

- With the help of a 40 ton crane staff removed one of the North Marin Line pumps so that a vendor could repair leaking bolts. The North Marin Line Booster pumps newly treated water from the San Geronimo Treatment Plant over White's hill into the distribution system. One of the primary pumps (pump #2 of 8 pumps within the building) failed. A new pump was purchased and installed in the Spring of 2023 but began to leak shortly after installation. With the help of staff, the vendor repaired the pump and reimbursed the District for the cost of the crane.
- Staff performed load tests of the San Geronimo and Ignacio Treatment Plant's emergency generators. When events occur which cause a disruption in the PG&E power supply, the District has generators available to keep water moving. These generator tests were completed "under load" while pumping water. These types of tests are necessary to be sure that the generator works during an emergency. The transfer from PG&E to generator and back performed as expected and without issues
- The District working in collaboration with One Tam submitted a grant application to the Wildlife Conservation Board to support forest resiliency work. The total grant amount is \$4,260,000 of which the District would receive \$2.8 million to support BFFIP implementation.
- District staff secured the 2023/2024 burn permit from Bay Area Air Quality Management District and began pile burning operations on the watershed.
- The District continued implementation of Year 5 of the Biodiversity Fire, & Fuels Integrated Plan with continued Forest Fuel Reduction and Doug Fir Thinning work in South and East Potrero Meadow Project Areas. Continued work on the 92 acre Upper Cataract Doug Fir Thinning project and the last remaining 14 acres of New Fuelbreak Construction in the Taylor Trail area were completed in December. Additional projects included routine Dam Maintenance and broom work across multiple locations.
- The District was awarded \$599,689 through CDFW's Fisheries Restoration Grant Program to complete final designs and permitting for Phase 2 of the Lagunitas Creek Habitat Enhancement Project.

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	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	Funded	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	\$86,800	0
One Tam Forest Health Strategy	CA WCB	Forestry Restoration	11/21/23	BFFIP Implementation	BFFIP Implementation for 2-3 years	Open	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	Open	TBD	\$150,628.00	50%
UPCOMING OPPORTUNITIES								\$0	
Hazard Mitigation Program	FEMA	Natural Hazards	Summer 2023	Treatment Plant Confiners	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	3,923	12,039	3,720	11,416
Monthly production, December	401	1,230	435	1,336
Daily average, December	12.93	39.69	14.04	43.08
Recycled				
Total production this FY	151.79	465.82	136.85	419.98
Monthly production, December	9.03	27.72	7.36	22.59
Daily average, December	0.29	0.89	0.24	0.73
Raw Water				
Total production this FY	38.84	119.20	42.81	131.38
Monthly production, December	0.00	0.00	0.00	0.00
Daily average, December	0.00	0.00	0.00	0.00
Imported Water				
Total imported this FY	1,672	5,130	781	2,397
Monthly imported, December	93	284	222	681
Reservoir Storage				
Total storage	22,618	69,413	21,300	65,367
Storage change during December	1,522	4,671	3,785	11,617
Stream Releases				
Total releases this FY	1,829	5,612	1,582	4,856
Monthly releases, December	463	1,421	398	1,220

2. Precipitation:

<u>FY 2023/24 (in.)</u>	<u>FY 2022/23 (in.)</u>	
Alpine	10.27	19.86
Bon Tempe	7.78	16.81
Kent	12.37	16.80
Lagunitas *	12.25	23.02
Nicasio	7.63	14.77
Phoenix	12.63	19.85
Soulajule	6.34	14.70

* Average to date = 19.30 inches

3. Water Quality:

<u>Laboratory:</u>	<u>FY 2023/24</u>	<u>FY 2022/23</u>
Water Quality Complaints:		
Month of Record	3	10
Fiscal Year to Date	44	93
Water Quality Information Phone Calls		
Month of Record	7	13
Fiscal Year to Date	16	52

The WQ lab ensured that the water supplied met or surpassed water quality regulations by collecting and analyzing 1,439 analyses on treatment plants and distribution system samples.

Mild steel corrosion rates averaged 1.68 (0.35 – 2.84) 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: 1 water storage tank sanitary survey was performed during the month.

Disinfection Program: No new pipelines were disinfected during the month of December. Performed chlorination on 19 water storage tanks to ensure compliance with bacteriological water quality regulations.

Tank Water Quality Monitoring Program: Performed 39 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 1 sanitary tank survey, treated 19 tanks for low chlorine, and checked an additional 39 tanks for low chlorine residual in December 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	0.03	≤ 0.10	0.03	≤ 0.10
Chlorine residual (mg/L)	2.74	2.75 *	2.71	2.75 *	2.78	2.75 *
Color (units)	0.5	≤ 15	0.5	≤ 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 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 and fifth benches from the top of the wall, and has installed approximately 118 soil nails and more than 20% of the concrete wall. The Contractor continues to haul soil stockpiles between the future Pine Mountain Tank site on Concrete Pipe Road and the Bullfrog Quarry soil

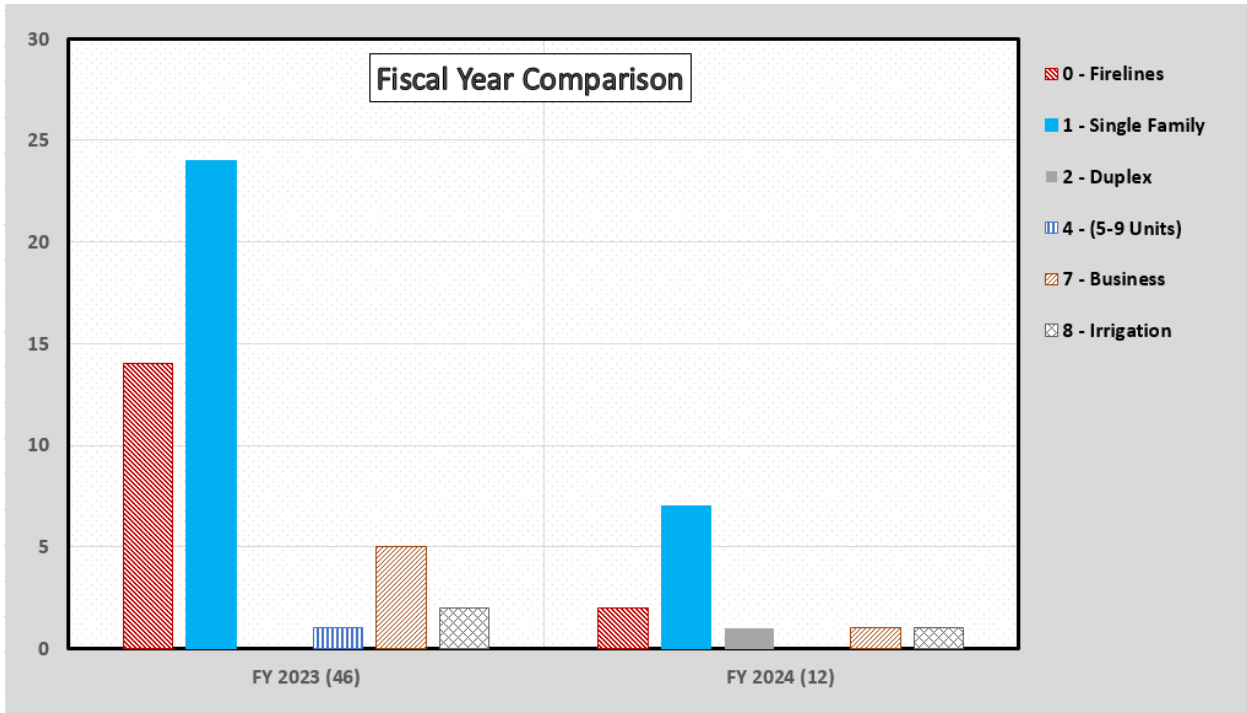
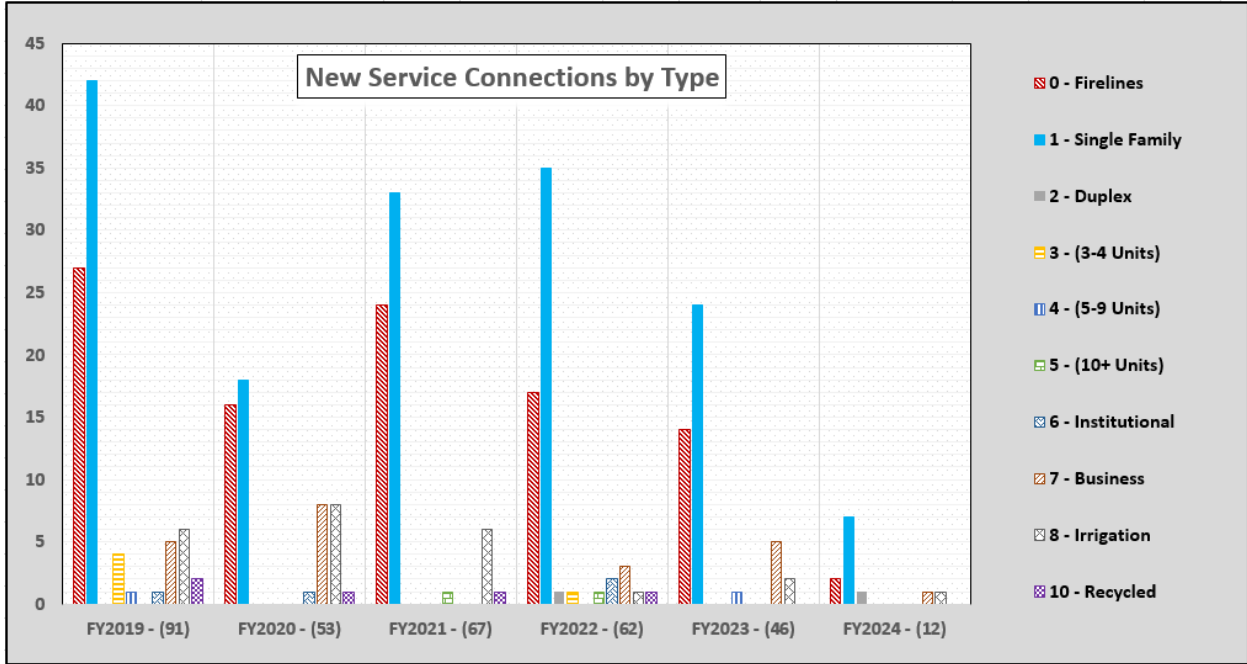
stockpile site. All pedestrian and vehicular access along Sky Oaks and Bon Tempe Roads will be controlled during hauling, with vehicle hold times as long as 5 minutes at a time. Concrete Pipe Road between Taylor Trail and Fairfax-Bolinas Road remains closed Monday through Friday 8:00 AM to 5:00 PM. District staff anticipate that approximately one third of the project will be complete by January 31. The project will be winterized and temporarily suspended by January 31, and will restart August 1, 2024. After the project is winterized and temporarily suspended, full access will be returned to normal on Concrete Pipe Road and Taylor Trail through the duration of the suspension period.

- 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 has completed the cleaning of all of the spillways and all temporary fall protection anchors have been installed. All GPR work has also been completed and the District is preparing recommendations for proposed coring locations for Peters and Seeger spillways, which will be submitted to the California Division of Safety of Dams. CCTV investigation of weep holes and subdrains has been completed at Peters spillway, and continues at Soulajule and Seeger spillways. Work that remains includes concrete coring, some video inspection of subdrains, and miscellaneous repair work.

6. Other:

<u>Pipeline Installation</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Pipe installed during December (feet)	0	267
Total pipe installed this fiscal year (feet)	1,384	4,983
Total miles of pipeline within the District	908*	908*
<i>* Reflects adjustment for abandoned pipelines</i>		
<u>Pipe Locates (1,098 Responses)</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Month of December (feet)	25,430	11,698
Total this fiscal year (feet)	182,418	142,901
<u>Main Line Leaks Repaired:</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Month of December	6	20
Total this fiscal year	69	104
<u>Services:</u>	<u>FY2023/24</u>	<u>FY2022/23</u>
Service upgrades during December	11	14

Total service upgrades this FY	94	89
Service connections installed during December	0	0
Total active services as of January 1, 2024	61,915	61,876



7. Demand Management:

	Dec-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)	31	182	291	731
Residential properties resi 3-5 (multi-family units)	1	4	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	26	110	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	287	2138	4150	9508
Outreach to new Marin Water customers (letters sent)	213	969	0	0
School Education				
School assemblies				
Number of activities	0	10	0	0
Number of students reached	0	11500	0	0
Field trips				
Number of activities	0	6	15	0
Number of students reached	0	117	307	0
Classroom presentations				
Number of activities	0	4	17	0
Number of students reached	0	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	9	54	103	190
Number of Rain Barrel/Cisterns approved	1	5	15	76
"Cash for Grass" Turf Replacements approved	8	37	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	4	16	27	298
HET rebates	0	6	22	92
Number of Smart Controllers rebates approved	2	24	35	69
Number of Smart Home Water Monitor "Flume Direct Distribution" redeemed	11	223	271	1568
Number of Smart Controllers "Rachio Direct Distribution" approved	0	120	77	178
Advanced Metering Infrastructure (AMI)				
AMI leak letters sent to customers (>200 GPD)	88	770	1168	1050
ORDINANCES				
Water Waste Prevention				
Water Waste Reports Received	0	110	392	4451
Water Waste Notifications Sent	0	21	81	0
Landscape Plan Review				
Plans submitted	5	56	88	77
Plans exempt	0	12	5	1
Plans completed	0	20	20	17
Plans in workflow (pass & fail)	11	97	145	123
Tier 4 Exemption				
Inspections that resulted in a pass	0	2	1	1
Graywater Compliance Form				
Applications Received (as of Dec 2019)	3	69	123	57
Systems installed	1	15	23	13

8. Watershed Protection:

Ranger Personnel Update

In 2024 the District launched a new Ranger Trainee program with the onboarding of two new Ranger Trainees, Salvador Vasquez and Dianne Dollente. In early December our newest Park Ranger, completed his 12 weeks of Field Training Program and is now working as a solo patrol Ranger. In late December Ranger Brett Pedisich left the Ranger unit, but not Marin Water, when he became the new Safety Manager for the District.

Year in Review

During 2023 the Rangers handled 7,350 incidents, events and calls for service, this was an increase of 2,204 over 2022. These numbers include 1,942 warnings, 730 citations and 1,895 visitor assists, all were increases when compared to 2022. Also in 2023 the Rangers completed 916 miles of foot and bike patrols, which was an increase over 2022 as well. These increases reflect the increased staffing levels for the Rangers that has allowed for more Rangers to be available in the field.

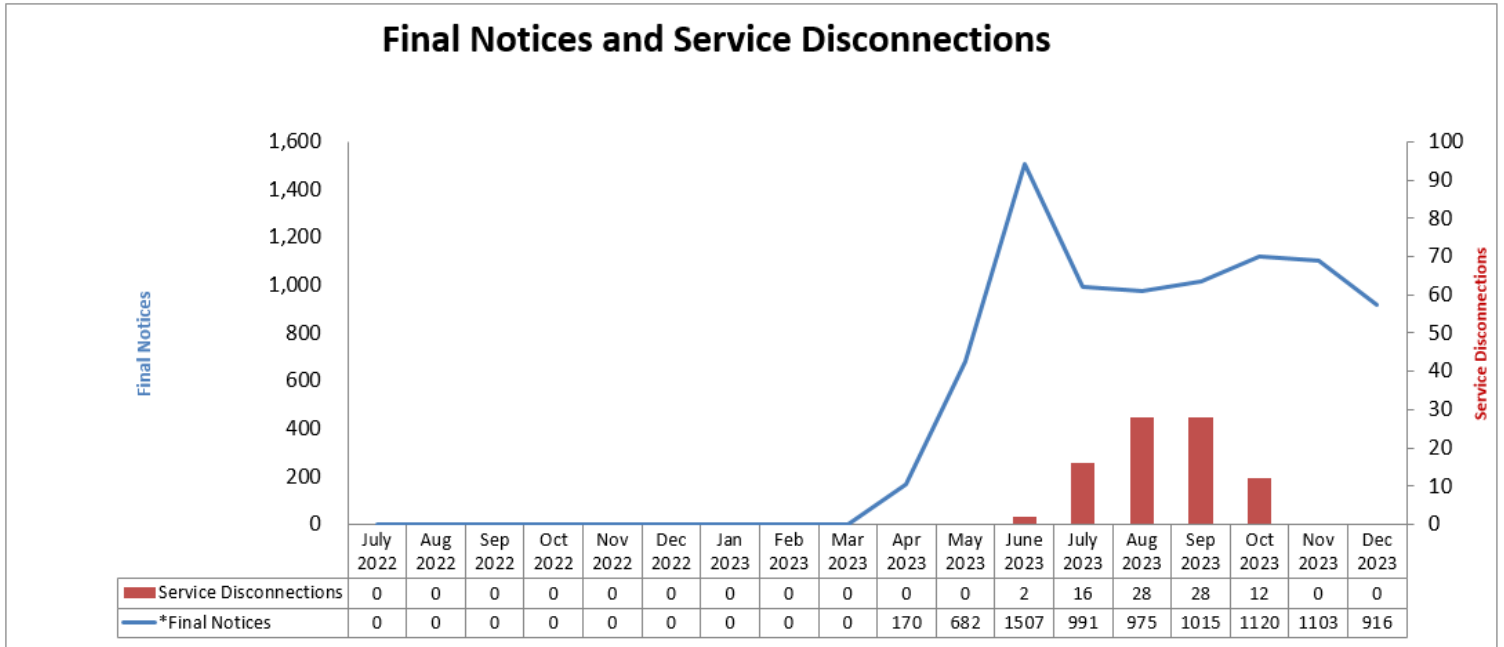
Rangers Request Mobile Crisis Response Team

During December the Rangers responded numerous times to reports of a subject acting strangely. The subject is known to the Rangers, and known to be unhoused. He suffers from mental health and substance abuse issues. Rangers called for assistance from the Marin County Mobile Crisis Response Team. Mobile Crisis is county-wide resource with licensed behavioral health clinicians that assist law enforcement with subjects who are in crisis. Mobile Crisis evaluated and then transported the individual off the watershed for additional support. They also assigned a case worker to him.

Incidents and Events	609
Fish and Game Checks	130
Warnings	130
Visitor Assists	123
Dam Check	101
Assist Watershed Maintenance	40
Citations	37
Misc Law Enforcement Calls	9
Suspicious Circumstance	9
Vandalism	7
Preventive Search and Rescue	4
Citizen Complaint: illegal Bike Use	3
Assist Outside Agency	3
Assist outside Law Enforcement Agency	3
Search and Rescue	3
Ranger Callout	2
Humane/Animal Related	2
Medical Aid	1
Citizen Complaint: Off Leash Dogs	1
Assist Fire/EMS	1
Traffic Court	1
Hit and Run	1
Citizen Complaint: Bike Speed	1
Citizen Complaint: Illegal Camping	1


Citations	37
Non-Payment of Parking Fees	23
Parking After Sunset	5
Bike on Trail	3
Dog off Leash	2
Obstruct Traffic/Parking within 6' of Center	1
No Parking	1
Fishing without a License	1
Over limit fishing	1

9. Shutoff Notices and 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