



STAFF REPORT

Meeting Type: Board of Directors
Title: General Manager's Report July 2024
From: Ben Horenstein, General Manager
Meeting Date: September 3, 2024

TYPE OF ACTION: X Action Information Review and Refer

RECOMMENDATION: Approve Report

SUMMARY:

A. HIGHLIGHTS:

- The daily average net production for the month of July 2024 was 26.8 MGD compared to 25.2 MGD for the month of July 2023. Typical usage for July is 32.4 MGD.
- The daily average flow from Sonoma County Water Agency for the month of July 2024 was 9.1 MGD compared to 11.9 MGD for the month of July 2023.
- Staff awarded contract for the Spillway Modifications Project and held kick off meeting in July. This project will be evaluating spillway modification options for additional storage at Nicasio, Soulajule, Kent and Alpine dams, focusing on Nicasio first. The Nicasio Spillway modification project looks to gain an additional 3,000 acre-feet of storage to our system.
- Staff advertised the Fire Flow Improvement Program Rock Ridge Pipeline Replacement Project. This project will install approximately 7,560 linear feet of new welded steel pipe and PVC pipe in Unincorporated Marin County and within the Town of Fairfax to replaced leak prone fire flow deficient cast iron pipe installed as early as 1934. This project will increase resiliency, reliability and fire flow capacity within these areas as part of the Fire Flow Improvement Program.
- The District awarded the 2024 Francisco Boulevard Anode Well Replacement Project. This project will replace an existing 40 foot deep cathodic protection well installed in 1965 that has been depleted with a new anode well. The new anode well will ensure the continued cathodic protection of the Districts welded steel water mains, ensuring system reliability and extending the life of the infrastructure while helping reduce cost in premature replacement.
- During routine preventative maintenance on a pressure regulator, the Mechanical and Electrical Department identified a discharge gate valve as broken in the off position. This broken valve inhibited a secondary redundant water supply to the neighborhood. In coordination with the Systems Maintenance Department, the valve was replaced. In addition to placing the supply

back into service, the work allowed the Department to improve the facility by raising the regulator to an elevation that will improve safety and ergonomics during future maintenance.

- After a construction accident, Fairfax Manor First lift pump was unavailable. Staff constructed a temporary pump station, that now includes an enclosed container security fencing, and electrical power that eliminates the diesel operation and associated concerns about the noise and diesel fumes.
- The District initiated implementation of Year 6 of the Biodiversity Fire, & Fuels Integrated Plan in July 2024. Veg work in July was limited to Yellow Starthistle removal at multiple sites across the watershed. Project prep and coordination for Roadside Mowing near 5 Corners, Grazing along Sky Oaks Rd, and Forest Fuel Reduction near Lake Lagunitas took place in July, but ultimately implementation will proceed in August after bird nesting season ends. Veg work in July is typically minimal due to wildfire ignition risks, timing of vegetation contracts, and bird nest compliance constraints.
- Watershed Maintenance working in collaboration with the Santa Cruz Trail Stewardship implemented 15 days to trail work on the Azalea Hill Trail Restoration Project with California Conservation North Bay and California Conservation Corps crews.
- Initiated Lagunitas Creek Restoration Project and begin pre-project biological monitoring surveys to support construction activities.

MARIN WATER GRANT STATUS

PROJECT DETAILS						REQUIREMENTS		BUDGET	
OPPORTUNITY	FUNDER	FUNDER PRIORITIES	APPLICATION DATE	MATCHING PROJECT	DESCRIPTION	STATUS	PREREQUISITE	FUNDS REQUESTED	MATCH REQUIREMENT %
CURRENT APPLICATIONS								\$23,173,326	
Desal Feasibility Study	USBR	Desalination	2/28/2023	Desalination	Exploring new brackish desal in Petaluma	Open	None	\$200,000	50
Prop. 1, Round 2 IRWM Disadvantaged Community	DWR	Water Infrastructure	12/1/2022	Marin City/San Rafael Infrastructure	Replacing aging transmission lines and laterals in Marin City and San Rafael's Canal District	Funded	IRWM CC Approval	\$6,500,000	0
Forestry Corps	CCNB	Vegetation Management	1/1/2023	Ongoing Forestry work	Workforce development; state funding directly to CCNB to fund crews working on the watershed	Funded	Corps Partnership	\$500,000	0
Fisheries Restoration Grant Program	CDPW	Fisheries	4/20/2023	Lagunitas Creek Restoration	Funding for Phase II site design and CEQA	Funded	30% designs	\$723,000	5
Lagunitas Creek Salmonid Spawning Gravel Improvement Project	DWR Riverine	Fisheries	11/1/2022	Lagunitas Creek Restoration	Gravel augmentation for Lagunitas Creek	Funded	None	\$590,000	0
Prop 1, Fisheries Restoration	CDPW	Fisheries	7/1/2023	Lagunitas Creek Restoration	Lagunitas Creek Restoration Sites 1-6	Funded	60% designs	\$4,422,898	0
CA Division of Boating & Waterways	NRA	Water Quality	7/1/2023	Reservoir Water Quality	Monitor and prevent infestation of quagga and zebra mussels	Funded	NA	\$86,800	0
One Tam Forest Health Strategy	CA WCB	Forestry Restoration	11/21/2023	BFFIP Implementation	BFFIP Implementation for 2-3 years	Funded	CEQA	\$6,000,000	0
WaterSMART Applied Science	USBR	Fisheries	10/15/2023	Advanced Weather Modeling	Funding for weather modeling to inform water resources management	Funded	TBD	\$150,628.00	50%
Hazard Mitigation Program	FEMA	Natural Hazards	1/1/2023	Treatment Plant Clarifiers	Funds to address seismic hazards in water treatment facilities	Not Funded	NOI APPROVAL	\$0.00	25%
WaterSmart Energy Efficiency	USBR	Conservation	2/22/2024	AMI	Funding to expand AMI	Open	Environmental Compliance	\$1,000,000	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
WaterSMART Planning & Design	USBR	Water Supply	5/20/2024	Water Supply Planning	Funding for advancing implementation of Strategic Water Supply Projects	Open	TBD	\$400,000.00	50%
Environmental Resources Grant	USBR	Forest Health	6/24/2024	BFFIP Implementation	BFFIP Implementation for 2-3 years	Open	TBD	TBD	50%
UPCOMING OPPORTUNITIES								\$0	
Hazard Mitigation Program	FEMA	Natural Hazards	10/1/2024	Treatment Plant Clarifiers	Funds to address seismic hazards in water treatment facilities	TBD	NOI APPROVAL	TBD	25%
Environmental Enhancement Fund (EEF)	CDPW	Fisheries	9/1/2024	Lagunitas Creek Phase II	Funds to implement phase II of Lagunitas Creek Restoration project.	Open	TBD	TBD	TBD
Drought Resiliency Program	USBR	Water Supply	10/1/2024	TBD	Funding for advancing implementation of Strategic Water Supply Projects	TBD	TBD	TBD	TBD
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	Not in USACE work plan	Define incremental discrete project elements	\$28,000,000.00	
Small Storage Program	USBR	Water Supply	12/1/2025	Phoenix Lake	Funding for new water supply projects	TBD	Approved Feasibility Study	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-foot)
Potable				
Total production this FY	801	2,458	780	2,394
Monthly production, July	801	2,458	780	2,394
Daily average, July	25.83	79.28	25.17	77.23
Recycled				
Total production this FY	38.23	117.31	36.28	111.34
Monthly production, July	38.23	117.31	36.28	111.34
Daily average, July	1.23	3.78	1.17	3.59
Raw Water				
Total production this FY	10.81	33.17	10.90	33.45
Monthly production, July	10.81	33.17	10.90	33.45
Daily average, July	0.35	1.07	0.35	1.08
Imported Water				
Total imported this FY	272	835	368	1,131
Monthly imported, July	272	835	368	1,131
Reservoir Storage				
Total storage	23,151	71,049	23,663	72,619
Storage change during July	-1,075	-3,299	-1,260	-3,866
Stream Releases				
Total releases this FY	221	678	221	677
Monthly releases, July	221	678	221	677

2. <u>Precipitation:</u>	<u>FY 2024/25 (in.)</u>	<u>FY 2023/24 (in.)</u>
Alpine	0.00	0.00
Bon Tempe	0.00	0.00
Kent	0.00	0.00
Lagunitas *	0.00	0.00
Nicasio	0.00	0.00
Phoenix	0.00	0.00
Soulajule	0.00	0.00
* Average to date = 0.00 inches		

3. Water Quality:

<u>Laboratory:</u>	<u>FY 2024/25</u>	<u>FY 2023/24</u>
Water Quality Complaints:		
Month of Record	19	10
Fiscal Year to Date	19	10
Water Quality Information Phone Calls		
Month of Record	15	1
Fiscal Year to Date	15	1

The WQ lab ensured that the water supplied met or surpassed water quality regulations by collecting and analyzing 2,450 analyses on treatment plants and distribution system samples.

Mild steel corrosion rates averaged 2.06 (0.43 – 3.61) 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 San Rafael High for this month on record.

Disinfection Program: 1,985' of new pipelines were disinfected during the month of July. Performed chlorination on 32 water storage tanks to ensure compliance with bacteriological water quality regulations.

Tank Water Quality Monitoring Program: Performed 110 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 2,450 treatment and distribution water samples, and the water quality department treated 32 storage tanks for low chlorine and checked 110 storage tanks for low chlorine residual in July 2024.

4. Water Treatment:

<u>Treatment Results</u>	<u>San Geronimo</u>		<u>Bon Tempe</u>		<u>Ignacio</u>	
	Average	Monthly Goal	Average	Monthly Goal	Average	Monthly Goal
Turbidity (NTU)	0.05	≤ 0.10	0.04	≤ 0.10	0.04	≤ 0.10
Chlorine residual (mg/L)	2.76	2.75 *	2.67	2.75 *	2.82	2.75 *
Color (units)	0.5	≤ 15	0.5	≤ 15	0.2	≤ 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 1 – Rough Grading Project (D21043): The Pine Mountain Tunnel Tanks Replacement Project is a multi-year two-phased project that will replace the existing Pine Mountain Tunnel. This project (Phase 1) will excavate approximately 45,000 cubic yards of hillside and will install a soil nail retaining wall in preparation for a future project that will install two 2-million gallon pre-stressed concrete storage tanks (Phase 2). This Phase 1 project will also perform site grading and drainage improvements.
 - Project Budget: \$7,734,575
 - Monthly Activities: The Contractor mobilized to the project site on August 1 and began preparing the site for the second season of retaining wall and rough grading work. Concrete Pipe Road between Taylor Trail and Fairfax-Bolinas Road remains closed Monday through Friday 8:00 AM to 5:00 PM throughout the duration of the project. The Phase I rough grading and retaining wall project is anticipated to be complete January 31, 2025.

- b. Redwood Drive Pipeline Replacement Project (CN1989): This project is a component of the District’s Fire Flow Improvement Program and will install approximately 4,400 linear feet of 6-inch welded steel pipe to replace old, leak-prone, and fire flow deficient piping installed as early as 1913 in the unincorporated community of Woodacre.

- Project Budget: \$2,204,075.20
 - Monthly Activities: All contract work is complete with the exception of final paving and miscellaneous punchlist items. Final paving is underway and the project is anticipated to be complete in August.
- c. Wolfback Ridge Tanks Rehabilitation Project (CN2016): 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: District staff and the Contractor are completing shop drawing preparation and review for the tank roof systems. Field work is expected to begin October and the contract completion is estimated March 2025.
- d. Sir Francis Drake Pipeline Replacement Project (CN1996): This project will install approximately 4,540 linear feet of welded steel pipe to replaced aged, leak-prone cast iron pipe installed as early as 1924 on Sir Francis Drake Boulevard between San Francisco Boulevard and Butterfield Road. Water pipelines will also be replaced on Broadmoor Avenue and Saunders Avenue, each for approximately 250 feet from Sir Francis Drake.
- Project Budget: \$3,799,400
 - Monthly Activities: The Contractor is has completed water mainline installation on Sir Francis Drake, and is currently completing mainline installation on Cordone Drive and El Cerrito Avenue. Remaining contract work includes transferring services from the main pipeline to homes and businesses, as well as final asphalt roadway paving. The District is working closely with Marin Transit and the Town of San Anselmo to mitigate traffic impacts from construction work on Sir Francis Drake Boulevard. The project is anticipated to be complete in November.
- e. Granada Drive Pipeline Replacement Project (CN2007): 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 Contractor has installed more than 3,000 feet of water mainline and transferred more than 60 water services along El Camino Drive, Estrada lane, Paloma Drive, and the lower section of Granada Drive. The Contractor is currently performing final connection work for these sections and will perform final roadway paving for these sections later in August. The Contractor is beginning construction activity on Prince Royal Drive and Endeavor Drive.
- f. Lagunitas Creek Coho Habitat Enhancement Project – Phase 1A (CN2022): Phase 1A of the Lagunitas Creek Coho Habitat Enhancement Project will implement an extensive set of habitat enhancement structures in Lagunitas Creek within Samuel P. Taylor State Park. The work includes the installation of large woody debris, rock, and gravel structures in Lagunitas Creek in support of endangered Coho Salmon, threatened steelhead populations, and freshwater shrimp.
- Project Budget: \$3,958,000

- Monthly Activities: The project is underway and the Contractor has mobilized to the project site. The Contractor is currently performing clearing and grubbing, and temporary access work necessary for the subsequent creek restoration work. The Cross Marin Trail will remain open to recreation during construction and traffic control measures will be implemented to protect the public. Project completion is anticipated in late November.
- g. Tiburon Pipeline Replacement Project (CN2014): The 2024 Tiburon Pipeline Replacement Project is a component of the District's Capital Improvement Program and Fireflow 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 preconstruction meeting was held on August 1 and work is expected to begin the week of August 12. The project is expected to be completed in the winter.
- h. 2024 Anode Replacement Project (CN2032): The 2024 Anode Replacement Contract is a component of the District's Capital Improvement Program. The District has approximately 6,930 corrosion test stations throughout the distribution system, most of which utilize magnesium anodes to prevent corrosion damage to the pipelines. These magnesium anodes extend the useful life of the pipelines by preventing leaks and costly damage caused by corrosion. These anodes are sacrificial by nature and deplete over time, requiring replacement. This project is part of the District's annual or bi-annual effort to routinely replace sacrificial magnesium anodes throughout the District's service area.
- Project Budget: \$115,250
 - Monthly Activities: The Contractor has completed anode installations at more than 20 locations and have approximately 30 sites remaining on the contract. The project is anticipated to be complete by the end of August.
- i. 2024 Anode Well Replacement Project (CN2033): The 2024 Anode Well Replacement Project will rehabilitate an existing cathodic protection well in the City of San Rafael, which was installed in 1965 and is due for replacement. The aged well will be replaced insitu with an 11-inch diameter, 41-foot deep anode well in accordance with Marin County regulations. Magnesium anodes installed in the well are used to protect the District's infrastructure by preventing corrosion, particularly sodium-rich San Francisco Bay mud where corrosion is accelerated.
- Project Budget: \$197,500
 - Monthly Activities: The construction contract was awarded at the July 16 Board of Directors Meeting and contract execution is underway. The project is anticipated to begin in August and be complete in October.

6. Other:

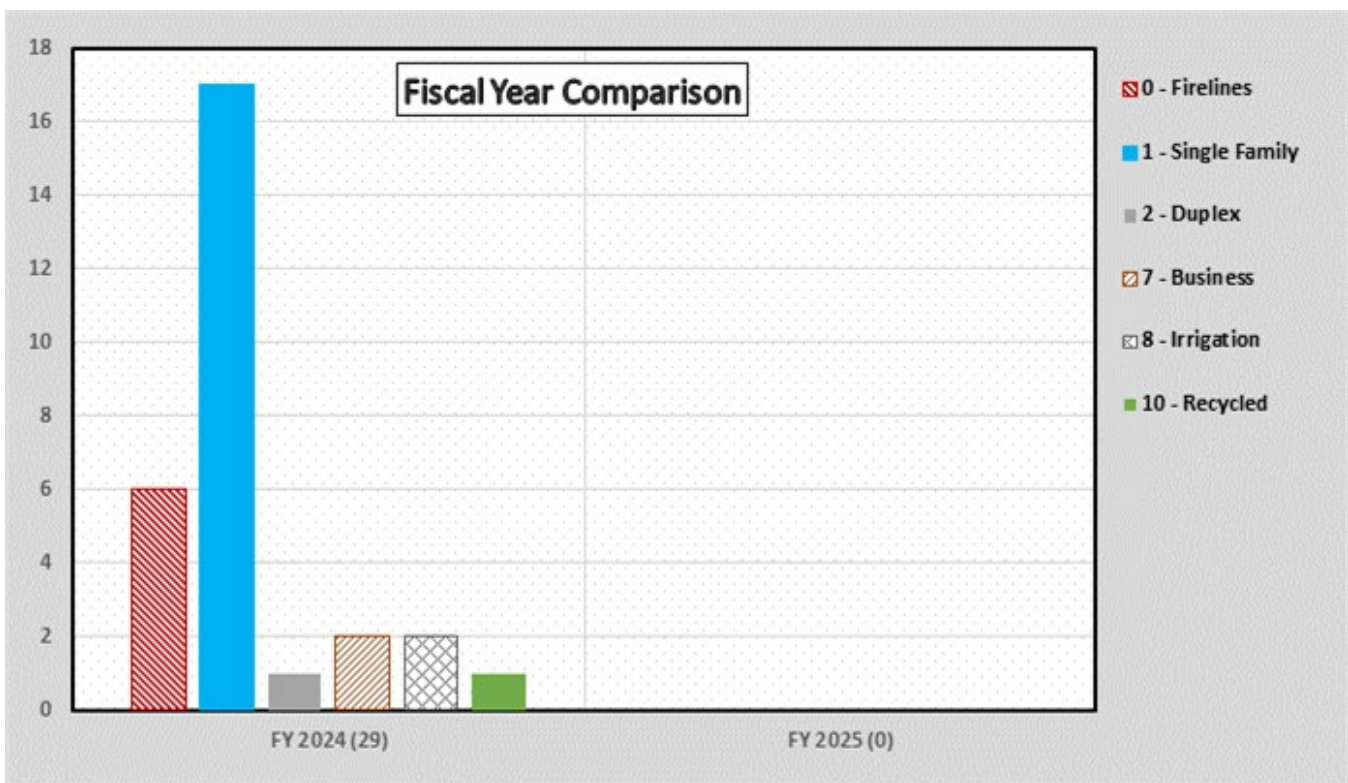
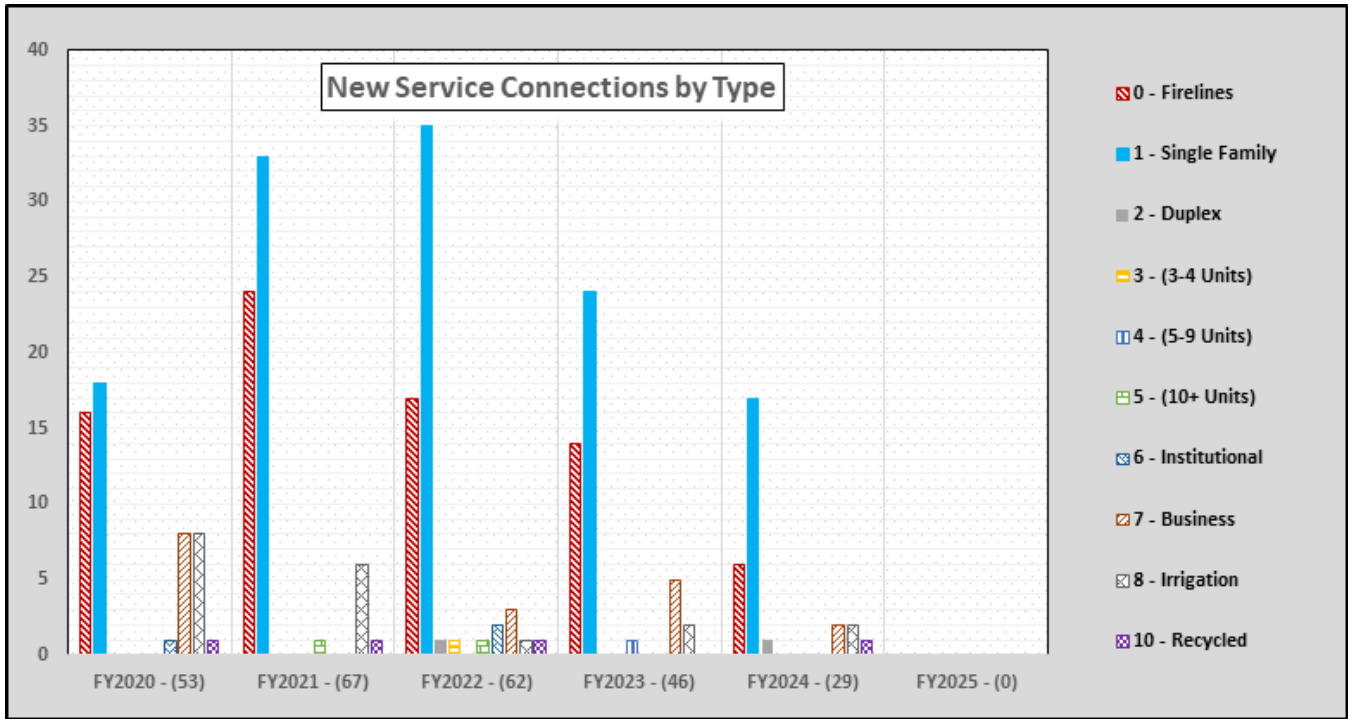
<u>Pipeline Installation</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Pipe installed during July (feet)	4,413	213
Total pipe installed this fiscal year (feet)	4,413	213
Total miles of pipeline within the District	908*	908*

** Reflects adjustment for abandoned pipelines*

<u>Pipe Locates (1,097 Responses)</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Month of July (feet)	40,289	25,751
Total this fiscal year (feet)	40,289	25,751

<u>Main Line Leaks Repaired:</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Month of July	13	12
Total this fiscal year (7/1/24-5/31/25)	13	12

<u>Services:</u>	<u>FY2024/25</u>	<u>FY2023/24</u>
Service upgrades during July	18	13
Total service upgrades this FY	18	13
Service connections installed during July	0	4
Total active services as of August 1st, 2024	60,579	60,449
(Total Including firelines)	61,965	61,828



7. Recruitments and Hires

The District is currently recruiting for the following positions:

- Engineering Technician-Development Services Supervisor
- Supervising Land Surveyor

Through competitive recruitments, employees promoted to the following positions:

- Controls Technician
- Utility Crew Leader

The District recently hired new employees for the following positions:

- Watershed Aide - Fisheries (2 Positions)

8. Demand Management:

	Jul-24	FY 24/25 TOTAL	FY 23/24 TOTAL	FY 22/23 TOTAL
WATER-EFFICIENCY PROGRAMS				
Water-Use Site Surveys				
Conservation Assistance Program (CAP) Consultations				
Residential properties resi 1-2 (single-family)	50	50	402	291
Residential properties resi 3-5 (multi-family units)	0	0	6	3
Non-residential properties resi 6-7 (commercial)	0	0	0	3
Dedicated irrigation accounts resi 8-10 (large landscape)	1	1	0	0
Marin Master Gardeners' Marin-Friendly Garden Walks				
Residential garden walks	12	12	160	72
Public Outreach and Education, Customer Service				
Public outreach events (number of people attending)	500	500	1924	17775
Public education events (number of participants)	0	0	5475	328
Department customer calls/emails	756	756	4485	4150
Outreach to new Marin Water customers (letters sent)	119	119	1908	0
School Education				
School assemblies				
Number of activities	0	0	20	0
Number of students reached	0	0	21850	0
Field trips				
Number of activities	0	0	15	15
Number of students reached	0	0	322	307
Classroom presentations				
Number of activities	0	0	14	17
Number of students reached	0	0	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
Incentives				
Number of HECWs approved	2	2	97	103
Number of Rain Barrel/Cisterns approved	0	0	9	15
"Cash for Grass" Turf Replacements approved	4	4	57	116
Number of Laundry-to-Landscape Systems (kits) approved	0	0	0	7
Hot water recirculating system rebates	0	0	8	30
Pool Cover rebates	3	3	35	27
HET rebates	3	3	17	22
Number of Smart Home Water Monitor "Flume Direct Distribution" redeemed	24	24	527	271
Number of Smart Controllers rebates approved	3	3	52	35
Number of Smart Controllers "RainBird compatible w/Flume" approved	21	21	131	0
Number of Smart Controllers "Rachio Direct Distribution" approved	56	56	222	77
Rain Barrel Give-a-way (Gallons)	5720	5720		0
Advanced Metering Infrastructure (AMI)				
AMI leak letters sent to customers (>200 GPD)	172	172	1330	1168
ORDINANCES				
Water Waste Prevention				
Water Waste Reports Received	25	25	221	392
Water Waste Notifications Sent	3	3	52	81
Landscape Plan Review				
Plans submitted	10	10	117	88
Plans exempt	2	2	23	5
Plans completed	0	0	30	20
Plans in workflow (pass & fail)	11	11	160	145
Tier 4 Exemption				
Inspections that resulted in a pass	0	0	2	1
Graywater Compliance Form				
Applications Received (as of Dec 2019)	10	10	157	123
Systems installed	7	7	35	23

9. Watershed Protection:

Trail Focus: Cataract Trail

Cataract Trail, with its many waterfalls is one of the most popular trails on Mount Tam attraction visitor from across the Bay Area, the state and from across the country. The trail is heavily impacted from visitor use and social media attention. So far this year it has accounted for 25% of the medical aid calls that the Rangers have responded to. This month the Rangers have seen a dramatic increase of littering, which even included dirty diapers thrown into the creek. In July the Rangers completed 24 miles of foot patrol on the trail, saw over 1000 visitors, made 60 law enforcement contacts and provided nearly 80 visitor assists



The bag of litter collected on Cataract Trail on July 27, 2024

Concrete Pipe Construction Starts Up Again

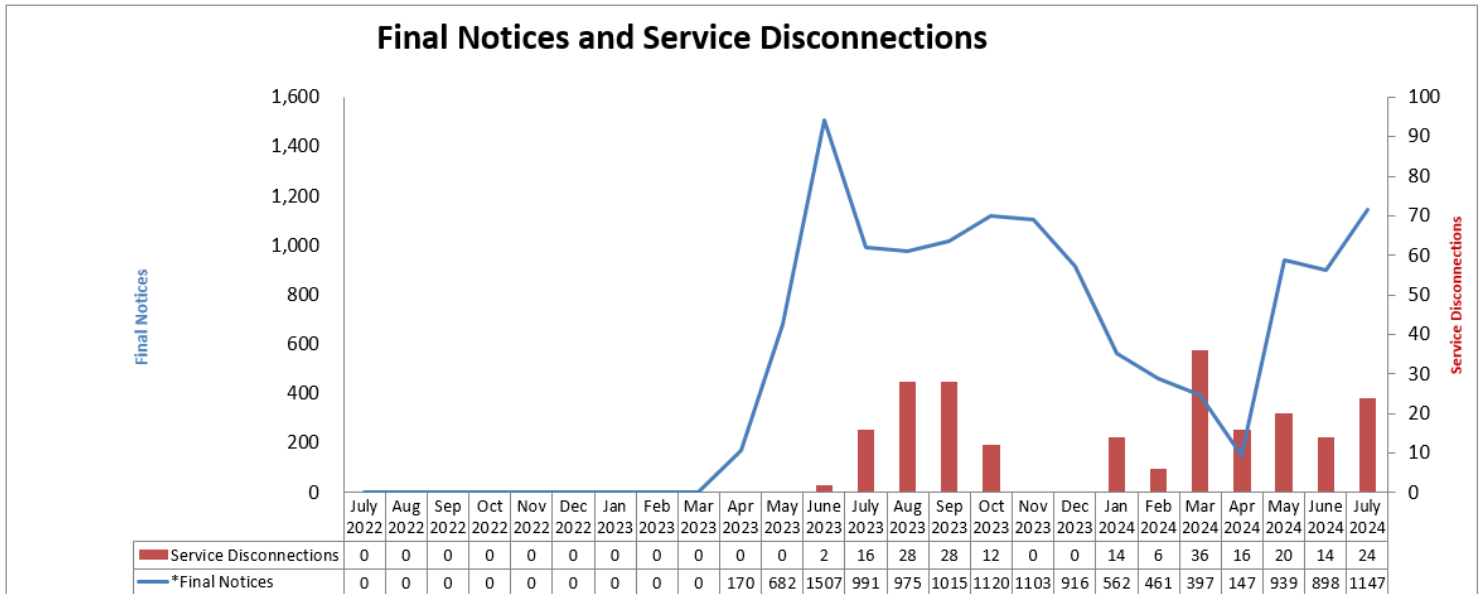
The construction of the two 2-million gallons water storage tanks on Concrete Pipe Road below Sky Oaks will resume August 1st. Rangers were kept busy last construction period with visitors disregarding the barricades and closures, hiking, biking and jogging through the closed area. The site is unsafe for visitors and we will be on alert again as the construction resumes.

Incidents and Events	795
Visitor Assists	248
Warnings	225
Dam Check	75
Assist Watershed Maintenance	56
Citations	43
Fish and Game Contact	46
Misc Law Enforcement Calls	26
Citizen Complaint: Illegal Bike Use	2
Vandalism	14
Citizen Complaint: Off Leash Dogs	2
Medical Aid	6
Illegal Trail Work	9
Search and Rescue	4
Preventative Search and Rescue	4
Illegal Fire	1
Illegal Encampment	1
Humane/Animal Related	1
Court Appearance (Guilty)	2
Ranger Callout	1
Red Flag Warning	1
Citizen Complaint: Bike speed	1
Citizen Complaint: Bike Speed	1
Suspicious Fire	1
Preventative Search and Rescue	4
Suspicious Circumstance	3
Illegal Trail Work	9
Outreach Event	1
Humane/Animal Related Call	1
Assist Other MMWD Work Group	1
Citations	48
Non-Payment of Parking Fees	46
Boating	1
Dog off Leash	1



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 style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> Ben Horenstein General Manager	<hr style="border: 0; border-top: 1px solid black; margin-top: 5px;"/> Ben Horenstein General Manager