



RWQCP CAPITAL PROGRAM

Finance Committee

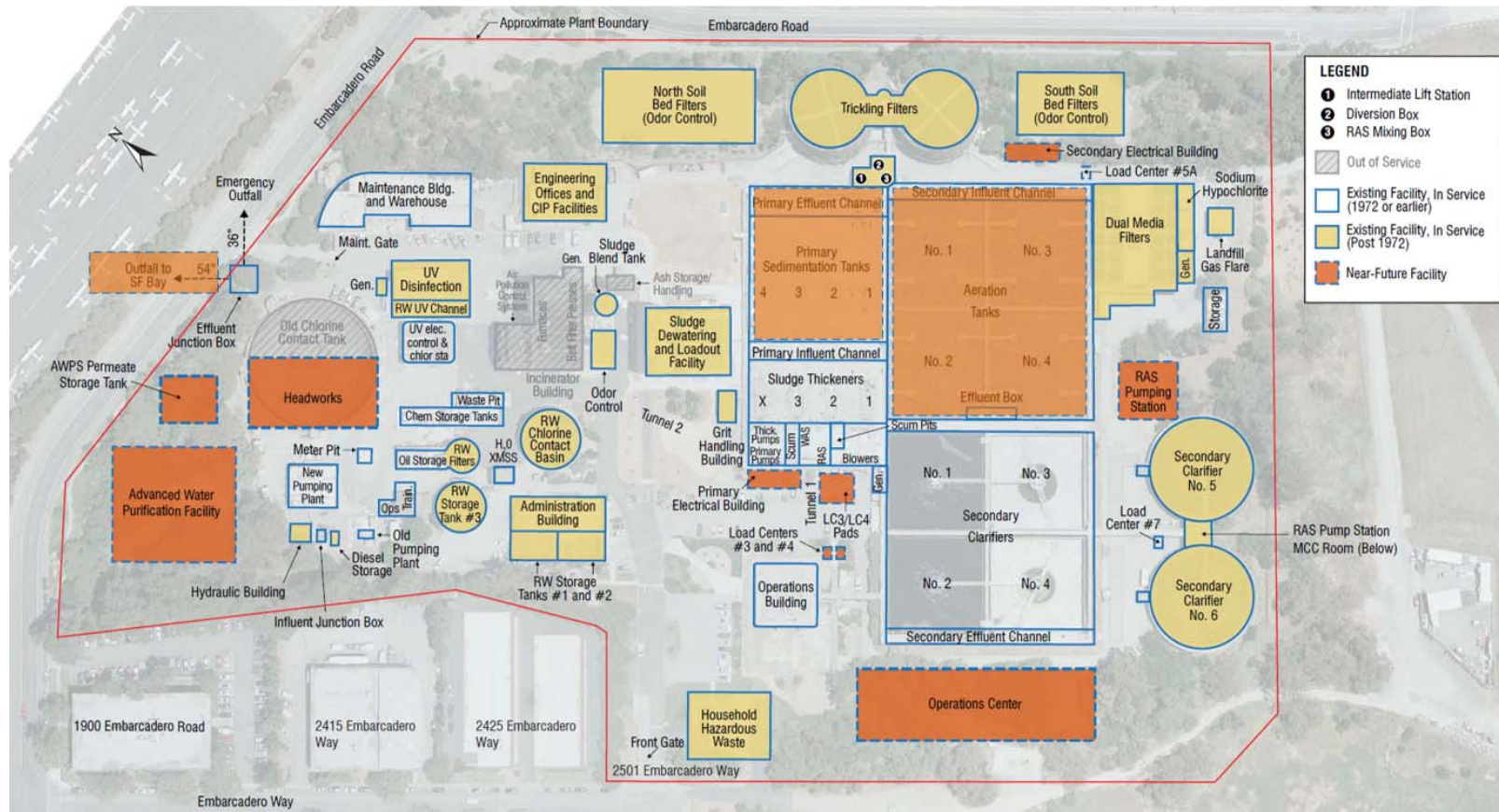
APRIL 20, 2021

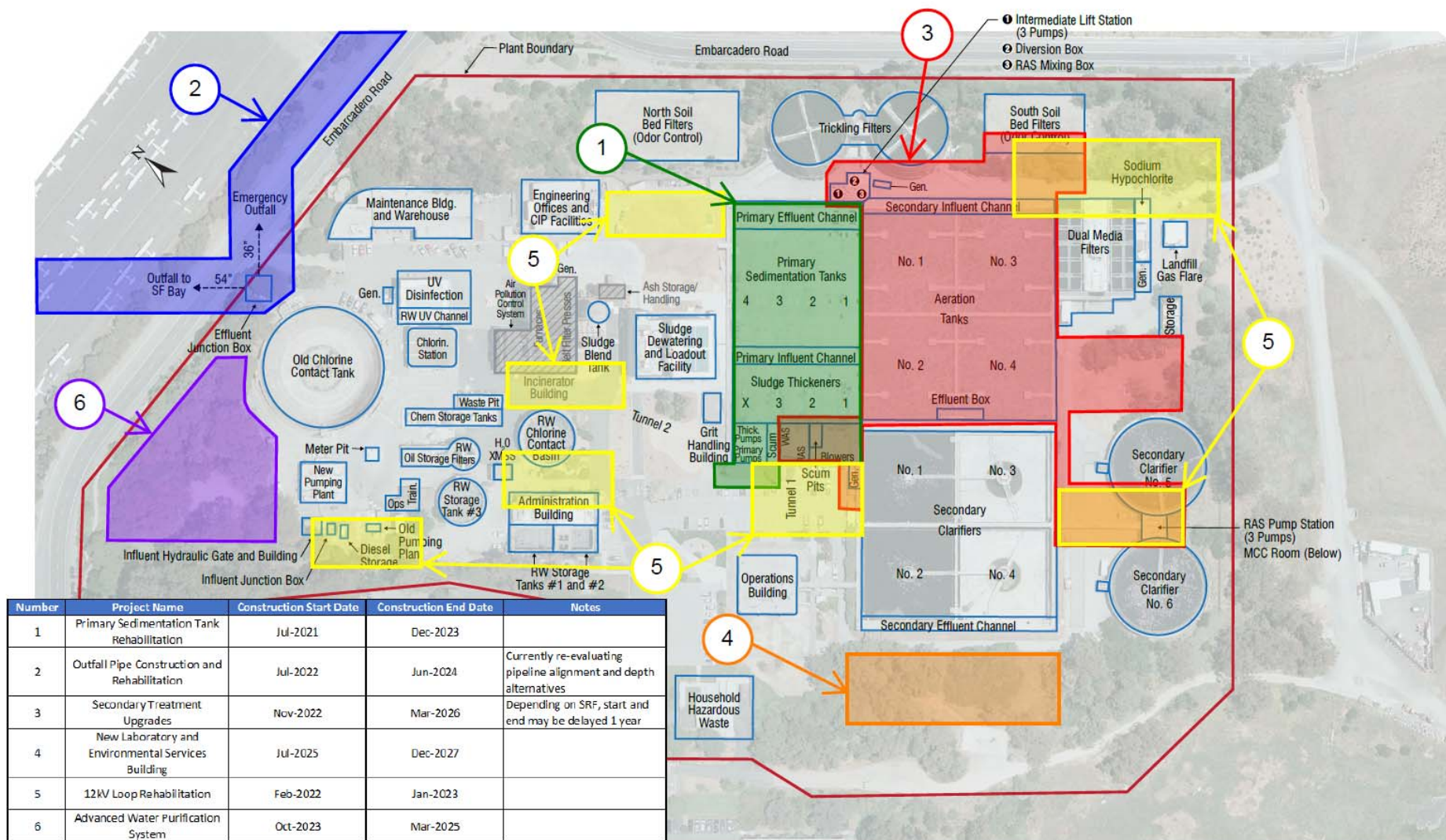
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Agenda

- Project status updates
- Capital program delivery risks
 - Technical and Logistical
 - Schedule and Sequence
 - Coordination
 - Financial (Cashflow, Timing, and Scope Changes/Cost Estimates)
- Financial forecasts

RWQCP EXISTING AND FUTURE FACILITIES/UPGRADES





AERIAL VIEW SHOWING EXISTING FACILITIES AND ACTIVE PROJECTS
CITY OF PALO ALTO

CAPITAL WORK IN-PROGRESS

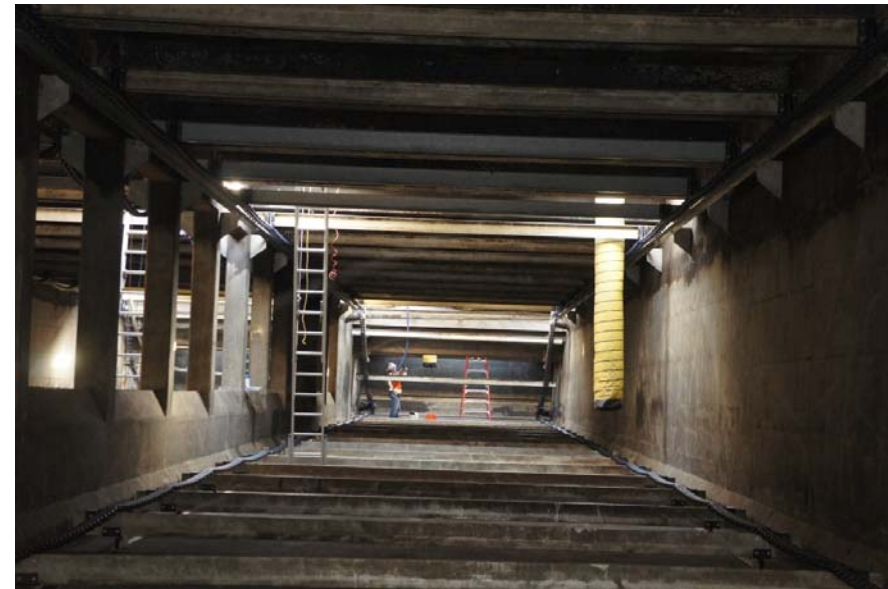
| Project | Status | Expected Funding | Expense (million \$) |
|--|--------------------------------|--|-------------------------|
| Primary Sedimentation Tanks Rehabilitation and Equipment Room Electrical Upgrade Project | Awarding Construction | SRF Loan | \$19.4 |
| New Outfall Pipeline | 100% Design / Levee Re-eval | SRF Loan | \$11.1 |
| Secondary Treatment Upgrades | 60% Design Complete | SRF Loan / USEPA Loan | \$146 |
| Technical Services Building / Lab Building/Ops Center | Advanced Planning | Revenue Bond | \$57.0 |
| Advanced Water Purification System | In Design | VW \$16M; MV \$3M; PA WWT \$1M; SRF | \$20.0 |
| Headworks Facility | Budgeted | SRF Loan | \$48.0 |
| Projects in Progress | Various | Operating Capital Budget | \$8.3 |
| | | Subtotal | \$310 |

CAPITAL PROGRAM COMPARISON TO NEIGHBORING FACILITIES

| Project | CIP Program (million, \$) | Residential Population Served |
|---|------------------------------|----------------------------------|
| San Jose (10-year CIP for Regional Wastewater Treatment Facility) | \$1,400 | 1,400,000 |
| Sunnyvale Clean Water Program | \$450 | 152,770 |
| Silicon Valley Clean Water RESCU Program (Redwood City) | \$495 | 220,000 |
| San Mateo Clean Water Program | \$991 | 140,000 |
| Palo Alto Regional Water Quality Control Plant CIP | \$310 | 236,000 |

PRIMARY SEDIMENTATION TANKS REHABILITATION AND EQUIPMENT ROOM ELECTRICAL UPGRADE

- Addresses Aging Infrastructure
 - Rehabs 4 concrete tanks
 - Replaces 49-year old electrical gear
- Awarding Construction Contract (rebid)
- Total Project Cost \$19.4M



PRIMARY SEDIMENTATION TANKS REHABILITATION AND EQUIPMENT ROOM ELECTRICAL UPGRADE (CONTINUED)

- Primary Sedimentation Tanks Rehabilitation and Equipment Room Electrical Upgrade Project - 5/17/21 PACC
 - Approve 3 Partner Agreements (Stanford; East Palo Alto Sanitary District; Mountain View / Los Altos)
 - Approve Construction Contractor
 - Approve SRF Loan Resolution to Repay Loan
 - Construction Management Firm Selection (in future)
- Construction NTP June 2021; Complete December 2023
- General Schedule on Four Tanks:
 - Two tanks in 2022 dry season
 - Two tanks in 2023 dry season



NEW OUTFALL LINE

- 63" new pipe; Rehab 54" existing pipe; addresses capacity, leaks, sea level rise adaptation
- 100% design; seven permits in hand
- \$11.1M SRF funded project (1.1% interest rate)
- DELAY – USACE Levee and Airport Runway Shift
 - Future levee height unknown
 - Airport runway shifts depending on height
 - Takeoff/landing angles change (our FAA permit would need to be changed)
 - Pipe may need to be deeper (re-eval in progress)
 - Loan funding eligible if progress continues



SECONDARY TREATMENT UPGRADES

- Scope of Project:
 - Increases secondary treatment capacity to create nitrogen removal, which addresses 2024 regulation limit on nitrogen
 - Addresses aging mechanical and electrical infrastructure (41- to 49-years old)
- 60% design is complete; Design completion 2021
- Start Construction 2023; End Construction 2026 (39m construction) (pending finance timing)
- USEPA (WIFIA) and California SWRCB (SRF) Loan Applications In Progress



SECONDARY TREATMENT UPGRADES: COUNCIL ACTIONS

- Future Council Actions (late 2022 or early 2023)
 - Approve Loan Resolutions to Repay Loan (SRF and WIFIA)
 - Approve Construction Contract \$127M (future)
 - Construction Management Firm Selection \$12.7M (future)
- Total Project Cost \$146M (under review)



SECONDARY TREATMENT UPGRADES: COSTS (UNDER REVIEW)

Project Costs (Total = \$146M) (Note: Used \$160M in SRF Loan Application)

| Cost (\$ millions) | Item |
|-----------------------|--|
| \$115.6 | 60% Most Probable Construction Cost, Class 2 Estimate for Construction, Brown & Caldwell 12/21/20 Estimate |
| \$11.6 | Range of High Accuracy +20%; using assumed +10% |
| \$1.3 | Program Management Fee, 1% of construction |
| \$12.7 | Construction Management Fee, 10% of construction |
| \$4.4 | Brown and Caldwell (3.5% of construction) |
| \$0.36 | USEPA WIFIA Loan Application Fees and Credit Rating Expenses |
| \$146 | Total Project Cost |



SECONDARY TREATMENT UPGRADES: WIFIA & SRF FUNDING

- State SRF Low-Interest Loan
 - Current rate – 1.1%; range has been 0.9% - 1.4% in last 2 years
 - Competitive cut-score announced 1x/year (e.g., 13 out of 16)
- USEPA WIFIA Program Low-Interest Loan
 - Invited to apply
 - Nonrefundable \$250,000 application fee and sunk \$105,000 credit rating expense
 - Rates in last 2-years based on US Treasury Rates and borrower credit rating; current rate is 2.0%; rate locked when agreement is finalized
 - USEPA WIFIA ($\leq 49\%$ of funding) – WIFIA is a co-financing solution
- \$146M Principal
 - 100% SRF; \$6.0M debt service (Terms: 1.4%, 30y)
 - 49% WIFIA/51% SRF; \$6.2M debt service (Terms: 2.0%, 30y WIFIA/1.4%, 30y SRF)

ENVIRONMENTAL SERVICES & LAB BUILDING

- 10% design completed
 - Design was for all staff but maintenance in new “Ops Center”
 - 39,000 SF “mothership” construction \$57M
 - Architect released from design work
 - Completed work can be re-used for future evaluations
- Early stages of planning the scope of work for an advanced planning evaluation
 - Smaller buildings including 1-story lab-only, 2-story technical services, and/or offsite buildings
 - Remodeling of older onsite buildings including Operations and Administration Buildings



CAPITAL PROGRAM DELIVERY RISKS

- Technical and Logistical Risks
 - 24/7 operation
 - Bypass operations
 - Limited staging areas
- Schedule and Sequence Risks
 - Project A before Project B before Project C (e.g., Primary Sedimentation Tank Rehab project finished before 12kV Electrical Upgrades project finished before Secondary Treatment Upgrades project finished)
 - Advanced Water Purification System needs an odor control system permitted, installed, and authorized to operate by the Bay Area Air Quality Management District before groundbreaking can commence on the new facility

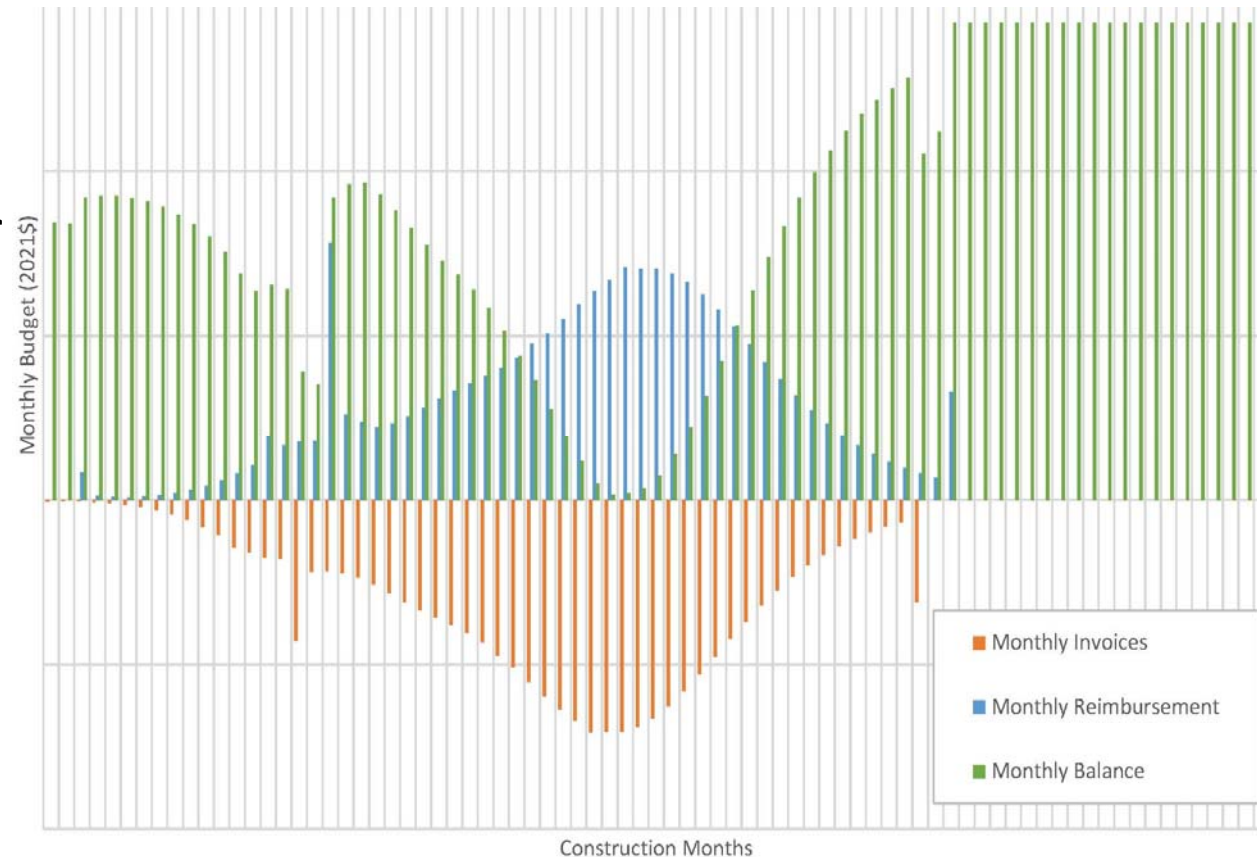


CAPITAL PROGRAM DELIVERY RISKS

- Coordination Risks
 - Communication failures
 - Staffing challenges
 - Contract solicitation and amendment processes
 - Partner agreement approvals for major capital improvement projects
 - New regulatory requirements

CAPITAL PROGRAM DELIVERY RISKS

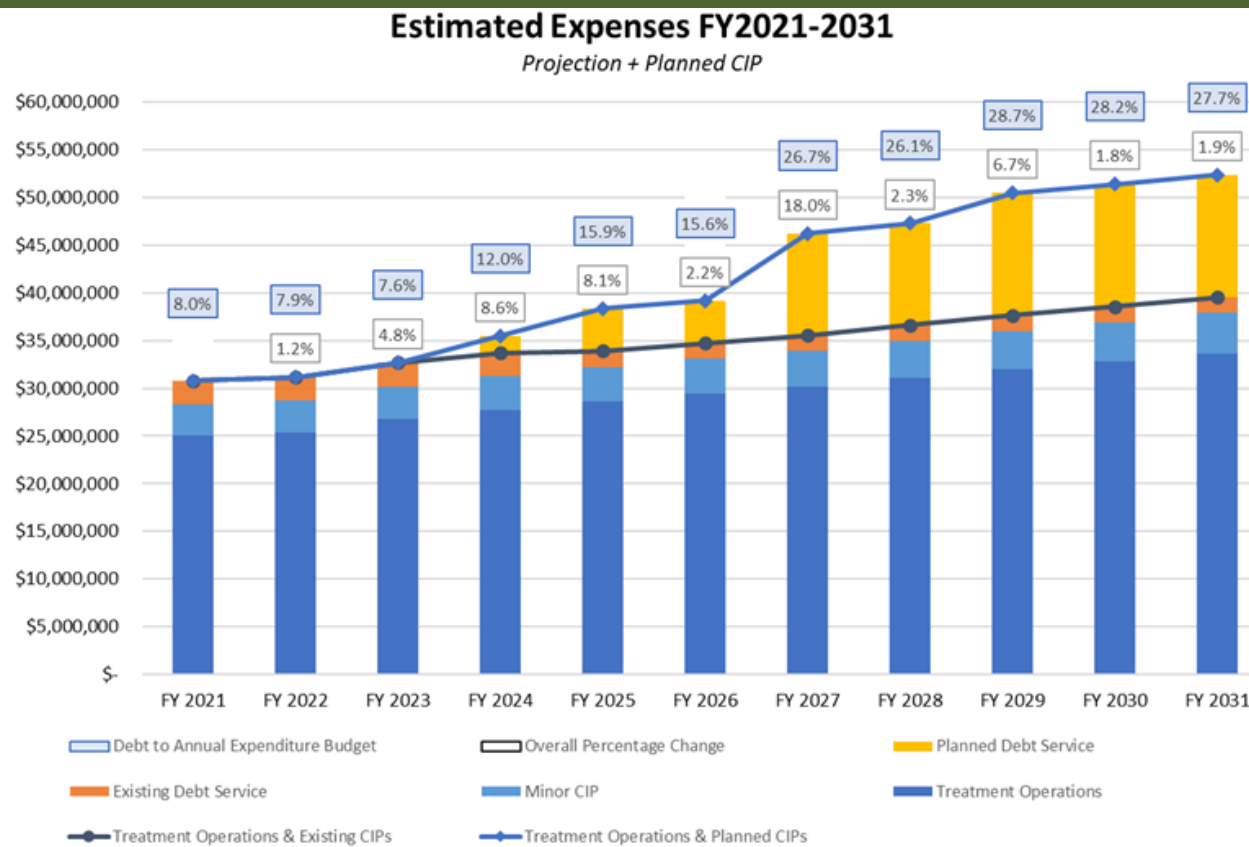
- Financial Risks
 - Potential seasonal cashflow limitations for WWT Fund during the \$146M, 39-month Secondary Treatment Upgrades Project
 - Reimbursement process for SRF/WIFIA
 - Bridge loans



CAPITAL PROGRAM DELIVERY RISKS

- Financial Risks, continued
 - Timing issues to secure financing (SRF, WIFIA, and revenue bond)
 - Scope changes and cost estimating uncertainties impacting
 - Loan application financing levels
 - Partner agreement financing levels
 - Budgeted amounts
 - Partner agency rate forecasting

FUND CHANGES



Wastewater Treatment Fund Expenses

| Table 4: Wastewater Treatment Fund (WWT) Total Cost ¹ | | | |
|--|---------------------|----------------|--|
| Fiscal Year | Total WWT Fund Cost | Percent Change | Key Project Debt Added |
| 2022 | \$31,576,000 | 1.2% | |
| 2023 | \$33,081,000 | 4.8% | |
| 2024 | \$35,895,000 | 8.6% | Outfall WQ-19002 Lab & Environmental Services Building WQ-14002 |
| 2025 | \$38,764,000 | 8.1% | Primary Sedimentation Tank Rehab WQ-14003 |
| 2026 | \$39,608,000 | 2.2% | |
| 2027 | \$46,668,000 | 18.0% | Secondary Treatment Upgrades WQ-19001 |
| 2028 | \$47,716,000 | 2.3% | |
| 2029 | \$50,897,000 | 6.7% | Headworks WQ-16002 |
| 2030 | \$51,432,000 | 1.8% | |
| 2031 | \$52,397,000 | 1.9% | |
| 2032 | \$52,838,000 | 0.8% | |
| ¹ Advanced Water Purification System project not included due to Valley Water funding | | | |

Council Actions Next Six Months

- Approve construction management firms for capital projects – 5/17/21 PACC
- Primary Sedimentation Tanks Rehabilitation and Equipment Room Electrical Upgrade Project - 5/17/21 PACC
- Potentially approve, if needed, approximately \$250,000 in loan application and credit processing fees for USEPA WIFIA loan for Secondary Treatment Upgrade project – late 2021
- Construction contract award for 12kV Medium Voltage project (\$6.9M) - TBD
- Outfall Pipeline design consultant contract amendment for additional design fee for redesign of a deeper pipeline to address levee height and airport runway shift to the south – TBD, if necessary

FINANCE COMMITTEE (APRIL 20, 2021)

End of Slides