Engineering, Operations, & Technology Committee

Engineering Services Manager's Report

Item 8b

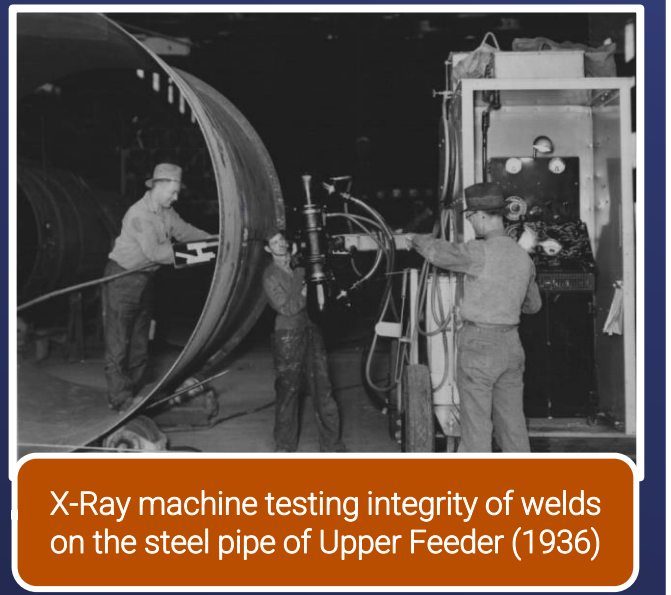
March 13, 2023

National Engineers Week (E-Week)

- February 19, 2023 to February 25, 2023
  - Annual celebration that always encompasses George Washington's Birthday (February 22)
  - George Washington considered Nation's First Engineer for his surveying contributions
- Metropolitan was found on the innovation of engineers and land surveyors – the CRA is a modern engineering marvel

Geologists and engineers investigating core samples (1933)

Surveyors in the Thousand Palms Tunnel (1936)

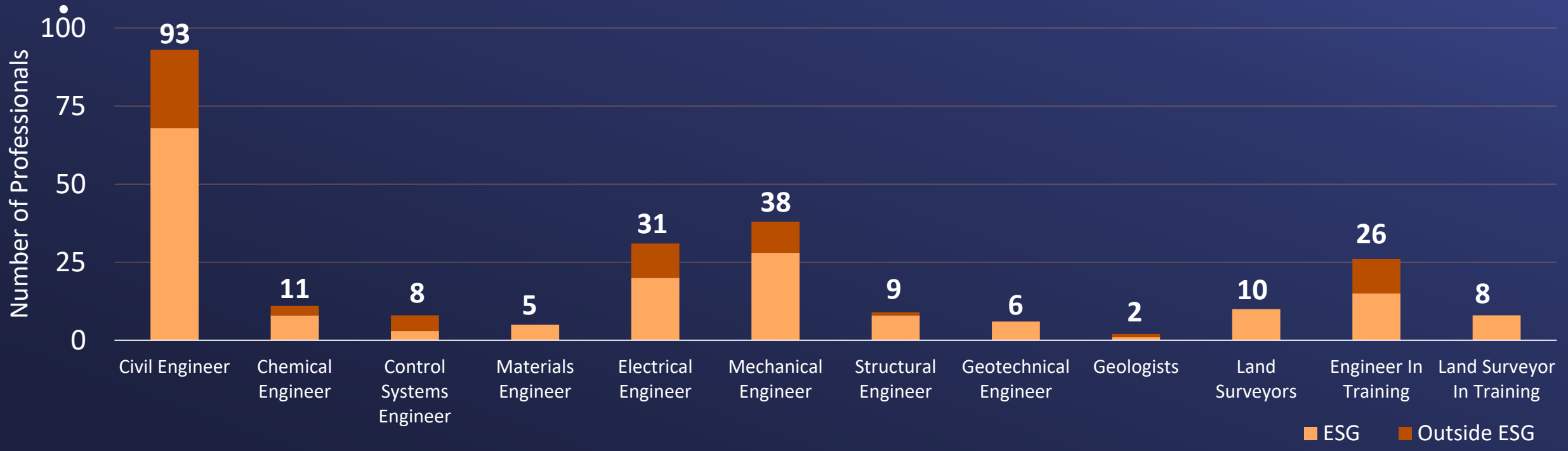


X-Ray machine testing integrity of welds on the steel pipe of Upper Feeder (1936)

Formwork on Eagle Mountain Siphons (1936)

National Engineers Week (E-Week)

- Metropolitan staff today continues the legacy of innovation to ensure water reliability in Southern California
- Metropolitan has 259 staff in the Engineering, Engineering Technician, Survey and Mapping Technician, and Land Surveyor classifications. This is a breakdown of the professional licenses our staff have, administered by the State of California's Board for Professional Engineers, Land Surveyors, and Geologists:

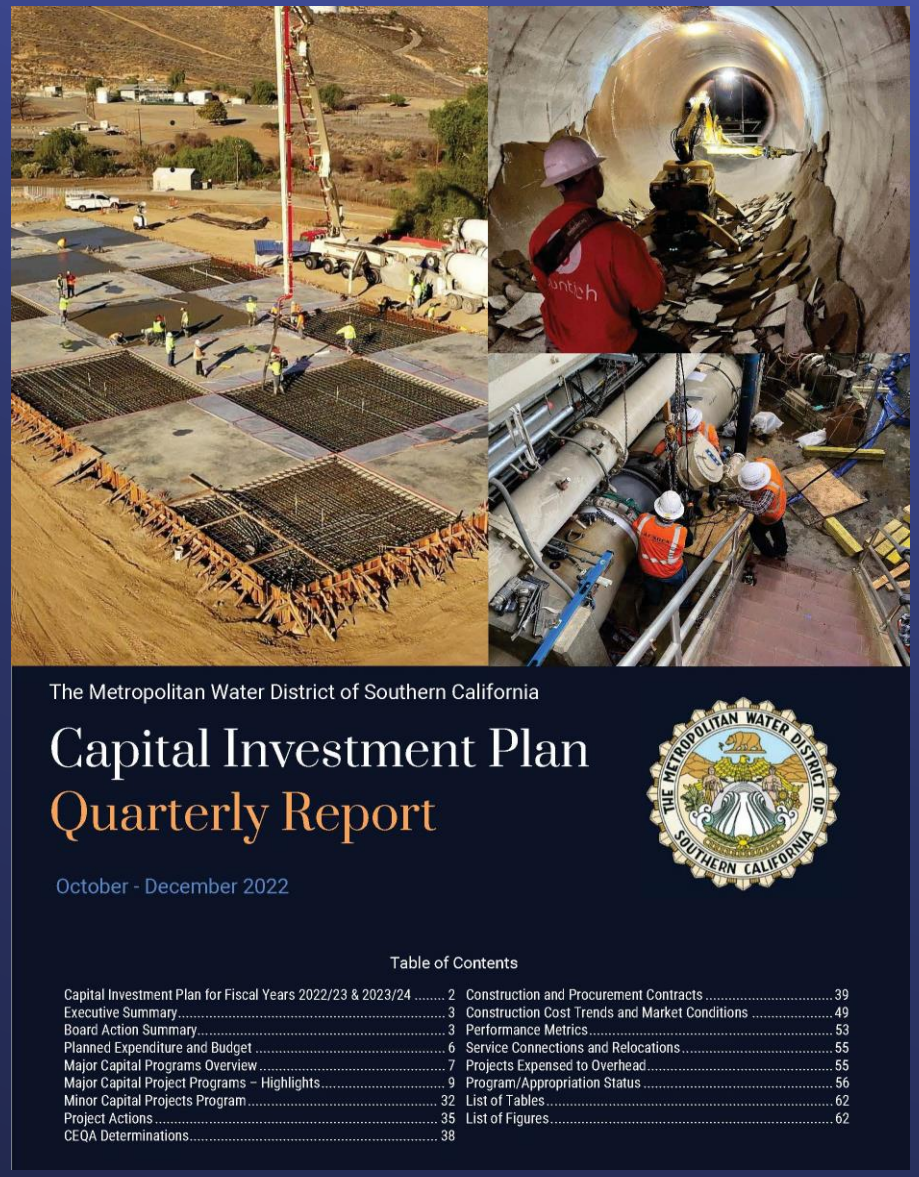


Construction & Procurement Contracts January 2023

Construction & Procurement Contracts Through January 2023	
Number of Contracts at end of January 2023	45
Total Bid Amount of Contracts in Progress at end of January 2023	$565.8M
Contracts Awarded in January 2023	4
Contracts With Notice To Proceed Issued in January 2023	1
Contracts Completed in January 2023	1
Contract Gross Earnings in January 2023	$11.1 M

CIP Quarterly Report
October – December 2022

- Included with March Board packet
- Highlights include:
  - CIP expenditure forecast for biennium
  - Highlights of key projects
  - Assessment of construction cost trends



The Metropolitan Water District of Southern California

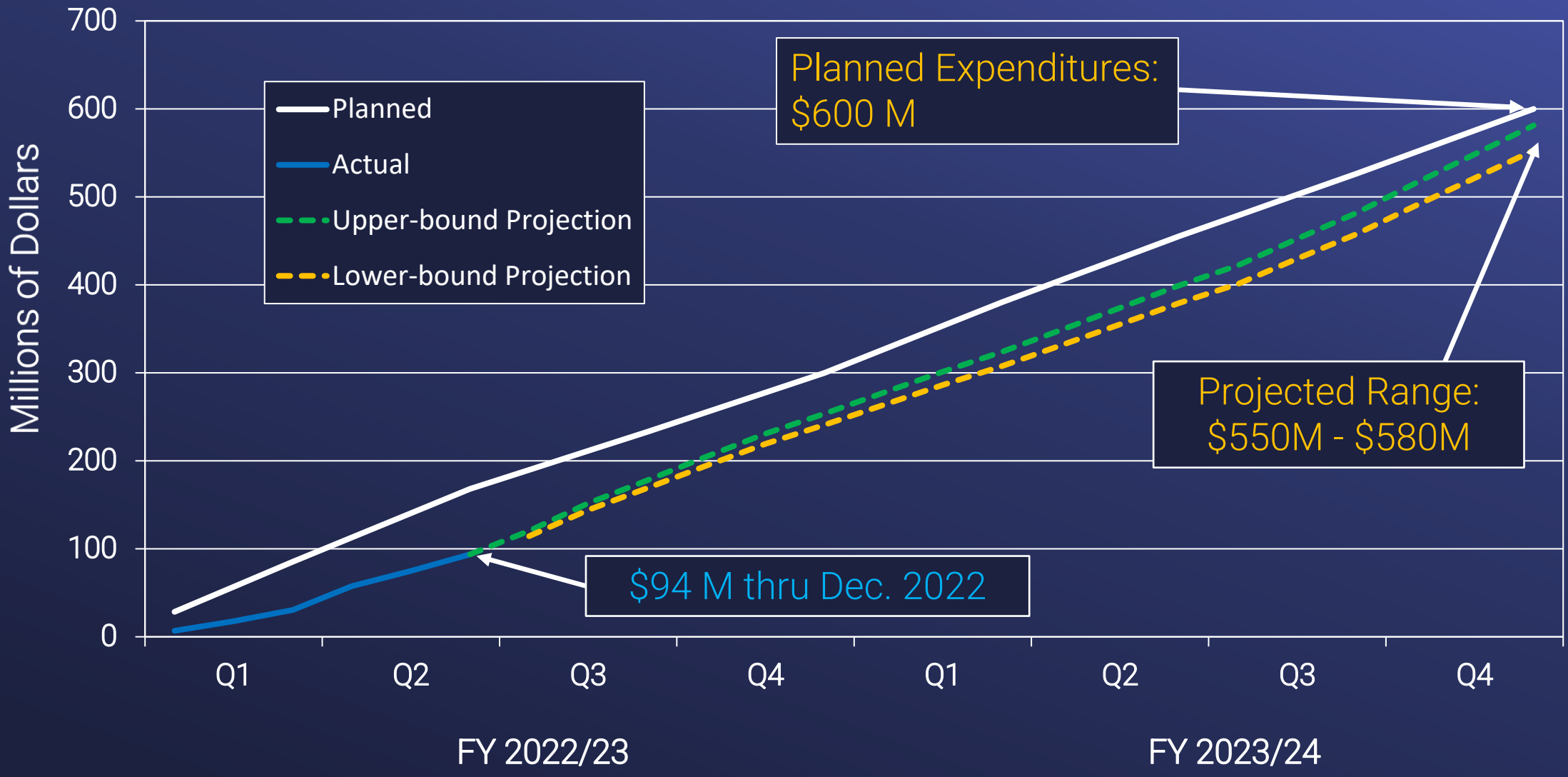
Capital Investment Plan
Quarterly Report

October - December 2022

Table of Contents

Capital Investment Plan for Fiscal Years 2022/23 & 2023/24 2
Executive Summary 3
Board Action Summary 3
Planned Expenditure and Budget 6
Major Capital Programs Overview 7
Major Capital Project Programs – Highlights 9
Minor Capital Projects Program 32
Project Actions 35
CEQA Determinations 38
Construction and Procurement Contracts 39
Construction Cost Trends and Market Conditions 49
Performance Metrics 53
Service Connections and Relocations 55
Projects Expensed to Overhead 55
Program/Appropriation Status 56
List of Tables 62
List of Figures 62

CIP Performance – FYs 2022/23 & 2023/24



Planned April 2023 Board Actions

- Award contracts for:
  - CRA structural protection
  - Large valves for drought projects
  - Seismic upgrades to Foothill power plant
- Authorize agreements for:
  - Studies for East/West conveyance drought actions
  - Seismic analysis of Lake Skinner Tower
  - Dam monitoring data acquisition systems
  - Design of Garvey Reservoir rehabilitation

Alternative Project Delivery Update

Sepulveda Feeder Pump Stations

- Reverse water flow on Sepulveda Fdr to deliver water from the Central Pool to the Jensen Exclusive Area
- Two new 30-cfs pump stations & appurtenant facilities

Approximate value -

- $80-$100M

Delivery method -

- Progressive Design Build (PDB)

Current Schedule -

- RFQ advertised – mid-March 2023
- Board award of Phase 1 agreement– August 2023 (Design)
- Construction Complete – early 2026

CRA Replacement of Casa Loma Siphon Barrel No. 1

- Board Award Date:
  - December 14, 2021
- Contract Amount:
  - $11,499,000 / Paid to date: 83.6%
- Original Contract Duration:
  - 350 Calendar Days / 74.3% to date
- On-Going Construction Tasks:
  - Completed tie-in to aqueduct
  - Monitoring performance

Demolition of existing siphon at tie-in location

12th Japan - US. - Taiwan Conference on Water System Seismic Practices

- Held in Kumamoto, Japan
- January 30 to February 1, 2023

Industry Day – February 2, 2023 Carson, CA

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

PRESENTS

METWORKS

Metropolitan Contracting Information Straight from the Source

Subcommittee on Pure Water & Regional Conveyance

- March 28, 2023
- Pure Water Quarterly Update
- Drought Portfolio Planning Update

THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928