenance fee of \$196,679, and is offset by a one-time credit in the amount of \$77,248 for a total cost of \$217,771.37.

**ATTACHMENT(S):**

1. SAP Reinstatement Agreement
2. Schedule 1 – Licenses and Entitlements

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Finance	 Bret Uppendahl Finance Director	 Ben Horenstein General Manager

SAP Public Services Inc., 1399 New York Avenue N.W. Suite 800

Marin Municipal Water District  
220 Nellen Avenue  
CORTE MADERA, 94925 CA

**LETTER AGREEMENT**  
**February 13, 2025**

**RE: Re-instatement of SAP maintenance**

Dear Customer,

Your SAP Support Schedule will continue in current effect and will be renewed for the next renewal period.

**Mutual Contingency and Integration Clause**

The parties hereby acknowledge and agree that this Letter Agreement, along with the prior letter agreements for the reinstatement of SAP Maintenance with Case ID 3062932435, signed December 31, 2024, and Case ID 3062964089, signed December 20, 2024 (collectively, the "Previous Letters"), are integrally connected and must be read and interpreted together as mutually contingent documents. Both the reinstatement of SAP Maintenance Case ID 3062932435 and the reinstatement of SAP maintenance Case ID 3062964089 collectively govern the terms and conditions under which the previously terminated software is reinstated. The reinstated software and corresponding rights, obligations, and functions under both agreements shall be considered as a unified whole, and the total reinstated amount of the software as specified shall be the combined sum detailed within both the reinstatement of SAP maintenance Case ID 3062932435 and the reinstatement of SAP maintenance Case ID 3062964089. Any reference to the reinstatement of the software herein shall be understood to encompass the entirety of the software as reinstated under the totality of both corresponding agreements.

In the event of any inconsistency between the terms of the reinstatement of SAP Maintenance Case ID 3062932435 and the reinstatement of SAP maintenance Case ID 3062964089, the terms most favorable to effectuating the combined reinstatement of the software will prevail unless otherwise explicitly agreed in writing by both parties.

For the licenses from the original contracts: **Sales orders** 11252126, 11275931, 12137291, 10157387, 10157731, 10157876, 10220164, 10386361, 10393028, 10423687, 10549176, 10664338, 10702106, 12038326, 13259480.

Licensee agrees to pay a one-time Support Reinstatement Fee of USD 98,339.71 for the Support Period from **January 1, 2023, to December 31, 2024**. SAP grants Licensee with a credit in the amount of USD 77,247.76 for the 2025 term to address the discrepancy in this Letter Agreement with the prior letter agreements for the calculated dollar amounts.

- One-time Support Reinstatement Fee – USD 98,339.71
- Maintenance Base of the Reinstated Software (used to calculate Annual Maintenance Fee) - USD 807,522.33
- Calculated Annual Maintenance Fee of Reinstated Software for 2025 - USD 196,679.42
- Total Maintenance Fee payment for 2025 before credit – USD \$295,019.13
- Credit amount towards Maintenance Fee for 2025 - USD 77,247.76
- Total Maintenance Fee owed by Licensee for 2025 after credit – USD 217,771.37
- Effective Date of Reinstatement – Jan. 1, 2025

All fees are payable thirty (30) days from date of invoice.

Acceptance of this letter is subject to Licensee paying the Reinstatement Fee mentioned in this Reinstatement letter.

In order to give effect to your reinstatement request, please, sign and return this letter to us at your earliest convenience (and, in any case, on or prior to March 31, 2025).

If you have any questions, please contact your SAP Sales Representative.

REVOCATION AND REPLACEMENT

The undersigned parties hereby agree and acknowledge that the Previous Letters shall be deemed null and void and of no effect upon the execution and delivery of this Letter Agreement. All values, terms, conditions, and any information contained in the Previous Letters are hereby revoked and superseded in their entirety by the values, terms, conditions, and information contained in this Letter Agreement.

Accepted By:

Marin Municipal Water District  
(Customer)

Signature: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_



## Schedule 1

## REINSTATED SOFTWARE

Sales Order	Material number	Material Description	Current Quantity
10157387	7001125	SAP Business Suite Professional	90
10157387	7001126	SAP Business Suite Employee	143
10157387	7001170	Billing (consumption based contracts)	70
10157387	7001172	Invoicing & Contract Accounting	70
10157387	7001382	SAP Tutor	90
10157387	7001116	SAP KM Training Content	90
10157387	7001132	SAP Payroll Processing	1,000
10157387	7000127	IS-PS Public Sector	1
10157387	7001152	MS SQL Server Enterprise Edition	1
10157731	7000268	BSI U.S. Payroll Tax Processing	1,000
10157731	7001152	MS SQL Server Enterprise Edition	1
10157876	EBUYER_1.0	Enterprise Buyer Prof. Edition	1
10157876	7001541	EnterpriseBuyer Prof. Edition Prof. Usr	90
10157876	7001542	EnterpriseBuyer Desk. Edition Req. Usr	143
10157876	7001036	zBP CE-RQT Catalogue Engine Requisite	1
10220164	7002009	RWD InfoPak Complete Package	90
10220164	7001985	RWD InfoPaks Option 5	90
10386361	7002983	SAP ALM/BAPI 4.6c	5
10393028	7002636	SAP Solution Manager	1
10423687	7003274	SAP Interactive Forms by Adobe - Enable	233
10423687	7001152	MS SQL Server Enterprise Edition	1
10549176	7003655	SAP Solution Manager Enterprise Edition	1
10664338	7001152	MS SQL Server Enterprise Edition	1
10702106	7010018	SAP Public Budget Formulation	1
10702106	7001152	MS SQL Server Enterprise Edition	1
12038326	7001125	SAP Business Suite Professional	7
12038326	7002389	SAP Business Suite Developer User	14
12038326	7018104	MS SQL Server Enterprise Edition	1
13259480	7001125	SAP Business Suite Professional	5
13259480	7018104	MS SQL Server Enterprise Edition	1
11252126	7011289	SAP Business Analytics Prof User	2
11252126	7016760	SAP Multichannel Foundation f. Utilities	30
11252126	7011384	BA&T SAP BOBJ BI, Edge ed. d. mgmt. (CS)	1
11252126	7001152	MS SQL Server Enterprise Edition	1
11252126	7003655	SAP Solution Manager Enterprise Edition	1
11275931	7015760	SAP Meter Admin a. Oper. f. Water Util.	70
11275931	7015789	SAP Water Data Mngmt f. Water Utilities	70
11275931	7015792	SAP Adv. Metering Infstr. Water Utilit.	70
11275931	7015763	SAP Bill-To-Cash Mgmt f. Water Utilities	70
11275931	7015775	SAP Sales Mgmt + Cust. Serv. Water Util.	70
11275931	7001152	MS SQL Server Enterprise Edition	1
12137291	7017299	SAP Single Sign-On	5



# STAFF REPORT

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**Meeting Type:** Board of Directors  
**Title:** Approve a Professional Services Agreement with Carollo Engineers for Engineering Design of Atmospheric River Capture Project  
**From:** Paul Sellier, Director of Water Resources  
**Through:** Ben Horenstein, General Manager  
**Meeting Date:** April 15, 2025

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**TYPE OF ITEM:**        X        Action                    Information

**RECOMMENDATION:** Approve a Professional Services Agreement with Carollo Engineers not to exceed \$9,699,235 to provide engineering services for the preliminary and final design package and bidding support services for the Atmospheric River Capture (ARC) and authorize the General Manager to negotiate and execute the contract

**SUMMARY:** At the February 25, 2025 Board of Directors meeting, the water supply conveyance alternative PETA-3 was approved by the Board as the preferred alternative to advance into design and environmental review. PETA-3 has been renamed the Atmospheric River Capture (ARC) Project. Following direction from the Board, Staff requested proposals from qualified engineering firms for design services and received one proposal from Carollo Engineers (Carollo). Carollo's proposal, interview responses, and performance working with the District on prior projects reflect their team's thorough understanding of the project need, urgency, complexities as well as Carollo's technical expertise designing similar projects.

**DISCUSSION:** By mid-2021, as a result of historic drought conditions, the District was left with just months of water supply. Fortunately, with the help of historic rainfall, the District's reservoirs were at capacity by December 2021, that provided relief from the drought emergency and time to more thoroughly investigate water supply options. Over the next year the District developed the Strategic Water Supply Assessment (SWSA) that investigated the District's ongoing vulnerability to drought and established the need for additional water supply. The SWSA evaluated a range of water supply alternatives that culminated in February 2023, when the Board selected the Integrated Roadmap for improved water supply resiliency (Roadmap). Staff has been working to implement the Roadmap projects, including a review of new and available information to thoroughly define the longer-term projects included in the Roadmap.

On February 25, 2025, the Board of Directors reviewed a short-list of water supply alternatives including raising Kent Dam, raising Soulajule Dam, constructing a 10-MGD desalination plant, and

constructing the Atmospheric River Capture project (formerly PETA-3). The Board directed staff to proceed with the design and environmental review of the Atmospheric River Capture project (ARC) as it was identified to be superior across nearly all planning criteria compared to other long-term supply alternatives available to the District.

Once constructed, ARC will support the District by capturing excess water during atmospheric river events in the Russian River watershed for storage in Nicasio Reservoir. The proposed transmission pipeline will tie into the existing North Marin Aqueduct (NMA) that conveys water from Sonoma County Water Agency. The proposed pipeline route is along San Marin-Novato Blvd for approximately 9.2 miles before heading south another 4.0 miles along Pt. Reyes – Petaluma Road to Nicasio Reservoir.

Following direction from the Board, staff requested proposals from qualified engineering firms for design services and received one proposal from Carollo. In review of the proposal, Carollo demonstrated exceptional attention to detail and awareness in key areas of the project that are expected to be most challenging, including coordination with local agencies and jurisdictions, including PG&E, identifying potential geotechnical issues early in the design process to minimize change orders, ensuring technical analysis adequately supports the environmental review and permitting process to maintain the overall project schedule, and working with landowners to identify feasible sites for facilities.

Carollo has an excellent record of timely deliverables with the District, having delivered final design drawings and bid documents for the Fairfax Manor 1<sup>st</sup> Lift Pump Station Replacement Emergency project in six months as well as 30% design for the Emergency Intertie Project in just four months. Previous experience working with Carollo has indicated their strength in interfacing with other jurisdictions, vendors, environmental consultants, and private stakeholders, in addition to detailed coordination with CalTrans. Carollo has proposed the same team and team-members be assigned to the Project as previously active on the recent Conveyance Improvements Project. Staff is confident that the Carollo team provides the District the necessary experience, skills and resources to complete the design successfully and on schedule.

Project Implementation

Board authorization of design services	April 15, 2025
Complete Basis of Design Report	October 2025
Complete 60% Design Package	June 2026
Complete 90% Design Package	October 2026
Complete Final 100% Design Package	January 2027
Project Bid Phase	January – March 2027

Staff recommends the Board of Directors approve a Professional Services Agreement with Carollo Engineers not to exceed \$9,699,235 and authorize the General Manager to negotiate and execute the contract to provide engineering services for the preliminary and final design package and bidding support services for the Atmospheric River Capture Project.

**ENVIRONMENTAL REVIEW:** Staff has issued a request for proposals to qualified environmental consultants for the environmental review and permitting associated with this project and will return for the Board’s approval with a preferred environmental consultant in May 2025.

**FISCAL IMPACT:** The total cost impact associated with the proposed agreement is \$9,699,235 as shown in Table 1. Funds are included in the adopted FY 2026 Budget.



**Table 1**  
**Atmospheric River Capture Project**  
**Engineering Design Scope of Work and Fee Summary**

<b>Task Description</b>	<b>Budget</b>
<b>Task 1 – Project Management:</b> This task includes conducting project progress meetings, preparing monthly progress reports, preparing and attending Board presentations, internal technical reviews and quality assurance, coordination with sub-consultants	\$753,535
<b>Task 2—Develop Basis of Design Report (BODR):</b> This task includes review of existing information and related record drawings, conducting a field visit to the proposed route, identifying project design criteria, conducting hydraulic modeling of project facilities and sizing of facilities; confirm pipeline alignment for constructability, maintenance, and operations; confirming pipe materials and evaluating pipeline construction techniques; evaluating site alternatives for pump station facilities, dechlorination facilities, and reservoir discharge facilities; conducting transient analysis for surge protection of the facilities, conducting a workshop with staff on project facilities alternatives, refinement of desktop geotechnical evaluation, development of preliminary construction cost estimate; identifying permitting agencies and requirements; evaluate Kastania Pump Station for future expansion; development of construction schedule and sequencing; develop Preliminary (30%) drawings and specifications table of contents; development of draft and final Basis of Design Report including review workshop with District	\$1,918,642
<b>Task 3—Field Investigations:</b> This task includes conducting a topographic survey of the project limits, including development of a base-map, aerial survey, supplemental ground surveys, and right-of-way retracements; conducting a detailed geotechnical investigation of the project limits, including obtaining subsurface exploration permits and encroachment permits, traffic control services, drilling borings along the pipeline alignment, conducting groundwater monitoring, seismic refraction surveys and laboratory testing; conducting existing utility research and coordination, developing a potholing plan and performing potholing to more precisely locate existing utilities	\$1,471,420
<b>Task 4—Permitting and Stakeholder Coordination:</b> This task includes preparation and submittal of required agency permits, providing support to the District for stakeholder concerns regarding the project, and assistance with public outreach as needed – including preparation of a project outreach plan, development of project materials, planning and preparation of public workshops to support the project	\$358,944
<b>Task 5—Easement and Property Acquisition Assistance:</b> This task includes identification of temporary or permanent construction easements as well as preparation of legal descriptions and plats for easement acquisitions; assistance with identification of permanent property acquisitions required for the project, including preparation of legal descriptions and plats	\$295,508

<b>Task 6 — District CEQA Consultant Coordination:</b> This task includes CEQA coordination meetings with the District's environmental consultant and technical support necessary for the development of CEQA	\$52,468
<b>Task 7 — Coordination with Other District Consultants and Agencies:</b> This task includes assisting the District with coordination with other agencies as required as the project facilities will tie into facilities owned and operated by others, coordination with PG&E to connect proposed facilities to the electrical grid, including the application for power connection, coordination with other District consultants as needed	\$105,566
<b>Task 8 — Develop Pipeline Construction Documents (Package No. 1):</b> This task includes development of 60%-, 90%-, and 100%- pipeline design document submittals and probable construction costs, conducting review meetings with District staff at each level of design development	\$2,069,466
<b>Task 9— Develop Pump Stations Construction Documents (Package No. 2):</b> This task includes development of 60%-, 90%-, and 100%- pump station design document submittals and probable construction costs, conducting review meetings with District staff at each level of design development	\$2,401,816
<b>Task 10— Pipeline Bid Phase Services (Package No. 1):</b> This task includes supporting the District during pipeline bidding period, including responding to bidders' questions, interpreting construction documents, and attending on-site meetings as well as developing plans and specs for use during construction	\$92,880
<b>Task 11— Pump Stations Bid Phase Services (Package No. 2):</b> This task includes supporting the District during pump station bidding period, including responding to bidders' questions, interpreting construction documents, and attending on-site meetings	\$178,990
<b>TOTAL</b>	<b>\$9,699,235</b>

**ATTACHMENT(S):**

1. Draft Scope of Work
2. Fee Estimate

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Water Resources	 <b>Paul Sellier</b> Water Resources Director	 <b>Ben Horenstein</b> General Manager

## SCOPE OF SERVICES OUTLINE

### Final Design Services for the **MARIN ATMOSPHERIC RIVER CAPTURE PROJECT**

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#### **TASK 1 - PROJECT MANAGEMENT**

##### 1.01 - Project Administration

Consultant will administer the project to maintain project schedule and budget. The project progress and budget status will be included in monthly progress reports that will be attached to billing invoices submitted to the District. Additionally, the monthly progress report will include a list of work completed for the invoice period and anticipated work efforts for the next invoice period. Consultant will also develop a detailed Project Work Plan (PWP). The PWP will serve as both a project procedures manual to govern day to day direction, including schedules, budgets, resource utilization, and information management systems as well as how the project will be implemented.

This task also includes internal project team meetings to coordinate the project discipline teams. Internal team meetings will occur on a bi-weekly basis, will be one (1) hour in length, and will be held virtually between the project team leads.

##### 1.02 - Conduct Project Status Meetings

The Consultant will attend and manage the project kickoff meeting. Topics of discussion will include communications, schedule of meetings, project schedule and coordination between all parties. Consultant will provide an agenda prior to the meeting and meeting minutes and action items.

Consultant will conduct Bi-weekly project coordination meetings with District staff to keep the project team up to speed on all ongoing activities. Meetings will be conducted using a platform agreeable to the District such as MSTEams, Zoom, Skype, or Go to Meeting. Consultant will prepare a standing agenda and meeting minutes for each meeting. Bi-weekly project coordination meetings will be one (1) hour in length on a mutually agreed upon day of the week.

##### 1.03 - Implement Quality Management

Consultant will implement and maintain its standard Quality Management Program for the project. All deliverables will be reviewed in accordance with the quality management program prior to being submitted to the District for review.

##### 1.04 - Board Presentation Assistance

Under this task, the Consultant will coordinate with District staff to prepare presentation materials and present project information to the MMWD Board of Directors as requested. It is assumed that a total of six (6) Board meetings will be attended.

##### Task 1 Deliverables:

- Monthly progress reports.
- Project Work Plan (PWP). (PDF)

- Meeting agendas and notes.
- Board meeting presentation information.

Task 1 Assumptions:

- Schedule to be eighteen (18) to twenty (20) months.
- Kickoff meeting to be in person at District offices.
- Bi-Weekly Project Status meetings to be virtual. (Total of 36 meetings)
- Internal bi-weekly discipline team meetings. (Total of 36 meetings)

## **TASK 2 - DEVELOP BASIS OF DESIGN REPORT (BODR)**

### **2.01 - Review Existing Information**

A review of existing information, related documents, hydraulic model information and record drawings will be performed for the District's existing facilities affected by this project and any other water facilities that may be within the project limits. District to provide all relevant existing information for review.

### **2.02 - Conduct Field Visit**

This task includes a one (1) day field site visit to familiarize the project team of the pipeline alignment and potential site(s) for the pump station(s), dichlorination facility and the reservoir discharge facility. This field visit will be attended by the main discipline leads.

### **2.03 - Identify Project Design Criteria**

The Consultant, with District input, will identify the design criteria for the project facilities under this task. This will include review of any existing District standard design criteria and Consultant recommendations.

### **2.04 - Conduct Hydraulic Analysis and Facility Sizing**

Consultant will conduct hydraulic modeling analysis of the project facilities to identify required components. The modeling will identify components such as pipeline diameter, pump station(s) sizing, storage tank sizing, shut off valve(s), and other required hydraulic components.

### **2.05 - Confirm Pipeline Alignment**

This task will include confirmation of the identified pipeline alignment as identified in the Water Supply Conveyance Improvements Project Technical Memorandum No. 3 Preferred Alternative Selection, dated February 2025. The alignments will be reviewed for constructability, maintenance, and operation. Any recommended revisions will be identified and documented.

### **2.06 - Confirm Pipe Materials**

This task will confirm the proposed pipe materials that will be used for the construction of the project facilities. This information will then be incorporated into the final design process.

### **2.07 - Evaluate Pipeline Construction Techniques**

This task will include a review of construction techniques that will be included along the pipeline alignment(s). This will include both open cut trenching as well as trenchless

technologies to mitigate impacts of the construction efforts on the surrounding areas. that may include trenchless construction techniques. The appropriate construction techniques will be documented and discussed with the District.

#### 2.08 - Evaluate Pump Station Alternatives

This task will include the evaluation of both horizontal centrifugal versus vertical turbine pump station configurations for the design of the pump station(s). Each alternative will be evaluated for constructability, maintenance, and operations requirements.

#### 2.09 - Evaluate Dechlorination Alternatives

This task will include the evaluation of alternatives for Dechlorination Facility configurations. Each alternative will be evaluated for constructability, maintenance, and operations requirements and discussed with the District.

#### 2.10 - Evaluate Reservoir Discharge Facility Alternatives

This task will include the evaluation of alternatives for Reservoir Discharge Facility configurations. Each alternative will be evaluated for constructability, maintenance, and operations requirements and discussed with the District.

#### 2.11 - Conduct Transient Analysis

Under this task, a transient analysis will be conducted to evaluate the surge protection facilities required for the project. This analysis may include the development of a surge tank facility for the pump station site(s) and/or the development of air release and air vacuum valve facilities along the pipeline alignment.

#### 2.12 - Conduct Project Facilities Alternatives Workshop

At the conclusion of the development of the above items, a workshop will be conducted with District staff to review and discuss the pump station, dechlorination facility and Nicasio Reservoir Discharge Facility alternatives. At the conclusion of the workshop, the recommended pump station(s), dechlorination and reservoir discharge configurations will be identified for further development in the final design stage.

#### 2.13 - Refine Desktop Geotechnical Evaluation

Consultant's geotechnical subconsultant, Miller Pacific Engineering Group, previously completed a geotechnical desktop evaluation of the conveyance pipeline alignments that were considered by the District as alternatives for the new aqueduct, as discussed in the Water Supply Conveyance Improvements Project Technical Memorandum No. 3 Preferred Alternative Selection, dated February 2025. Under this task, the Consultant will include updating the desktop evaluation to address the Nicasio Aqueduct pipeline alignment, pump stations and other improvements. This updated report will include recommendations and a preliminary plan for future subsurface exploration. It is anticipated that the report will be used to guide geotechnical-related portions of project planning and preliminary design of the project facilities.

#### 2.14 - Develop Preliminary Construction Cost Estimate

Under this task, a Preliminary Construction Cost Estimate will be developed for the project facilities. This cost estimate will be consistent with the Association for the Advancement of



Cost Engineering (AACE) International Class 4 estimate with an accuracy range of +50 percent to -30 percent of the actual project cost.

#### 2.15 - Identify Permitting Agencies and Requirements

Under this task, the Consultant will identify permitting agencies to be coordinated with for pipeline alignment, pump station locations and all of the facilities associated with the project.. The actual permit such as encroachment, license or easement will be identified along with permit requirements. Approximate permit fees will also be identified. A contact person for each permitting agency will be identified with full contact information for future use.

#### 2.16 - Develop Construction Schedule and Sequencing

This task includes the development of a proposed construction scheduling and sequencing for the project facilities. It is assumed that two (2) separate construction packages will be developed under the final design process.

#### 2.17 - Develop Preliminary (30%) Drawings and Specification TOC

Development of a 30% Project document submittal will be completed under this task. The 30% design documents will include the following:

- Pipeline Plan and Profile drawings (Only plan view shown)
- Dechlorination Facility layout drawing(s)
- Reservoir Discharge Facility layout drawing(s)
- Pump Station(s) site layout drawing(s)
- Pump Station(s) mechanical layout drawings
- Pump Station(s) structural plan drawings
- Storage tank layout drawings
- Instrumentation P&ID's
- Technical Specifications Table of Contents (TOC)

One PDF of the plans (half-size), and technical specifications TOC will be provided to the District for review.

#### 2.18 - Evaluate Kastania Pump Station for Future Expansion

Under this task, the Consultant will conduct a brief review of the existing Kastania Pump Station to identify required improvements for expansion of the pump station as identified in the Water Supply Conveyance Improvements Project Technical Memorandum No. 3 Preferred Alternative Selection, dated February 2025. The evaluation will review the ability of the required pumping capacity to be incorporated into the existing facility. The review will focus on the space available, mechanical and electrical requirements that might be incorporated into the existing structure. A seismic evaluation of the existing structure is not included in this evaluation.

#### 2.19 - Develop Draft BODR

This task will include the development of the draft Basis of Design Report (BODR) that will identify the components and facilities for the project to be implemented during the final design process. The draft BODR will be submitted to the District for review.

2.20 - Conduct Draft BODR Review Workshop

At the conclusion of the District review process for the draft BODR, the Consultant will conduct a review meeting to discuss the District’s review comments and questions. All District review comments will be documented for formal response.

2.21 - Develop Final BODR

This task will include the development of the final BODR document and include responses to all of the District review comments. District review comments and formal responses will be included in a review comment response log spreadsheet. The final BODR document will be submitted to the District.

Task 2 Deliverables:

- Project Facilities Alternatives Workshop agenda and materials (as required).
- Draft BODR report. (PDF)
- Draft BODR Review Workshop agenda and materials (as required).
- Review comment response log. (Excel spreadsheet)
- 30% Plans (Half size) and Technical Specifications TOC. (PDF)
- Final BODR report. (PDF)

Task 2 Assumptions:

- Field visit to include Kastania Pump Station.
- Assumes ultimate system layout of the Nicasio Aqueduct pipeline and two (2) pump stations for BODR level design.
- District to provide one (1) O&M staff member for Kastania Pump Station site visit for site access and questions & answers.

**TASK 3 - FIELD INVESTIGATIONS**

3.01 - Conduct Field Topographic Survey

Consultant’s subconsultant, Cinquini & Pastorini (C&P), will conduct a topographic survey of the project limits. The topographic survey will include:

Field Topographic Survey

C&P will prepare the project base mapping and right-of-way for the project. The survey will be based upon a project specific control network established using a combination of static GPS observations on newly set control monument tied to California Spatial Reference Center (CSRC) continuous global positioning stations (CGPS). We propose establishing the survey on California Coordinate System of 1983 (NAD83), Zone 2, Epoch 2017.5. The survey will vertically relate to North American Vertical Datum of 1988 based upon the application of GEOID18 to the orthometric heights of CGPS stations as determined CSRC. All primary and supplementary control will be determined using a least-squares adjustment process for increased project accuracy.

C&P will perform an aerial survey along the proposed pipeline alignment. The aerial mapping will be drawn at a scale of 1” = 40’ and include a strip of land approximately 200 feet in width. The results of the aerial survey will produce a color orthophoto for the project along with a cad file and digital terrain model.

C&P will perform supplemental ground surveys along the proposed alignment to collect features not seen on the aerial survey due to site conditions such as tree canopies and foliage. The supplemental mapping will include locating visible utility features at ground level. Surface evidence of underground utilities will be mapped to a Utility Quality Level D in accordance with ASCE Standard 38-22. Existing utility mapping, if provided to C&P, will be incorporated into the base mapping as a part of this task.

Topographic survey will include all necessary work to produce a topographic map, including features such as, but not limited to; building corners, curb lines, water meters, sewer cleanouts, valves, manholes (including rim, invert and pipe information), utility markings on the pavement, utility poles, driveway locations, sidewalks, trees 6-inches and larger where they may conflict with the pipeline, retaining walls and any other pertinent information that could apply to the project during design within the public right-of-way.

Full terrestrial based topographic surveys will be performed at the locations of the proposed pump stations. This mapping will be depicted at a drawing scale of 1 inch = 10 feet or 1 inch = 20 feet, as appropriate.

#### Right-of-Way Retracement Survey

C&P will prepare right-of-way retracements of roadways and the parcels involved with the proposed pipeline. This work includes records research and review of existing record maps, county maps, Caltrans mapping, deeds and other pertinent document for the roadway right-of-way along project corridor. Where the alignment runs along the private properties or where parcel acquisitions for pump stations occur, sufficient parcel boundary research will be performed so that easement acquisitions may take place, if needed. Once the records research and field monument ties have been completed, we will determine the right-of-way and provide the information to the design team for their use. Titled reports provided for the affected properties will be reviewed as a part of this work. Procurement of the title reports is not a part of this scope of work. It is anticipated that one or more Records of Survey will be required as a part of this project.

### 3.02 - Conduct Geotechnical Investigation

Consultant's subconsultant, Miller Pacific Engineering Group (Miller Pacific), will conduct a geotechnical investigation of the project limits. The geotechnical investigation will include:

#### Permitting

Permits will be obtained for subsurface exploration, as required by the County of Marin, Environmental Health Services. Additionally, encroachment permits from the City of Novato and Marin County for work within their right-of-way will be acquired. This will include preparing permit applications, developing site plans which show proposed exploration locations and providing any other information required by the respective permitting agency.

#### Traffic Control

Extensive traffic control services will be required to complete the permitting and fieldwork portions of the investigation. Miller Pacific will retain a professional traffic control subcontractor to assist in developing traffic control plans for inclusion with the encroachment permit applications. The subcontractor will also manage all traffic control-related services throughout the field investigations.

### Borings and Cone Penetration Tests

The field investigation will include drilling borings throughout the pipeline alignment and at the pump station sites. It is expected that minimizing impacts to traffic and neighboring properties will be a key consideration for the project team and stakeholders. An assumption that two truck-mounted drilling rigs will be operated when working within the roadways as a means of expediting the work and reducing potential impacts. The initial phase of subsurface exploration will include eight days of drilling to complete borings spaced at about 1,000 to 1,500 feet along the pipeline alignment. It is anticipated that about 50 to 60 borings to depths of 15 feet during this initial phase will be completed.

Upon completion of the initial borings, laboratory testing of samples will be tested and boring logs will be prepared and provided to the project team for review. As project design advances, a second phase of subsurface exploration will utilize cone penetration testing (CPTs) and additional borings will be completed. The scope includes completing a CPT at both proposed pump stations to characterize subsurface conditions and to generate a shear wave velocity profile to aid in seismic design. Three (3) borings at each of the pump stations will be completed to obtain samples for laboratory testing and further characterize subsurface conditions.

The second phase of subsurface exploration will also include an additional seven (7) days of drilling to further explore subsurface conditions along the pipeline alignment. Similar to the initial phase, it is anticipated that utilizing two drill rigs to complete about 50 to 60 borings to depths of about 15 feet will be required. While the final locations of these borings will be determined during design, it is expected they will be located between the initial borings to achieve an average spacing of about 500 to 750 feet throughout the pipeline alignment. The borings may also be located and deepened as required to further evaluate specific geotechnical considerations such as areas that include trenchless crossings, landslides or potentially difficult excavation conditions due to hard bedrock. Upon completion of the field investigation and laboratory testing, CPT and boring logs will be prepared and reviewed by the project team.

### Groundwater Monitoring

The scope will include groundwater monitoring for a period of several months to aid in estimating groundwater levels for project design. Vibrating monitoring piezometers will be installed at up to 15 boring locations and each piezometer will be equipped with a data recorder to measure fluctuations in water levels with time. Periodic site visits to the piezometer locations will be conducted to download the data and include the results of the monitoring in the geotechnical reports.

### Seismic Refraction Surveys

The potential for hard rock excavation conditions was identified throughout portions of the proposed aqueduct alignment as part of the previous desktop evaluation. Included in this scope are seismic refraction surveys to aid in estimating the depth and rippability of various bedrock units throughout the alignment. A total of five (5) seismic refraction survey transects locations along the alignment are included. The need for and locations of these surveys will be determined following the initial phase of borings when subsurface conditions are better defined.

### Laboratory Testing

Laboratory testing on soil samples obtained from the borings to estimate pertinent engineering properties will be performed. The type and frequency of laboratory testing used to develop the budget estimate is summarized below and is primarily based on experience with similar projects and anticipated subsurface conditions. Based on experience various bedrock units may include naturally occurring asbestos which can result in cost and safety considerations. Therefore, asbestos testing so that this potential hazard can be further evaluated has been included. A testing program may be modified based upon conditions encountered during the subsurface exploration and input from the project team.

<b>Laboratory Test</b>	<b>Soil Property</b>	<b>ASTM Test Method</b>	<b>Estimated Number of Tests</b>
Water Content	Moisture	D2216	200
No. 200 Sieve	Fine-grained	D1140	120
Sieve Analyses	Gradation	D6913	60
Unit Weight	Density	D7263	200
Atterberg Limits	Plasticity	D4318	20
Unconfined Strength	Strength	D2166	120
Corrosivity of Soil	Corrosivity	Caltrans	20
Asbestos	Asbestos	CARB	5

### Geotechnical Reports

Upon completion of the field investigation and laboratory testing, geotechnical reports which summarize our subsurface exploration and laboratory data and provide geotechnical recommendations and design criteria will be prepared. It is anticipated that separate construction documents will be developed for the pipeline and pump stations, and separate reports to include with each set of documents will be developed. The reports will address new foundations, seismic design, excavation conditions, site grading, trench backfill, temporary shoring and dewatering, lateral earth pressures for below-grade structures, pavements and other geotechnical-related items.

#### 3.03 - Conduct Existing Utility Research and Coordination

Under this task, Consultant will perform existing utility research within the project area in accordance with the American Society of Civil Engineers (ASCE) 38-02 - Level "C" standard guidelines. A log of received information and responses will be maintained. If no response is received within 30 days, a second letter and phone call will be made to ensure contact. Utility mapping received will be compiled in a utility base map file that can externally referenced into the field topographic survey.

3.04 - Develop Potholing Plan

A potholing plan will be developed for utilities deemed as “High Risk” facilities if determined to be required. The potholing plan will be reviewed by the District and any requested revisions incorporated into the plan.

3.05 - Conduct Potholing

After the potholing plan is approved by the District the potholing will be executed to identify more precise locating both in horizontal and vertical location of existing utilities (as required). It is assumed that 50 potholes are included in this task.

3.06 - Conduct Cathodic Protection Field Investigation

Consultant’s subconsultant, JDH Corrosion Consultants, Inc. (JDH), will conduct a corrosion field investigation of the project limits. The corrosion field investigation will include:

- Perform site alignment reconnaissance to identify locations suitable for rectifiers and/or locations that could indicate potential stray current.
- Conduct in-situ soil resistivities at an approximate 2,000 ft. interval along the pipeline alignment using the Wenner 4-pin technique. In-situ resistivities will be measured at 2.5, 5, 7.5, 10 and 15 foot depths using a Soil Resistivity Meter. Barnes layer calculations will be performed to determine the corrosivity of the different soil layers to the proposed pipeline materials.
- Collect soil samples from the project Geotechnical Consultant, who will be collecting soil samples as a part of their soil investigation along the proposed pipeline alignment(s), at the proposed pump station sites, and at the proposed dechlorination facility site for chemical analysis. (Assumes 35 samples; one sample approximately every 2000-ft. of pipeline alignment.)
- The soil samples should be collected from pipe depth and transferred to CERCO Analytical, Inc., located in Concord, CA for chemical analysis. The soil samples will be analyzed for pH, chlorides, sulfates, resistivity, and Redox potential using ASTM test methods as detailed in the table below. The preparation of the soil samples for chemical analysis will be in accordance with the applicable specifications. JDH will coordinate with the geotechnical engineer to pickup and deliver the samples to the laboratory for testing.

Soil Chemical Analysis Test Methods

Chemical Analysis	ASTM Method
Chlorides	D4327
pH	D4972
Resistivity (as received and @ 100% saturation)	G57
Sulfate	D4327
Redox Potential	D1498

- Evaluate the results of the chemical analysis and determine the corrosivity of the soils along the pipeline alignments to the proposed materials of construction (e.g. mortar-coated steel, dielectric-coated steel and concrete cylinder pipe, etc.).
- Review the plans and profiles for the new transmission pipeline prepared by Consultant for construction details and proposed pipeline materials and determine the suitability of the proposed materials based on the collected field and laboratory data. An alignment corrosivity study report will be prepared which will provide a summary of the field data collected along with the chemical analysis of the soil samples and an analysis of this data. The potential for corrosion on the various material options for the new transmission pipeline will be determined based on the analysis and recommendations for the long-term prevention of corrosion will be included for all pipe material options. All fieldwork and recommendations will be in compliance with applicable NACE/AMPP and Local Water District Design Standards.
- Assist with contacting adjacent utilities to notify and request relevant information regarding existing cathodic protection systems that may be near the Project.
- Review provided Geotechnical Engineering exploration/boring plans, logs, and reports.
- Stray current analysis. (Assumed not required)
- Prepare Basis of Design Report outlining corrosion control design approach for each pipe material option. Engineering Technical Memorandum to summarize cathodic protection system recommendations.

#### Task 3 Deliverables:

- Topographic survey. (AutoCAD format).
- Sealed hardcopy of Topographic and Boundary Survey Map.
- Draft Geotechnical Report. (PDF)
- Final Geotechnical Report. (PDF)
- Utility coordination letters. (PDF)
- Potholing plan. (PDF)
- Pothole investigation summary report. (PDF)
- Cathodic protection field investigation and corrosion protection recommendations technical memorandum. (PDF)

#### Task 3 Assumptions:

- Drilling permits will be obtained from the County's Environmental Health Services for up to 125 borings and CPTs at the rate of \$125 per boring or CPT which is the rate published on the County's website.
- Encroachment permits will be obtained from the City of Novato and the County of Marin for work within their respective right-of-way.
- Traffic control services will include up to 12 Traffic Control Plans prepared by professional traffic control subcontractor, and up to 20 days of traffic control field services at Prevailing Wage rates.
- Any permission and arrangements for site access at locations within private properties or other areas will be handled by others.
- Prevailing Wage rates will apply for our drilling and CPT subcontractors. Subsurface exploration for the pipeline will be completed with two drilling rigs operated

simultaneously, whereas exploration for the pump stations will be completed with a single drill and CPT rig.

- The boring and CPT locations are located on relatively level grade and accessible to truck-mounted drilling equipment. No provisions have been included for site clearing.
- The borings and CPTs will be located using a handheld GPS receiver. Surveyor will formally survey geotechnical boring locations and include in topographic survey information.
- Provisions to mark the work areas and notify Underground Service Alert (USA) prior to the drilling so that utility owners can mark any underground utilities near the proposed borings is included.
- Total of two (2) utility coordination meetings per known utility company.
- A total of fifty (50) potholes are included.
- Corrosion field investigation assumes 35 samples; one (1) sample approximately every 2000-ft. of pipeline alignment.

#### **TASK 4 - PERMITTING AND STAKEHOLDER COORDINATION**

##### **4.01 - Provide Permitting Agency Assistance**

This task includes the permitting with the local regulatory agencies for the defined pipeline alignments. The Consultant will prepare and submit to the City the required regulatory agency permits as identified below:

- County of Sonoma - Encroachment Permit
- County of Marin - Encroachment Permit
- City of Novato - Encroachment Permit

##### **4.02 - Provide Stakeholder Coordination Assistance**

Under this task, stakeholder coordination assistance will be provided. Consultant will attend coordination meetings with identified stakeholders to address project concerns. The District will be the main point of contact for all stakeholder meetings. It is assumed that a total of six (6) stakeholder meetings will be attended.

##### **4.03 – Public Outreach Assistance (Optional Task)**

As an optional task the Consultant's subconsultant, Katz and Associates (K&A), can assist in the public outreach portion of the project. The public outreach task will include the following:

##### **Project Outreach Plan**

To raise awareness among project stakeholders about the purpose and benefits of the project, and ensure consistent, timely, accurate and proactive information sharing and engagement with stakeholders, K&A will prepare a Public Outreach Plan (Plan). The Plan serves as a road map for engaging with key stakeholders and external audiences including elected officials, civic and business leaders, community and industry groups, environmental organizations and NGOs, media, area residents and interested members of the public. This Project will garner varied levels of stakeholder interest and inquiries, and this Plan is intended to prepare the Project team in advance for appropriate stakeholder outreach and engagement. This Plan will be the first deliverable for the outreach work.



Materials Development

K&A will develop a suite of informational materials that can be provided to the public or internal stakeholders. Informational materials and tools will be tailored to different audiences, address specific concerns and information needs as well as a varying knowledge base to convey program messages in a consistent manner. These materials will provide objective, general information about the Project, and be written and illustrated using understandable terminology and images for the layperson. All materials should be brief and visually appealing. All informational materials will be reviewed for cultural sensitivity and appropriateness and distributed in print and electronic formats to reach diverse audiences. These initial materials would include a project fact sheet, FAQ, content for a project website and a PowerPoint presentation template for future internal and external presentations.

Preliminary Design Outreach Workshop

Planning and implementation of Project workshops for stakeholders to provide input on draft Project designs, once the initial design work has been completed will be included under this task. The workshops will allow the public to learn basic information about the Project and provide input on the elements pre-determined by the Project team to be open to public input. The workshops will be developed and planned in coordination with the Project team and is assumed to take place in-person with a member of the outreach team and District representatives. As design progresses, it will be important to share updated information and how feedback from the public was incorporated into the design for the project. It is assumed that a total of five (5) workshops will be included.

Task 4 Deliverables:

- Draft Permit application packages. (As required)
- Final Permit application packages. (As required)
- Stakeholder coordination meeting agenda, meeting minutes and materials.
- Public Outreach meeting agenda, meeting minutes and materials.

Task 4 Assumptions:

- District to pay all permitting fees directly.
- Total of six (6) stakeholder coordination meetings.
- Total of five (5) public outreach workshops.
- Permitting Agency coordination meetings to be virtual.

**TASK 5 - EASEMENT AND PROPERTY ACQUISITION ASSISTANCE**

5.01 - Provide Permanent and Temporary Construction Easement Acquisition Assistance

C&P will assist the project team with identifying the limits of permanent and temporary construction easements that may be necessary for the project. C&P will prepare legal descriptions and plats for permanent and temporary easement acquisitions and any easement vacations or quitclaims that may occur. An estimate of fifteen (15) legal descriptions and plats are assumed for the project under this task.

5.02 - Provide Property Acquisition Assistance

C&P will assist the project team with identifying the limits of permanent property acquisitions that may be required for the project. C&P will prepare legal descriptions and plats for

permanent property acquisitions and any easement vacations or quitclaims that may occur. An estimate of five (5) legal descriptions and plats are assumed for the project under this task.

Task 5 Deliverables:

- Draft and Final easement acquisition plats and descriptions.
- Draft and Final property acquisition plats and descriptions.

Task 5 Assumptions:

- A total of fifteen (15) draft easement acquisition plats and descriptions.
- A total of fifteen (15) final easement acquisition plats and descriptions.
- A total of five (5) draft property acquisition plats and descriptions.
- A total of five (5) final property acquisition plats and descriptions

**TASK 6 - DISTRICT CEQA CONSULTANT COORDINATION**

6.01 - Attend CEQA Coordination Meetings

This task includes California Environmental Quality Act (CEQA) coordination meetings with the District’s environmental consultant to coordinate environmental and cultural impacts of the project facilities. It is assumed that a total of four (4) meetings will be conducted. These meetings will be virtual and one (1) hour in length.

6.02 - Provide Technical Support for CEQA Development

Consultant will provide technical information, as required, to the District’s environmental consultant to inform the assessment of environmental and cultural impacts of the project facilities. Consultant will incorporate mitigation requirements of environmental and cultural impact results provided by the District’s environmental consultant into the overall final design of the project facilities.

Task 6 Deliverables:

- Technical information for CEQA development. (As required)

Task 6 Assumptions:

- District consultant to be lead contact for CEQA coordination meetings
- Four (4) CEQA coordination meetings.
- Coordination meetings to be virtual.
- CEQA mitigation requirements to be incorporated into final design efforts.

**TASK 7 - COORDINATION WITH OTHER DISTRICT CONSULTANTS AND AGENCIES**

7.01 - Coordination with Other District Consultants

Consultant will attend coordination meetings with the District’s other consultant teams as needed. A budget allowance of 48 hours for this task has been assumed for this task.

7.02 - Coordination with Other Agencies (Sonoma Water, NMWD, Others)

This task includes the coordination with other agencies as required. The project facilities will be tying into facilities owned and operated by others and coordination with the affected

agencies will be required. The Consultant will be directed by the District on this task and the District will be the lead. A budget allowance of 132 hours for this task has been assumed for this task.

7.03 - Coordination with Pacific Gas and Electric (PG&E)

Coordination with Pacific Gas and Electric (PG&E) will be required to connect the project facilities to the electrical power grid owned and operated by PG&E. This task includes coordination and application for the power connection. The Consultant will assist the District in completing the power connection application and coordinating power requirements. Any fees for the service connection application(s) will be directly paid for by the District.

7.04 - Funding Strategy Assistance

Under this task, Consultant will research and compile a list of potential federal, state, and local grant and loan opportunities that may be available for the project.

Consultant will develop a brief Funding Strategy Project Memorandum summarizing the approach to the funding opportunities identified/considered. The resulting funding opportunities will be documented in a Funding Matrix (within the memorandum) which will include details such as funding agency, program, description of funding program eligibility, requirements and limitations, total funding provided, documentation requirements, timing, relevance to the project, and the next steps to take toward securing funding.

Findings of the funding search will be presented to the District in a meeting (MS Teams format). Consultant will update the Funding Strategy Project Memorandum based on review input from the District and discussions from the meeting.

Task 7 Deliverables:

- Technical information. (As required)
- Draft PG&E Service application package.
- Final PG&E Service application package.
- Draft Funding Strategy Project Memorandum.
- Final Funding Strategy Project Memorandum.

Task 7 Assumptions:

- Coordination efforts with Other District Consultants includes an allowance of 48 hours.
- Coordination efforts with Other Agencies includes an allowance of 132 hours.
- PG&E service application fees to be paid directly by the District.
- If District decides to move forward with funding opportunities, Consultant will provide additional budget request for additional funding assistance.

**TASK 8 - DEVELOP PIPELINE CONSTRUCTION DOCUMENTS (PACKAGE NO. 1)**

8.01 - Develop 60% Pipeline Submittal Package

Development of a 60% Pipeline document submittal will be completed under this task. One PDF of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 8.02 - Develop 60% Pipeline Opinion of Probable Construction Cost (OPCC)

Development of the 60% Pipeline Opinion of Probable Construction Cost (OPCC) will be completed under this task. The 60% Pipeline OPCC will be provided to the District for review approximately two (2) weeks after the 60% Pipeline plans and specification submittal. This cost estimate will be consistent with the Association for the Advancement of Cost Engineering (AACE) International Class 2 estimate with an accuracy range of +20 percent to -15 percent of the actual project cost.

#### 8.03 - Conduct 60% Pipeline Review Meeting

A design review meeting will be conducted to discuss the 60% Pipeline plans and specification submittal and any questions that the District may have after the review period. It is assumed that the District will require two (2) weeks for the review period.

#### 8.04 - Develop 90% Pipeline Submittal Package

Development of a 90% Pipeline document submittal will be completed under this task. Review comments from the 60% design review will be incorporated into the design and response to comments log will be developed and provided to the District. One pdf of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 8.05 - Develop 90% Pipeline Opinion of Probable Construction Cost (OPCC)

Development of the 90% Pipeline Opinion of Probable Construction Cost (OPCC) will be completed under this task. The 90% Pipeline OPCC will be provided to the District for review approximately two (2) weeks after the 90% Pipeline plans and specification submittal. Review comments from the 60% design review of the Pipeline OPCC will be incorporated and response to comments log will be developed and provided to the District. This cost estimate will be consistent with the Association for the Advancement of Cost Engineering (AACE) International Class 2 estimate with an accuracy range of +20 percent to -15 percent of the actual project cost.

#### 8.06 - Conduct 90% Pipeline Review Meeting

A design review meeting will be conducted to discuss the 90% Pipeline plans and specification submittal and any questions that the District may have after the review period. It is assumed that the District will require two (2) weeks for the review period.

#### 8.07 - Develop 100% (FINAL) Pipeline Submittal Package

Development of a 100% (FINAL) Pipeline document submittal will be completed under this task. Review comments from the 90% design review will be incorporated into the design and response to comments log will be developed and provided to the District. One pdf of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 8.08 - Develop 100% (FINAL) Pipeline Opinion of Probable Construction Cost (OPCC)

Development of the 100% (FINAL) Pipeline Opinion of Probable Construction Cost (OPCC) will be completed under this task. The 100% (FINAL) Pipeline OPCC will be provided to the District for review approximately two (2) weeks after the 100% Pipeline plans and specification submittal. Review comments from the 90% design review of the Pipeline OPCC

will be incorporated and response to comments log will be developed and provided to the District. This cost estimate will be consistent with the Association for the Advancement of Cost Engineering (AACE) International Class 1 estimate with an accuracy range of +15 percent to -10 percent of the actual project cost.

**Task 8 Deliverables:**

- 60% Pipeline Submittal package. (PDF - Full size (22x34))
- 60% Pipeline Submittal package. (PDF - Half size (11x17))
- 60% Pipeline Review Meeting agenda and materials.
- 60% Pipeline Review comment response log.
- 90% Pipeline Submittal package. (PDF - Full size (22x34))
- 90% Pipeline Submittal package. (PDF - Half size (11x17))
- 90% Pipeline Review Meeting agenda and materials.
- 90% Pipeline Review comment response log.
- 100% (Final) Pipeline Submittal package. (PDF - Full size (22x34))
- 100% (Final) Pipeline Submittal package. (PDF - Half size (11x17))

**Task 8 Assumptions:**

- Pipeline to be designed as:
  - Total approximately 13.2 miles in length.
  - Diameter of 36-inches.
- District 60% Pipeline review period to be two (2) weeks.
- District 90% Pipeline review period to be two (2) weeks.
- Review meetings to be in person and held at District offices.

**TASK 9 - DEVELOP PUMP STATION CONSTRUCTION DOCUMENTS (PACKAGE NO. 2)**

**9.01 - Develop 60% Pump Station Submittal Package**

Development of a 60% Pump Station document submittal will be completed under this task. One PDF of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

**9.02 - Develop 60% Pump Station Opinion of Probable Construction Cost (OPCC)**

Development of the 60% Pump Station Opinion of Probable Construction Cost (OPCC) will be completed under this task. The 60% Pump Station OPCC will be provided to the District for review approximately two (2) weeks after the 60% Pump Station plans and specification submittal.

**9.03 - Conduct 60% Pump Station Review Meeting**

A design review meeting will be conducted to discuss the 60% Pump Station plans and specification submittal and any questions that the District may have after the review period. It is assumed that the District will require two (2) weeks for the review period.

**9.04 - Develop 90% Pump Station Submittal Package**

Development of a 90% Pump Station document submittal will be completed under this task. Review comments from the 60% design review will be incorporated into the design and response to comments log will be developed and provided to the District. One pdf of the

plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 9.05 - Develop 90% Pump Station Opinion of Probable Constriction Cost (OPCC)

Development of the 90% Pump Station Opinion of Probable Constriction Cost (OPCC) will be completed under this task. The 90% Pump Stations OPCC will be provided to the District for review approximately two (2) weeks after the 90% Pump Station plans and specification submittal. Review comments from the 60% design review of the Pump Stations OPCC will be incorporated and response to comments log will be developed and provided to the District.

#### 9.06 - Conduct 90% Pump Station Review Meeting

A design review meeting will be conducted to discuss the 90% Pump Station plans and specification submittal and any questions that the District may have after the review period. It is assumed that the District will require two (2) weeks for the review period.

#### 9.07 - Develop 100% (FINAL) Pump Station Submittal Package

Development of a 100% (FINAL) Pump Station document submittal will be completed under this task. Review comments from the 90% design review will be incorporated into the design and response to comments log will be developed and provided to the District. One pdf of the plans (full-size), plans (half-size), and specifications will be provided to the District for review.

#### 9.08 - Develop 100% (FINAL) Pump Station Opinion of Probable Constriction Cost (OPCC)

Development of the 100% (FINAL) Pump Station Opinion of Probable Constriction Cost (OPCC) will be completed under this task. The 100% (FINAL) Pump Station OPCC will be provided to the District for review approximately two (2) weeks after the 100% Pipeline plans and specification submittal. Review comments from the 90% design review of the Pump Station OPCC will be incorporated and response to comments log will be developed and provided to the District.

#### Task 9 Deliverables:

- 60% Pump Station Submittal package. (PDF - Full size (22x34))
- 60% Pump Station Submittal package. (PDF - Half size (11x17))
- 60% Pump Station Review Meeting agenda and materials.
- 60% Pump Station Review comment response log.
- 90% Pump Station Submittal package. (PDF - Full size (22x34))
- 90% Pump Station Submittal package. (PDF - Half size (11x17))
- 90% Pump Station Review Meeting agenda and materials.
- 90% Pump Station Review comment response log.
- 100% (Final) Pump Station Submittal package. (PDF - Full size (22x34))
- 100% (Final) Pump Station Submittal package. (PDF - Half size (11x17))

#### Task 9 Assumptions:

- Assumes only Pump Station "A" will be included in the final design.

- Pump station to be designed as:
  - Initially 10.4 million gallons per day (mgd)
  - Buildout of 30.0 mgd in the future.
- One (1) 1.0 to 1.5 million gallon tank to be required.
- District 60% Pump Station review period to be two (2) weeks.
- District 90% Pump Station review period to be two (2) weeks.
- Review meetings to be in person and held at District offices.

## **TASK 10 - PIPELINE BID PHASE SERVICES (PACKAGE NO. 1)**

### **10.01 - Attend Pre-Bid Meeting**

Under this task Consultant will attend a pre-bid meeting for the Pipeline Project (Package No. 1) to answer questions and discuss overall project intent. The District will facilitate this meeting and issue meeting minutes.

### **10.02 - Answer Bidder Questions/Provide Addendums**

This task includes providing assistance, to the District during the bidding period of the Pipeline Project (Package No. 1). The scope of work includes responding to bidders' questions, preparing addenda to the contract documents during the advertisement period, and providing ongoing consultation and interpretation of the construction documents.

### **10.03 - Develop Conformed Documents**

Following the bid period for the Pipeline Project (Package No. 1), Consultant will prepare conformed construction documents (plans and specifications) and provide copies to the District for use during construction.

#### **Task 10 Deliverables:**

- Pre-Bid meeting agenda
- Addenda materials (As required). (PDF)
- Conformed documents. (PDF)

#### **Task 10 Assumptions:**

- Pre-Bid meeting to be in-person and held at District offices.
- Meeting minutes to be developed by District and reviewed by the Consultant.
- District to pay any encroachment permit fees (if required).
- Total of three (3) addenda.

## **TASK 11 - PUMP STATION BID PHASE SERVICES (PACKAGE NO. 2)**

### **11.01 - Attend Pre-Bid Meeting**

Under this task Consultant will attend a pre-bid meeting for the Pump Station Project (Package No. 2) to answer questions and discuss overall project intent. The District will facilitate this meeting and issue meeting minutes.

### **11.02 - Answer Bidder Questions/Provide Addendums**

This task includes providing assistance, to the District during the bidding period of the Pump Station Project (Package No. 2). The scope of work includes responding to bidders'

questions, preparing addenda to the contract documents during the advertisement period, and providing ongoing consultation and interpretation of the construction documents.

#### 11.03 - Develop Conformed Documents

Following the bid period for the Pump Station Project (Package No. 2), Consultant will prepare conformed construction documents (plans and specifications) and provide copies to the District for use during construction.

##### Task 11 Deliverables:

- Pre-Bid meeting agenda
- Addenda materials (As required). (PDF)
- Conformed documents. (PDF)

##### Task 11 Assumptions:

- Pre-Bid meeting to be in-person and held at District offices.
- Meeting minutes to be developed by District and reviewed by the Consultant.
- District to pay any encroachment permit fees (if required).
- Total of five (5) addenda.



Estimated Costs and Fee Schedule

TASK																								OTHER DIRECT COSTS										COST SUMMARY					
	Prudhal	Taylor	Marshall Kris Zappone	Baune	Coulter		Whitehouse											Civil Mechanical Structural	Electrical I&C					Subtotals	PECE	Cinquin & Passerins, Inc.	Miller Pacific Engineering Group	JDH Corrosion Consultants, Inc.	Associated Right of Way, Inc.	Katz & Associates	Sigfried Engineering	Exaro	Subtotals	5.0%	Misc. Costs and Printing	Travel	Total ODCs	Total Cost	
	PIC	PM	QM	DM	Pipeline Lead	Civil Engineer	Pump Station Lead	Structural Engineer	Electrical Engineer	I&C Engineer	SCADA Engineer	Trenchless Engineer	Corrosion Engineer	Hydraulic Engineer	Cost Est. Engineer	Permitting Engineer	Funding	Staff Engineer	Staff Engineer	GIS/CADD SR. Tech.	GIS/CADD Tech.	PM Admin Assistance	Clerical																
																									Hours	Budget													
	2025 Rate Schedule Column	\$364	\$364	\$364	\$364	\$265	\$265	\$304	\$304	\$304	\$304	\$364	\$304	\$304	\$304	\$364	\$364	\$217	\$226	\$233	\$265	\$210	\$264	\$157															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	
Task 1 - Project Management																																							
1.01 Project Administration	72	360	0	216	72	0	72	36	36	36	36	12	12	0	0	0	0	0	0	0	0	120	72	1152	\$392,640	\$19,584	\$0	\$8,500	\$0	\$20,000	\$0	\$0	\$0	\$28,500	\$1,425	\$500	\$250	\$50,250	\$442,899
1.02 Conduct Project Status Meetings (Bi-Weekly)	40	76	0	76	76	0	18	18	18	18	18	18	18	18	0	18	6	36	18	0	36	0	36	562	\$178,406	\$9,554	\$0	\$0	\$5,000	\$0	\$0	\$0	\$5,000	\$250	\$0	\$0	\$14,804	\$193,210	
1.03 Implement Quality Management	2	8	24	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	58	\$20,628	\$986	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$986	\$21,614				
1.04 Board Presentation Assistance	6	48	0	36	36	0	12	12	12	12	12	6	6	0	0	12	0	12	12	0	36	0	18	288	\$89,916	\$4,896	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$5,896	\$95,812			
Task 1 Total Hours	120	492	24	344	184	0	102	66	66	66	66	36	36	18	0	30	6	48	30	0	72	120	134	2000															
Task 1 Total Budget	\$46,320	\$189,912	\$9,264	\$132,784	\$51,704	\$0	\$32,844	\$21,252	\$21,252	\$21,252	\$21,252	\$13,896	\$11,892	\$5,796	\$0	\$11,580	\$1,380	\$11,520	\$7,410	\$0	\$16,056	\$32,280	\$22,244	\$681,590	\$35,020	\$0	\$8,500	\$5,000	\$20,000	\$0	\$0	\$0	\$33,500	\$1,675	\$1,000	\$750	\$71,945	\$753,535	
Task 2 - Develop Basis of Design Report (BODR)																																							
2.01 Review Existing Information	2	4	0	8	8	0	8	4	4	4	4	4	2	4	0	4	0	8	8	4	4	0	0	84	\$24,820	\$1,344	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,344	\$26,164
2.02 Conduct Field Visit	0	8	0	8	8	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	\$14,616	\$768	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$6,000	\$7,268	\$21,884		
2.03 Identify Project Design Criteria	2	4	0	4	8	0	4	4	4	4	4	4	2	4	0	4	0	8	8	0	0	0	0	62	\$18,064	\$992	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$992	\$19,056				
2.04 Conduct Hydraulic Analysis and Facility Sizing	2	4	0	8	8	0	0	0	0	0	0	0	0	40	0	0	0	80	0	0	40	0	0	182	\$45,856	\$2,912	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,912	\$48,768	
2.05 Confirm Pipeline Alignment	2	4	0	8	8	0	0	0	0	0	0	0	0	8	0	4	0	40	0	0	16	0	0	90	\$23,504	\$1,440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,440	\$24,944	
2.06 Confirm Pipe Materials	2	2	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	20	\$5,760	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$320	\$6,100		
2.07 Evaluate Pipeline Construction Techniques	2	4	0	8	16	0	0	0	0	0	0	0	0	4	0	0	0	32	0	0	0	0	64	\$17,296	\$1,024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,024	\$18,320		
2.08 Evaluate Pump Station Alternatives	2	4	0	8	0	24	24	8	8	8	0	0	0	8	0	0	0	40	40	0	8	0	182	\$48,520	\$2,912	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,912	\$51,432		
2.09 Evaluate Dechlorination Alternatives	2	2	0	4	0	4	8	4	4	4	0	0	0	0	0	0	0	24	24	0	8	0	0	88	\$22,748	\$1,408	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,408	\$24,156	
2.10 Evaluate Reservoir Discharge Alternatives	2	4	0	8	16	0	4	4	4	4	0	0	0	8	0	0	0	24	24	0	8	0	110	\$29,328	\$1,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,760	\$31,088		
2.11 Conduct Transient Analysis	2	4	0	8	8	0	8	8	8	8	0	0	0	40	0	0	0	80	0	0	40	0	186	\$47,072	\$2,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,976	\$50,048		
2.12 Conduct Project Facilities Alternatives Workshop	0	4	0	8	8	0	8	8	8	8	0	0	2	4	0	0	0	16	16	0	16	0	114	\$30,000	\$1,824	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$6,000	\$8,324	\$38,324				
2.13 Refine Desktop Geotechnical Evaluation	0	2	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	\$22	\$5,616	\$352	\$0	\$11,200	\$0	\$0	\$0	\$0	\$11,200	\$560	\$0	\$0	\$12,112	\$17,728	
2.14 Develop Preliminary Construction Cost Estimate	2	4	0	8	4	0	4	4	4	4	0	0	0	0	0	0	0	16	16	0	8	0	112	\$35,556	\$1,792	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,792	\$37,348				
2.15 Identify Permitting Agencies and Requirement	2	4	0	4	8	0	0	0	0	0	0	0	0	0	0	16	0	32	0	0	8	0	82	\$21,752	\$1,312	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,312	\$23,064				
2.16 Develop Construction Schedule and Sequencing	0	4	0	4	8	2	2	2	2	2	0	2	2	0	0	0	0	32	0	0	4	0	4	\$70	\$18,030	\$1,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,120	\$19,150			
2.17 Develop Preliminary (30%) Drawings and Specification TOC	83	193	208	208	108	224	112	58	51	53	52	5	42	0	0	0	0	610	270	370	1491	0	395	4533	\$1,127,505	\$72,528	\$0	\$0	\$15,500	\$0	\$40,000	\$0	\$55,500	\$2,775	\$0	\$0	\$130,803	\$1,298,308	
2.18 Evaluate Kastania PS for Future Expansion	2	4	0	8	16	0	4	4	4	4	0	0	0	0	0	0	0	16	16	0	8	0	102	\$27,500	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,632	\$29,132				
2.19 Develop Draft BODR	2	8	8	8	8	0	8	8	8	8	4	4	2	8	4	4	0	80	64	0	64	0	40	356	\$86,888	\$5,696	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,696	\$92,584			
2.20 Conduct Draft BODR Review Workshop	0	4	0	4	12	0	4	0	0	0	0	4	2	4	2	4	0	16	8	0	8	0	4	90	\$24,936	\$1,440	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$6,000	\$7,940	\$32,876			
2.21 Develop Final BODR	2	4	4	4	16	0	4	4	4	4	2	2	0	4	2	2	0	40	32	4	32	0	198	\$45,192	\$2,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,976	\$48,1,16				

## UPCOMING MEETINGS

This schedule lists upcoming board and committee meetings as well as upcoming agenda items for the next month, which may include Board interest in adding future meeting items. The schedule is tentative and subject to change pending final publication and posting of each meeting agenda.

<b>Internal Meetings</b>		
<b>Meeting Date</b>	<b>Meeting Type</b>	<b>Key Item(s)</b>
Tuesday, Apr. 22, 2025 9:30 a.m.	Planning Committee Meeting/Special Meeting of the Board of Directors	Fairfax Manor Pump Station Project, CIP Budget Update
Thursday, Apr. 24, 2025 9:30 a.m.	Finance & Administration Committee Meeting/Special Meeting of the Board of Directors	HR Update, FY 2025/26 and FY 2026/27 Budget Update
Tuesday, May 6, 2025 4:30 p.m.	Board of Directors' Regular Bi-Monthly Meeting with a Closed Session at the beginning	Budget Workshop

<b>External Meetings</b>	
<b>Meeting Date</b>	<b>Meeting Type</b>
Wednesday, Apr. 16, 2025 3:00 p.m.	Tomales Bay Foundation
Monday, Apr. 28, 2025 9:30 a.m.	North Bay Water Reuse Authority
Friday, May 2, 2025 9:30 a.m.	North Bay Watershed Association meeting cancelled and reconvening in June.
Monday, May 5, 2025 9:00 a.m.	Sonoma Water Advisory Committee/Technical Advisory Committee