



Sunnyvale

Sunnyvale Cleanwater Program: Program Update

Council Study Session
November 1, 2022



Water Pollution Control Plant



Approx. Scale: 1" = 7000'

440± Acre Ponds

Pond Facilities

16.5± Acre Site

Caribbean Drive

Landfill

Landfill

Sunnyvale Cleanwater Program: Planning



Sunnyvale Cleanwater Program: Drivers



REGULATIONS



CONDITION



CAPACITY

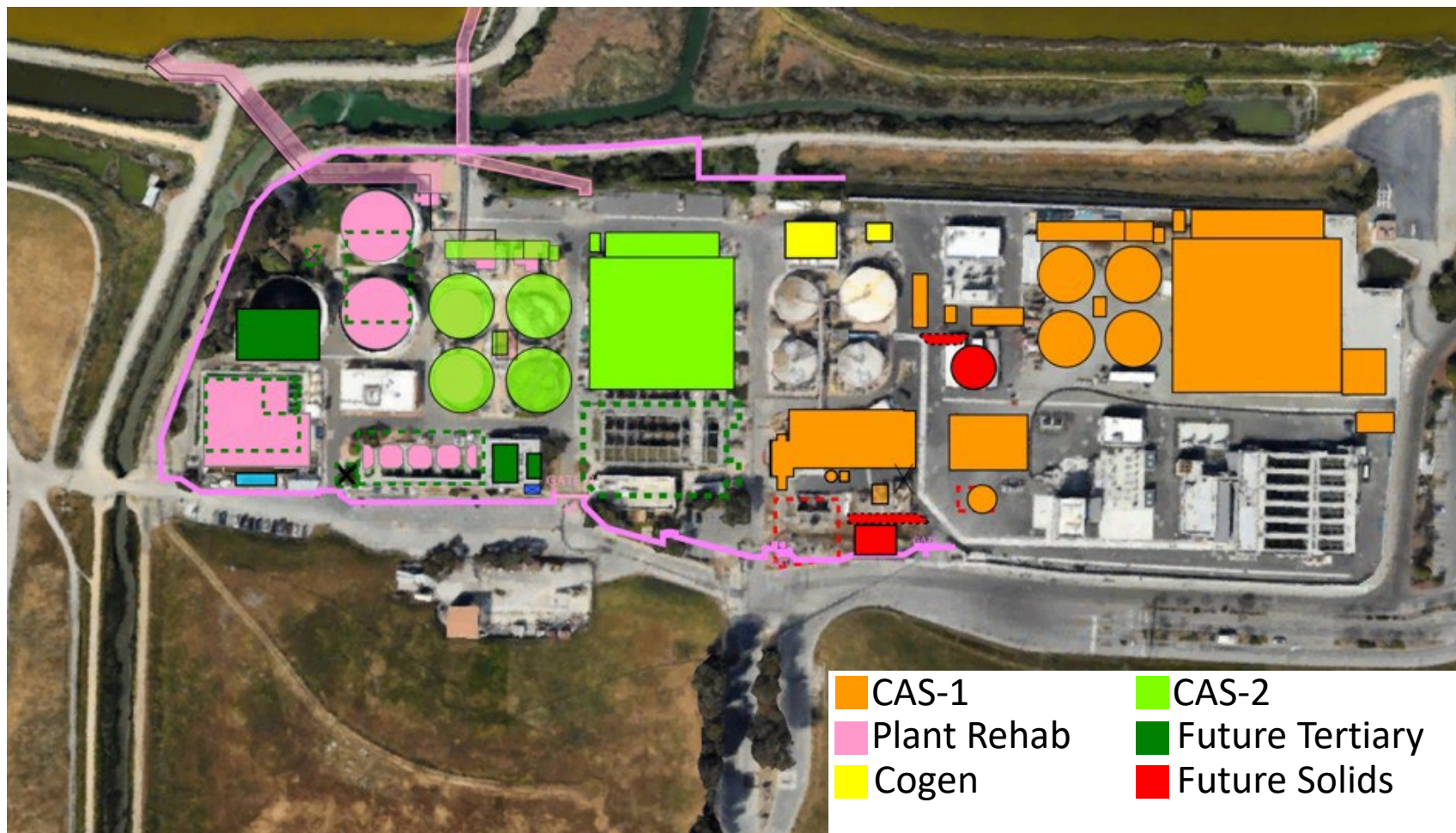


PERFORMANCE

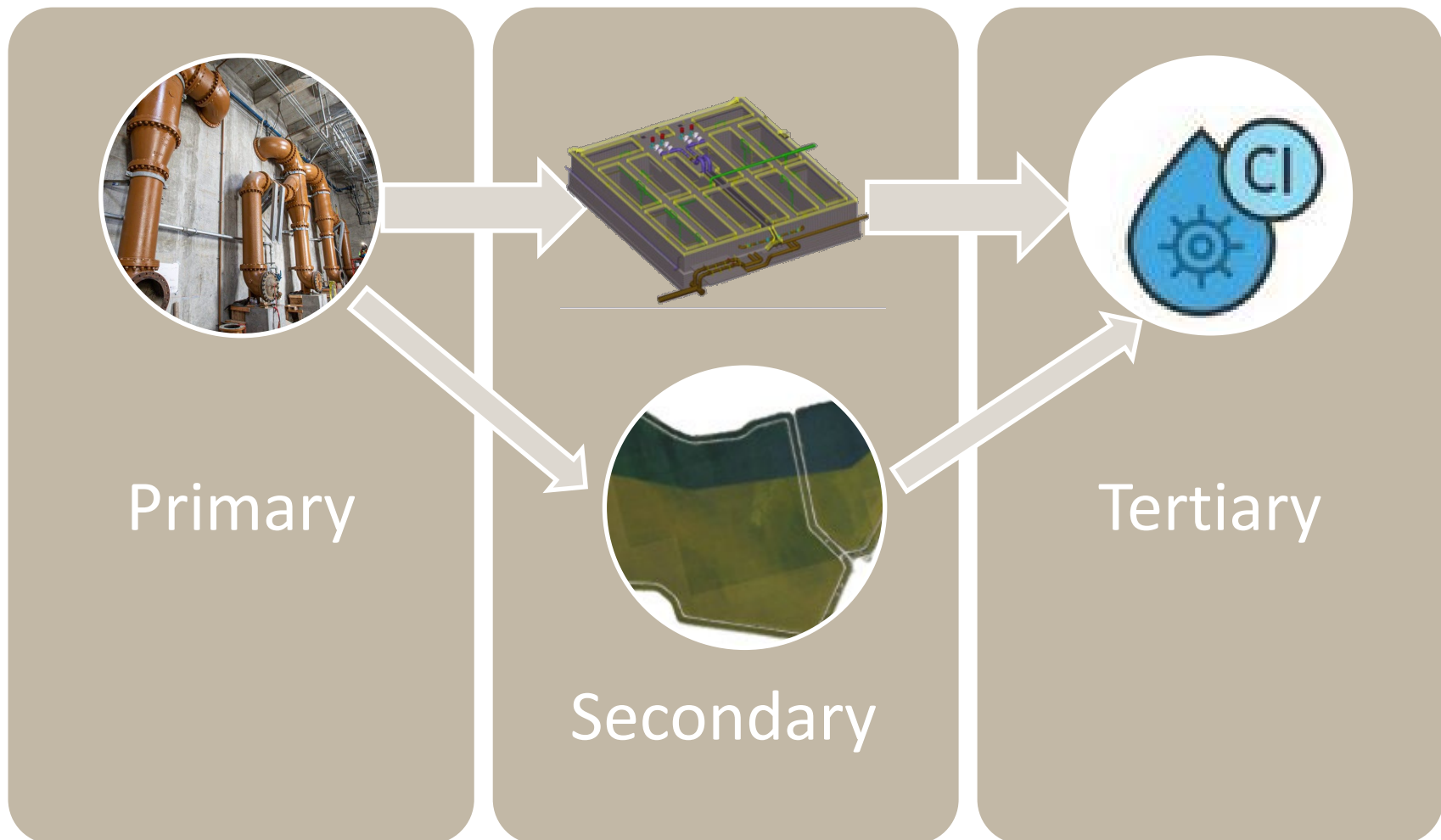


POLICY

Sunnyvale Cleanwater Program: Projects



Sunnyvale Cleanwater Program: Phase 2



Sunnyvale Cleanwater Program Update

Accomplishments

Challenges

Road ahead

Caribbean Drive Parking and Trail Access Enhancements



Site Preparation Package



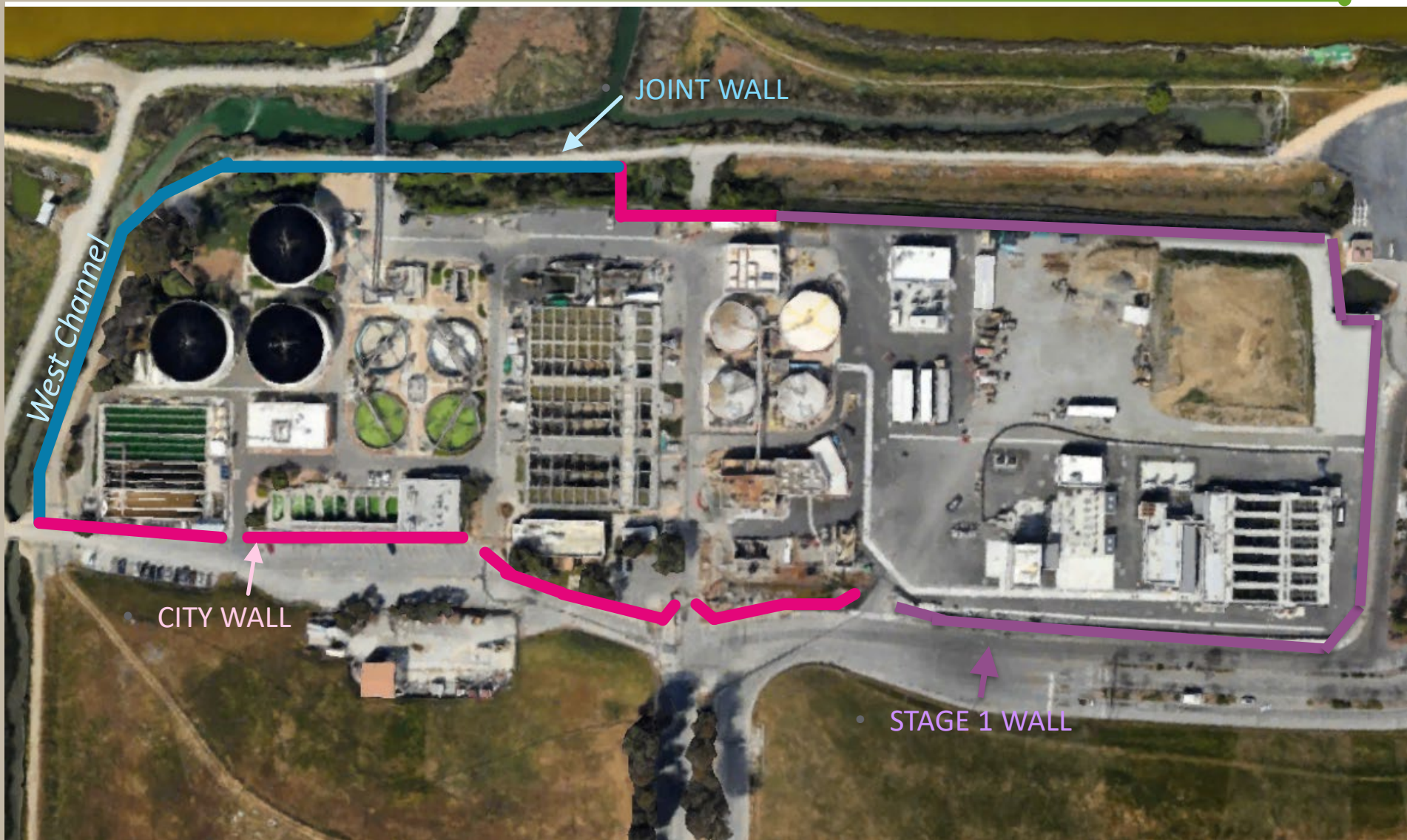
Secondary Treatment/Dewatering



Plant Rehab




Perimeter Wall



Sunnyvale Cleanwater Program Update

Accomplishments

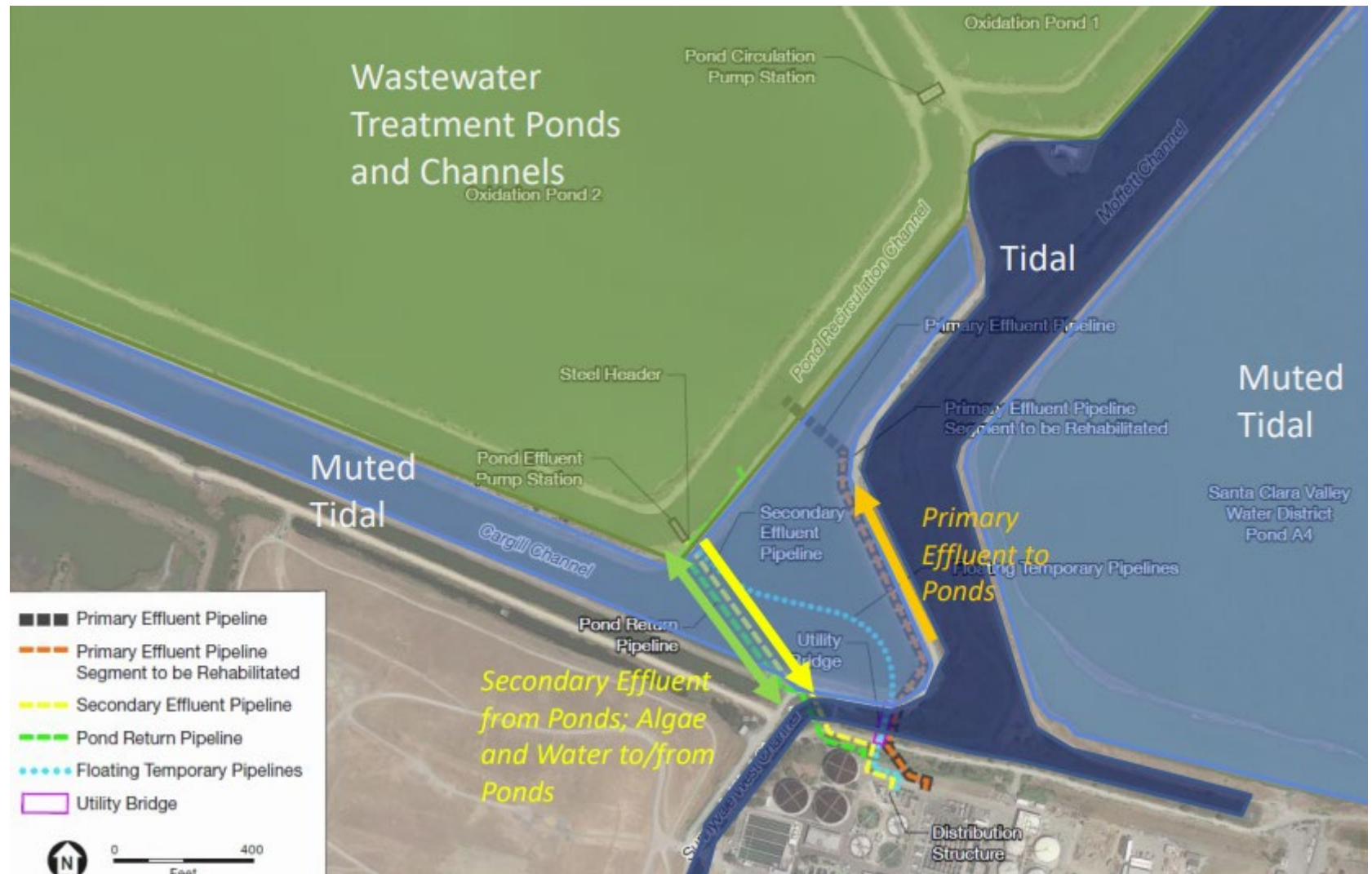
 **Challenges**

Road ahead

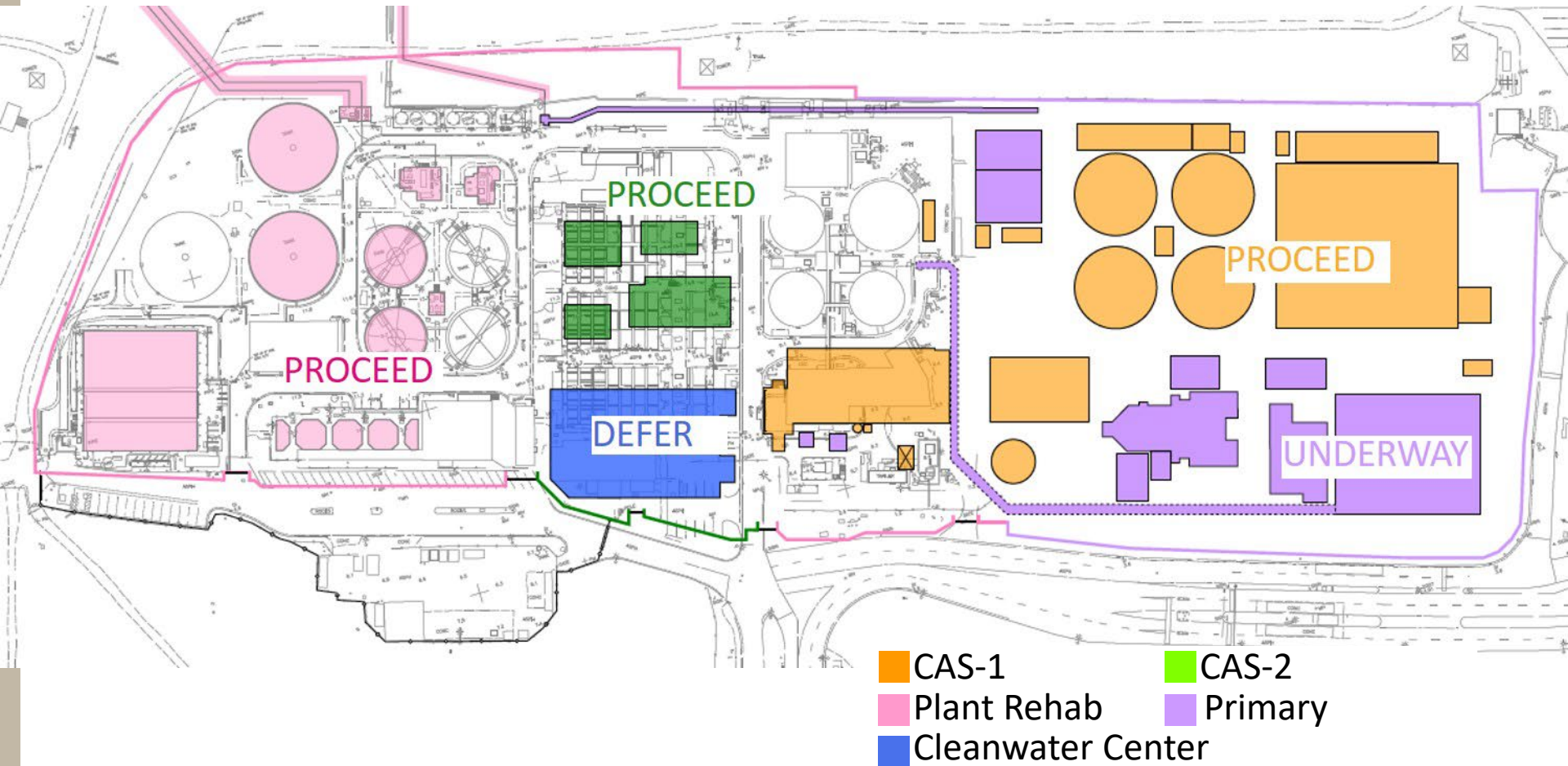
Headworks/Primary Treatment



Pipeline Rehab and Replacement



Cleanwater Center



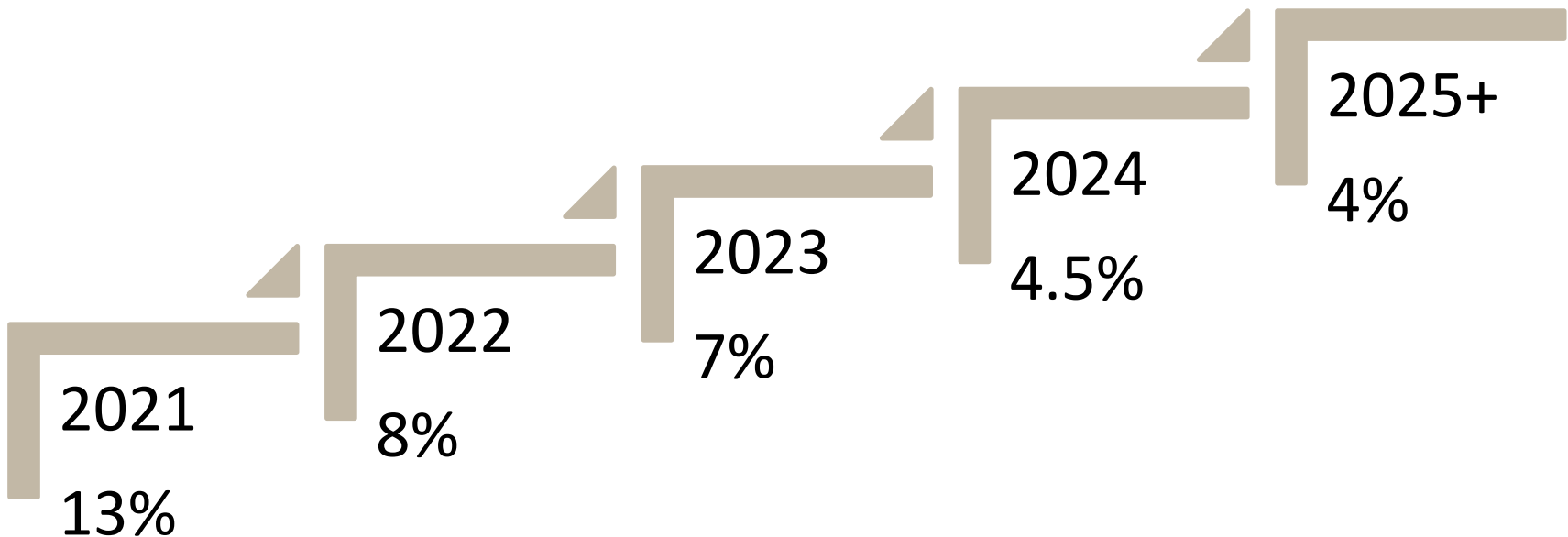
Cleanwater Program Cost—Active Projects

Project	Adopted Budget	Estimated Cost	Variance
Primary/Headworks	\$123M	\$123M	--
CWC Stage 1 (site work)	\$5M	\$5M	--
Plant Rehab	\$73M	\$77M	\$4M
Secondary & Dewatering	\$274M	\$358M	\$84M
Total	\$475M	\$563M	\$88M

Bay Area Construction Market (2021-present)

Agency	Project	Engineer's Estimate	Low Bid
Central San	Solids handling improvements	\$140M	\$180M
Union Sanitary District	Aeration basin modifications	\$63M	\$121M
EBMUD	Orinda WTP Disinfection	\$221M	\$268M
Palo Alto	Secondary treatment upgrades	\$118M	\$162M

Cleanwater Program Cost—Escalation



Information from Leland-Saylor Associates

Cleanwater Program Cost—All Projects

(with higher inflation factors applied)

Projects	Adopted Budget	Estimated Cost	Variance
Programmatic	\$130M	\$166M	\$36M
Active Design and Construction	\$475M	\$563M	\$88M
Future Phase 2	\$5M	\$7M	\$2M
Phase 3	\$51M	\$68M	\$17M
Phase 4	\$219M	\$359M	\$140M
Phase 5	\$27M	\$44M	\$17M
Subtotal	\$907M	\$1,207M	\$300M
CWC Stage 2 (office/lab building)	--	\$56M	
Other Unfunded	--	TBD	

Financing the Largest Project in City History

Foundation: Council Policy

- 7.1.1 Long Range Goal XI: To prudently utilize the issuance of debt to minimize costs, maximize cash flow, and/or ensure that future users are responsible for costs as appropriate.
- Utility Fund Policies 7.1.1 I1b.5: Bonded debt financing should be used for capital improvements as appropriate to:
 - ◆ Make cost recovery of an asset more consistent with its useful life
 - ◆ Equitably assign cost over multiple generations of customers who use the assets
 - ◆ Smooth near-term rate impacts of the project

\$650 Million in Low Interest Loans

Clean Water State Revolving Fund Loan Round 1

\$127.1 M at 1.7% Interest, \$4 M in loan principal forgiven
Financed Primary Treatment and Headworks (Phase 1)

Water Infrastructure Financing and Innovation Act Loan

\$220.6 M at 1.56% Interest

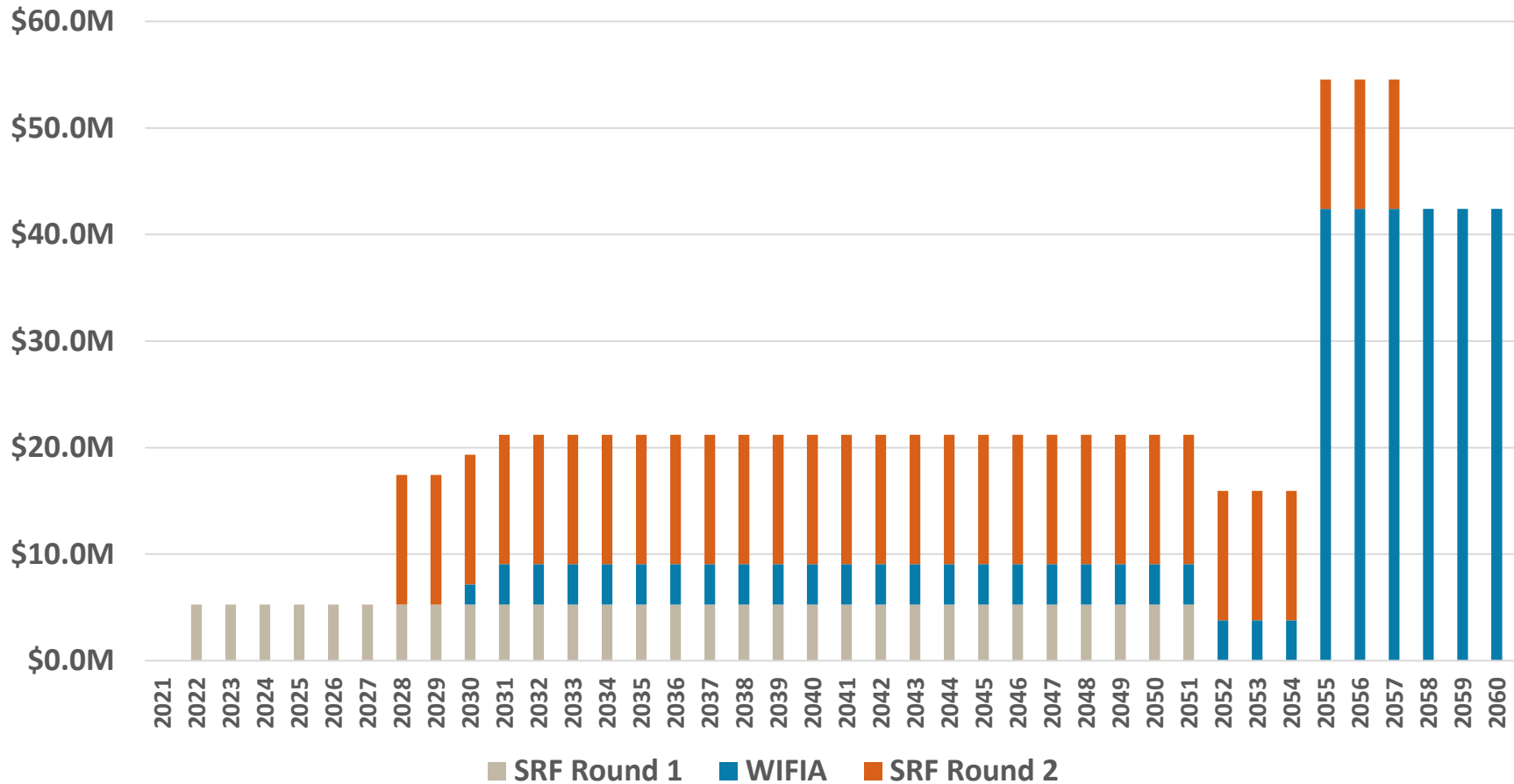
Favorable debt service structure with interest only through 2053
Financing a portion of Secondary Treatment (Phase 2)

Clean Water State Revolving Fund Loan Round 2

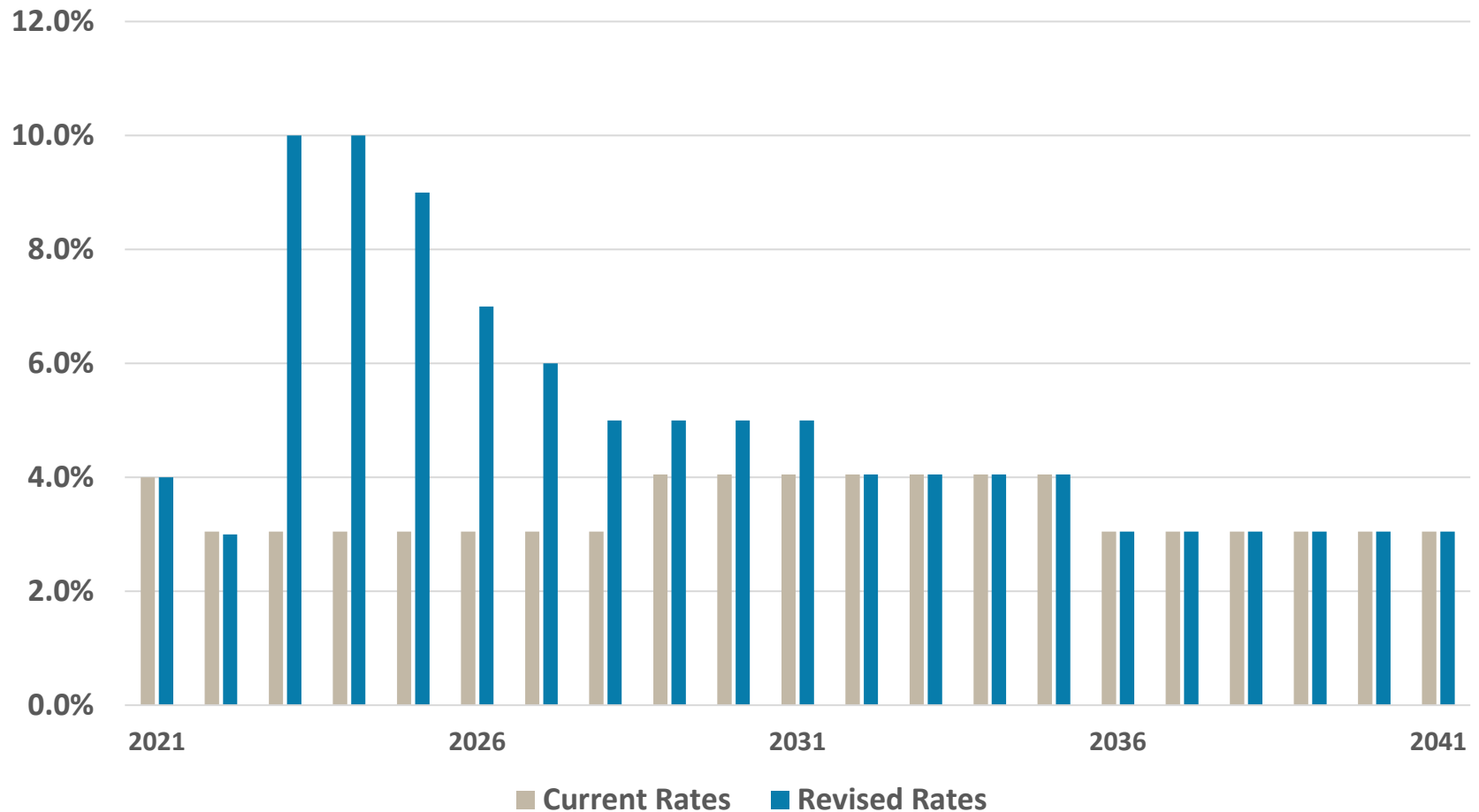
\$302.1 M at 1.6% Interest

Financing the remainder of the Secondary Treatment

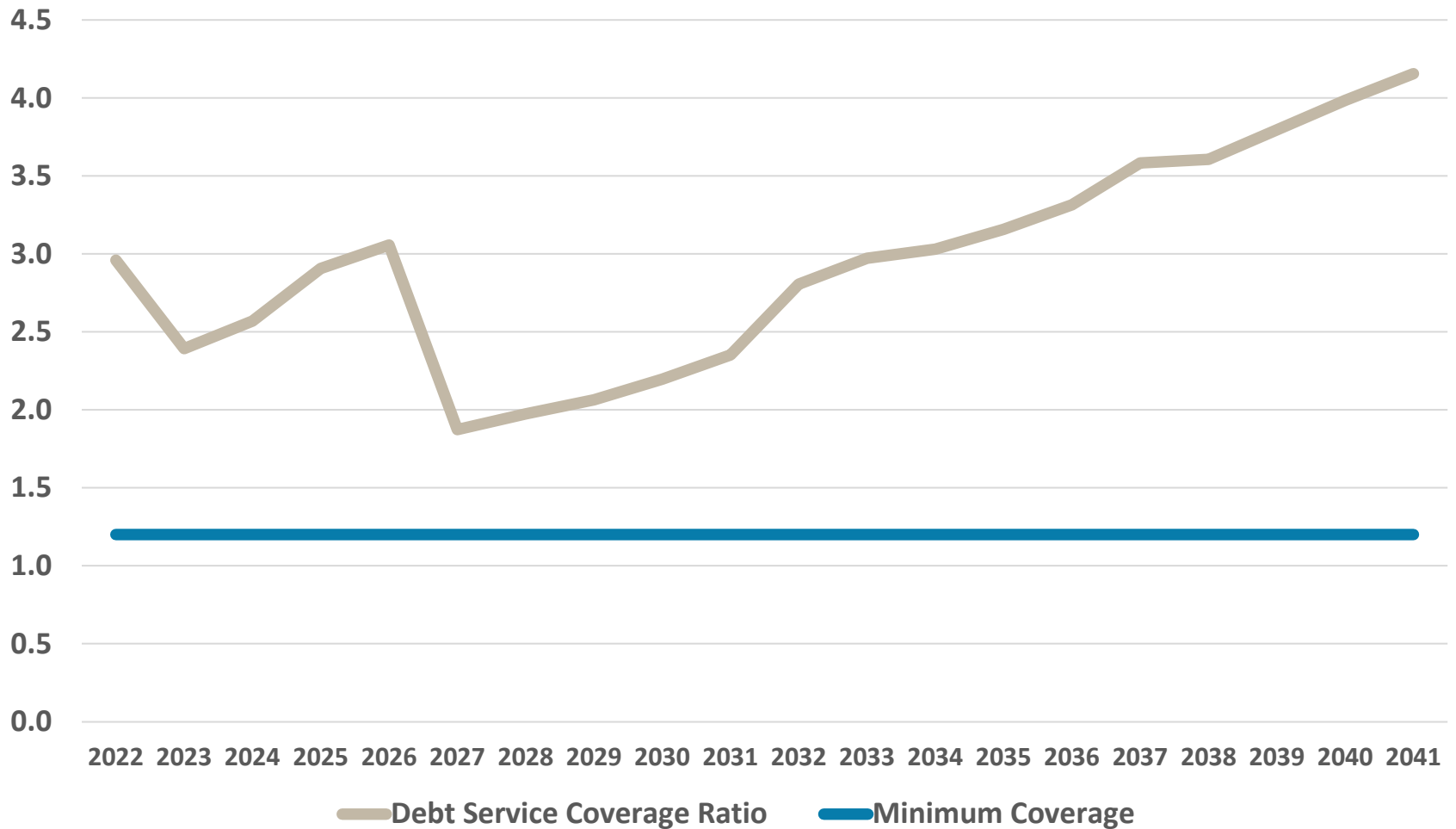
Debt Service Payments



Estimated Future Sewer Rate Increases



Debt Service Coverage (min 1.2x)



Sunnyvale Cleanwater Program Update

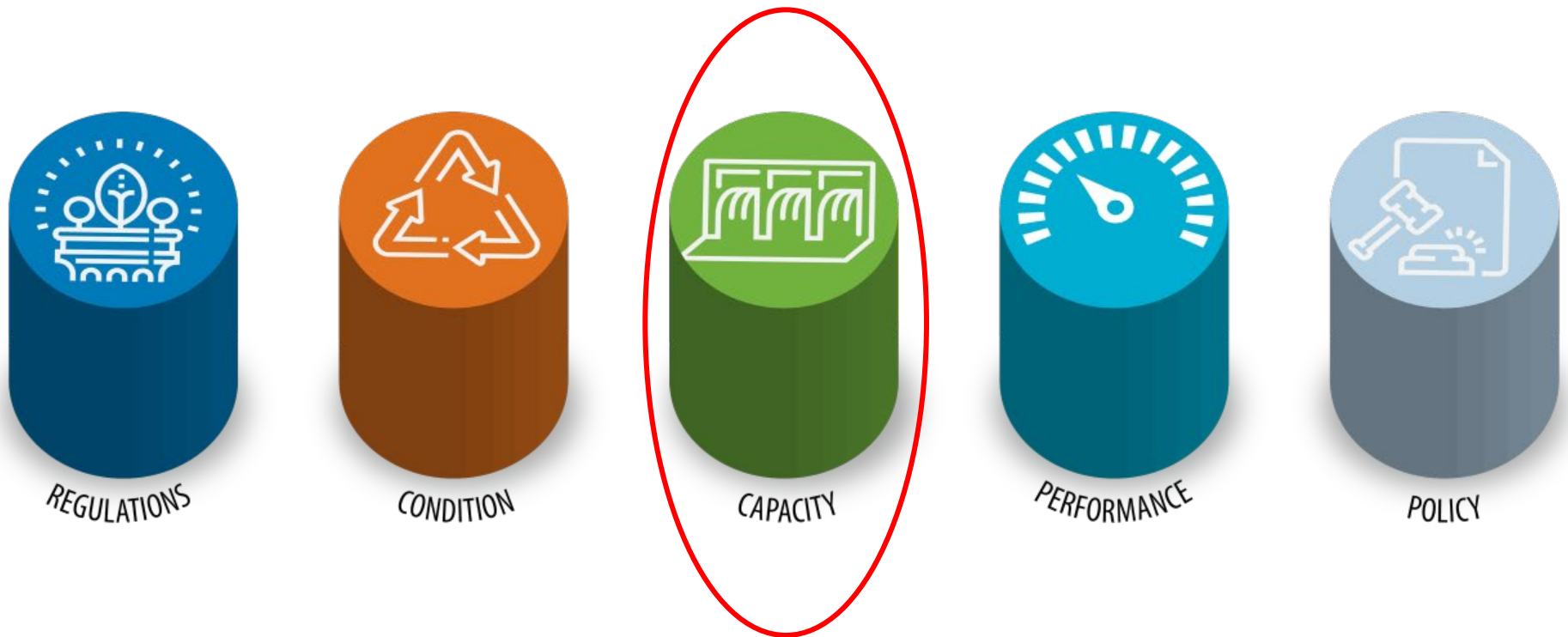
Accomplishments

Challenges



Road ahead

Cleanwater Program Drivers



Cleanwater Program Drivers

Capacity

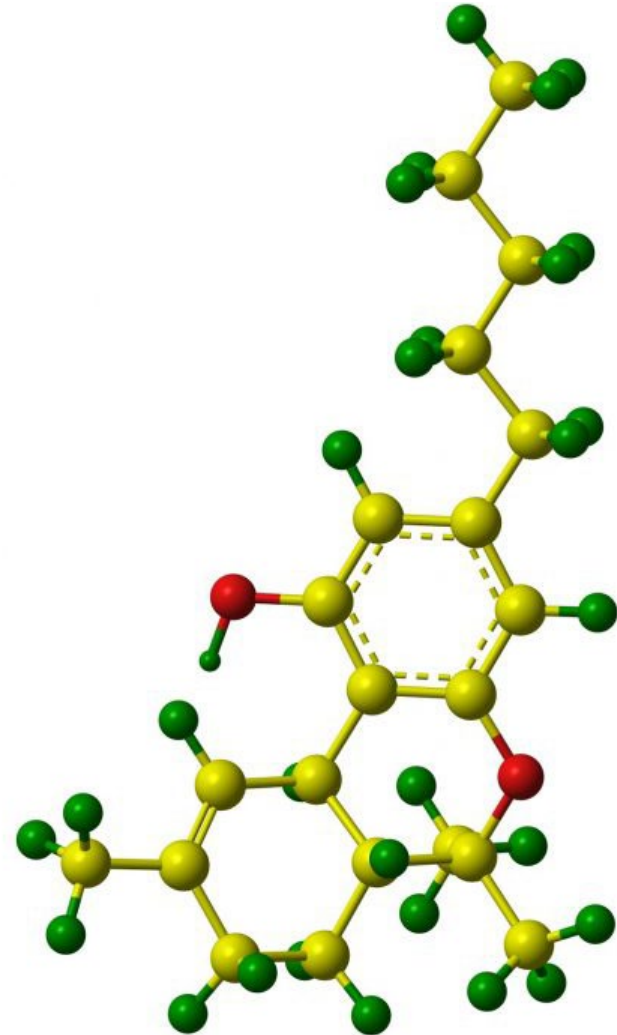
- Timing of projects
- Size of projects
- Selection of projects



Cleanwater Program Drivers

Regulations

- Nutrient Hard Cap Limits
- PFAS
 - ◆ Removal from potable water supply
 - ◆ Pretreatment of industrial discharge
 - ◆ **Treatment at WPCP**
 - ◆ **Biosolids disposal limitations**



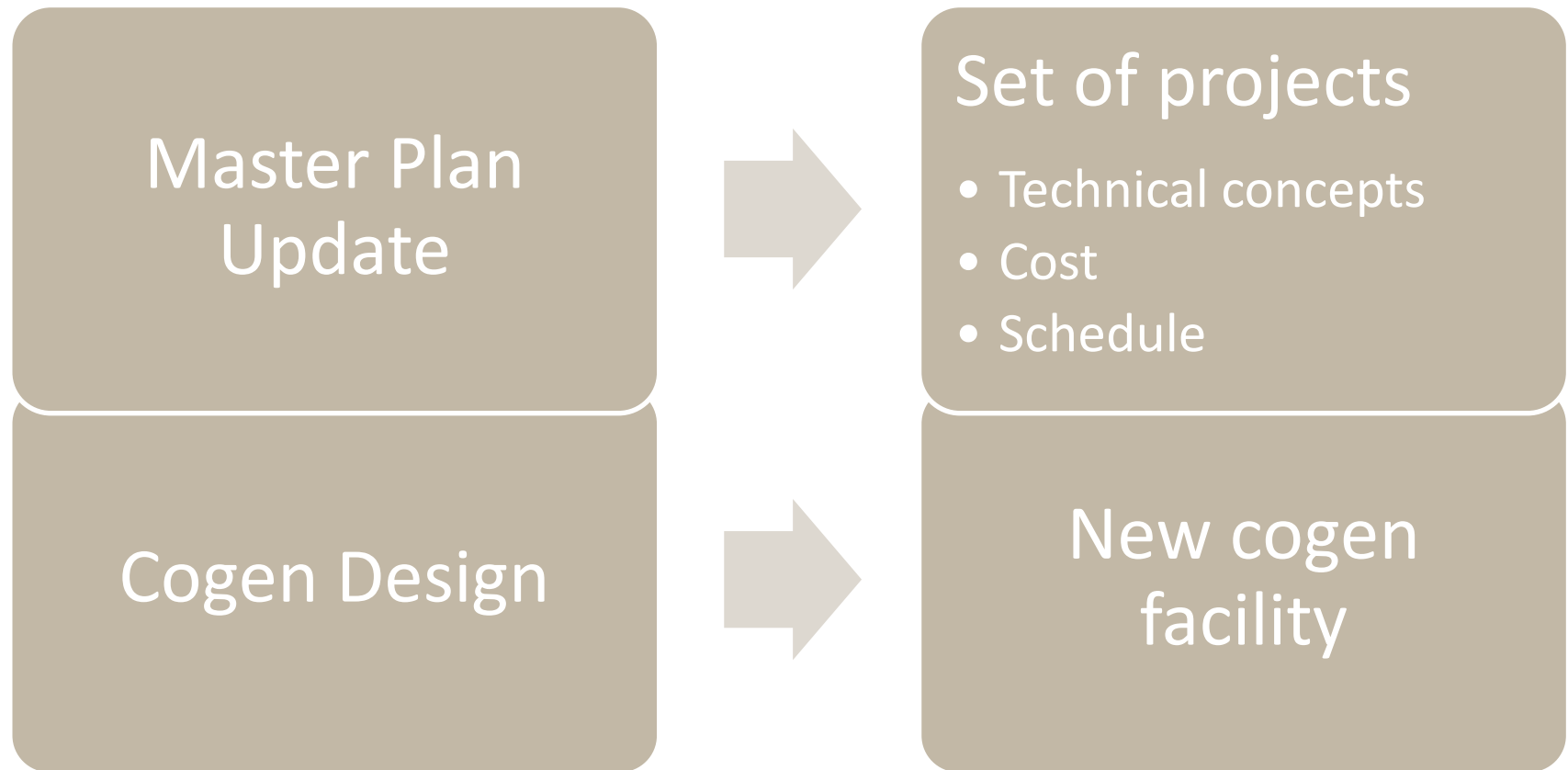
Cleanwater Program Drivers

Condition

- Remaining life before failure
- Reliability
- Safety



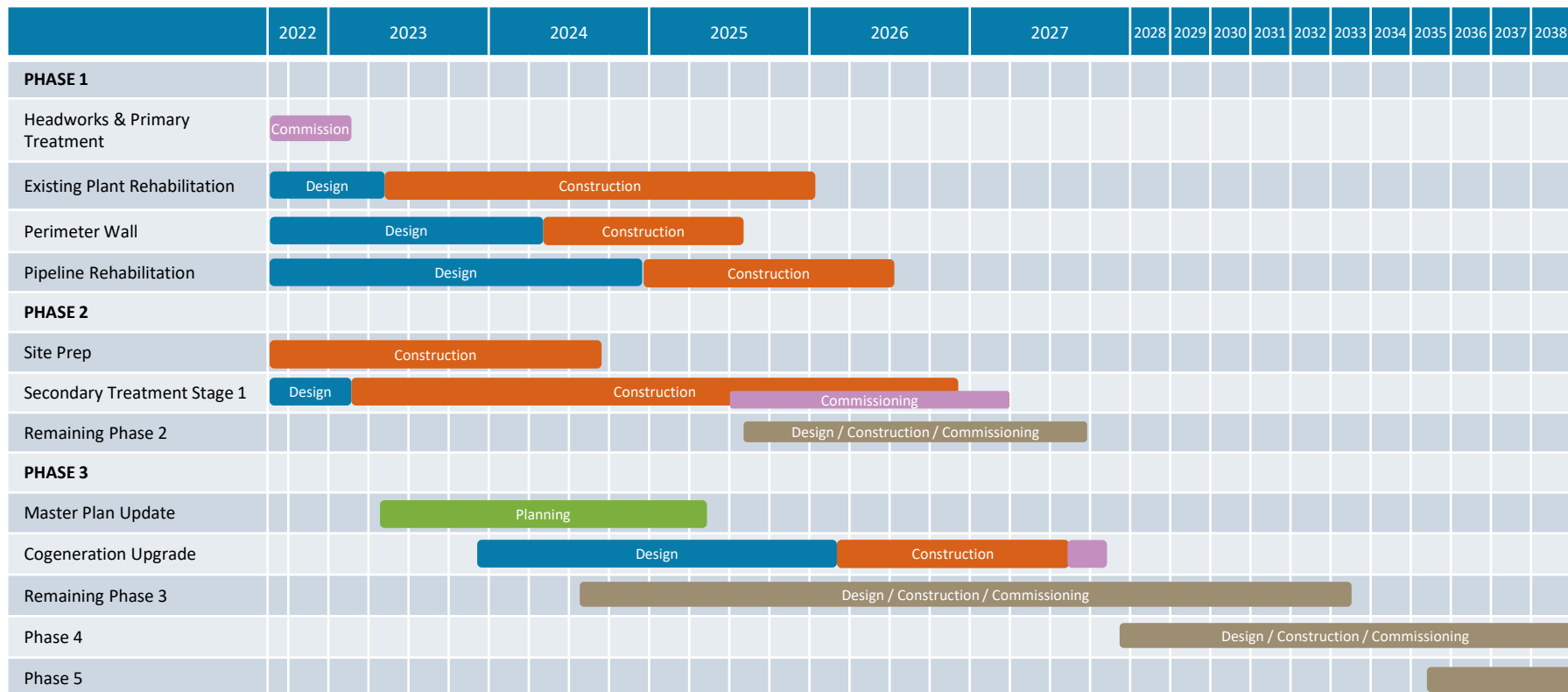
Cleanwater Program Approach



Next Steps

- November 2022 – Award Secondary Treatment, Thickening and Dewatering construction contract
- January 2023—Award Plant Rehabilitation construction contract
- February 2023—Award Master Plan Update/Cogen design contract
- June 2023—Capital projects budget

Sunnyvale Cleanwater Program: Schedule



Thank you!

Questions?

Cleanwater Program Cost—All Projects

Original assumptions:

- Budgets are based on 2% annual escalation.
- Engineering services during construction were benchmarked at 3% of the contractor's bid.
- Construction management costs have not been updated.