



# **Budget Study Session: FY 2023-24 and 2024-25**

May 2, 2023

Board of Director's Meeting



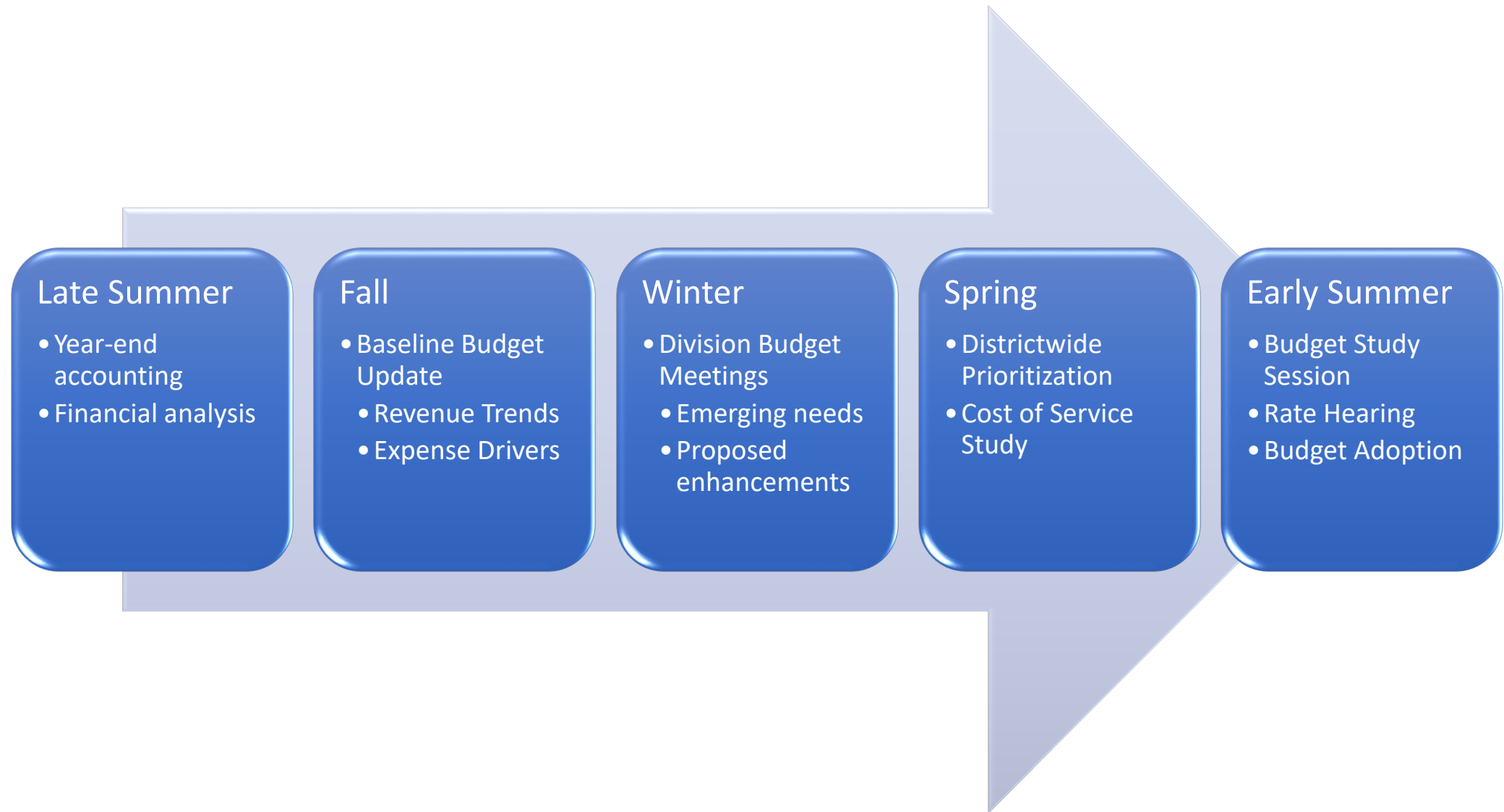
# Overview

- Budget Overview
- District Budget Process
- Preliminary Budget Summaries
- Cost Drivers
- Budget Enhancements
- Division Operating Budget Summaries
- Capital Improvement Program
- Next Steps

# Marin Water Budget Overview

- Total budget of \$135 million in FY 2023-24 (Operating and Capital funds)
  - 22% increase from FY 2022-23
- Operating Fund = \$104.8 million (13% increase)
  - Day to day operations and maintenance
  - Debt Service
- Capital Fund = \$25.6M (40% increase)
  - Capital improvement projects
  - Water Supply Enhancement
  - Vehicle and Equipment replacement
- Two year budget process
  - Mid-cycle review

# Budget Process Map





# Districtwide Budget Goals

Strengthen water supply reliability in the face of extreme droughts

Build upon water and wildfire resiliency efforts on the Mt. Tam Watershed

Keep pace with inflation and invest in aging infrastructure

Replenish reserves to prepare for future uncertainties

# Marin Water Budget Overview

## District Expenditure Budget by Fund

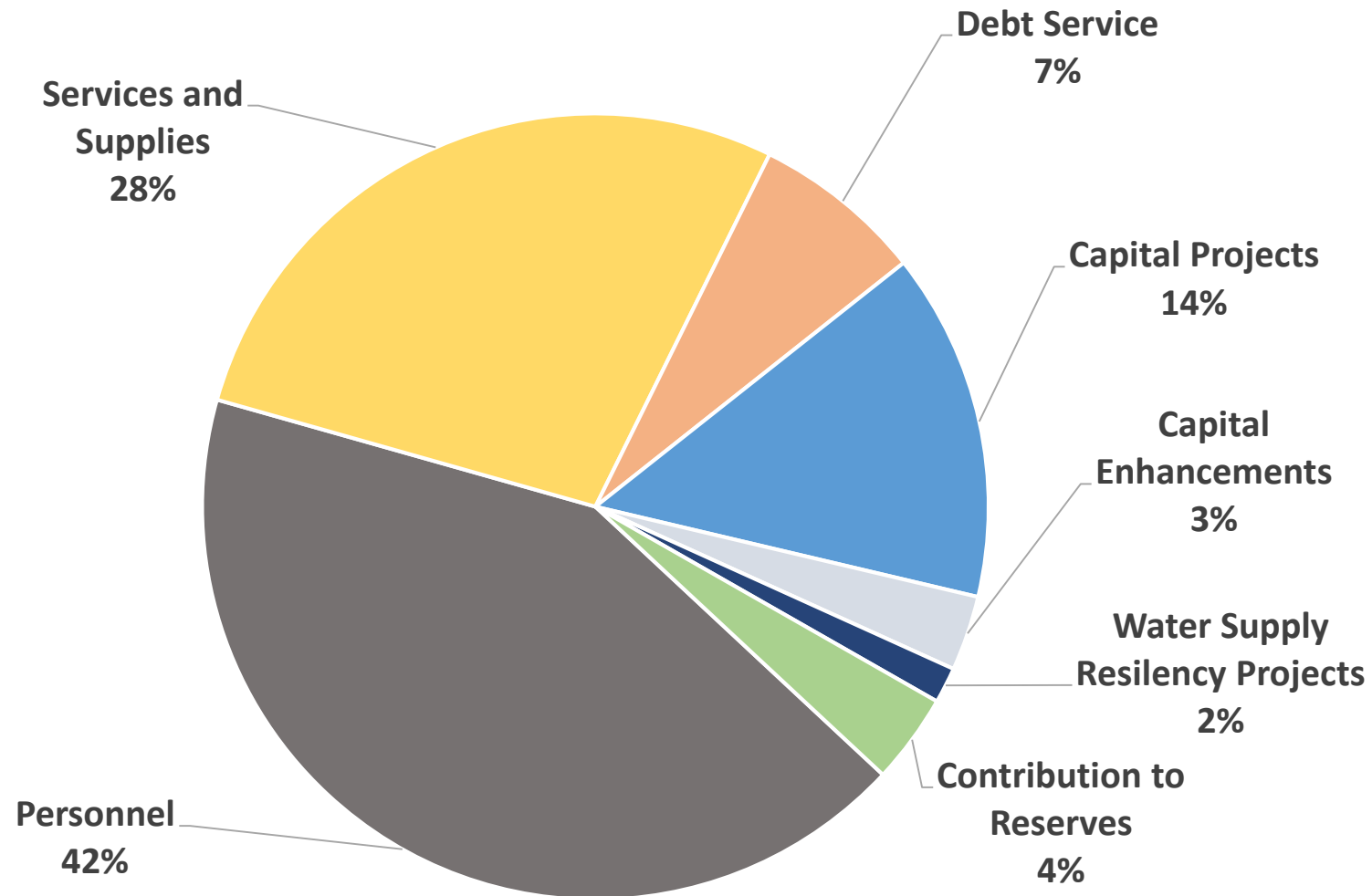
	<b>FY 22 Budget</b>	<b>FY 23 Budget</b>	<b>FY 24 Budget</b>	<b>% Change</b>	<b>FY 25 Budget</b>	<b>% Change</b>
Operating Fund	\$ 88,748,961	\$ 92,181,473	\$ 104,139,464	13%	\$ 109,347,389	5%
Capital Fund*	\$ 18,195,975	\$ 18,885,807	\$ 26,347,000	40%	\$ 41,174,510	56%
Contribution to Reserves	\$ -	\$ -	\$ 5,000,000		\$ 5,000,000	
<b>Total</b>	<b>\$ 106,944,936</b>	<b>\$ 111,067,280</b>	<b>\$ 135,486,464</b>	<b>22%</b>	<b>\$ 155,521,899</b>	<b>15%</b>

## District Expenditure Budget by Category

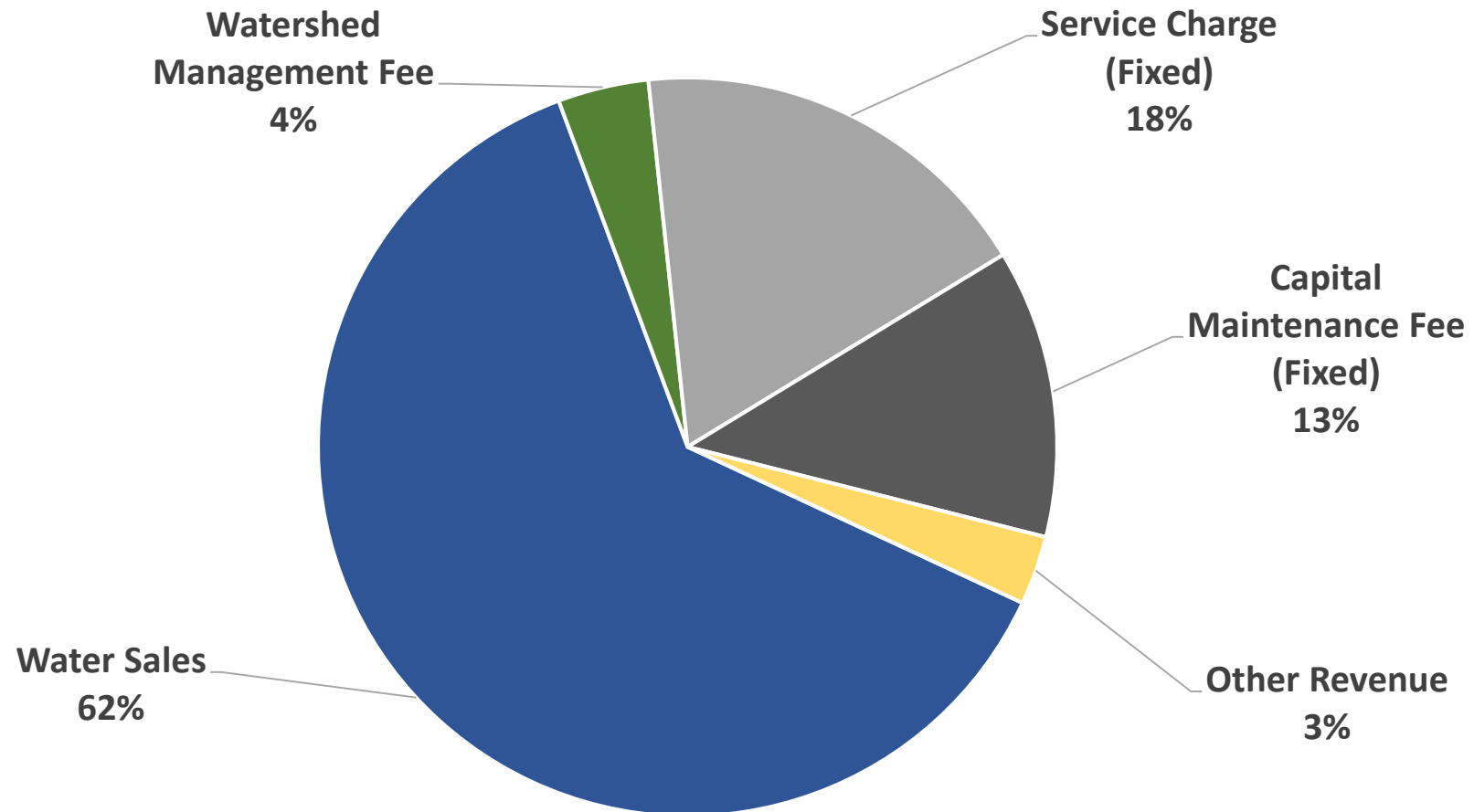
	<b>FY 22 Budget</b>	<b>FY 23 Budget</b>	<b>FY 24 Budget</b>	<b>% Change</b>	<b>FY 25 Budget</b>	<b>% Change</b>
Personnel	\$ 53,841,604	\$ 56,248,399	\$ 57,462,068	2%	\$ 59,528,020	4%
Services and Supplies	\$ 24,723,354	\$ 26,226,567	\$ 37,150,103	42%	\$ 40,416,802	9%
Debt Service	\$ 10,184,004	\$ 9,706,507	\$ 9,527,293	-2%	\$ 9,402,567	-1%
Capital Projects	\$ 18,195,975	\$ 18,885,807	\$ 19,422,000	3%	\$ 20,975,760	8%
Capital Enhancements	\$ -	\$ -	\$ 4,175,000		\$ 10,998,750	163%
Water Supply Projects	\$ -	\$ -	\$ 2,750,000		\$ 9,200,000	235%
Contribution to Reserves	\$ -	\$ -	\$ 5,000,000		\$ 5,000,000	0%
<b>Total</b>	<b>\$ 106,944,937</b>	<b>\$ 111,067,280</b>	<b>\$ 135,486,464</b>	<b>22%</b>	<b>\$ 155,521,899</b>	<b>15%</b>

*\*Excluding use of fund balance, grant funds and Fire Flow fund*

# Marin Water FY 24 Expenditure Budget by Category (\$135M)



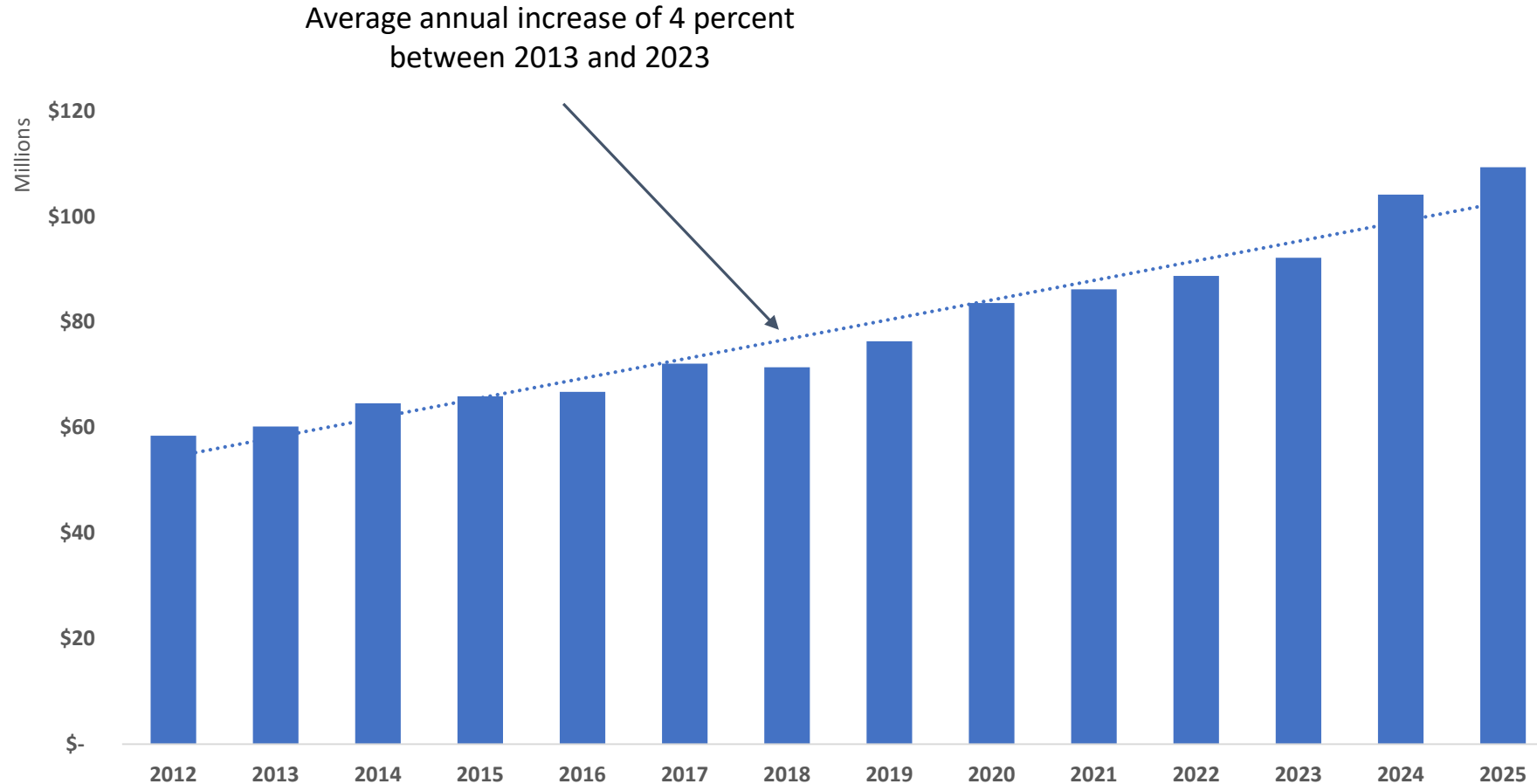
# Marin Water FY 24 Revenue Budget by Source



# Primary Cost Drivers and Budget Enhancements

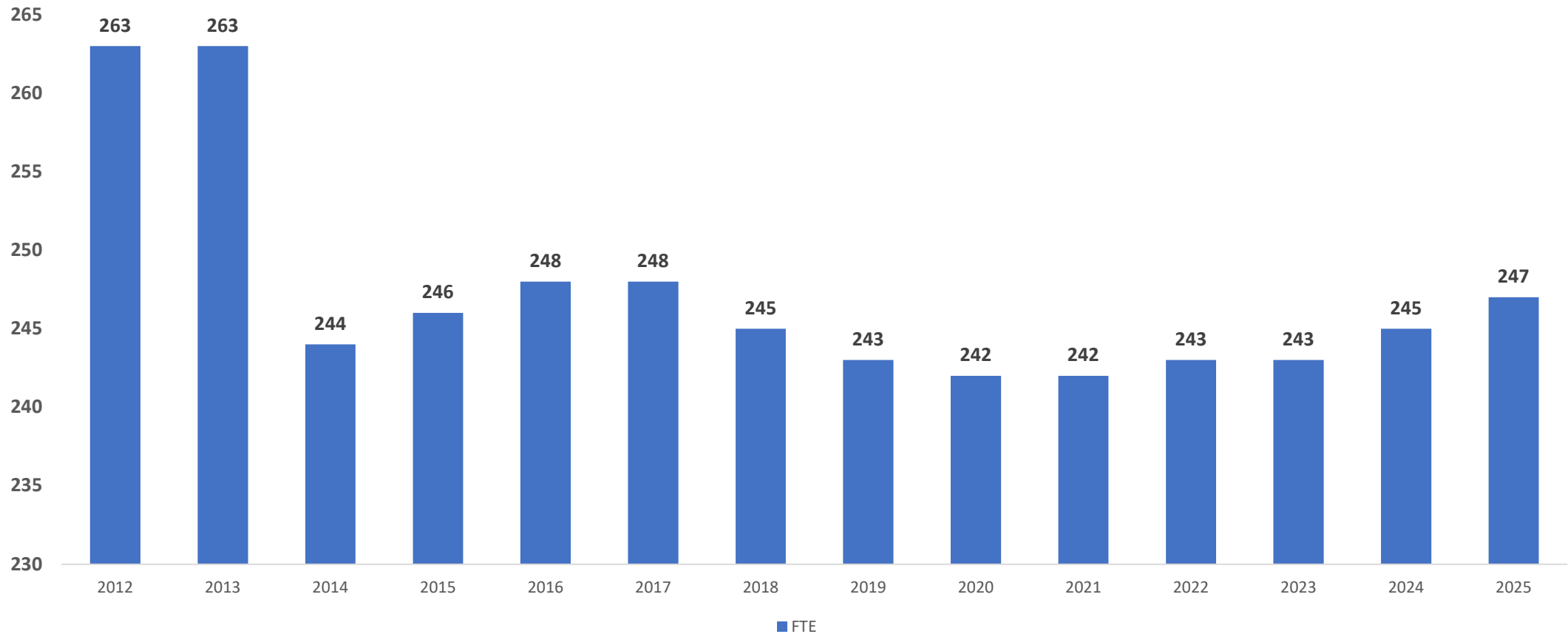
Operating and Capital Funds (compared to FY 2022-23 Budget)		FY 2023-24 Impact
Water Supply Resiliency: Short term projects, Roadmap, Reserve (\$2.5m)		\$6,600,000
Capital Projects: Deferred Maintenance, Critical Systems		\$3,675,000
Service Enhancements: Watershed (BFFIP) funding and Ranger Trainee, Districtwide Training		\$810,000
Purchased Water and Water Treatment		\$2,563,000
Reserve Replenishment (Unrestricted)		\$2,500,000
Paving Contracts		\$2,100,000
Insurance		\$835,000
Personnel Costs (Baseline)		\$892,000
Total FY 24 Increase:		\$19,975,000

# Historical Budget Trends: Operating Budget Expenditures



- Operating Budget increases 13% in FY 2024 and 5% in FY 2025
  - Incorporates two years of cost increases in core functional areas

# Historical Budget Trends: Districtwide Staffing Levels



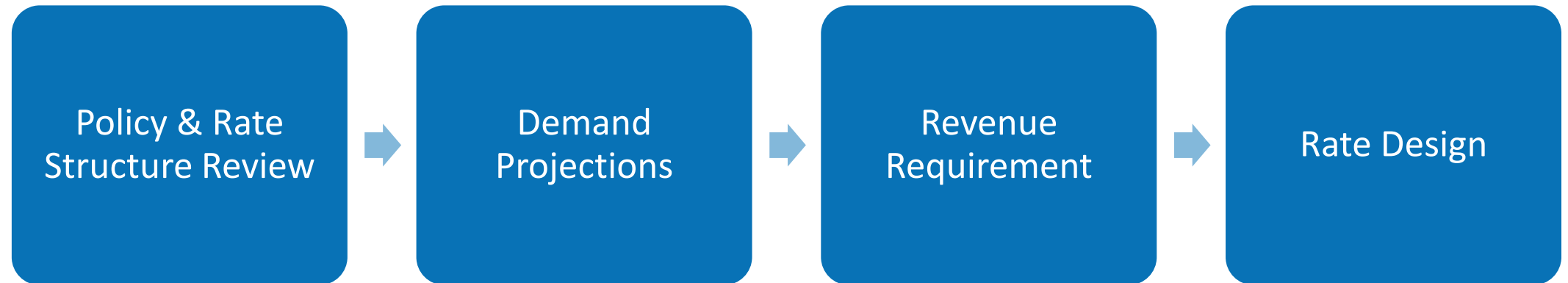
- Largely flat staffing levels since 2014
  - FY 2024 = Addition of 2.0 FTE (Ranger Trainee and Organizational Training Specialist )
  - FY 2025 = Addition of 2.0 FTE (Valve Exercising Crew)

# Marin Water: Rate Study

- Beginning in 2022, District staff worked with an independent water rate consultant to perform a cost of service analysis
  - Financial Plan = Revenue Requirement
    - Baseline Budget
      - Inflationary cost drivers
      - Non-discretionary expenditures
    - Districtwide funding enhancements
  - Rate Design
    - Reduced fixed fees
    - Increased volumetric/variable rates
    - Lower residential tier breaks
    - Drought rates



# Cost of Service Analysis: Step by Step Approach



# Marin Water Revenue Requirement

- Baseline Operating Deficit
  - Reduced demand
  - Inflationary cost drivers
- Deferred Maintenance
  - Aging system requires more than double the current capital budget to maintain pace with replacement and improvement needs
- Water Supply Roadmap
  - Short term, 'no regrets' projects
  - Long term projects with additional studies
  - Water Supply Project Reserve
- Service Enhancements
  - Watershed (BFFIP), Ranger Trainee, Training Program position, Valve Exercising Crew
- Reserve replenishment and technology

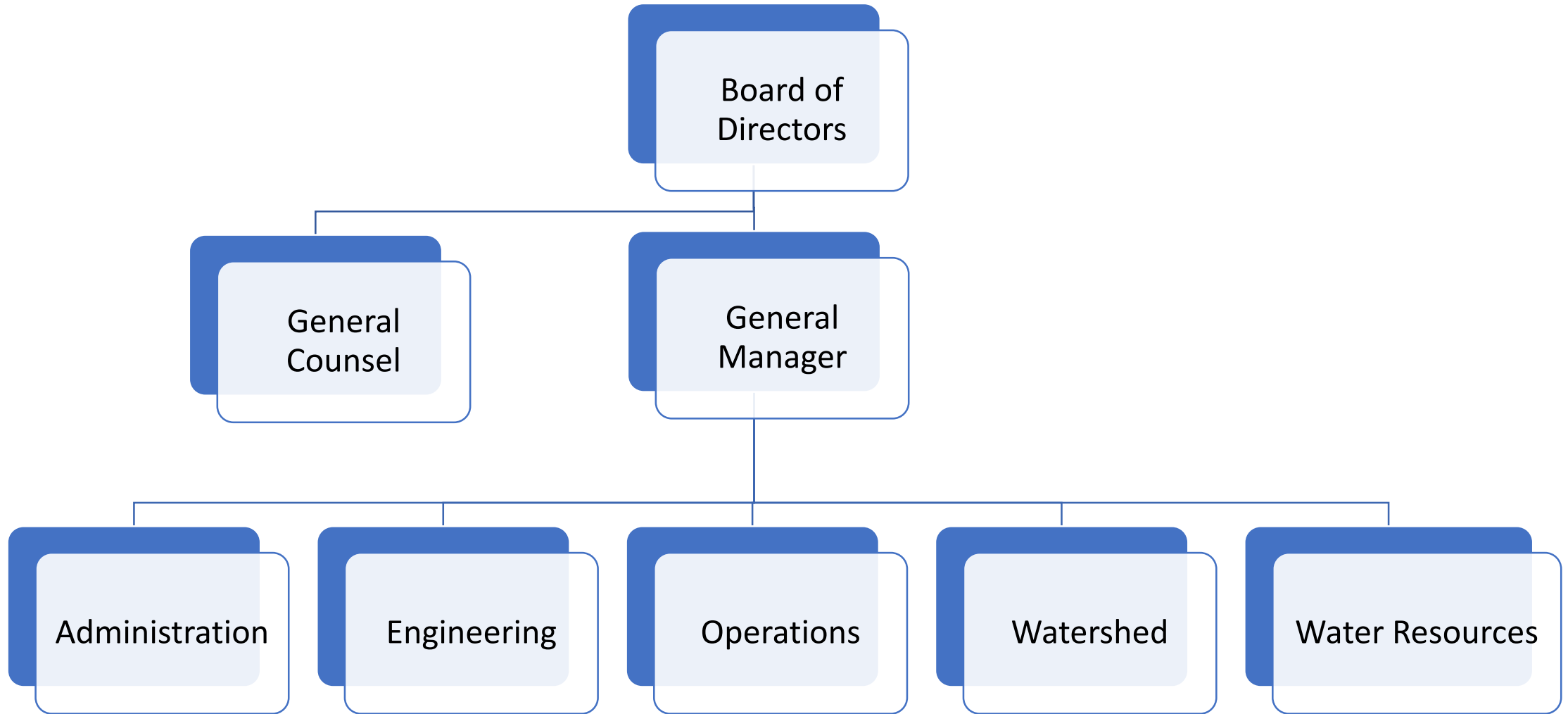
# Marin Water: Revenue Summary

## District Revenue Budget

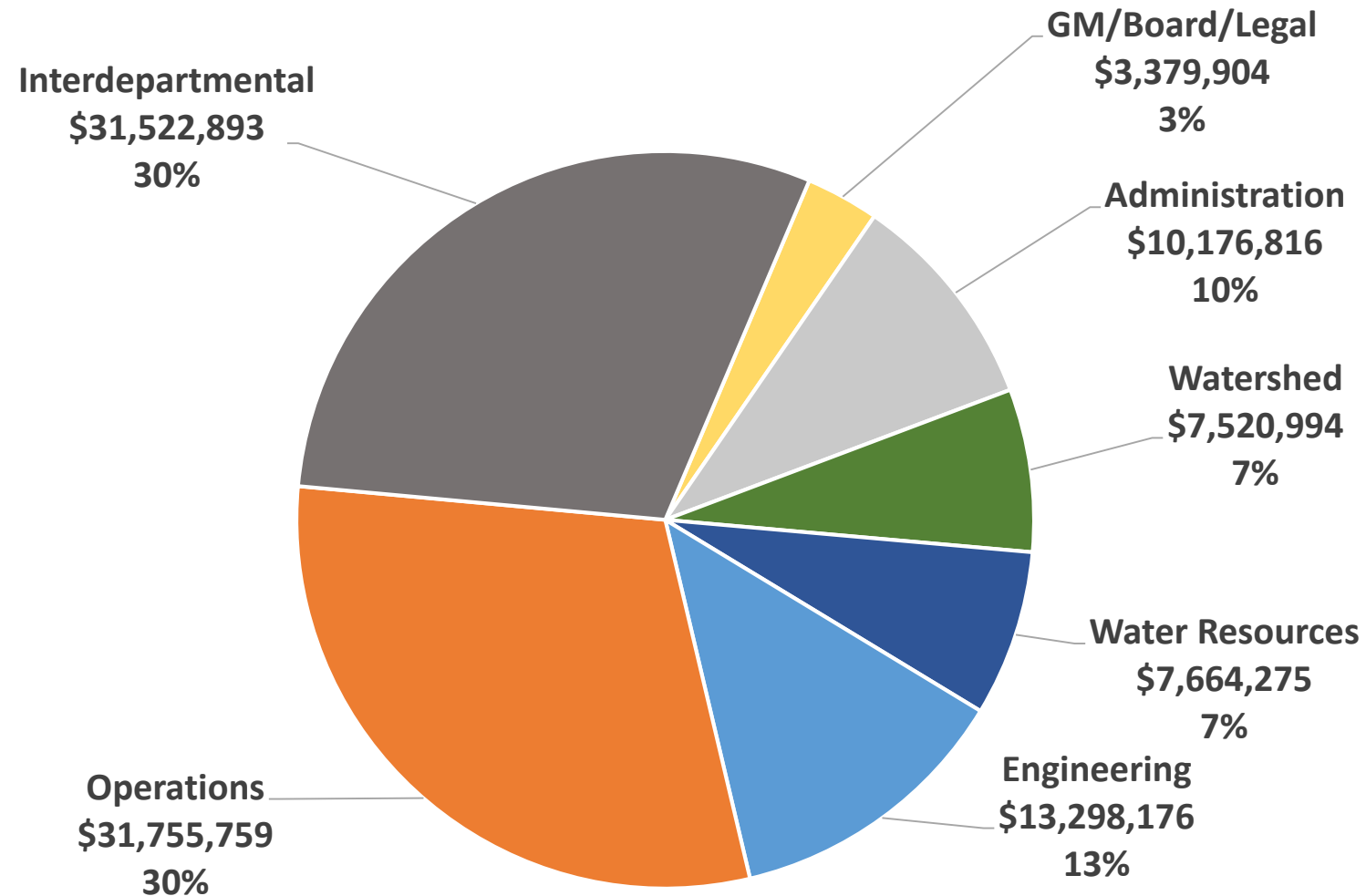
	<b>FY 22 Budget</b>	<b>FY 23 Budget</b>	<b>FY 24 Budget</b>	<b>% Change</b>	<b>FY 25 Budget</b>	<b>% Change</b>
Water Sales	\$58,483,079	\$60,881,258	\$84,509,603	39%	\$102,302,966	21%
Service Charge	\$22,481,250	\$23,381,979	\$24,370,494	4%	\$25,589,019	5%
Watershed Management Fee	\$5,005,772	\$5,207,474	\$5,386,376	3%	\$5,655,695	5%
Capital Maintenance Fee	\$17,370,793	\$18,065,625	\$17,118,698	-5%	\$17,974,633	5%
Other Revenue	\$3,603,644	\$3,548,954	\$4,085,655	15%	\$3,924,527	-4%
<b>Total</b>	<b>\$ 106,944,538</b>	<b>\$ 111,085,290</b>	<b>\$ 135,470,826</b>	<b>22%</b>	<b>\$ 155,446,840</b>	<b>15%</b>
<i>Fixed fees as % of water rates</i>	<i>43%</i>	<i>43%</i>	<i>32%</i>		<i>29%</i>	

- Overall increase of 22 percent in FY 2024 and 15 percent in FY 2025
  - Reduced fixed fee revenues in FY 2024
    - Fixed fees are a declining percentage of District revenue
  - Majority of revenue increase is attributable to volumetric (variable) water sales revenue

# Marin Water Org Chart



# Marin Water Operating Budget by Function



# Functional Budget Summaries

- Administrative Support
- Operations
- Watershed
- Water Resources
- Engineering
- Capital Improvement Program (CIP)

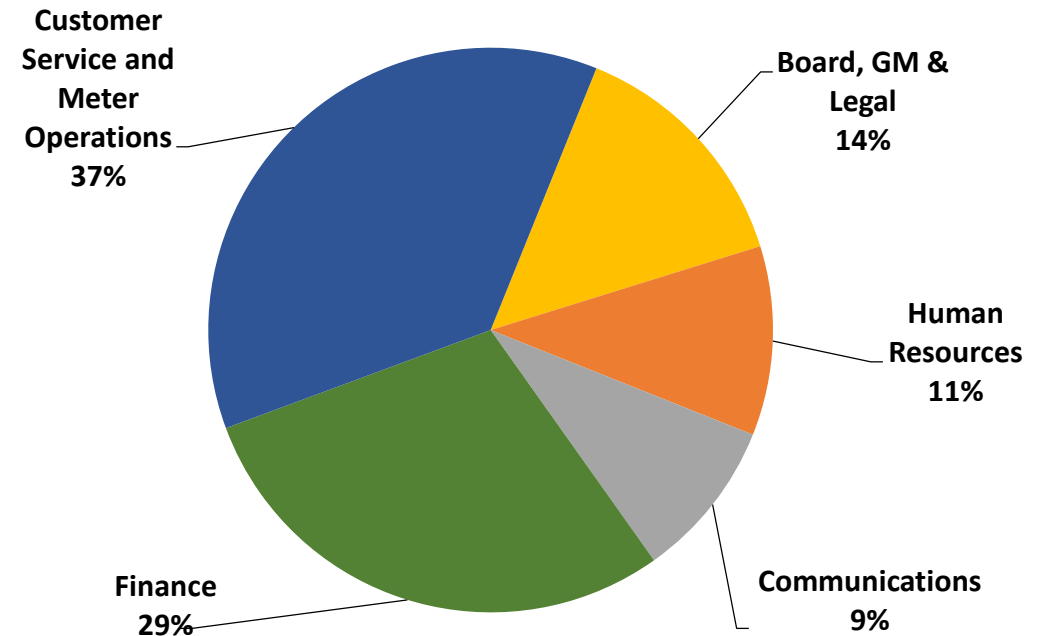


# **Administrative Support Divisions FY 2023-25 Budget Overview**



# Overview: Administrative Support Functions

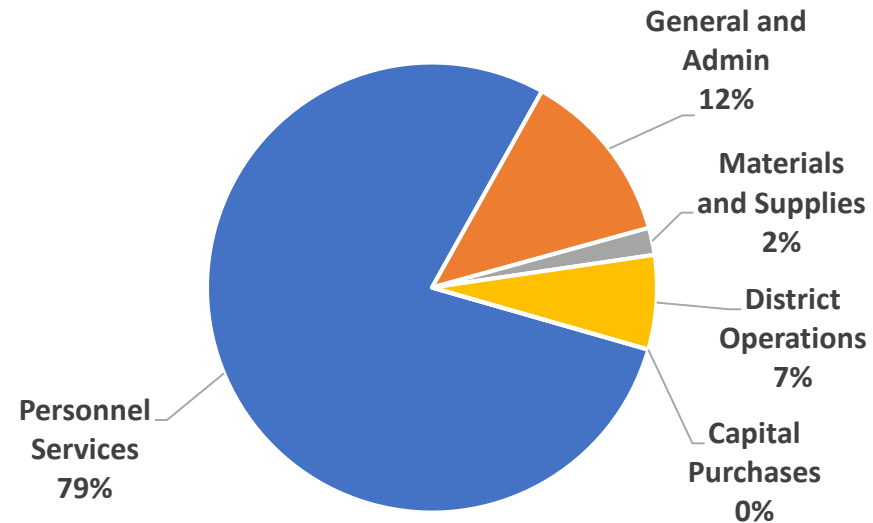
- Baseline Operating Budget = \$13.5 million, 51 FTE
  - 5 Primary Functional Areas:
    - Board, GM and Legal
    - Human Resources
    - Communications
    - Finance
    - Customer Services and Meter Operations





# Preliminary Operating Budget by Expenditure Category

	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	% Change	FY 2025 Budget	% Change
Personnel Services	\$10,102,852	\$10,537,043	\$10,666,199	1%	\$10,969,072	3%
General and Admin	\$1,570,863	\$1,633,795	\$1,707,990	5%	\$1,739,410	2%
Materials and Supplies	\$250,200	\$249,700	\$265,000	6%	\$278,000	5%
District Operations	\$510,550	\$546,200	\$917,532	68%	\$956,432	4%
Capital Purchases	\$8,500	\$8,500	\$0	-100%	\$0	0%
<b>Total</b>	<b>\$12,442,965</b>	<b>\$12,975,238</b>	<b>\$13,556,721</b>	<b>4%</b>	<b>\$13,942,914</b>	<b>3%</b>



# Proposed Changes and Cost Drivers

- Baseline Cost Drivers
  - Outreach and Marketing for Water Efficiency Programs
  - Employee Engagement & Development
  - Software Support
- Proposed Changes
  - Organizational Development and Training position (HR)



# Workplan Priorities & Milestones

- District-wide training program
- Transition to new recruitment platform
- Agenda Management System
- Connection Fee Study
- Financial Policy Updates



# Operations Division FY 2023-25 Budget Overview





# Operations Overview

- Core Functions
- Organization
- Facilities/Assets Managed
- Operation and Maintenance
- Operations Division Budget



# Operations Core Functions

- Operation and Maintenance of the Water System
- Water Treatment
- Support Services
  - Auto Shop
  - Warehouse





# Operations Staffing

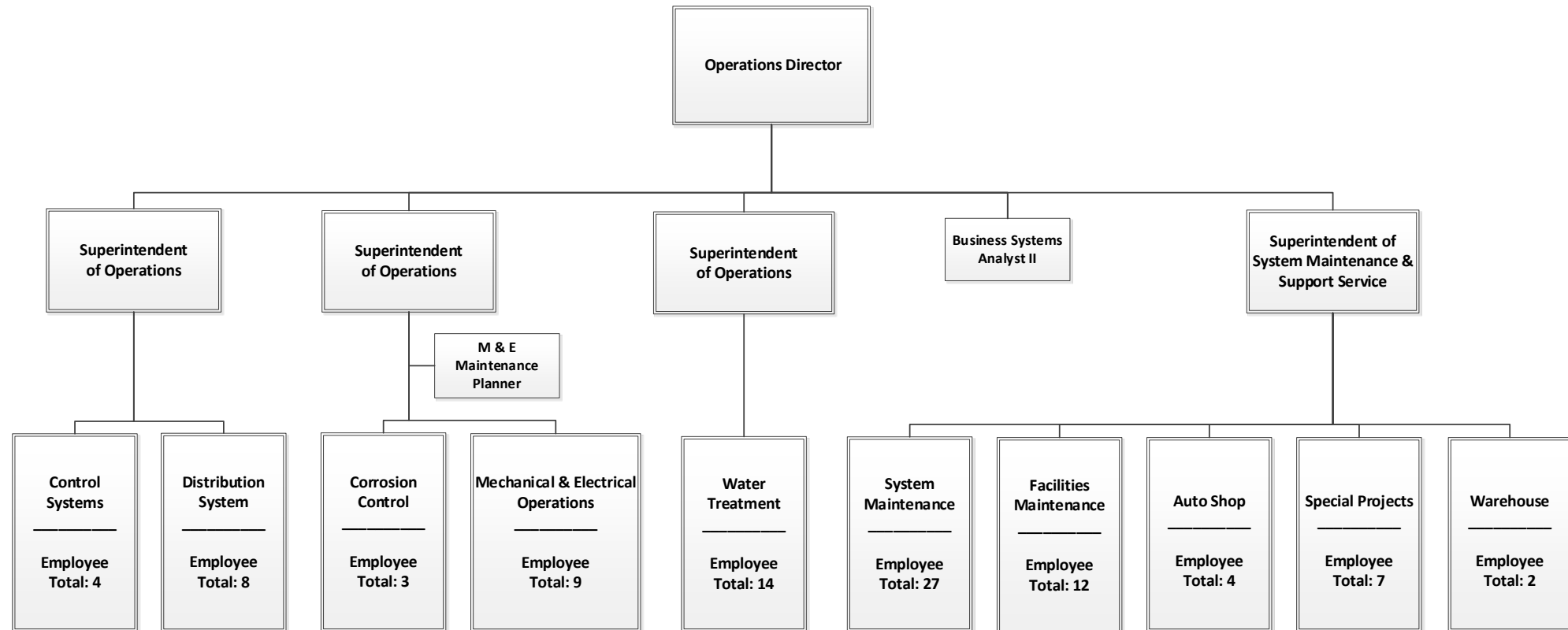
- 97 staff
- 10 different departments
- 40 job classifications
  - Wide range of skillsets required to operate and maintain the water system



# Operations Org Chart



MMWD Organizational Chart  
Operations  
April 25, 2023





# Facilities/Assets Managed

- Over 900 miles of pipe
- 126 storage tanks
- 97 pump stations
- 196 facility sites
- Water treatment plants
- Fleet of vehicles/equipment
- Warehouse
- Pelican Way Yard



# Provide 24/7 Water Emergency Response



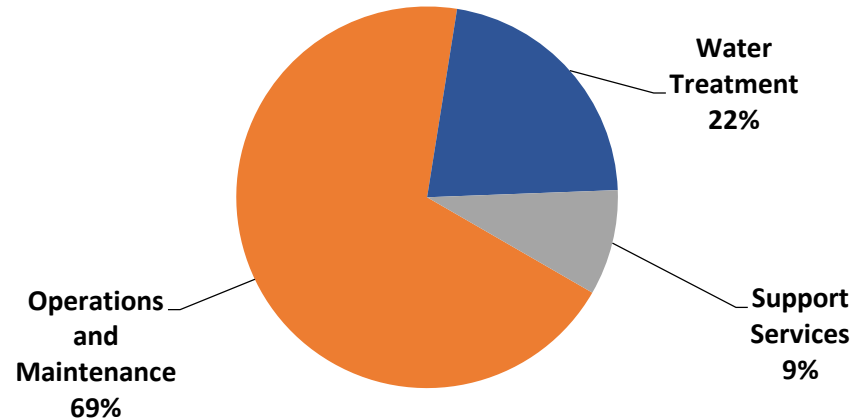
# Overview: Operations Division

- Baseline Operating Budget = \$31 million, 97 FTE
  - Primary Functional Areas:
    - Operations and Maintenance
    - Water Treatment
    - Support Services
  - Ongoing collaboration with Engineering Division and Water Resources Division for day to day activities and capital planning
- Department Baseline Capital Budget \$1 million
  - Automotive Services and Facility Maintenance

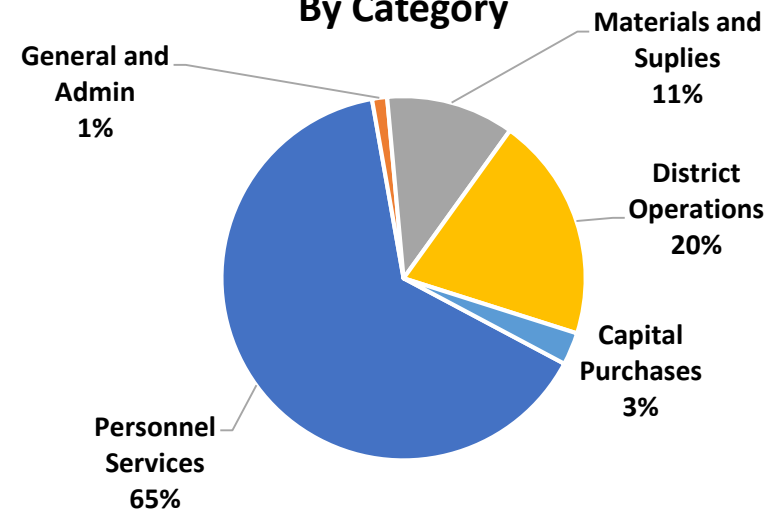
# Preliminary Operating Budget by Expenditure Category

	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	% Change	FY 2025 Budget	% Change
Personnel Services	\$19,685,853	\$20,762,324	\$20,463,277	-1%	\$21,335,640	4%
General and Admin	\$458,215	\$458,200	\$424,741	-7%	\$419,753	-1%
Materials and Supplies	\$2,506,245	\$2,683,039	\$3,613,096	35%	\$3,802,520	5%
District Operations	\$3,752,852	\$3,765,181	\$6,339,892	68%	\$6,665,291	5%
Capital Purchases	\$903,170	\$903,170	\$914,753	1%	\$1,044,100	0%
<b>Total</b>	<b>\$27,306,335</b>	<b>\$28,571,914</b>	<b>\$31,755,759</b>	<b>11%</b>	<b>\$33,267,304</b>	<b>5%</b>

**Budget by Function**



**By Category**





# Proposed Changes and Cost Drivers

- Baseline Cost Drivers
  - Paving and Construction Contracts
  - Water Treatment Chemicals
- Proposed Changes
  - Valve Exercising Program in FY 2025



# Water System Valves

- Shut Water Off in Areas
- Control Water Flows

Valve in service 50 plus years



New valve





# Valve Exercising Program

- 16,579 valves (ranges 2"-36")
  - Operate valves through full cycle on a regular schedule
- Staffing and Equipment
  - Addition of two full time employees
  - Two new vehicles with valve exercising equipment





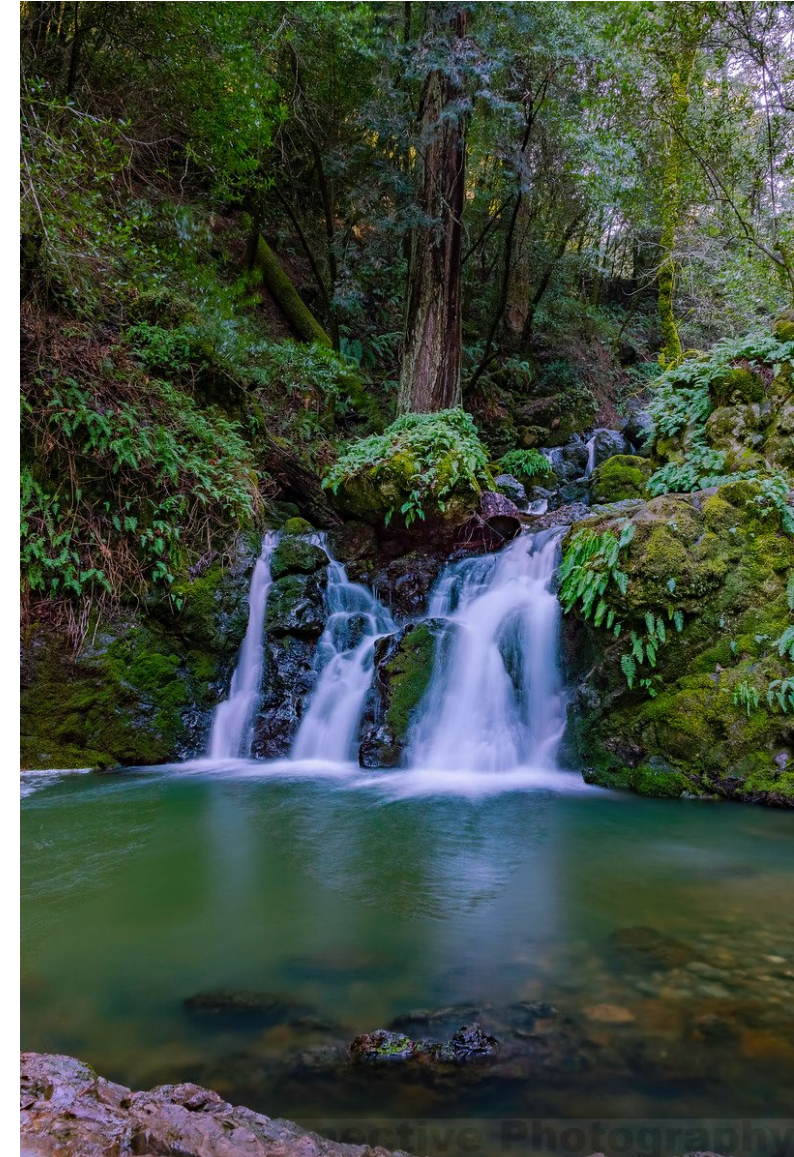
# **Watershed Department FY 2023-25 Budget Overview**





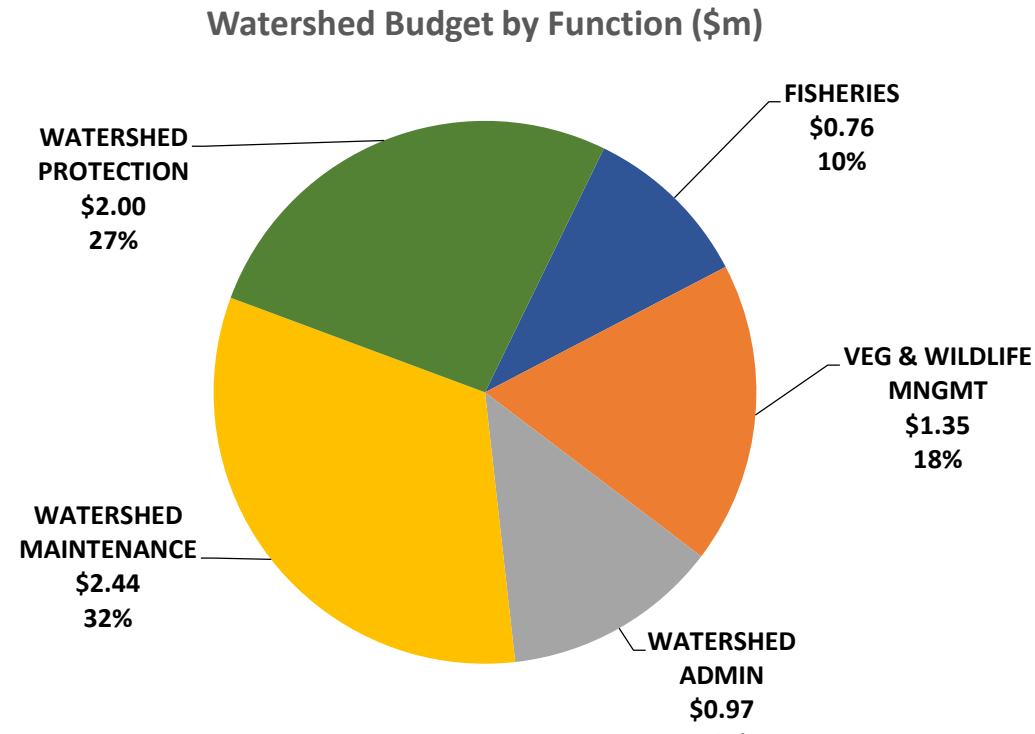
# Overview: Watershed Department

- Baseline Operating Budget = \$7.4 million, 22 FTE
  - 5 Primary Functional Areas:
    - Watershed Protection
    - Watershed Maintenance
    - Vegetation and Natural Resources
    - Fisheries
    - Grants and Legislation
- Department Baseline Capital Budget = \$118k
  - Ranger, Fisheries and Vegetation Management Equipment
- CIP-funded initiatives = \$4.0 million:
  - Biodiversity, Fire and Fuels Integrated Plan (BFFIP)
  - Watershed Facilities, Services Roads and Trail Maintenance
  - Grant Funded Projects
    - Fisheries Restoration and Azalea Hill Trail Restoration



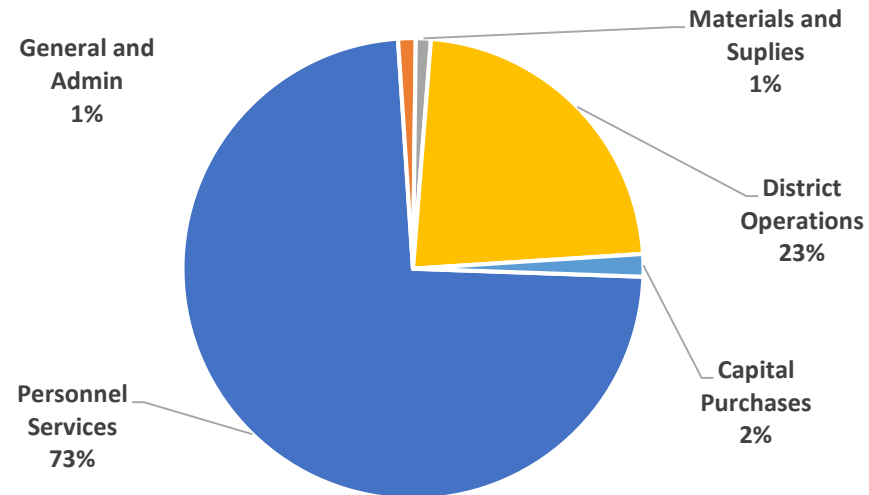
# Preliminary Baseline Operating Budget

- Department Overview
  - Total Budget = \$7.5 million; 22 FTE



# Preliminary Operating Budget by Expenditure Category

	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	% Change	FY 2025 Budget	% Change
Personnel Services	\$5,057,270	\$5,094,726	\$5,520,812	8%	\$5,690,970	3%
General and Admin	\$90,593	\$91,540	\$92,532	1%	\$93,632	1%
Materials and Supplies	\$71,400	\$76,950	\$79,350	3%	\$80,750	2%
District Operations	\$1,645,522	\$1,594,835	\$1,709,800	7%	\$1,730,544	1%
Capital Purchases	\$93,000	\$93,000	\$118,500	27%	\$92,000	0%
<b>Total</b>	<b>\$6,957,785</b>	<b>\$6,951,051</b>	<b>\$7,520,994</b>	<b>8%</b>	<b>\$7,687,896</b>	<b>2%</b>



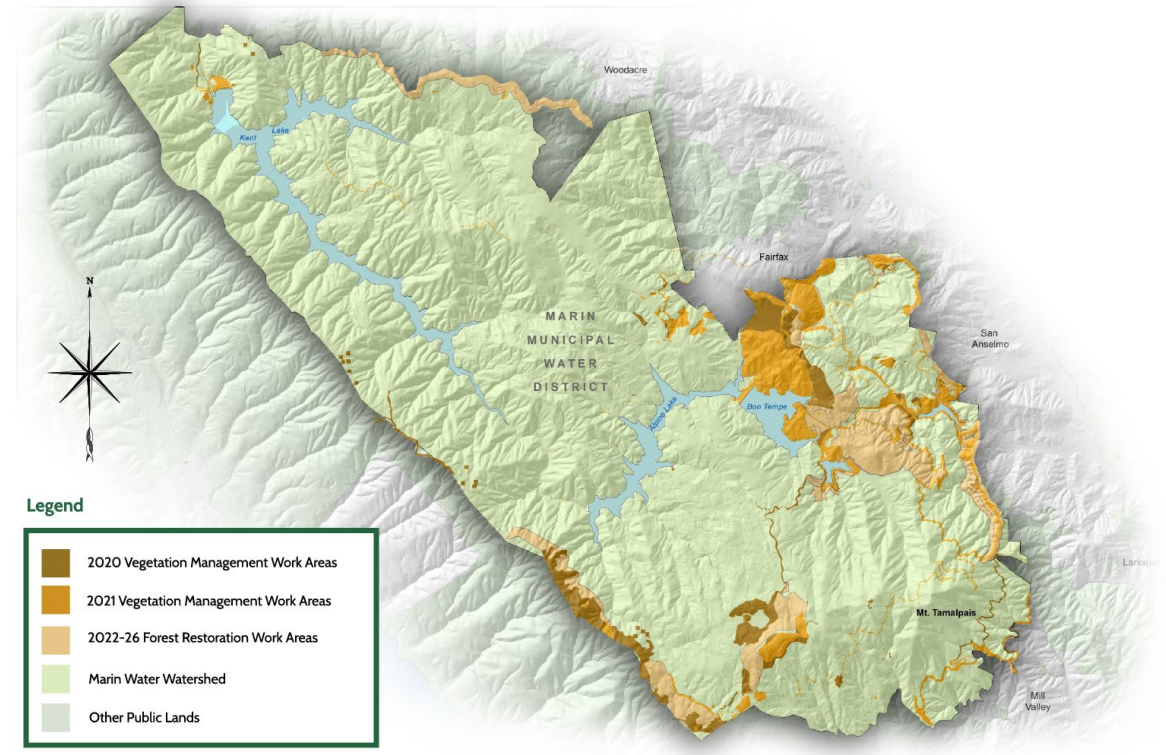
# Proposed Changes and Cost Drivers

## ■ Baseline Cost Drivers

- Environmental Permit Fees (culverts, fisheries restoration, etc.)
- Recreation Management Plan
- Watershed Evacuation Plan

## ■ Proposed Changes

- Increased BFFIP Funding for Invasive Management, Forest Restoration, Fuels Reduction
- Addition of Ranger Trainee Program





# Fisheries

## Staff

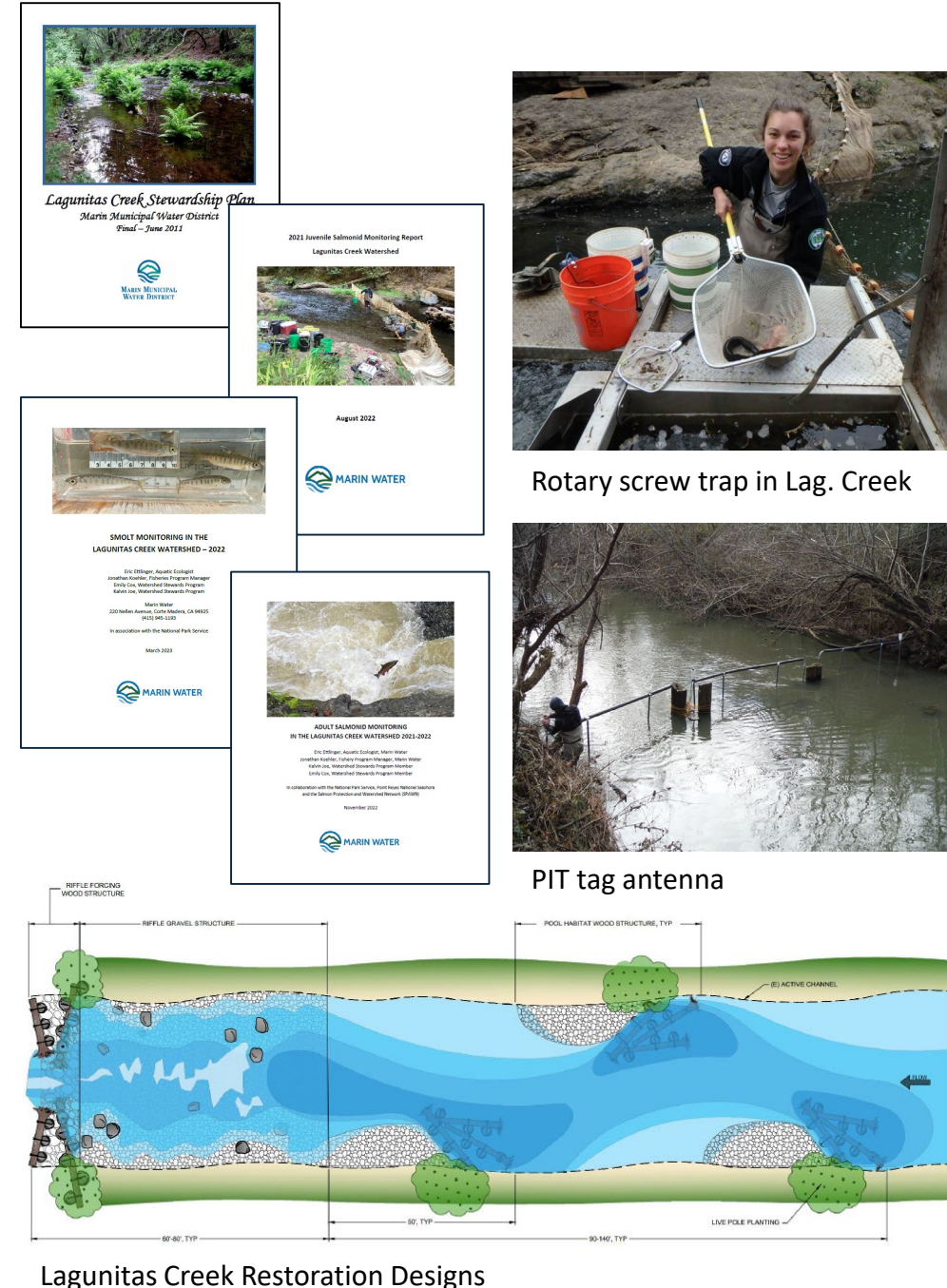
- 2 Fisheries Staff
- 2 AmeriCorps Watershed Stewardship Program Participants

## Programs

- Lagunitas Creek Stewardship Plan
  - WR 95-17 Compliance
  - Fisheries lifecycle monitoring
- Fisheries response and monitoring for water distribution main breaks
- Stream restoration planning & coordination

## Cost Drivers/Enhancements

- Lagunitas Creek Stream Restoration Monitoring
- Passive Integrated Transponder (PIT) Monitoring Program



Lagunitas Creek Restoration Designs

# Natural Resources and Volunteer

## Staff

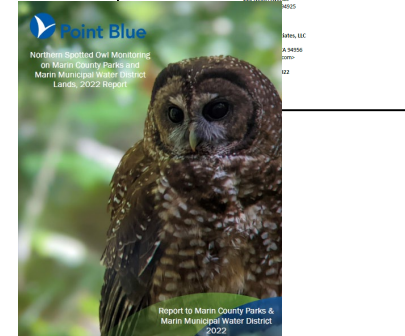
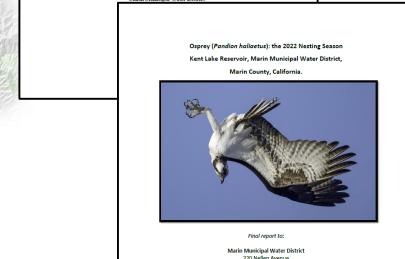
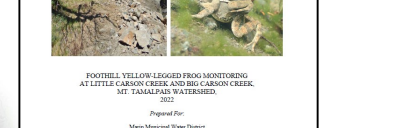
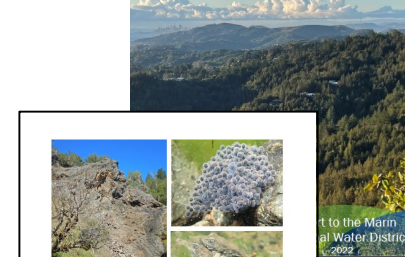
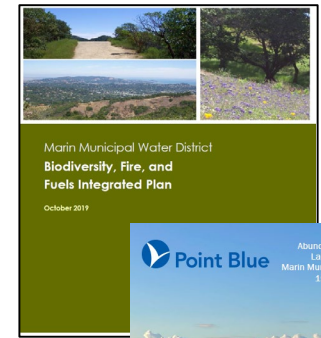
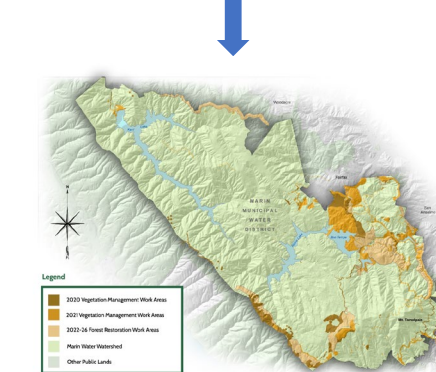
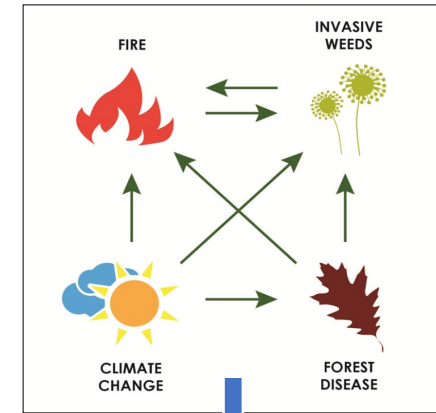
- 3 Natural Resources Staff
- 6 Seasonal Watershed Aides

## Programs

- BFFIP Compliance
  - Prescribed burn planning
  - Rare and invasive plant monitoring and management
- Watershed Volunteer and Outreach Program
- Watershed environmental planning, monitoring, and compliance

## Cost Drivers/Enhancements

- AmeriCorps Grizzly Corps Fellow
- BFFIP annual increase for biological compliance





# Watershed Maintenance

## Staff

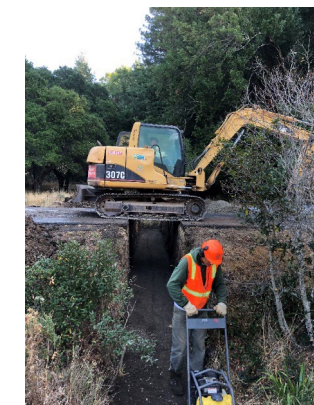
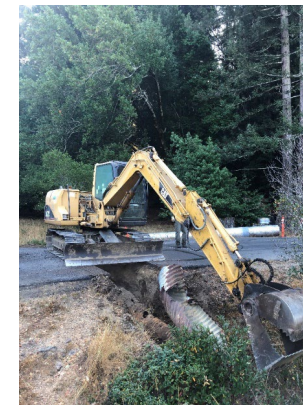
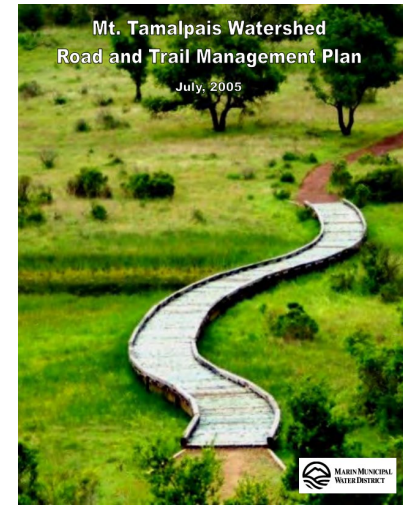
- 7 Watershed Maintenance Staff
- 4 Seasonal Watershed Aides

## Programs

- Fire Roads and Trails Maintenance
  - Culverts repairs, service road maintenance, trail stewardship, visitor facilities maintenance, etc.
- Watershed Facilities Maintenance
- BFFIP Implementation

## Cost Drivers/Enhancements

- Biodiversity, Fire, and Fuels Integrated Plan funding increase
- Inflationary increases related to materials & supplies





# Rangers

## Staff

- 6 Rangers & 1 Contract Deputy
- 3 Watershed Aides

## Programs

- Enforcement & Facilities security
- Medical response
- Wildland fire response and prescribed burning
- Search and Rescue
- Visitor outreach and watershed interpretation

## Cost Drivers/Enhancements

- One Ranger Training Position & establishment of ranger training program to support succession planning.
- 1 Additional Ranger (approved in FY 2021-22 budget)



Ranger Ambassador Program



Search and Rescue



Medical aid



Sky Oaks Kiosk



Wildland fire training



# Watershed Administration, Grant & Legislative

## Staff

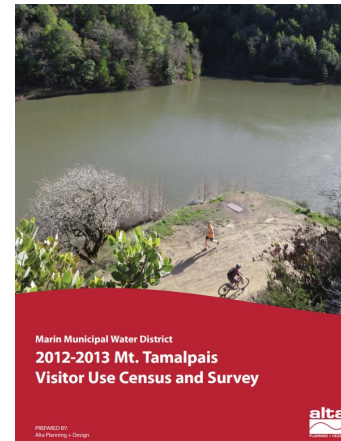
- 3 Staff

## Programs

- Grants, fundraising, and legislation
- Watershed Operations & Administration (permits, parking, research, contracts, visitor services, etc.)
- Watershed long-term planning and studies

## Cost Drivers/Enhancements

- Contract for federal funding support-federal Water Infrastructure Development Act \$28 million for Marin Water
- Watershed planning and studies



# Workplan Priorities & Milestones

- BFFIP
  - BFFIP Addendum
  - Forest Restoration Grant Funding
- Lagunitas Creek Restoration Implementation
  - Design and Construction
  - Passive Integrated Transponder (PIT) Monitoring Program
- Azalea Hill Trail Restoration
  - Trail Retaining Wall Construction-Grant Funded
  - Social Trail and Habitat Restoration
- Watershed Roads, Trails & Recreation Plan
  - Culver Replacements & Road Repairs
    - Winter Storm Repairs
  - Roads and Trails Plan Update
  - Watershed Stewardship and Outreach







# **Water Resources Division**

**FY 2023-25 Budget Overview**



# Overview: Water Resources Division

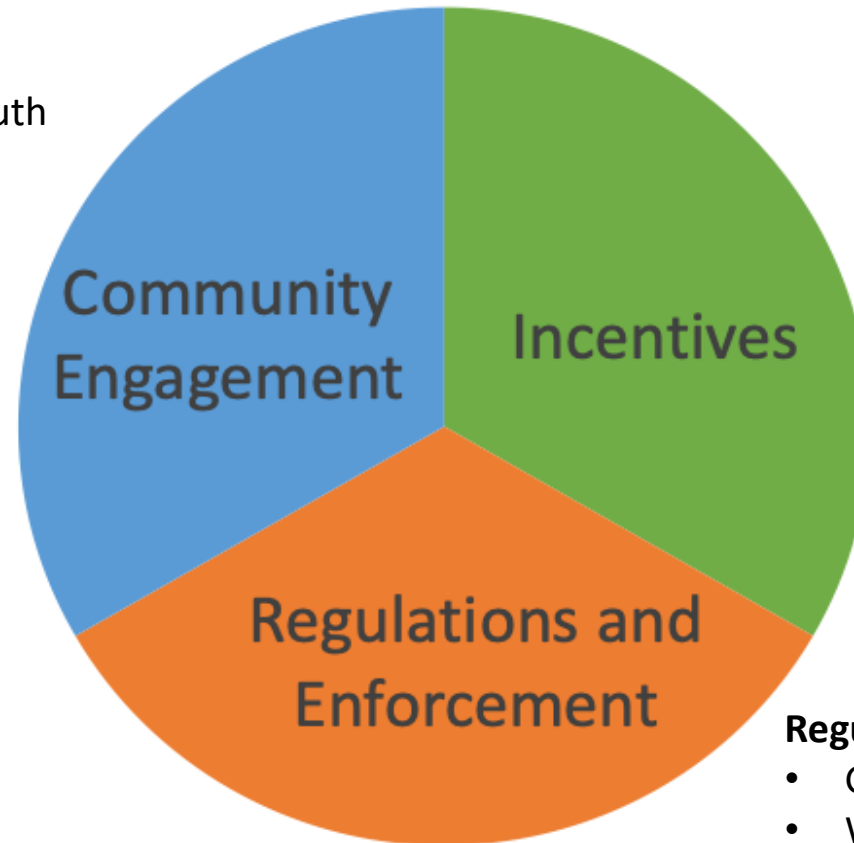
- Baseline Operating Budget = \$7.6 million, 25 FTE
  - 4 Primary Functional Areas:
    - Water Resources
    - Water Efficiency (Conservation)
    - Water Quality Lab
    - Backflow and Reclamation
    - Safety & Emergency Response
  - Ongoing collaboration with Engineering Division and Operations Division for day to day activities and long term planning
- Department Baseline Capital Budget = \$81k
  - Water Quality Lab and Safety Equipment

# Water Efficiency Program Overview

## Community Engagement

- Water Education for School Aged Youth
- Educational Seminars
  - Contractors/Installers
  - Homeowners
  - Landscape Workshops
- Leak Notifications
- Community Events
- Outreach Campaign

**FY 2024 Funding: \$2.6M**



## Incentives and Programs

- Rebates & Incentives
  - WCE & Supplemental Incentives
- Garden Grant
- Residential End Use Studies
- Water Loss Study
- Water Efficiency Master Plan
- Conservation Assistance Program

## Regulations and Enforcement

- Graywater Ordinance
- Water Efficient Landscape Ordinance
- Making Conservation a California Way of Life

# Safety & Emergency Response Overview



FY 2024 Funding: \$0.8M

## SAFETY PROGRAMS

- IIPP
- Fall Protection Program
- Confined Space Program
- Electrical Safety Program
- Personal Protective Equipment (PPE) Program
- Lead and Asbestos Management Plans
- Silica Prevention Program
- Fire Prevention Program
- Heat Illness Program
- HAZWOPER Program
- Hazard Communication Program
- Wildfire Smoke Procedures
- COVID-19 Protection Plan
- Respiratory Protection Plan
- Lock-out Tag-out Program
- Chemical Safety and Spill Response

# Water Quality Overview

- Water Quality is based on a multi barrier concept
  - Pristine natural watershed means we are not at risk for industrial contaminants
  - Treatment plants follow approved treatment practices and continuous monitoring of key parameters to ensure water produced is of highest standards
  - Monitoring of distribution system pressure and chlorine levels ensures safe drinking water is delivered to our customers
- Monitoring programs are designed to ensure compliance with acute and chronic water quality regulations from source to meter:
  - Acute - Total coliform rule testing is performed weekly in the distribution system and ensures that the water is free of bacteriological contamination
  - Chronic - Quarterly and Annual sampling is performed in the distribution system and lakes and can detect metals, disinfection by products and volatile organic compounds

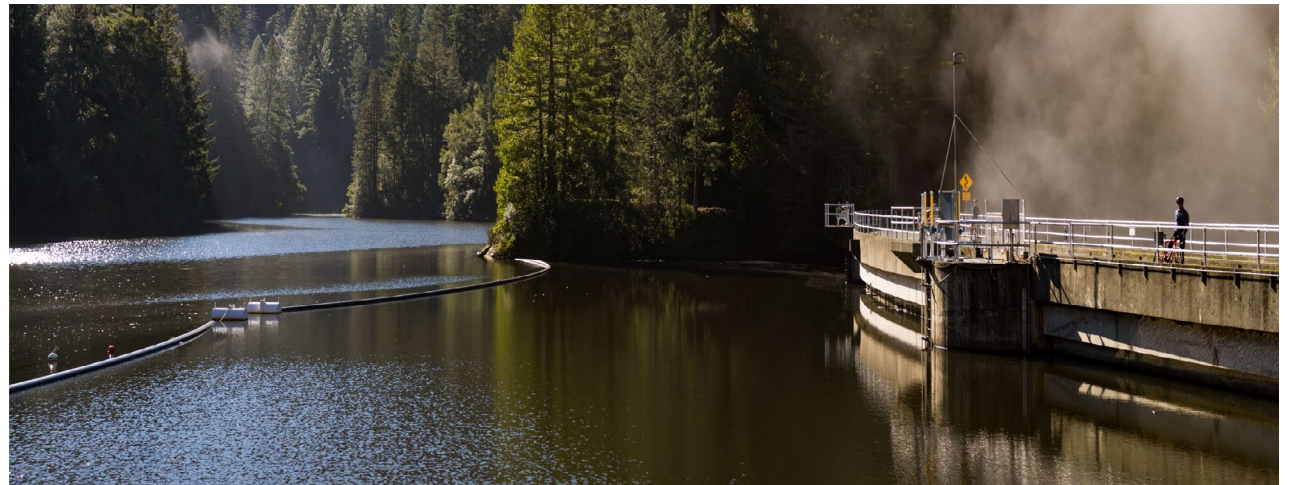
**FY 2024 Funding: \$2.5M**





# Water Quality Laboratory

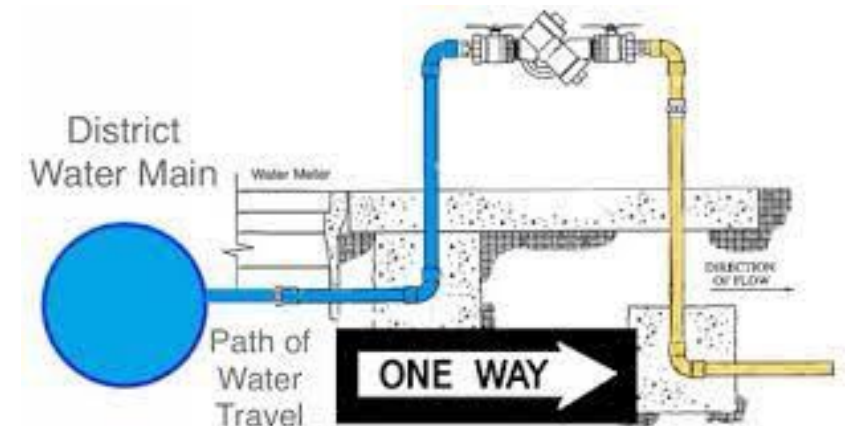
- WQ Lab Manager and 4 lab staff, 3 field sampling techs
- Accredited under CA Environmental Lab Accreditation Program
  - Accredited for 56 analytes
- Analysis capabilities:
  - Microbiology
  - General Physical
  - Disinfection By-Products
  - Inorganics





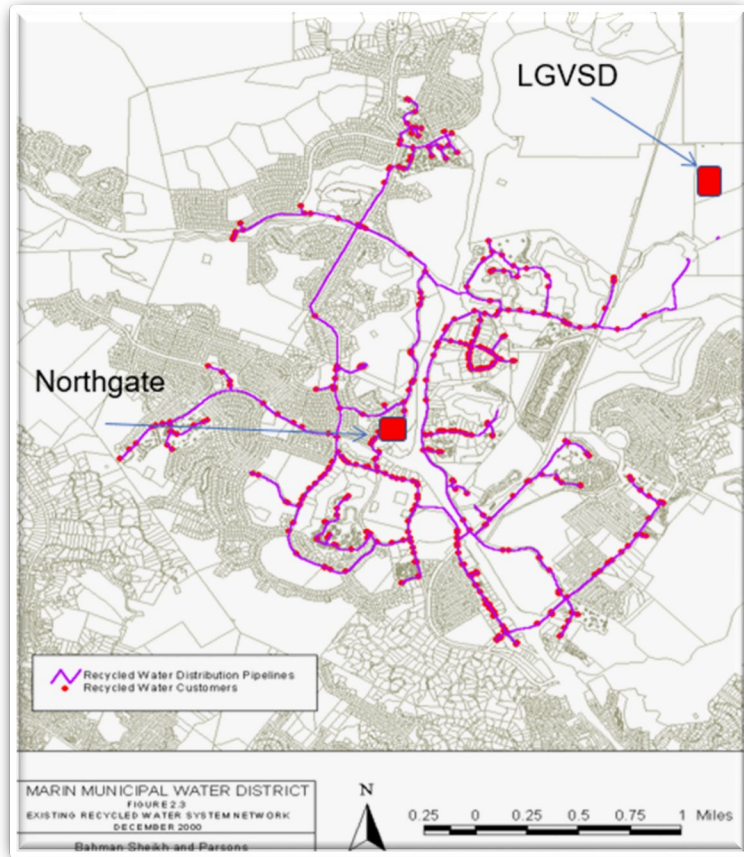
# Cross-Connection Control and Backflow

- Cross connections occur when a non potable water source such as a well, rainwater or graywater system is inadvertently connected to the drinking water system.
- Backflow assemblies prevent water from flowing backwards through a customer meter and prevent potential contamination of the distribution system.
- As required by state regulations, trained and licensed specialists implement Marin Water's program that protects and preserves the distribution system water quality.



FY 2024 Funding: \$0.6M

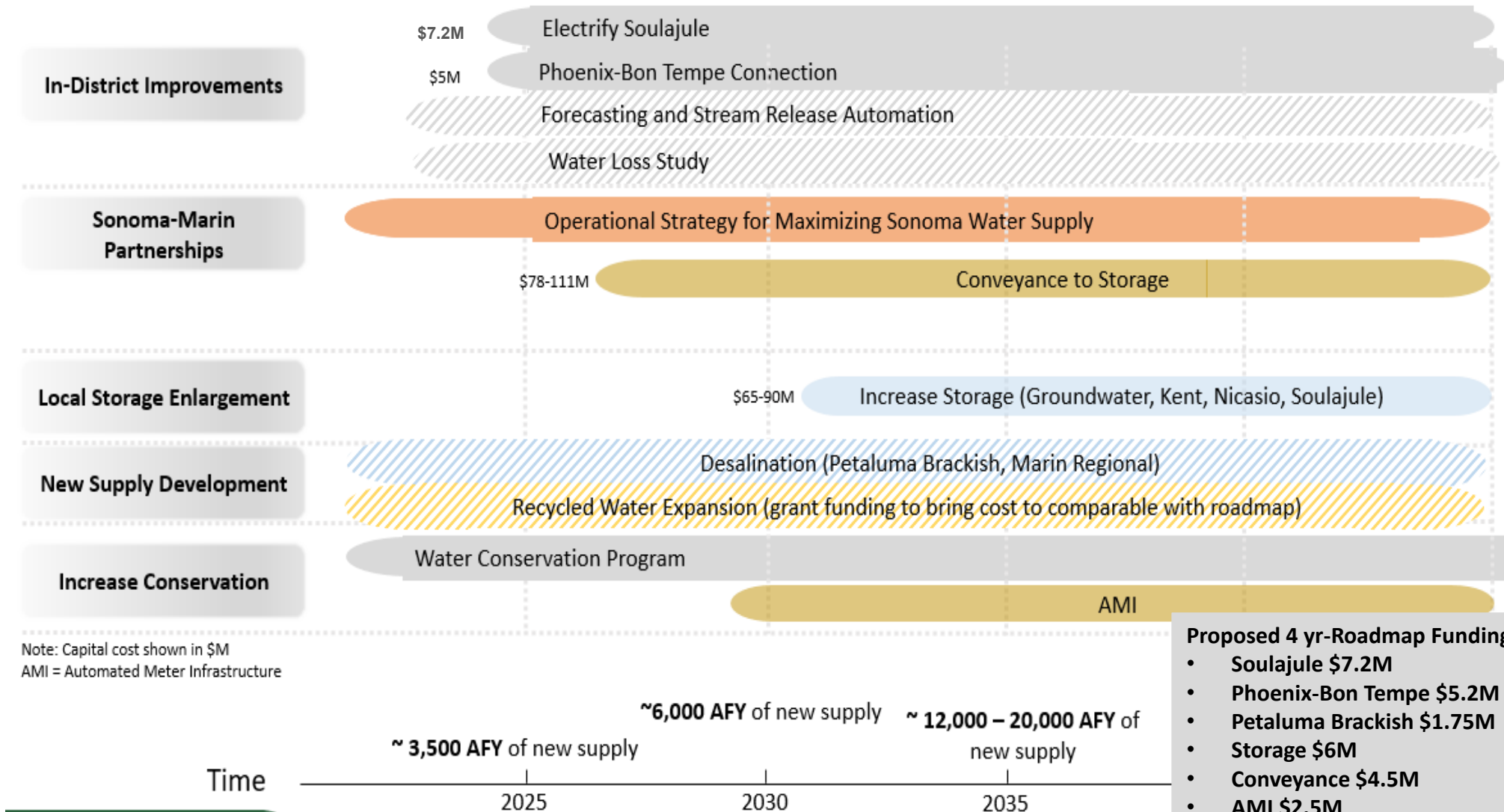
# Water Recycling



- 697 AF in 2022
- 332 Customers
- 25 miles of pipe
- 3 tanks
- 4 pump stations
- Water recycling in Marin Since 1979



# Water Resources – Water Supply Roadmap



## Proposed 4 yr-Roadmap Funding:

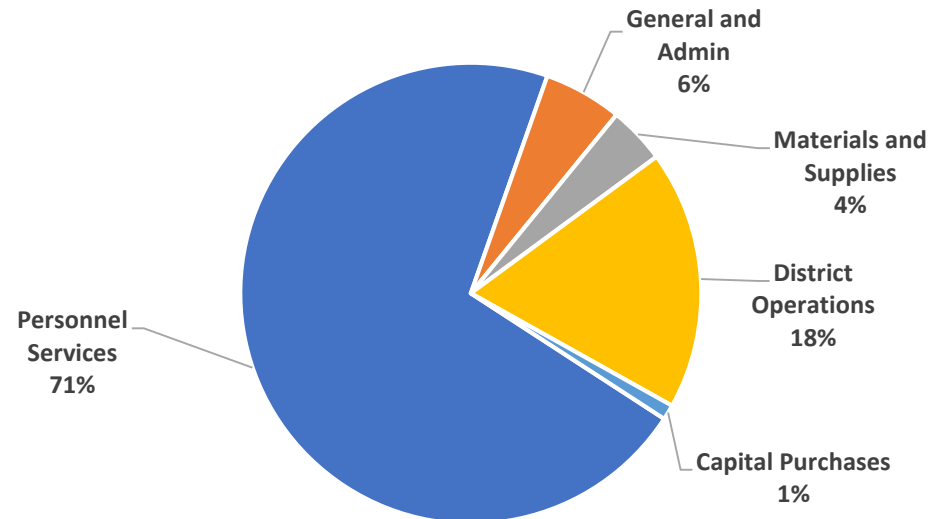
- Soulajule \$7.2M
- Phoenix-Bon Tempe \$5.2M
- Petaluma Brackish \$1.75M
- Storage \$6M
- Conveyance \$4.5M
- AMI \$2.5M
- Conservation \$6.8M

# Work Plan Priorities & Milestones

- Water Use Efficiency – Continue to develop effective water savings programs
  - Master Plan
  - Water Loss Review
- Water Quality – Meet or exceed all Federal and State drinking water standards
  - Pilot on-line analyzers to manage chlorine in high detention tanks
  - Managing taste and odor in lakes
  - New Lab accreditation standard
- Safety & Emergency Response – Continued focus on the safety of employees in the workplace
  - Update and provide training on the District's Emergency Operations Plan
- Backflow and Reclamation – Continue to monitor distribution system for threats to water quality while providing the highest level of service to our customers
- Water Resources - Implementation of Roadmap

# Preliminary Operating Budget by Expenditure Category

	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	% Change	FY 2025 Budget	% Change
Personnel Services	\$4,438,332	\$5,161,259	\$5,458,745	6%	\$5,613,815	3%
General and Admin	\$296,868	\$296,968	\$421,895	42%	\$449,595	7%
Materials and Supplies	\$332,975	\$304,275	\$307,575	1%	\$318,775	4%
District Operations	\$1,016,960	\$1,052,460	\$1,395,060	33%	\$1,445,060	4%
Capital Purchases	\$205,000	\$205,000	\$81,000	-60%	\$76,500	0%
<b>Total</b>	<b>\$6,290,135</b>	<b>\$7,019,962</b>	<b>\$7,664,275</b>	<b>9%</b>	<b>\$7,903,745</b>	<b>3%</b>





# Proposed Changes and Cost Drivers

- Baseline Cost Drivers
  - Regulatory Fees
- Proposed Changes
  - Water Conservation Element





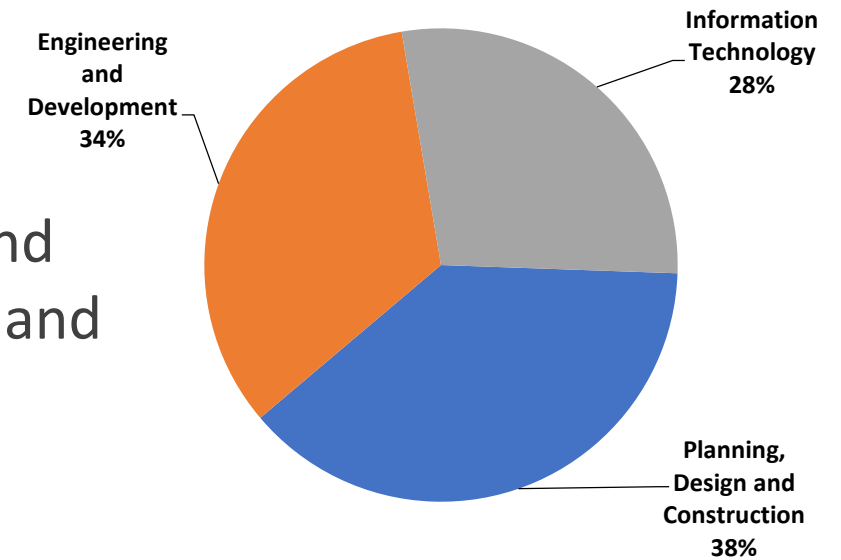


# Engineering Division FY 2023-25 Budget Overview



# Engineering Division Overview

- Baseline Operating Budget = \$13.2 million, 48 FTE
  - 5 Primary Functional Areas:
    - Planning, Design and Construction (3 departments)
    - Engineering Support and Development Services
    - Information Technology
  - Ongoing collaboration with Operations Division and Water Resources Division for day to day activities and capital planning
- Department Baseline Capital Budget \$60k
  - Primarily IT equipment





# Engineering Planning – Core Functions

- Division of Safety of Dams
  - Monthly/Annual Dam instrumentation reports
  - Dam Assessments
  - Emergency Action Plans Updates
- Project Planning, Environmental Review and Surveying
- Capital Improvement Program Planning and Budgeting
- Master Planning, Local Hazard Mitigation Plan, Urban Water Management Plan
- Hydraulic Modeling
- Liaison to Local Jurisdictions
- Fire Flow Technical Advisory Committee
- Water Rights Reports



Seeger Dam Non-Structural Spillway Repairs



# Engineering Design – Core Functions

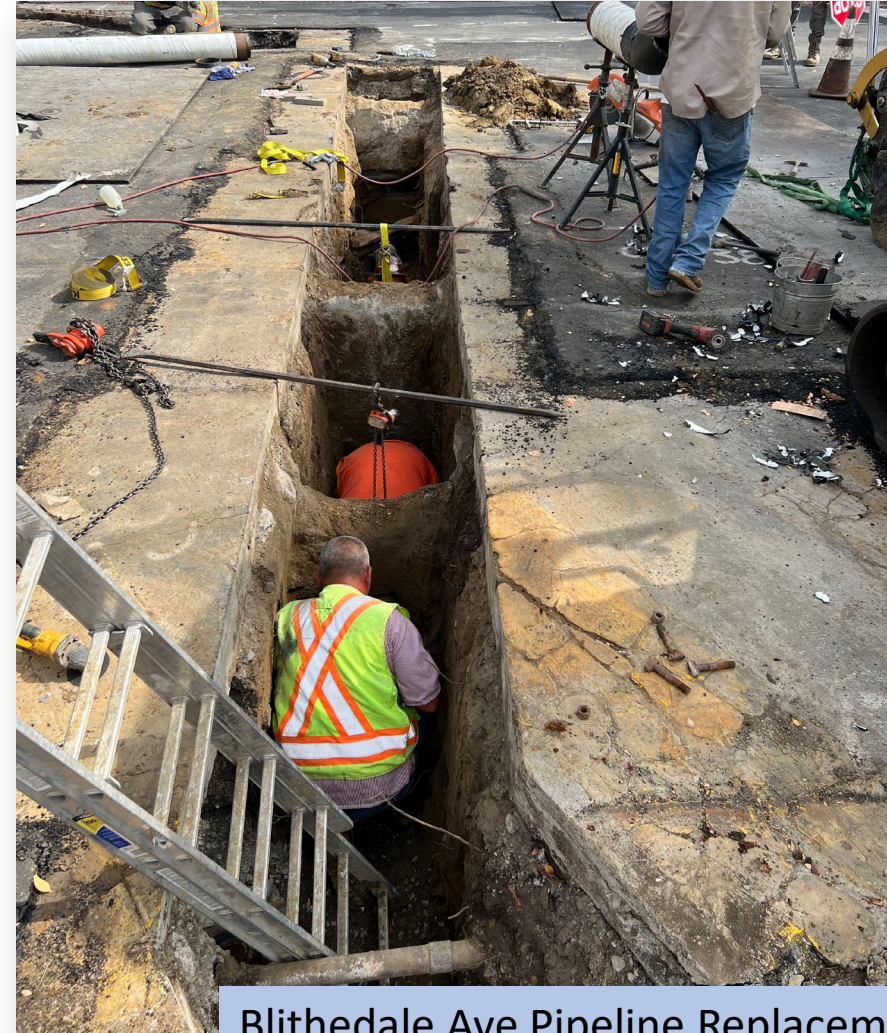
- Design Engineering
- Environmental Permitting
- Drafting (CAD)
- Field Measurements for Design
- Bid Process and Award
- Customer Communications on Construction Projects
- Managing Specialty Consultant (e.g. Geotechnical, Design, Electrical)
- Reimbursement Agreements with Local Jurisdictions



San Geronimo Water Treatment Plant

# Construction Engineering – Core Functions

- Construction Administration
  - Submittal Review
  - Notice to Proceed
  - Project Documentation
  - Invoicing – Verifying Certified Payroll
  - Change Orders
  - Permit Conditions, Storm Water, BMPs
- Inspections
  - Contract Enforcement
  - Environmental Monitoring and Mitigation
  - Field Observations
  - Coordinating with District Staff (WQ, Operations, Backflow)
- Paving/Compaction Testing
- Potholing



Blithedale Ave Pipeline Replacement Project



# Engineering Support & Development Services

- New Services, New Hydrants, Service Upgrades (~159 active requests)
- Records/As-Builts (CAD and GIS) ~400 updates in queue
- Mark and Locate (~400 USA Tickets last week alone)
- Real Property
  - Leases (~40 active)
  - Easements
  - Deeds and Titles
  - Right of Way
  - Encroachment Permits
- Pipeline Extension Agreements
- Connection Fees and Updates

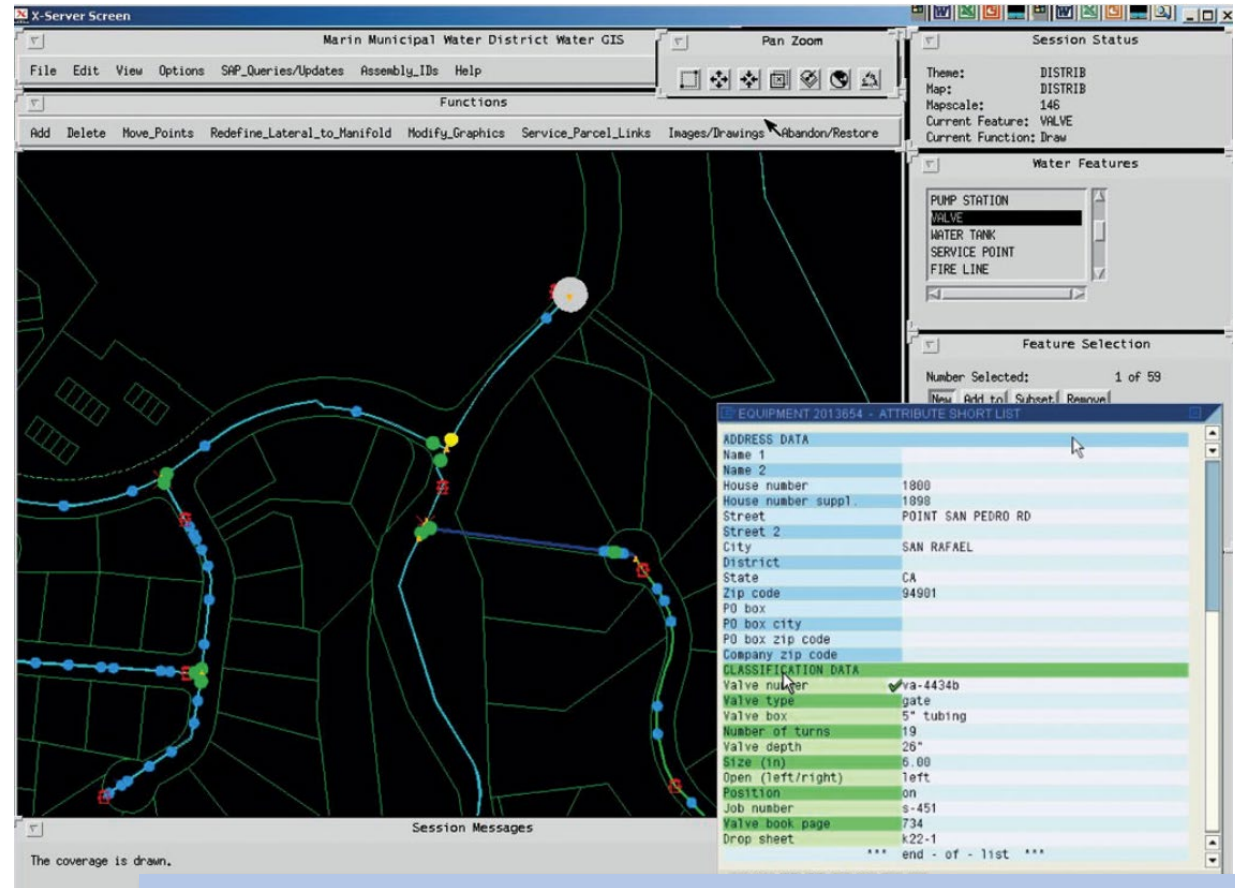


Typical 5/8" Customer Meter



# Information Technology – Core Functions

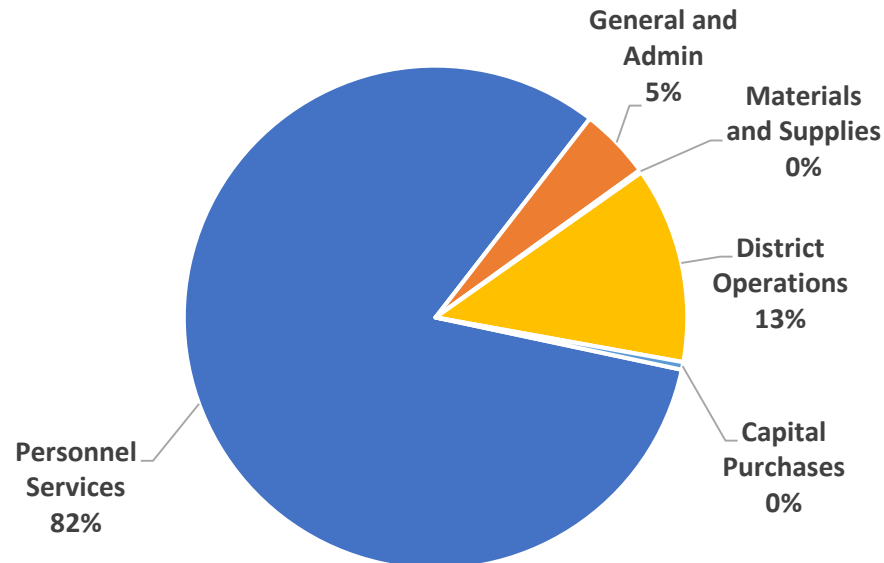
- Help Desk
- GIS, MS Exchange and Server Administration
- Hardware Maintenance and Upgrades
  - Rachno Cordova and Nellen Ave Servers
  - Wi-fi and Phones (cellular and desktop VOIP)
  - Computers/Monitors/Projectors
  - SDWAN, Fiber and Microwave Connections
- Cyber Security/Disaster Recovery
- Enterprise Resource Program (SAP)
- Software Licensing
- Opentext Document Management
- Technical Support Contracts
- Citrix Remote Desktop and Mobile Pass Two Factor Authentication Support



Marin Water's ESRI-SAP Integration from ArcNews Article

# Preliminary Operating Budget by Expenditure Category

	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	% Change	FY 2025 Budget	% Change
Personnel Services	\$10,913,297	\$10,938,047	\$10,927,036	0%	\$11,212,524	3%
General and Admin	\$645,844	\$645,692	\$605,380	-6%	\$604,980	0%
Materials and Supplies	\$41,800	\$41,800	\$23,600	-44%	\$23,600	0%
District Operations	\$811,480	\$860,090	\$1,677,060	95%	\$1,639,560	-2%
Capital Purchases	\$60,100	\$60,100	\$65,100	8%	\$155,100	0%
<b>Total</b>	<b>\$12,472,521</b>	<b>\$12,545,729</b>	<b>\$13,298,176</b>	<b>6%</b>	<b>\$13,635,764</b>	<b>3%</b>



# Baseline Cost Drivers (Engineering Operations)

- Software Licenses
- Colocation Facility Lease
- IT Hardware Repair Contracts
- IT Technical Support Contracts
- Non-capital Engineering Services Contracts
- Annual Fees for Dams
- Cellular Services (AT&T FirstNet)
- SDWAN Services
- Cisco VOIP Services



# Drivers for Proposed Changes

- Increased costs for SDWAN, Fiber and Microwave Services
- Increased Cyber Security Monitoring
- IT technical support contracts (server support and helpdesk)
- Web Hosting and A/V support
- Increase in software licensing (e.g. hydraulic model)
- Engineering Technical Support and Planning Contracts
  - Benefit/Cost Analysis
  - HMP Update
  - Surplus Land Assessment
  - Electrical/Energy Studies



# Work-plan Priorities & Milestones

- Long Term CIP Planning
  - Finalize Water System Master Plan and Update Risk Analysis
  - Develop 10 and 30 year plans
- Information Technology Strategic Plan
- SAP Conversion
  - ERP Needs Assessment and Options Review
  - Vendor Selection and Development of Professional Services Contract for implementation
  - Data transfer, customizations, beta testing, staff training, and “Go Live”
- Paving Restoration Program - Strategies and Approach



# CIP Budget Review

May 2, 2023  
Board of Directors



# Agenda

- Baseline Funding
- Enhancements
  - Water Supply
  - Backlog Stabilization
  - BFFIP
  - Systems Enhancements
  - Larger Projects



# Total CIP Budget by Investment Category

Category	FY24	FY25
Baseline	\$19,421	\$20,353
Grant Funded Projects	\$3,936	\$4,652
Fire Flow	\$4,500	\$4,500
Water Supply Enhancements	\$2,750	\$9,200
Backlog Stabilization	\$3,150	\$6,615
Watershed BFFIP Enhancements	\$500	\$525
System Improvements	\$525	\$3,858
<b>Total CIP</b>	<b>\$34,782</b>	<b>\$49,703</b>

\* Funding in 1,000s



# Baseline CIP Budget

# Baseline CIP Budget

Category	FY24	FY25
Pipelines	\$10,460	\$11,661
Pump Stations	\$1,385	\$3,420
Storage Tanks	\$5,200	\$5,860
Treatment Plants	\$1,920	\$1,120
Watershed	\$3,505	\$2,799
System Improvements	\$5,387	\$4,645
<b>Total Baseline*</b>	<b>\$27,857</b>	<b>\$29,505</b>

\*Includes funding from Capital Maintenance Fee, Rate Revenue, Connection Fees, Fire Flow Fee, Grants, and Interest



*Courtright Tank System Improvement  
(project completed October 2022)*

\* Funding in 1,000s



# Baseline projects

## Pipelines



*Cole Dr. Pipeline Replacement  
(Marin City)*



*Paloma, Granada, El Camino  
(Corte Madera)*



*Greenbrae Boardwalk Pipeline Replacement*



# Baseline projects

## Pump Stations & Storage Tanks



*Kastania Pump Station*



*Pine Mountain Tunnel*



*Bolsa Redwood Tank Replacement*



*Tocaloma Pump Station*



# Baseline projects

## Treatment Plants & System Improvements



*San Geronimo Treatment Plant Roof Replacement*



*Worn Springs Landslide Repair*



# Baseline projects

## Watershed



*Spillway Repairs (Seeger Dam)*

*Left: Culvert Replacement (Top);  
Trail Restoration (Bottom);*



***Before***



***After***

*Watershed fire fuel reduction projects*



# Enhancements: Water Supply Projects

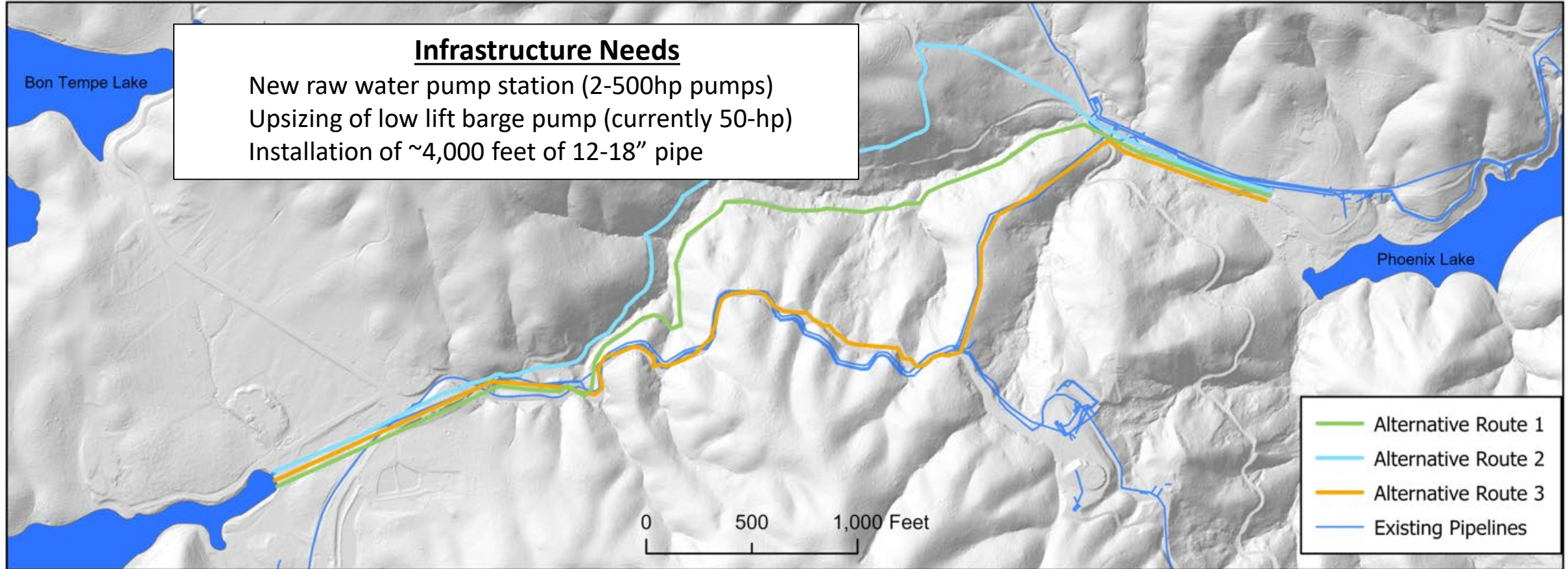
# Phoenix – Bon Tempe Project Overview

- Install new infrastructure to pump water up from Phoenix Lake to Bon Tempe Lake
- Phoenix storage capacity: 411 ac-ft
  - Represents 0.5% of total system storage
- Improves operational efficiency and would allow for more frequent use of water without intensive system modifications





# Phoenix Lake to Bon Tempe Proposed Routes



Total Project Cost  
estimated at \$5.2M

# Soulajule Project Overview

- Storage capacity: 10,572 acre feet
  - Represents 13% of total system storage
- Improves operability and flexibility of storage facilities
- Would set up improved efficiency for long term operating model



*Soulajule Dam & Pump  
Station*

# Soulajule Project Status

- Technical alternatives analysis underway
  - PG&E Load Study
  - Sustainable Solutions Turnkey (SST) Analysis
    - Permanent Generator/Fuel cell/Solar options
- RFP for Electrical Engineering technical support
- CEQA to commence after alternative selected
- 2-4 years out from project completion, based on PGE.
- Exploring grant funding

Total Project Cost  
estimated at \$7.2M



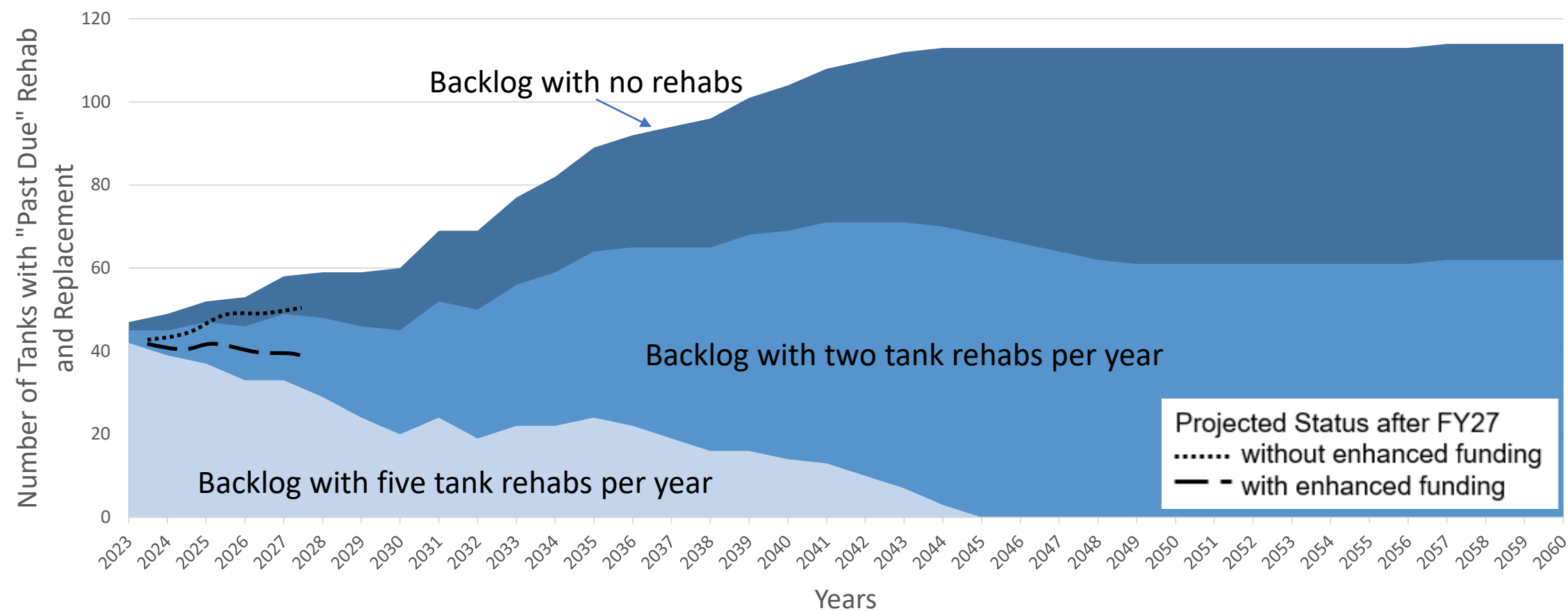
# Water Supply Preliminary Funding Schedule for Capital Investments\*

	\$[Millions]				
	2024	2025	2026	2027	Total
Phoenix to Bon Tempe	\$0.5	\$1.7	\$2	\$1	\$5.2
Soulajule Electrification	\$0.5	\$3.5	\$3.2	-	\$7.2
Roadmap – Long Term Projects	\$1.75	\$4	\$4.5	\$2	\$12.25
Total	\$2.75	\$9.20	\$9.70	\$3.00	\$24.65

\* Does not include strategic water supply investments embedded in the operations budget (e.g. conservation & stream flow augmentation)

# Enhancements to Baseline: Backlog Stabilization

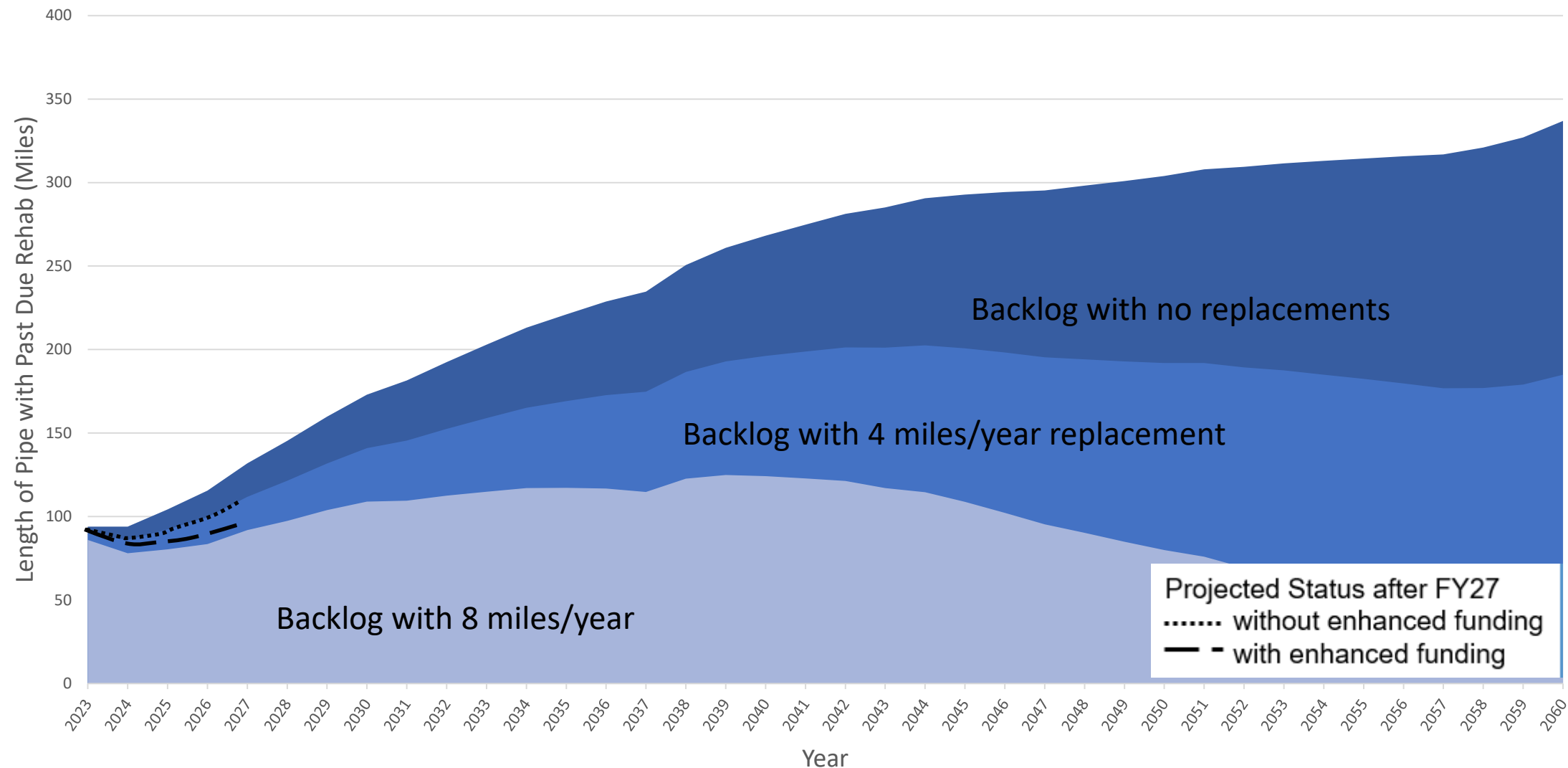
# Effect of Rehab Rate on Backlog of “Past Due” Tank Rehabs



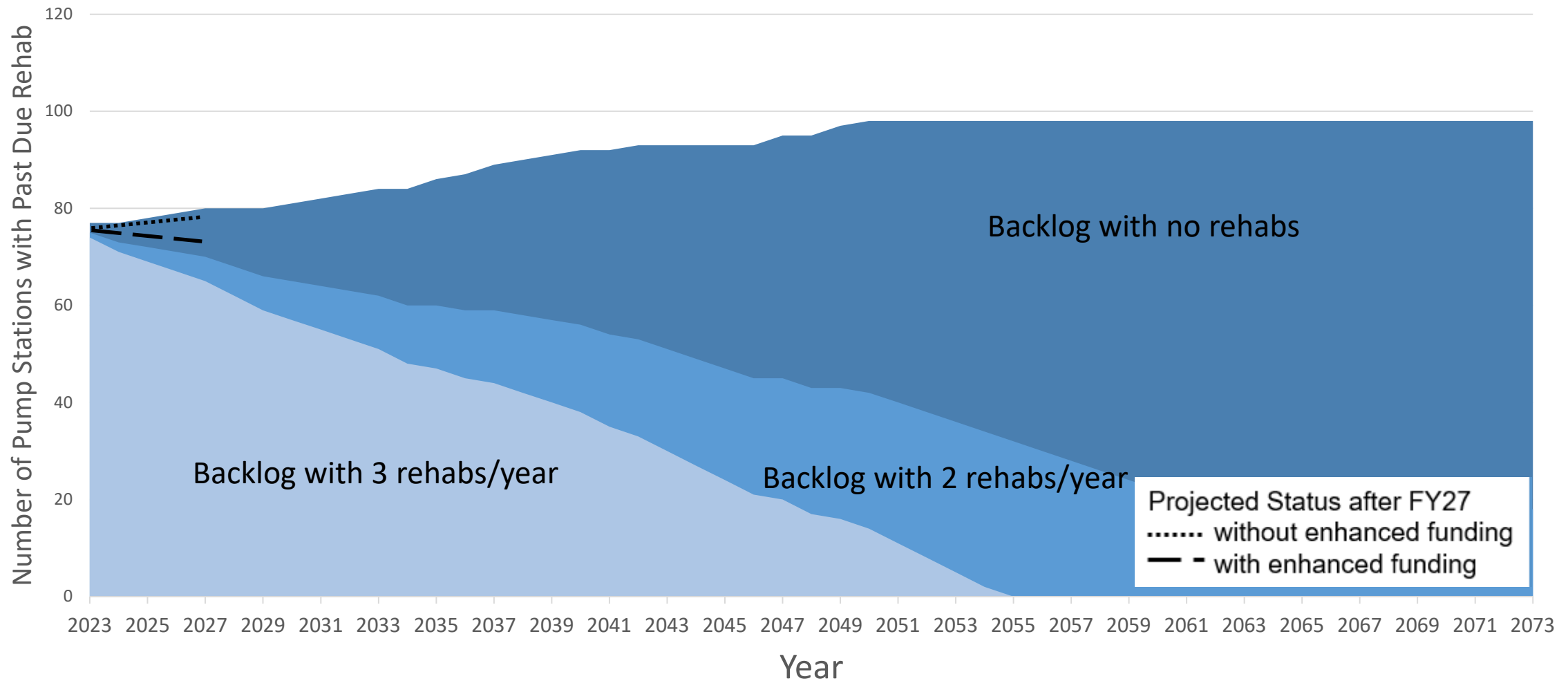
Includes major tanks only (114)



# Miles of Pipe “Past Due” for Replacement at different Rehab or Replacement Rates



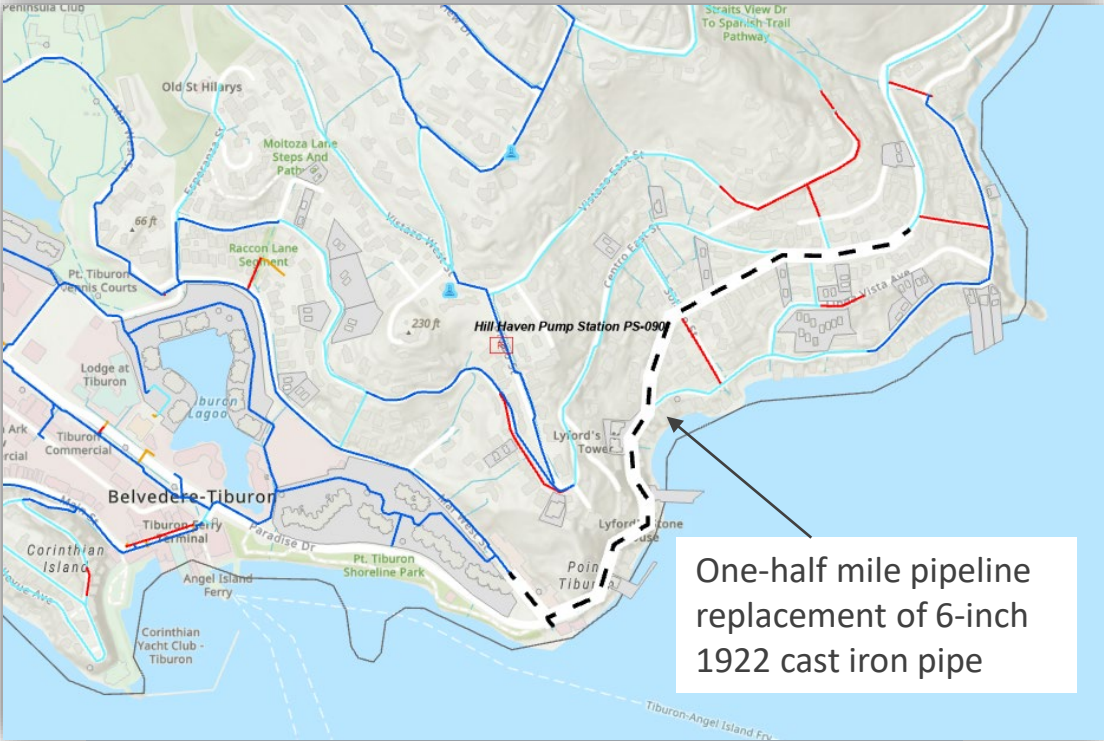
# Effect of Rehab Rate on Backlog of “Past Due” Distribution Pump Station Rehabs



# Backlog Stabilization

## Pipelines & Pump Stations

\$1.4M FY24, \$4M FY25



*Paradise Drive Pipeline Replacement*



*Portion of Paloma, Granada, El Camino (Corte Madera)*



*Portion of Tocaloma Pump Station*



# Backlog Stabilization

## Treatment Plants & Storage Tanks

\$1M FY24, \$1.5M FY25



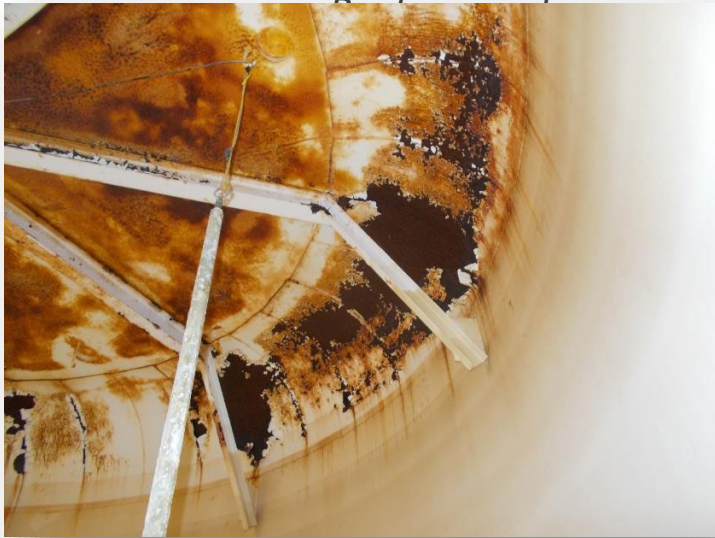
*Hind Tanks Redwood Tank Replacement*



*PLC/Motor Controls Upgrades*



*Portion of San Geronimo Treatment Plant Roof*



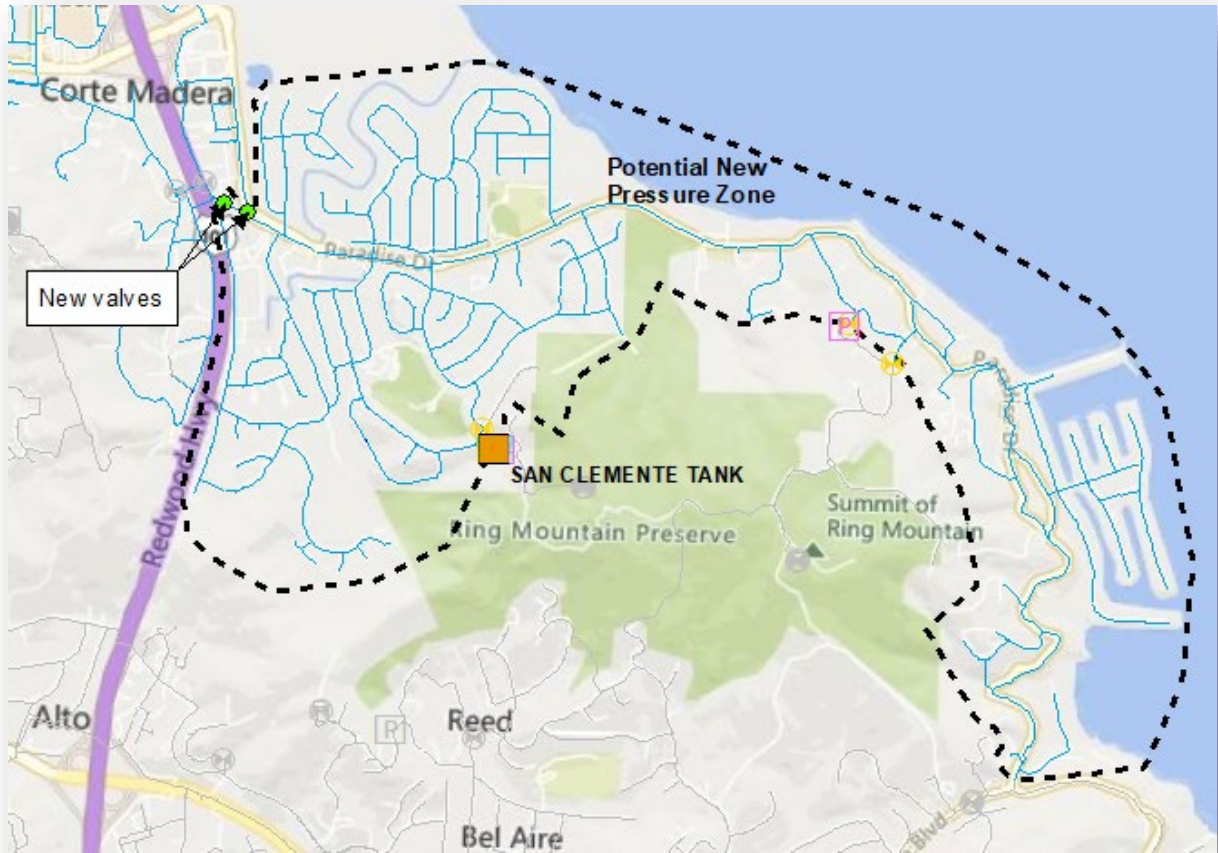
*Wolfback Ridge Tanks Recoating*



# Backlog Stabilization

## Watershed & System Improvements

\$600k FY24, \$500k FY25



*San Clemente System Improvement Project*

*Watershed Trail Improvement & Restoration*

# Enhancements: Watershed Biodiversity, Fire & Fuels Management



# Fire & Fuel Management



French broom removal below Bon Tempe Treatment Plant



Routine fuelbreak maintenance along Lower Railroad Grade

Enhanced funding allows for an annual additional **235** acres (17% increase) toward achieving the plan’s goals

Capital Funding Source	FY24	FY25
Baseline	\$1,170,000	\$1,217,000
Enhancements	\$500,000	\$500,000
Grants	\$1,101,000	

# Enhancements: Systems

# SAP Conversion - Enterprise Resource Planning

- Enterprise Resource Planning (ERP) refers to a type of software that organizations use to manage day-to-day business activities such as accounting, human resources, budgeting, procurement, inventory, project and maintenance management, and customers relations.
- SAP has been in use at the District for over 23 years
- SAP is at “end of life” with no more updates planned other than security patches through December 2027





# SAP Conversion: Annual Goals & Milestones

## ERP Implementation Plan

- Phase 1 - Initiate ERP Options Review
  - Issue RFP – September 2023
  - Conduct Needs Assessment – December 2023
  - Vendor Demonstrations and Options Review – 2024
- Phase 2 – Contract Development
  - Prepare bid documents and professional services agreements for preferred alternative – Dec 2024
  - Vendor/Consultant Selection
- Phase 3 – Implementation
  - Data transfers, customizations, and “sandbox” testing - 2025-2026
  - Staff training – Spring 2026
  - “Go Live” Target Date – July 1, 2026

Total Project Cost  
estimated at \$7-8M

# Advanced Metering Infrastructure (AMI)

- Educational tool to provide customers further opportunities to use water wisely
  - Fits into organizational goal of advancing water efficiency
  - Customer access of real-time water use data results in increased water conservation
  - AWWA Study found 6-12% reduction in average daily water use using 'automatic opt-in of leak detection notifications'
  - Useful tool during water shortage emergencies and other disasters
- System Components
  - Hardware, software, comms
- Funded \$2.5M FY27, grant application for expansion in underserved communities
  - Date TBD



# Enhancements: Larger Projects



# Smith Saddle Tanks



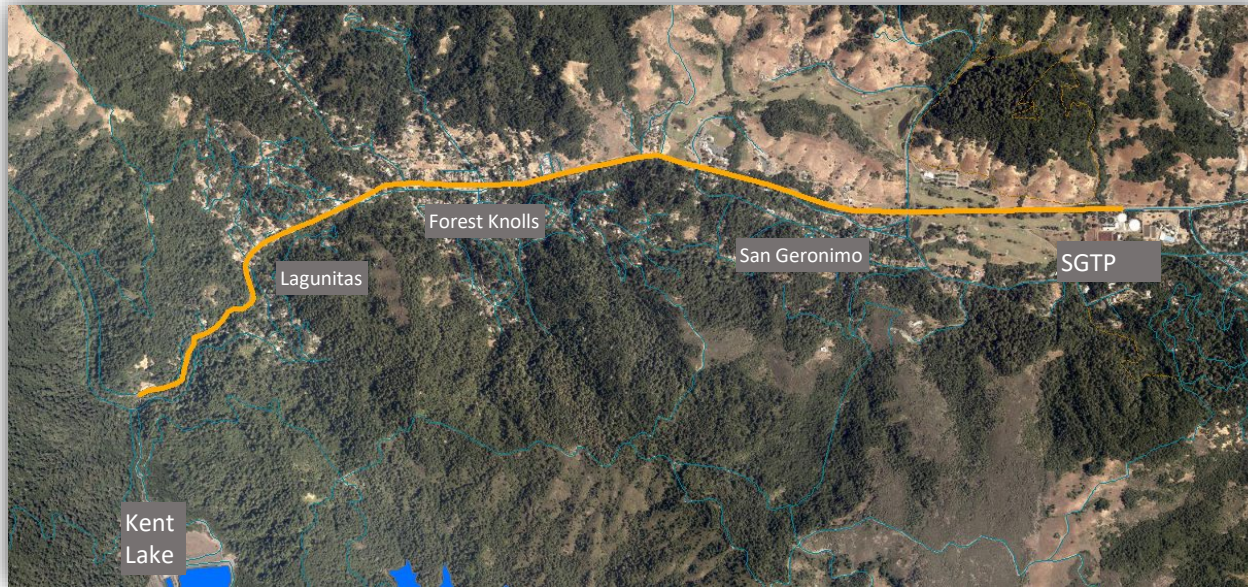
*Current condition (interior)*

- Smith Saddle Tanks provide 10MG of storage
  - Last interior recoat 1983
  - Last exterior recoat 1961



# North Marin Line

- Sole transmission from Nicasio and Kent to San Geronimo Treatment Plant
- 33" ACCP installed in 1957



*Lagunitas Creek Crossing*



# Larger Projects

*Existing San Geronimo  
Treatment Plant Clarifiers*



Project	Annual Cost	Description
North Marin Line	\$2,800,000	Debt service on \$28M project
Smith Saddle	\$2,400,000	Debt service on \$24M project
Ross Reservoir	\$1,500,000	Debt service on \$15M project
San Geronimo Clarifiers	\$2,500,000	Debt service on \$25M project



*Ross Reservoir*

Debt service begins in year 3 for 1-2 larger projects



# Summary

- Backlog funding distributed across asset classes to help accelerate baseline capital work
- In addition to baseline capital:
  - Early action water supply projects
  - Backlog Stabilization
  - Enhanced BFFIP work
  - SAP replacement
- Larger CIP Projects – Debt Service factored into future CIP budget (beginning FY26) for select large projects

## Recap and Next Steps

- District Budget is increasing by 22 percent in FY 2024
  - Inflationary cost drivers and operating enhancements
  - Water Supply Enhancement
  - Capital projects and deferred maintenance
  - Reserve Replenishment
- Revenues to support operating and capital budgets are incorporated in the proposed rate increase
  - Public Hearing planned for May 16, 2023
- Final Budget proposals will be brought to the Board in June 2023