



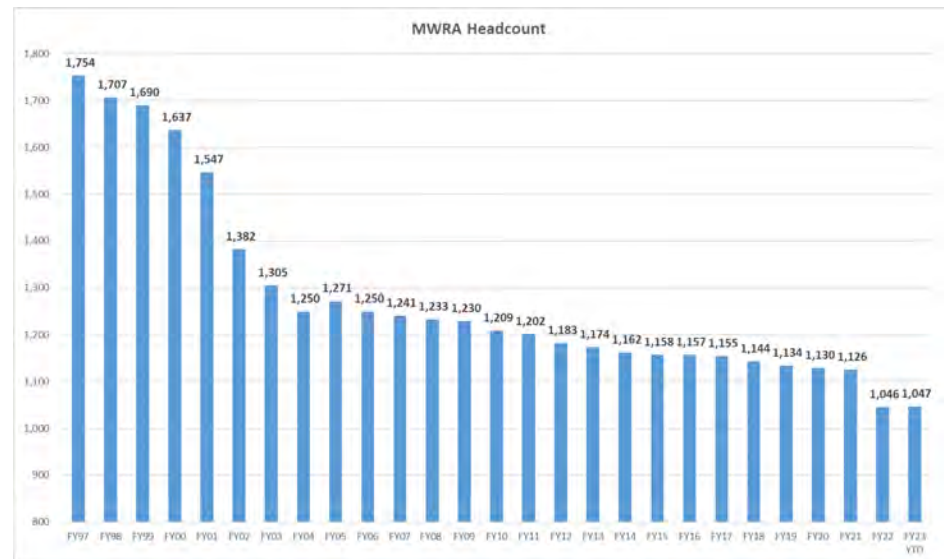
*Update on Office Relocation Project
Contract 7980*

February 15, 2023



Space Needs

- In 1999, MWRA merged the Waterworks and Sewerage Divisions into a new Operations Division to gain efficiencies
- Nine old MDC sites were consolidated into the Chelsea Facility in 2001
- As staffing has declined over the years, space needs have been reduced
- With the advent of telework, space needs have been reduced further



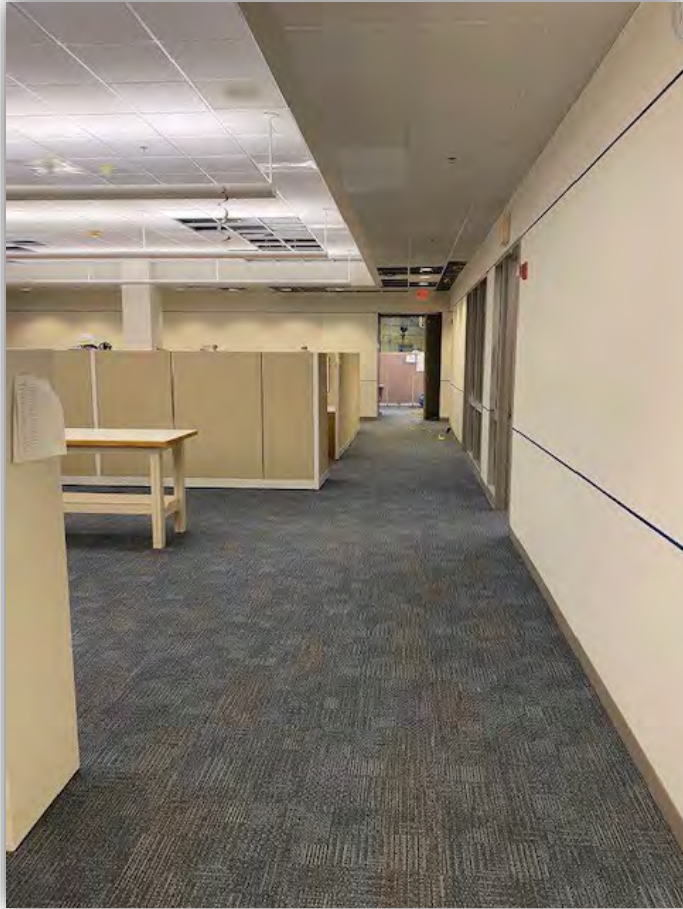


Chelsea - Existing Space





Deer Island - Existing Space





Deer Island - New Wiring, Ceiling Tiles, Lights, Carpet





Chelsea - New Wiring, Ceiling Tiles, Lights, Carpet





New Carpets and Cubicles





Carrels and Wall Art





New Cubicles and Refurbished Offices





Collaboration Areas





Current Schedule

- Chelsea Phase 1 (expect to be ready for occupancy February 22nd)
- Deer Island Phase 1 (expect to be ready for occupancy March 1st)
- Phase 2 (to commence February 22nd)
- Goal to be complete by end of April



*Key Indicators of MWRA Performance
FY2023 Second Quarter*

February 15, 2023

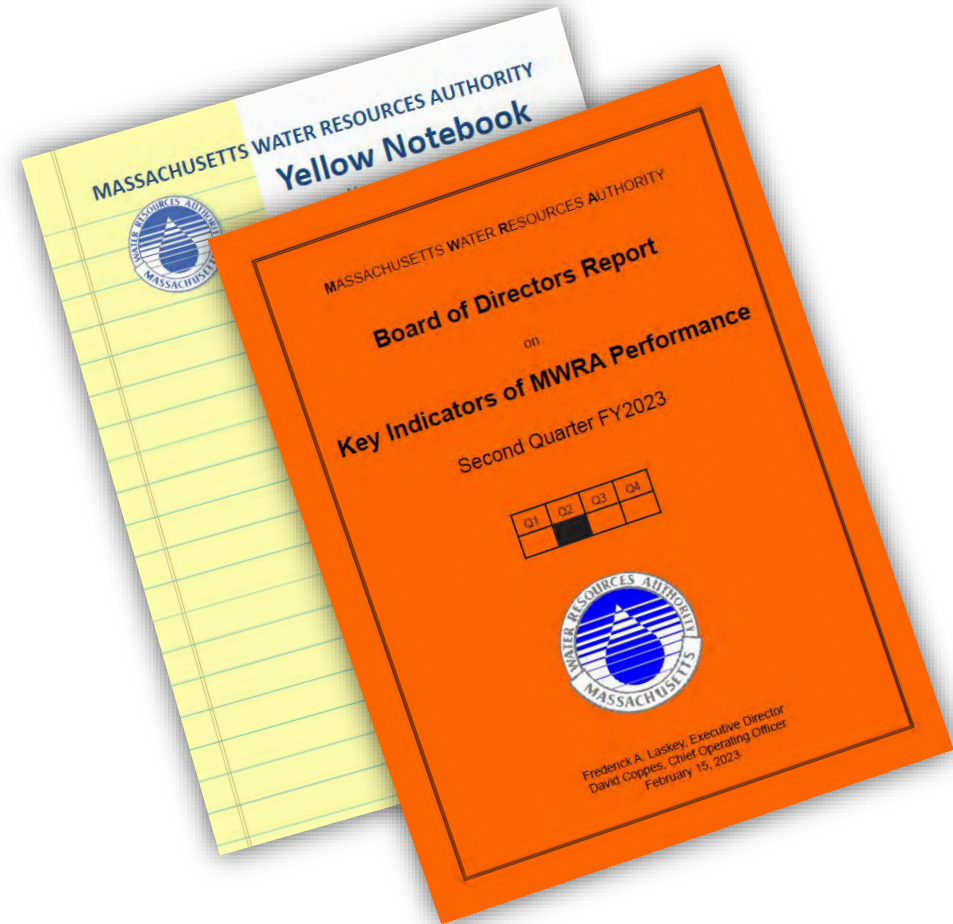


MWRA's Orange and Yellow Notebooks: Key Performance Indicators

Quarterly Orange and Monthly Yellow Notebooks

Tracks metrics throughout MWRA

- Operations and Maintenance
- Financial
- Business and Administration



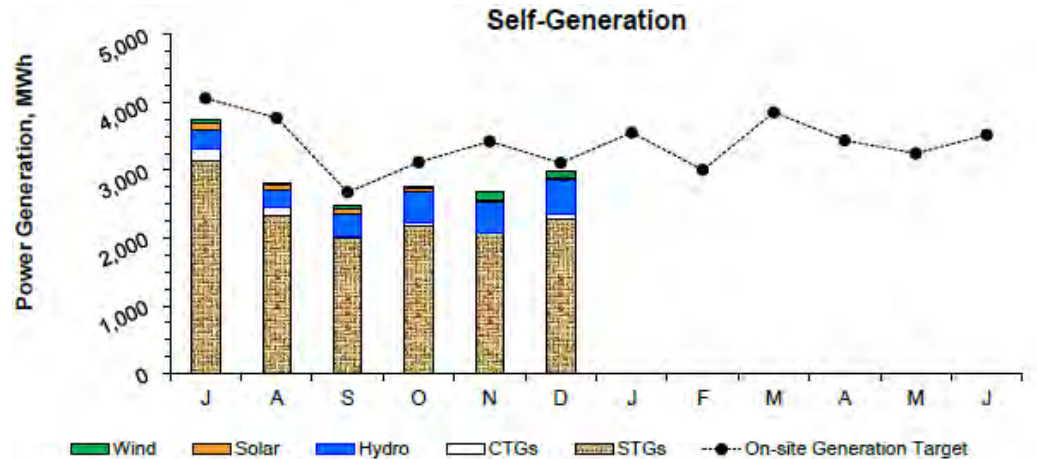


Monitors All Areas of MWRA Performance

Orange Notebook Chapters

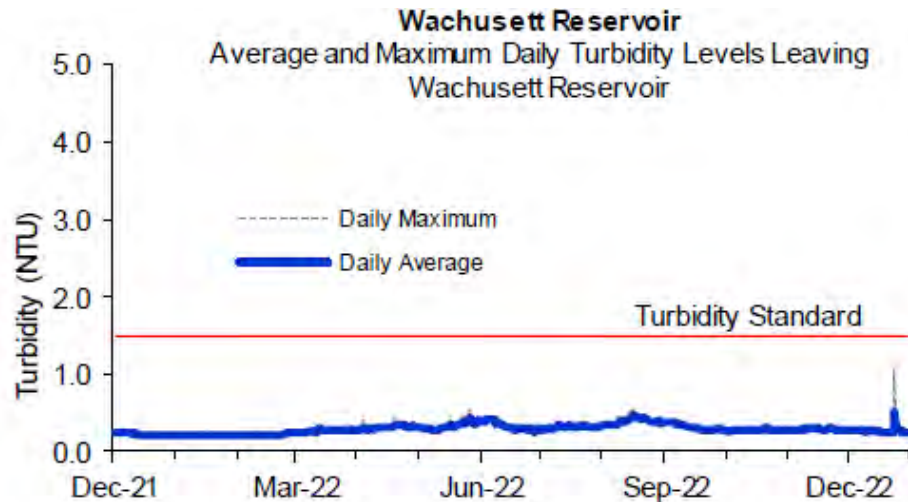
- Operations and Maintenance
- Construction Programs
- Drinking Water Quality and Supply
- Wastewater Quality
- Community Flows and Programs
- Business Services
- Other Management

Deer Island Self Power Generation – FY23

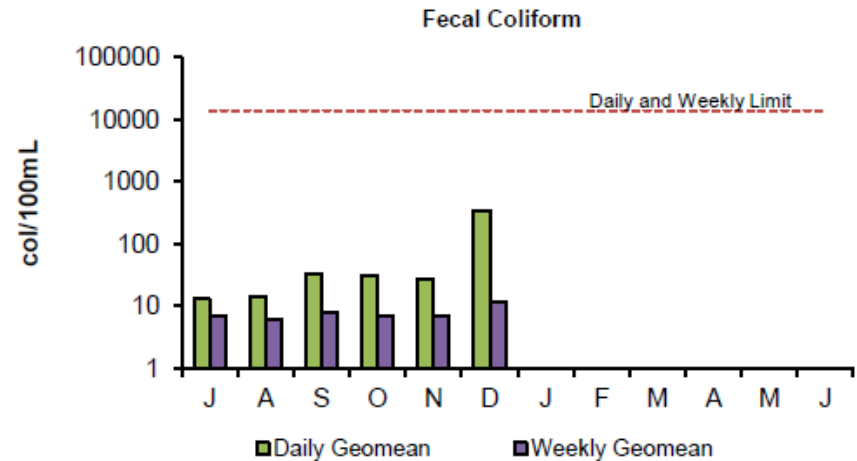




Water and Wastewater Quality Examples



Deer Island Treatment Island Plant



Fecal Coliform is an indicator for the possible presence of pathogens. The levels of these bacteria after disinfection show how effectively the plant is inactivating many forms of disease-causing microorganisms. In the 2nd Quarter, all permit conditions for fecal coliform were met.



*MWRA Fiscal Year 2024
Proposed Current Expense Budget*

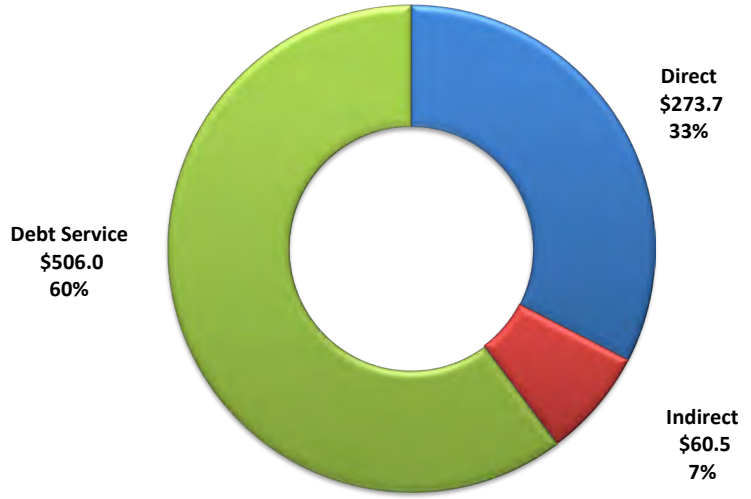
February 15, 2023



FY24 Proposed CEB: Budget Structure

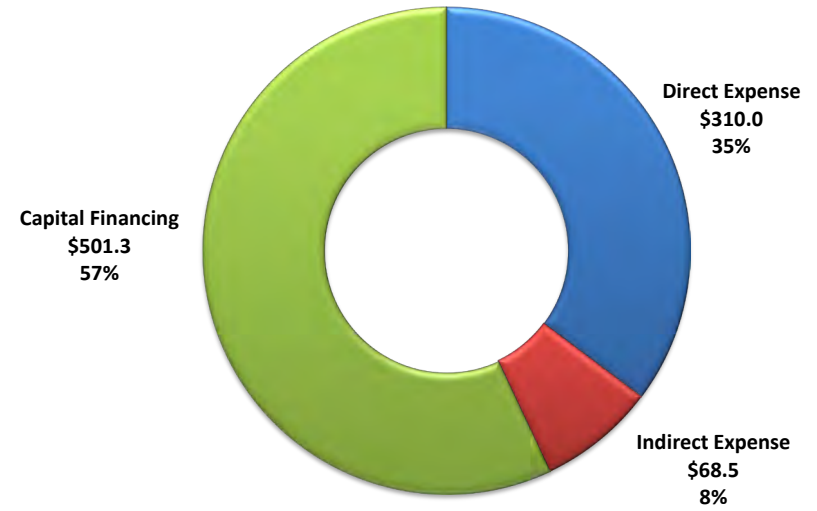
FY23 Approved Current Expense Budget

(\$s in million)



FY24 Proposed Current Expense Budget

(\$s in million)





FY24 Proposed CEB: Direct Expenses – Wages & Salaries

- \$123.1 million in FY24, increase of \$4.1 million or 3.5%
- FY24 Funds 1,168.0 FTEs (1,167.4 FTEs in FY23)
- Includes a Vacancy Adjustment (reduction) of \$2.7 million



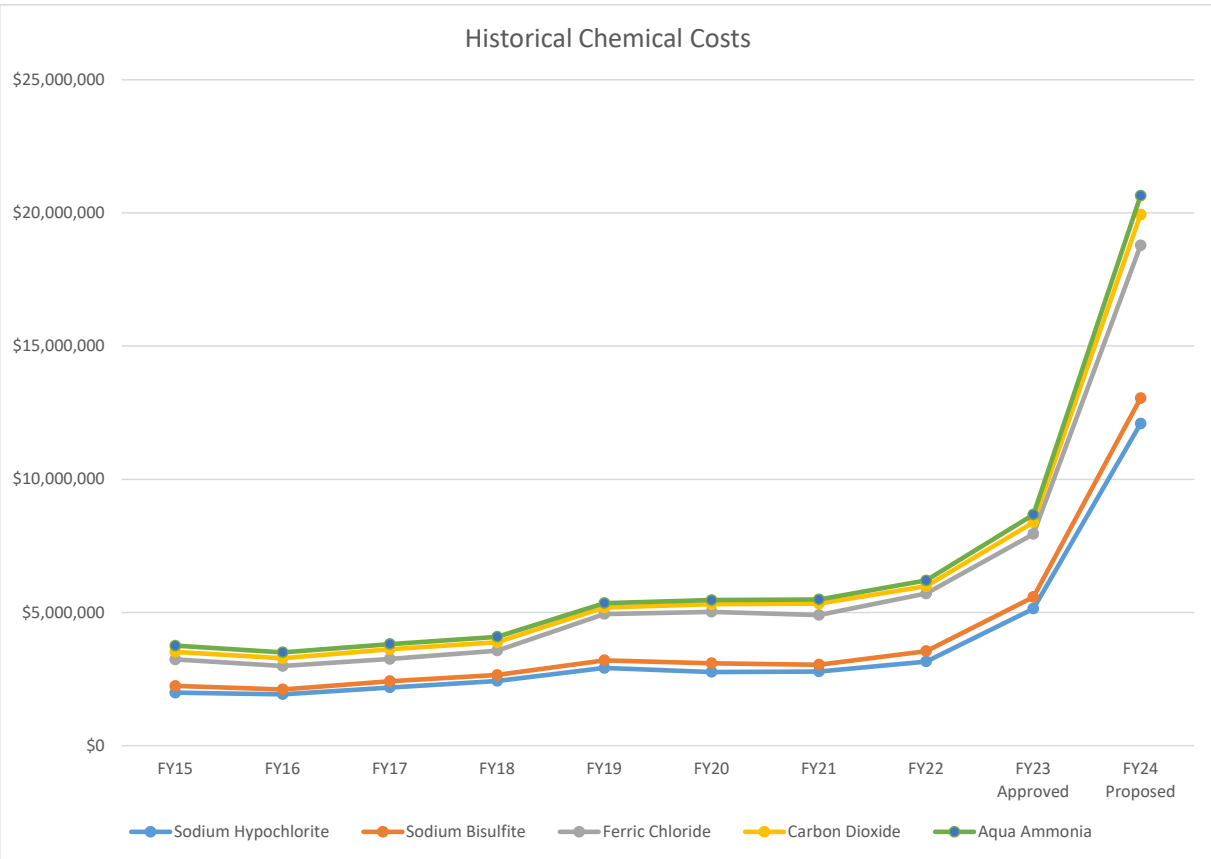
**WE ARE
HIRING**

MWRA Career Opportunities



FY24 Proposed CEB: Direct Expenses - Chemicals

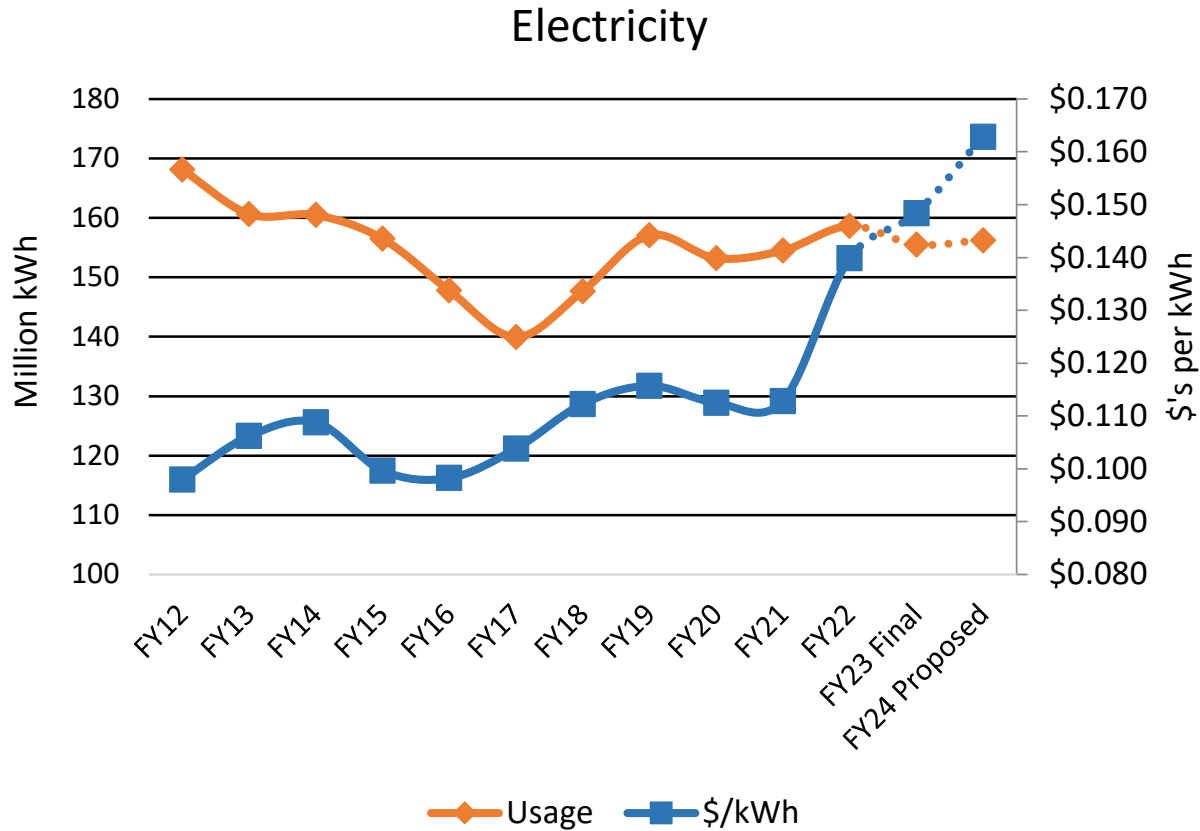
Historical Chemical Costs



Chemical	\$ Change	% Change
Sodium Hypochlorite	\$6.9 million	135.1%
Ferric Chloride	\$3.4 million	142.5%
Carbon Dioxide	\$727,000	166.4%
Sodium Bisulfite	\$513,000	116.4%
Aqua Ammonia	\$413,000	142.0%



FY24 Proposed CEB: Direct Expenses - Electricity





FY24 Proposed CEB: Direct Expenses – Sludge Pelletization

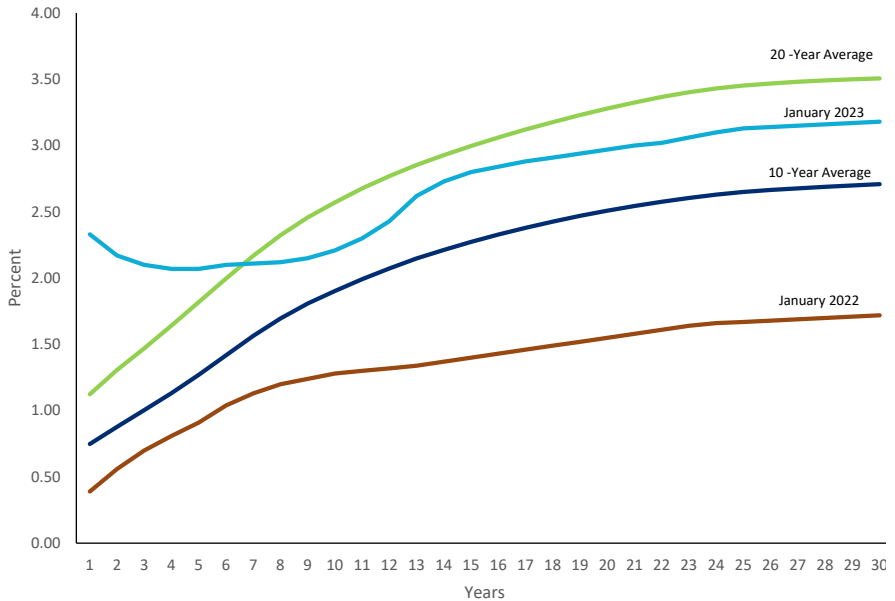
- \$26.9 million in FY24, increase of \$9.9 million or 58.1%
- \$3.7 million projected cost increases due to inflation
- Quantity Assumption: 103.2 dry tons per day
- \$6.2 million is for potential landfill disposal costs due to PFAS issues



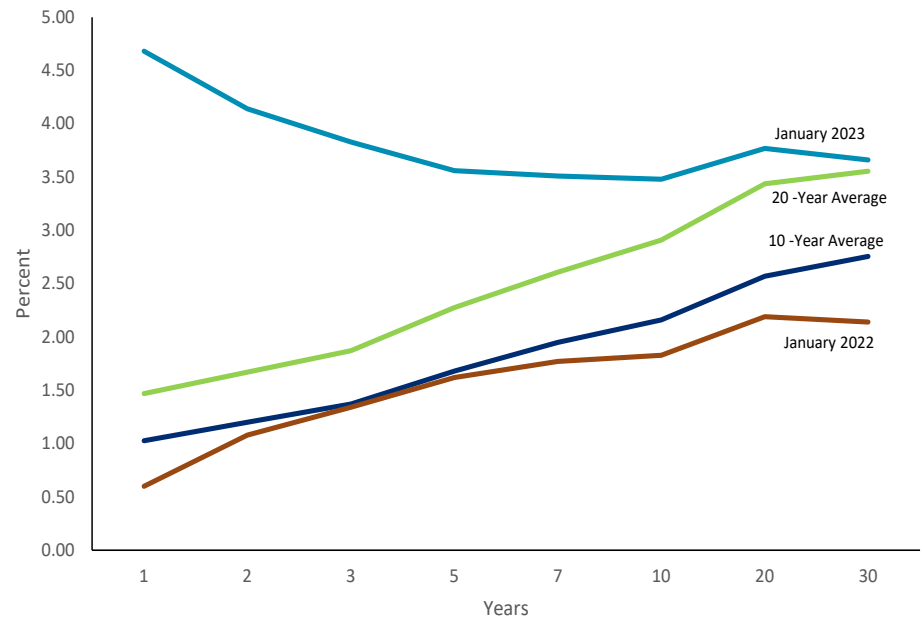


FY24 Proposed CEB: Capital Finance – Interest Rates

MMD Rates

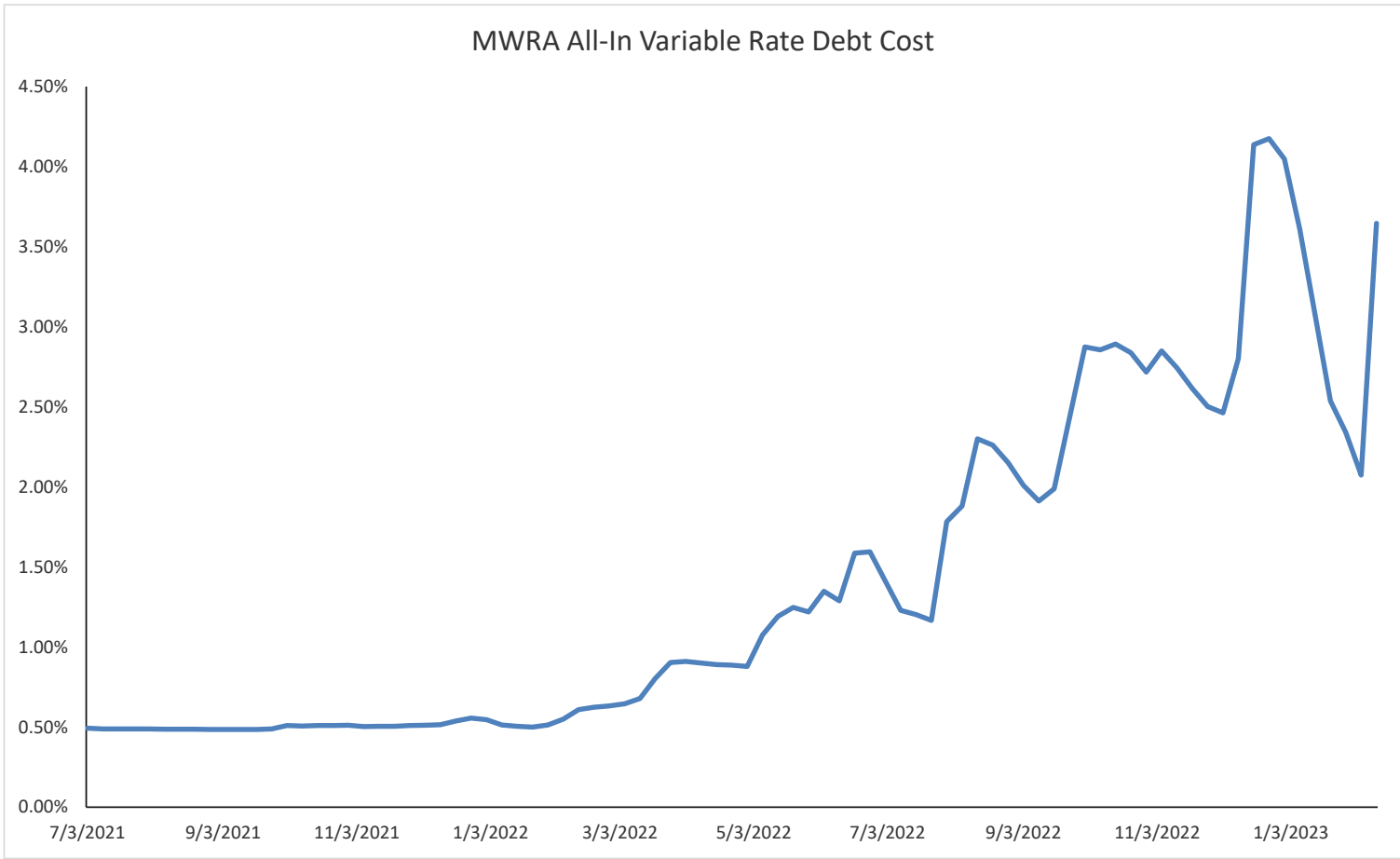


Taxable Interest Rates





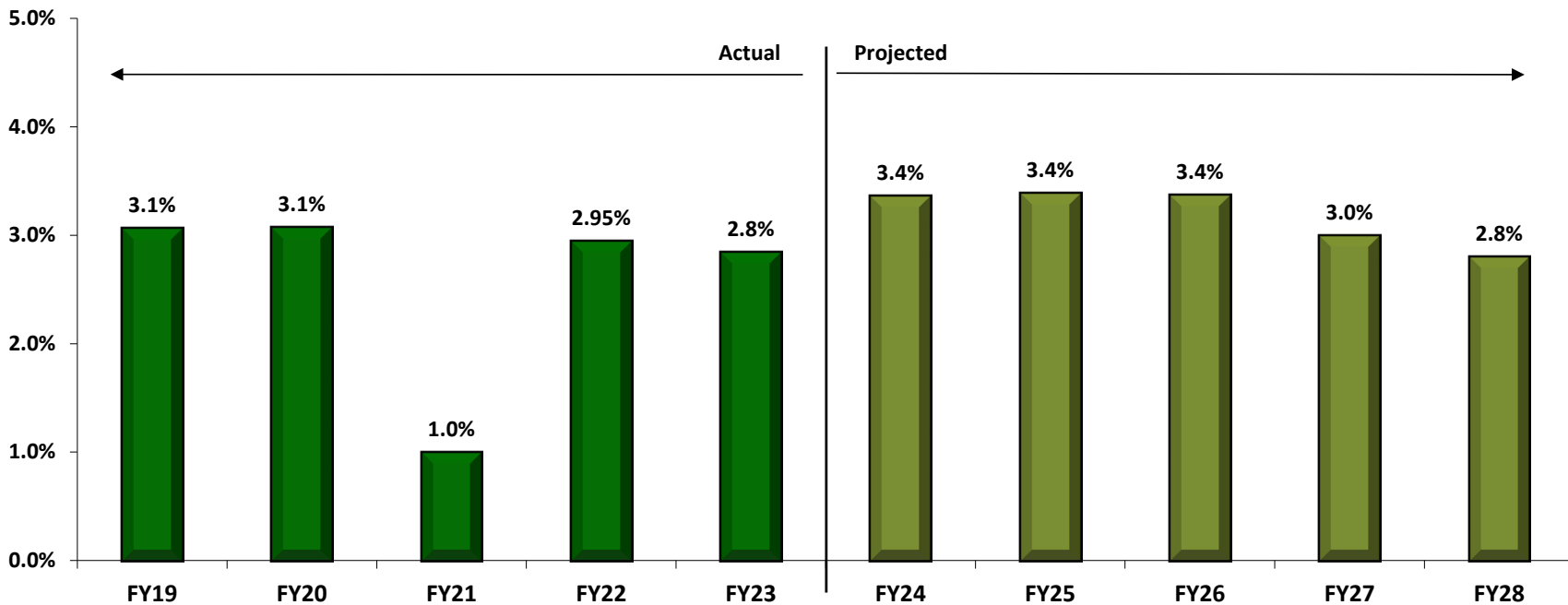
FY24 Proposed CEB: Capital Finance - Variable Rates





FY24 Proposed CEB: Rate Projections (Combined)

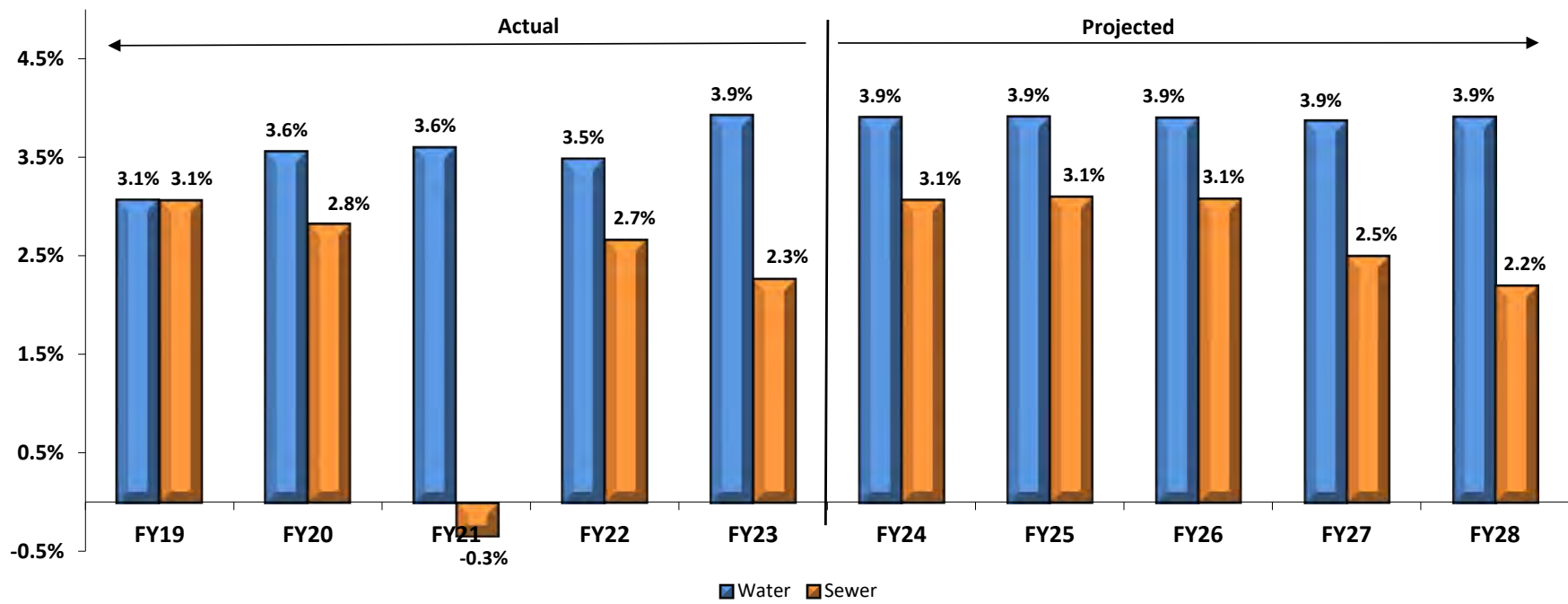
**MWRA Combined Utilities
Historical and Projected Rate Revenue Changes**





FY24 Proposed CEB: Rate Projections (By Utility)

MWRA Water & Sewer Utilities
Historical and Projected Rate Revenue Changes





FY24 Proposed CEB: Next Steps

- Transmit Proposed Budget to Advisory Board for 60 day review
- Public Hearing
- MWRA Board Hearing
- Staff will present Draft Final Budget in May
- Staff anticipate FY24 Budget adoption in June



*Purchase of Electricity for
MWRA Interval Accounts*

February 15, 2023

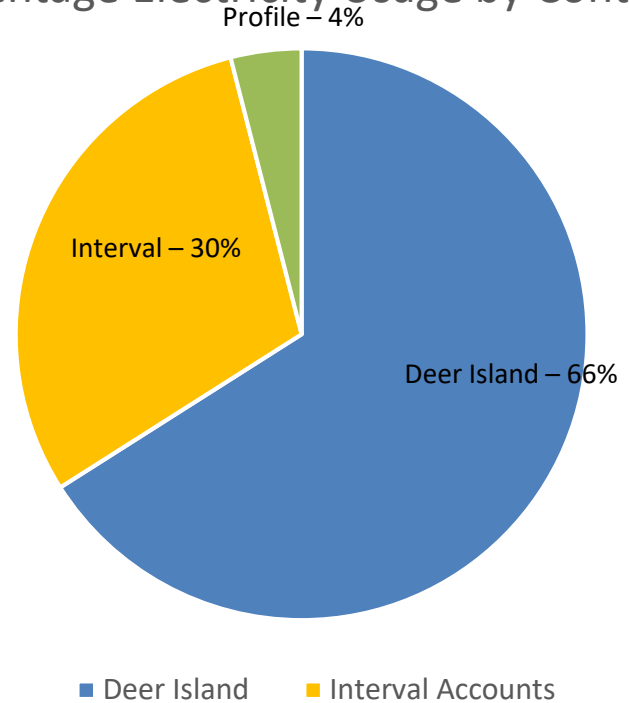


FY22 Electricity Usage by Contract

Electricity Usage in FY22:

- Deer Island – 105,833 MWh
– 1 Account
- Interval Accounts – 47 MWh
– 28 Accounts
- Profile Accounts – 6 MWh
– 40 Accounts

Percentage Electricity Usage by Contract





Clarifier Rehabilitation Phase II

*Deer Island Treatment Plant
Contract 7395*

February 15, 2023



Clarifier Rehabilitation Phase II



Facility Startup

- 1995 (28 years) Primary Clarifiers A-D
- 1997-2001 (22-25 yrs): Secondary Clarifiers A-C
- 1998-1999 (24 yrs): Original Coatings Primary Clarifiers

Major Upgrades to Date:

- 2009 Award - Clarifier Rehab Phase I
- 2013 Award – Scum Skimmer upgrade
- Both projects suggested need for future work: including concrete repair/coatings and gate replacement all for asset protection.
- **2023 – Contract 7395, Clarifier Rehab Phase II**

Deer Island's Primary and Secondary Clarifiers are mission-critical elements for NPDES permit compliance



Clarifier Rehabilitation Phase II Elements



Major Upgrades Include:

- 250,000 sq ft of concrete repairs – interior*
- 450,000 sq ft of coatings - interior tanks* (equivalent to 10 football fields)

* work completed in confined space in active plant

- Replace over 900 gates
- 360 SS316 collector drives
- 65,000 feet SS316 Drive Chain
- Over 10 miles of conductors/conduit
- 10,000 feet of grease lines
- Over 1,200 sprockets
- 3,000 LF of 14" SS aeration piping
- Approximately 400 hatches





Clarifier Rehabilitation Phase II Elements



Coating Failures



Concrete Repair



Shafts, Wear Strips/Shoes, Flights



Gates, Baffles, Shafts, Flights



Collector Drives



Bidder	Amount
Walsh Construction	\$289,359,690
Engineers Estimate	\$227,800,000

- Bid was approx. \$61.3 million or 26.7% higher than the Engineer's Estimate

Bid Review:

- Walsh included all aspects of the work
- No out of scope work was included
- Walsh has significant experience working in the tanks and on Deer Island



D/MBE and D/WBE Participation

- D/MBE goal for project
 - Goal 4.20%
 - Walsh proposed 4.34%
 - Value of proposed participation \$12,540,162
- D/WBE goal for project
 - Goal 4.50%
 - Walsh proposed 1.29%
 - Value of proposed participation \$3,745,530
- Requested partial waiver of D/WBE participation requirements

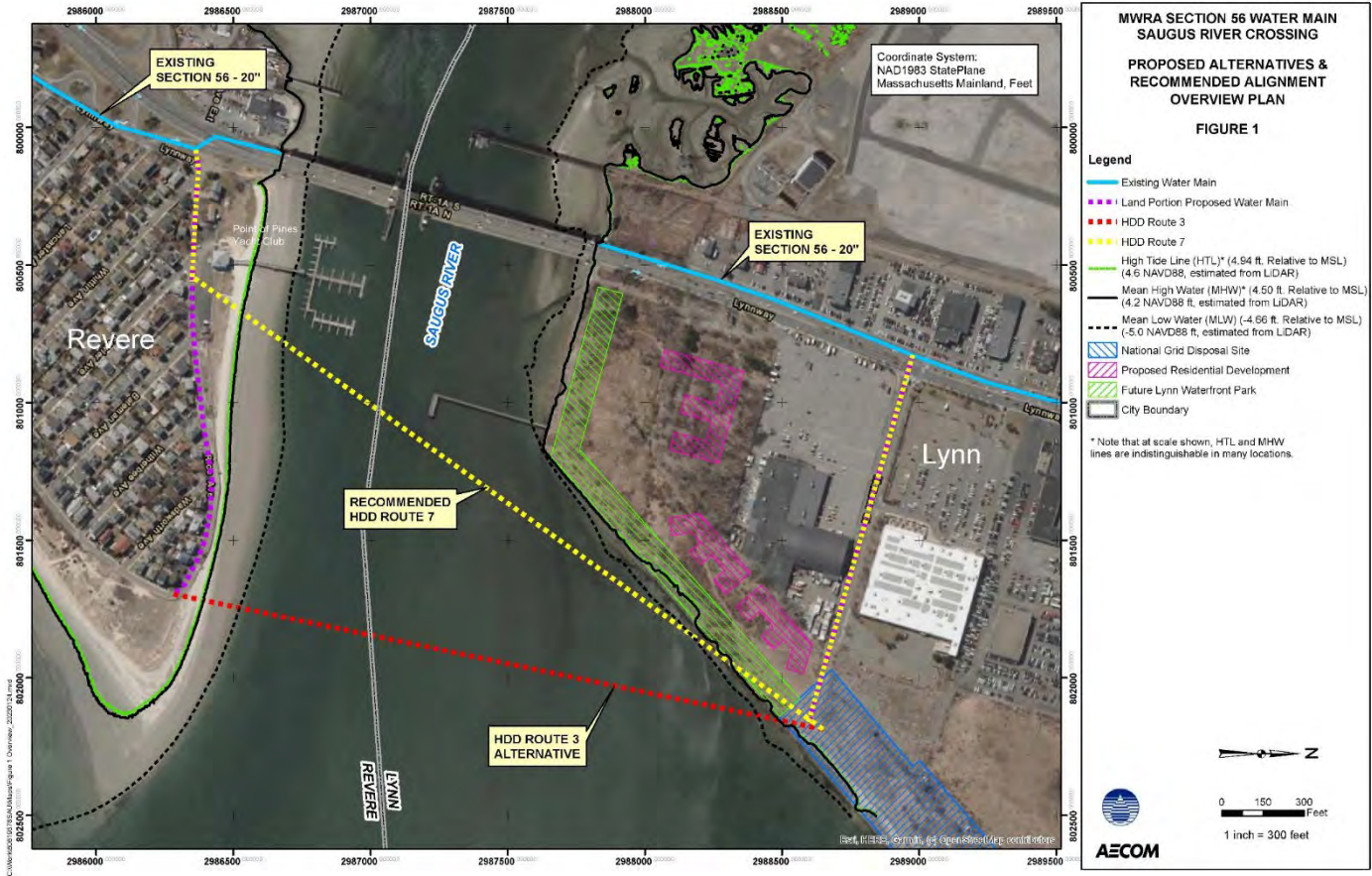


*Section 56 Saugus River Crossing
Amendment No. 1
Contract 7454*

February 15, 2023



Section 56 Project Map





Amendment Request

Time Extension – 27 Months

Out of Scope Work

- Archeological investigations - \$49,778
- Additional geotechnical assessment - \$351,500
- Chapter 91 license and additional MEPA Environmental permitting - \$258,000

Costs due to Time Extension

- Additional project management - \$225,580
- Escalation due to time extension - \$115,135