

watershed and were found to be relatively abundant

- Marin Water hosted a tour for Cal Fire grant program representatives to highlight ongoing work occurring as part of the Biodiversity Fire, & Fuels Integrated Plan.

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								\$72,173,326	
Local Water Supply Storage Projects	DWR	Water Supply	1/9/23	Water Supply	Three projects: recycled water, local storage enhancement, and winter water conveyance	Open	UWMP Compliance	\$53,000,000	50
Desal Feasibility Study	USBR	Desalination	2/28/23	Desalination	Exploring new brackish desal in Petaluma	Open	None	\$200,000	50
Prop.1. Round 2 IRWM Disadvantaged Community	DWR	Water Infrastructure	12/1/22	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	Jan 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	CDFW	Fisheries	4/20/23	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	11/1/22	Lagunitas Creek Restoration	Gravel augmentation for Lagunitas Creek	Funded	None	\$590,000	0
Prop 1. Fisheries Restoration	CDFW	Fisheries	7/1/23	Lagunitas Creek Restoration	Lagunitas Creek Restoration Sites 1-6	Open	60% designs	\$4,422,898	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	\$88,800	0
One Tam Forest Health Strategy	CA WCB	Forestry Restoration	11/21/23	BFFIP Implementation	BFFIP Implementation for 2-3 years	Open	CEQA	\$8,000,000	0
WaterSMART Applied Science	USBR	Fisheries	10/15/2023	Advanced Weather Modeling	Funding for weather modeling to inform water resources management	Open	TBD	\$150,628.00	50%
UPCOMING OPPORTUNITIES								\$0	
Hazard Mitigation Program	FEMA	Natural Hazards	Summer 2023	Treatment Plant Clarifiers	Funds to address seismic hazards in water treatment facilities	TBD	NOI APPROVAL	TBD	
Small Storage Program	USBR	Water Supply	Fall 2023	Phoenix Lake	Funding for new water supply projects	TBD	Approved Feasibility Study	TBD	
WaterSMART Planning & Design	USBR	Water Supply	4/2/2024	Water Supply Planning	Funding for advancing implementation of Strategic Water Supply Projects	Open	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	In appropriations	Authorization (secured 2022)	\$28,000,000.00	

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 2023/24		FY 2022/23	
	(million gallons)	(acre-feet)	(million gallons)	(acre-feet)
Potable				
Total production this FY	3,522	10,809	3,285	10,080
Monthly production, November	513	1,575	495	1,520
Daily average, November	17.11	52.51	16.51	50.68
Recycled				
Total production this FY	142.76	438.10	129.49	397.39
Monthly production, November	13.28	40.75	10.17	31.21
Daily average, November	0.44	1.36	0.34	1.04
Raw Water				
Total production this FY	38.84	119.20	42.81	131.38
Monthly production, November	0.83	2.55	2.32	7.12
Daily average, November	0.03	0.08	0.08	0.24
Imported Water				
Total imported this FY	1,579	3,417	559	1,716
Monthly imported, November	128	1,146	147	452
Reservoir Storage				
Total storage	21,096	64,742	17,514	53,750
Storage change during November	-504	-1,547	-681	-2,089
Stream Releases				
Total releases this FY	1,366	4,191	1,185	3,636
Monthly releases, November	371	1,140	366	1,122

2. <u>Precipitation:</u>	<u>FY 2023/24 (in.)</u>	<u>FY 2022/23 (in.)</u>
Alpine	5.01	2.82
Bon Tempe	4.42	2.74
Kent	5.89	2.72
Lagunitas *	5.88	4.06
Nicasio	4.15	2.54
Phoenix	4.83	3.58
Soulajule	2.83	2.15

* Average to date = 0.06 inches

3. Water Quality:

<u>Laboratory:</u>	<u>FY 2023/24</u>	<u>FY 2022/23</u>
Water Quality Complaints:		
Month of Record	11	16
Fiscal Year to Date	41	83
Water Quality Information Phone Calls		
Month of Record	2	8
Fiscal Year to Date	9	39

The WQ lab ensured that the water supplied met or surpassed water quality regulations by collecting and analyzing 1409 analyses on treatment plants and distribution system samples.

Mild steel corrosion rates averaged 2.73 (0.83 – 5.79) MPY. The AWWA has recommended an operating level of <5 MPY with a goal of <1 MPY.

Complaint Flushing: No flushing events were performed for this month on record.

Tank Survey Program: 8 water storage tank sanitary surveys were performed during the month. 63.95 % planned survey program has been completed for calendar year 2023.

Disinfection Program: No new pipelines were disinfected during the month of November. Performed chlorination's on 26 water storage tanks to ensure compliance with bacteriological water quality regulations.

Tank Water Quality Monitoring Program: Performed 32 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 performed 8 sanitary tank surveys, treated 26 tanks for low chlorine, and check an additional 32 tanks for low chlorine residual in November 2023.

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)	0.06	≤ 0.10	0.04	≤ 0.10	0.03	≤ 0.10
Chlorine residual (mg/L)	2.75	2.75 *	2.74	2.75 *	2.82	2.75 *
Color (units)	0.5	≤ 15	0.4	≤ 15	0.3	≤ 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 is currently excavating the fourth bench down from grade, and has installed more than 100 soil nails and more than 10% of the concrete wall. The Contractor has also begun hauling soil stockpiles between the future tank site on Concrete Pipe Road and the Bullfrog Quarry soil stockpile site. All pedestrian and vehicular access along Sky Oaks and Bon Tempe Roads will be controlled during hauling, with vehicle hold times as long as 5 minutes at a time. 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 project will be winterized and temporarily suspended by January 31 and will restart August 1, 2024.

- b. Spillway Condition Assessment Phase II (CN2006): This project is considered Phase II of a multi-phase project that will investigate the concrete spillways at Peters Dam (Kent Lake), Seeger Dam (Nicasio Reservoir), and SoulaJule Dam. Assessment work includes concrete coring, ground penetrating radar (GPR), video inspection and cleaning of sub-drains, and visual observation.
- Project Budget: \$680,106
 - Monthly Activities: The Contractor is currently cleaning the spillways and installing temporary fall protection anchors in anticipation of GPR assessments. The District has completed the GPR assessment for the SoulaJule spillway and is preparing to assess Seeger and Peters spillways. The GPR assessments will inform the District and California Division of Safety of Dams of recommended concrete coring locations for further assessment. Work that remains includes concrete coring, video inspection of sub-drain systems and weepholes, and miscellaneous repair work.

6. Other:

<u>Pipeline Installation</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Pipe installed during November (feet)	120	681
Total pipe installed this fiscal year (feet)	1,439	4,716
Total miles of pipeline within the District	908*	908*

** Reflects adjustment for abandoned pipelines*

<u>Pipe Locates (1,137 Responses)</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Month of November (feet)	26,611	24,049
Total this fiscal year (feet)	156,988	131,203

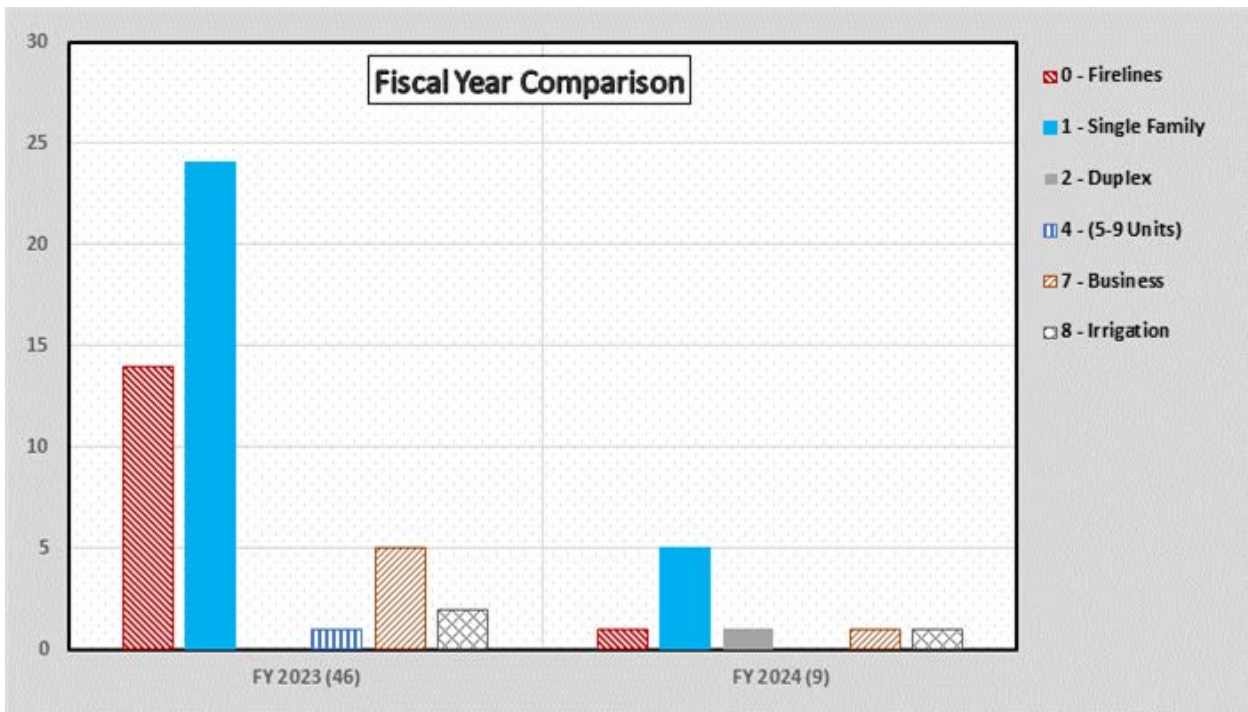
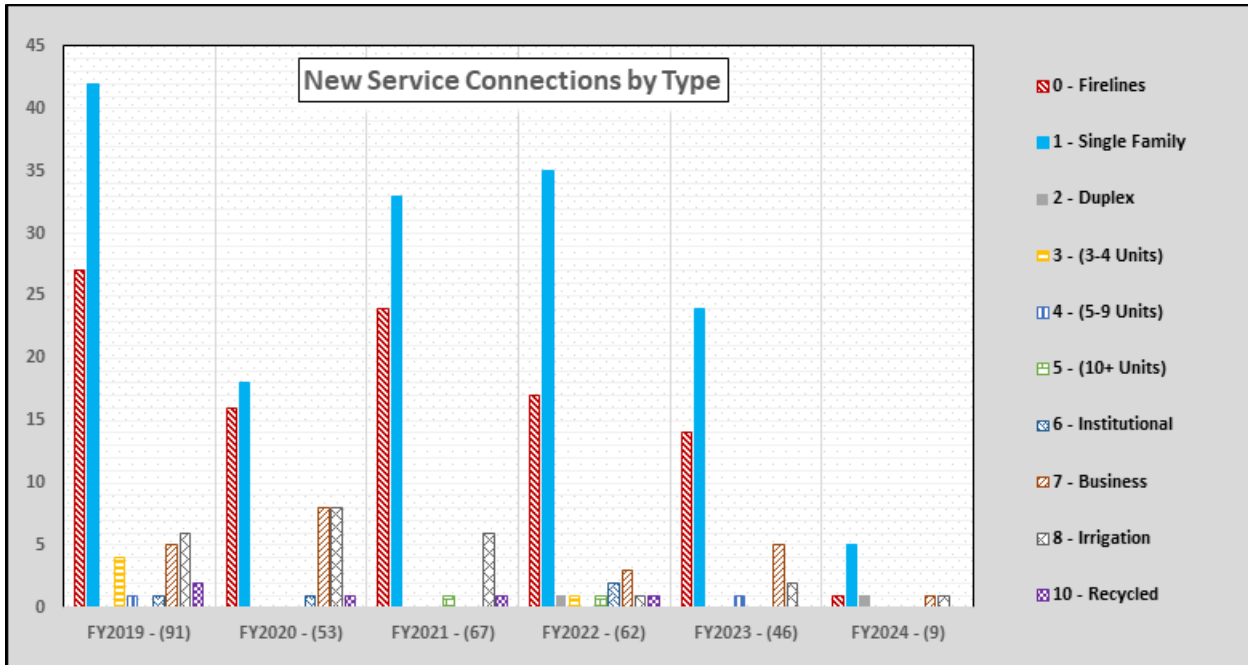
<u>Main Line Leaks Repaired:</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Month of November	10	36
Total this fiscal year	63	84

<u>Services:</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Service upgrades during November	16	14
Total service upgrades this FY	83	75
Service connections installed during November	2	3

Total active services as of December 1, 2023

61,927

60,494



7. Demand Management:

	Nov-23	FY 23/24 TOTAL	FY 22/23 TOTAL	FY 21/22 TOTAL
WATER-EFFICIENCY PROGRAMS				
Water-Use Site Surveys				
Conservation Assistance Program (CAP) Consultations				
Residential properties resi 1-2 (single-family)	43	151	291	731
Residential properties resi 3-5 (multi-family units)	2	3	3	7
Non-residential properties resi 6-7 (commercial)	0	0	3	1
Dedicated irrigation accounts resi 8-10 (large landscape)	0	0	0	3
Marin Master Gardeners' Marin-Friendly Garden Walks				
Residential garden walks	30	84	72	100
Public Outreach and Education, Customer Service				
Public outreach events (number of people attending)	0	1022	17775	1602
Public education events (number of participants)	0	0	328	536
Customer calls/emails admin staff	356	1851	4150	9508
Outreach to new Marin Water customers (letters sent)	171	756	0	0
School Education				
School assemblies				
Number of activities	4	10	0	0
Number of students reached	4600	11500	0	0
Field trips				
Number of activities	1	6	15	0
Number of students reached	32	117	307	0
Classroom presentations				
Number of activities	1	4	17	0
Number of students reached	32	151	531	0
Other (e.g. booth events, school gardens)				
Number of activities	0	0	1	0
Number of students reached	0	0	480	0
Incentives				
Number of HECWs approved	12	45	103	190
Number of Rain Barrel/Cisterns approved	1	4	15	76
"Cash for Grass" Turf Replacements approved	6	29	116	402
Number of Laundry-to-Landscape Systems (kits) approved	0	0	7	27
Hot water recirculating system rebates	0	3	30	122
Pool Cover rebates	3	12	27	298
HET rebates	2	6	22	92
Number of Smart Controllers rebates approved	5	22	35	69
Number of Smart Home Water Monitor "Flume Direct Distribution" redeemed	64	212	271	1568
Number of Smart Controllers "Rachio Direct Distribution" approved	14	120	77	178
Advanced Metering Infrastructure (AMI)				
AMI leak letters sent to customers (>200 GPD)	133	682	1168	1050
ORDINANCES				
Water Waste Prevention				
Water Waste Reports Received	8	110	392	4451
Water Waste Notifications Sent	2	21	81	0
Landscape Plan Review				
Plans submitted	12	51	88	77
Plans exempt	6	12	5	1
Plans completed	7	20	20	17
Plans in workflow (pass & fail)	23	86	145	123
Tier 4 Exemption				
Inspections that resulted in a pass	0	2	1	1
Graywater Compliance Form				
Applications Received (as of Dec 2019)	11	66	123	57
Systems installed	6	14	23	13

8. Watershed Protection:

Foot & Bike Patrols

During November the Rangers completed 120 miles of foot and bike patrols. These patrol allow the Rangers to traverse the many miles of trails on the Watershed. At the same time, it allows Rangers to be more visible and accessible to the watershed visitors. Rangers are encouraged to get out of their trucks to patrol our lands for hazards and safety issues. It also allows for closer monitoring of visitor behavior so we can educate and enforce many of the Watershed Regulations as well as Fishing Rules. The patrols are dependent upon staffing and as other assignments allow. Marin Water is one of the few land management agencies to encourage and support regular foot and bike patrols.

Fish Planting

With the first CA Dept. of Fish and Wildlife fish plants occurring for the fall season at Bon Tempe fishing activity has increased on the Watershed. Rangers increased patrols of the Bon Tempe area and made 96 fishing license checks during the month and warned 14 people for fishing related violations.

Watershed Law Enforcement & Patrol

In separate incidents, 2 arrests were made during the month of November. On November 10th the Watershed Deputy arrested a person with an outstanding warrant near Sky Oaks. Then on November 12th, prior to a Ranger's arrival, Sheriff's Deputies arrested a male subject at Nicasio Reservoir on charges of Domestic Violence and Resisting Arrest. The suspect and his girlfriend were illegally camping on MMWD lands where he committed domestic battery on her and then attempted to flee from deputies.

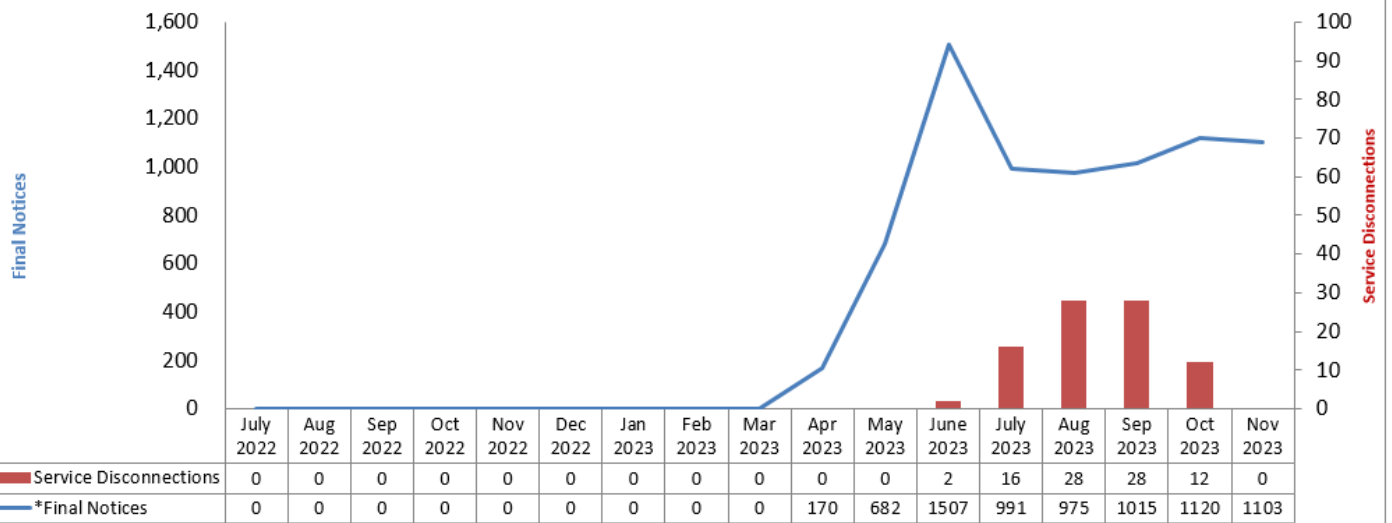
Incidents and Events	649
Warnings	151
Visitor Assists	119
Fish and Game Checks	96
Dam Check	93
Citations	61
Assist Watershed Maintenance	54
Misc Law Enforcement Calls	31
Vandalism	10
Preventive Search and Rescue	5
Citizen Complaint: illegal Bike Use	5
Suspicious Circumstance	4
Medical Aid	2
Citizen Complaint: Off Leash Dogs	2
Assist Other MMWD Work Group	2
Illegal Trail Work	2
Arrest	2
Lost Property	2
Resist Peace Officer	2
Illegal Fire	1
Assist Outside Agency	1
Citizen Complaint: Fishing Violation	1
Unsanctioned Event	1
Parking Lot Full	1
Illegal Camping	1

Citations	61
Non-Payment of Parking Fees	51
Obstruct Traffic/Parking within 6' of Center	4
Parking After Sunset	2
Blocking Fire Road Gate	1
Dog off Leash	1
Bike on Trail	1
Entering Closed Area	1




9. Shutoff Notices and Disconnections:

Final Notices and Service Disconnections



FISCAL IMPACT: None.

ATTACHMENT(S): None.

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