

San Francisco Public Utilities Commission: FY 2020-21 & FY 2021-22 Two-Year Capital Budget and Bond Authorization

Capital Planning Committee

March 9, 2020



Today's Agenda

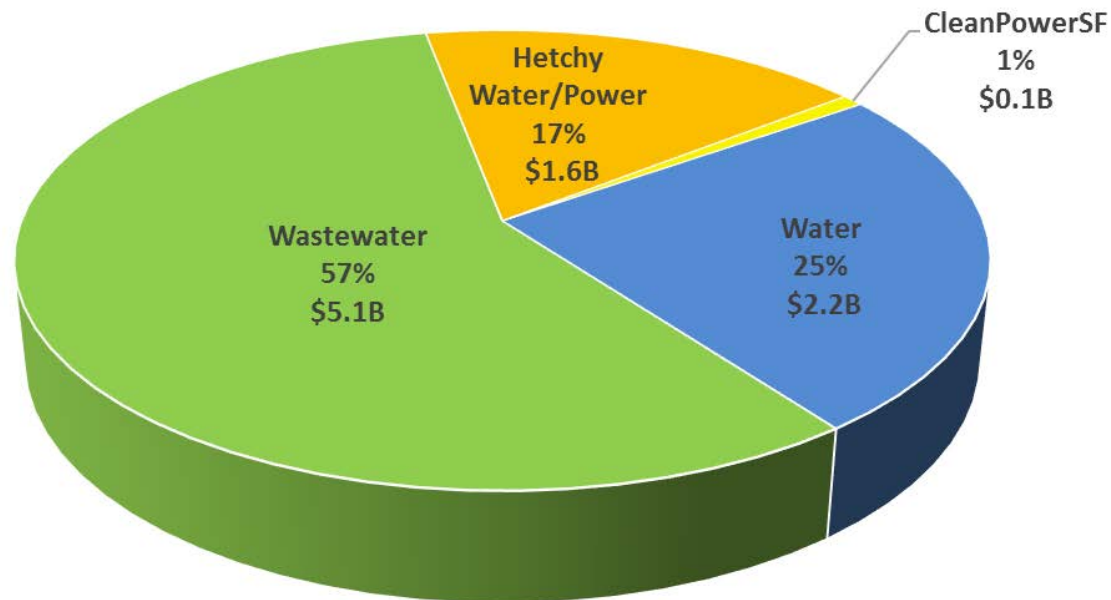
- Overview
- Wastewater Enterprise
- Water Enterprise
- Hetchy Water & Power
- Power Enterprise



Capital Budget Development Overview

- Capital budget developed as part of an update to the 10-year Capital and Financial Plans
- Comprehensive review of infrastructure needs
- Enhanced quality review process
 - Infrastructure staff validated all project schedules and costs
 - Project delivery capacity—dense, high-cost urban area, construction market dynamics, and delivery resources
 - Asset onboarding capacity
 - Re-prioritized existing project balances
- Reviewed during four special budget meetings in January
- Commission Adoption of Capital Budget and 10-Year Plan on February 11, 2020

FY 2020-21 to FY 2029-30 10-Year Capital Plan



Total \$9.0 Billion



FY 2020-21 to FY 2029-30 10-Year Capital Plan

| Enterprise (Millions) | | FY 2019-28 Approved | | FY 2021-30 Proposed | | Change | Change |
|-----------------------|----|------------------------|----|------------------------|----|---------|--------|
| Wastewater | \$ | 5,616.3 | \$ | 5,146.9 | \$ | (469.4) | -8% |
| Water* | | 1,726.7 | | 2,206.2 | | 479.5 | 28% |
| Hetchy Water/Power | | 1,280.5 | | 1,566.8 | | 286.3 | 22% |
| CleanPowerSF | | - | | 75.8 | | 75.8 | - |
| Total | \$ | 8,623.5 | \$ | 8,995.7 | \$ | 372.2 | 4% |

* \$153M Auxiliary Water Supply System (AWSS) funding is included in Water Enterprise Capital Plan.



Two-Year Capital Budget Summary Including Financing Cost

| Enterprise (Millions) | FY 2020-21 Proposed | FY 2021-22 Proposed | Total |
|-----------------------|------------------------|------------------------|------------|
| Wastewater | \$ 189.3 | \$ 447.7 | \$ 637.0 |
| Water* | 302.8 | 220.1 | 522.9 |
| Hetchy Water/Power | 94.4 | 165.9 | 260.3 |
| CleanPowerSF | <u>2.3</u> | <u>2.0</u> | <u>4.3</u> |
| Total | \$ 588.8 | \$ 835.7 | \$ 1,424.5 |

* \$153M Auxiliary Water Supply System (AWSS) funding is included in Water Enterprise FY 2020-21 Capital Plan.



Two-Year Bond Financing Authorization Summary

| Enterprise (Millions) | FY 2020-21 | | FY 2021-22 | | Total |
|---------------------------|------------|-------|------------|-------|-----------|
| Wastewater | | | | | |
| Wastewater Bonds | \$ | 55.8 | \$ | 273.8 | \$ 329.6 |
| Financing Costs | | 9.8 | | 48.3 | 58.1 |
| Totals | | 65.6 | | 322.1 | 387.7 |
| Water | | | | | |
| Water Bonds | \$ | 85.5 | \$ | 137.3 | \$ 222.80 |
| Financing Costs | | 15.1 | | 24.2 | 39.3 |
| Hetchy Water Bonds | | 28.4 | | 64.0 | 92.4 |
| Financing Costs | | 5.0 | | 11.3 | 16.3 |
| Totals | | 134.0 | | 236.8 | \$ 370.8 |
| Hetch Hetchy Power | | | | | |
| Hetchy Power Bonds | \$ | 48.4 | \$ | 73.2 | \$ 121.6 |
| Financing Costs | | 8.5 | | 12.9 | 21.4 |
| Total | | 56.9 | | 86.1 | 143.0 |
| SFPUC Total | \$ | 256.5 | \$ | 645.0 | \$ 901.5 |

Wastewater Enterprise



FY2020-21 to FY2021-22 Wastewater Capital Appropriation

| Program/Project (Millions) | FY 2019-20 Approved | FY 2020-21 Two - Year Proposed | FY 2021-22 |
|---|------------------------|-----------------------------------|-----------------|
| <u>Uses</u> | | | |
| Sewer System Improvement Program | | | |
| Program Management | \$ 16.6 | \$ - | \$ - |
| Treatment Facilities | 169.1 | 12.7 | 119.4 |
| Sewer/Collection System | 69.3 | 2.4 | 15.0 |
| Stormwater Management/Flood Control | 40.5 | 1.5 | 56.5 |
| SSIP Total | 295.4 | 16.6 | 190.9 |
| Renewal and Replacement | | | |
| Collection System - Sewer Improvements | 89.8 | 111.4 | 117.7 |
| Collection System - Condition Assessment | 3.6 | 5.7 | 8.0 |
| Treatment Plant Improvements | 24.2 | 25.4 | 26.6 |
| R & R Total | 117.5 | 142.5 | 152.3 |
| Treasure Island | 24.0 | - | 50.0 |
| Wastewater Facilities & Infrastructure | | | |
| Ocean Beach Protection | 5.4 | - | 2.4 |
| Southeast Community Center Improvements | 3.5 | 4.5 | - |
| Southeast Outfall Condition Assessment and Rehab | 1.1 | 15.8 | 3.7 |
| Islais Creek Outfall | 15.0 | - | - |
| Facilities & Infrastructure Total | 25.0 | 20.3 | 6.1 |
| SSIP, R&R, & Facilities & Infrastructure Costs | 461.9 | 179.4 | 399.4 |
| Financing Cost | 47.7 | 9.8 | 48.3 |
| Total | \$ 509.5 | \$ 189.3 | \$ 447.7 |
| <u>Sources</u> | | | |
| Revenue | \$ 113.0 | \$ 117.9 | \$ 120.3 |
| Capacity Fee | \$ 4.5 | \$ 5.8 | \$ 5.3 |
| Revenue Bonds | 392.0 | 65.6 | 322.2 |
| Total | \$ 509.5 | \$ 189.3 | \$ 447.7 |

Biosolids Digester Facilities Project

Budget: \$1,276M

Phase: 95% Design

Updates:

- Construction NTP issued August 2019
- Four (4) Early out bid packages were advertised for utility and sewer relocation and demolition

Construction: Aug 2019



Project Timeline:



■ Planning through Bid & Award ■ Construction ■ Close Out

New Headworks Facility Project

Budget: \$418.8M

Phase & Updates:

Scope I (Site Prep):

Construction

Scope II.A (Bruce Flynn PS):

Construction

Scope II.B (Influent Sewer):

Bid and Award

Scope II.C (Lift Station):

100% Design

Scope III (Headworks):

Construction



Project Timeline:



■ Planning through Bid & Award ■ Construction ■ Close Out

Balboa High School Green Infrastructure

Budget: \$14.7M

Phase: Planning

Location: Balboa High School and Denman Middle School Complex

Updates:

- Developing Joint Use Agreement



Construction: Estimated September 2022

Project Timeline:



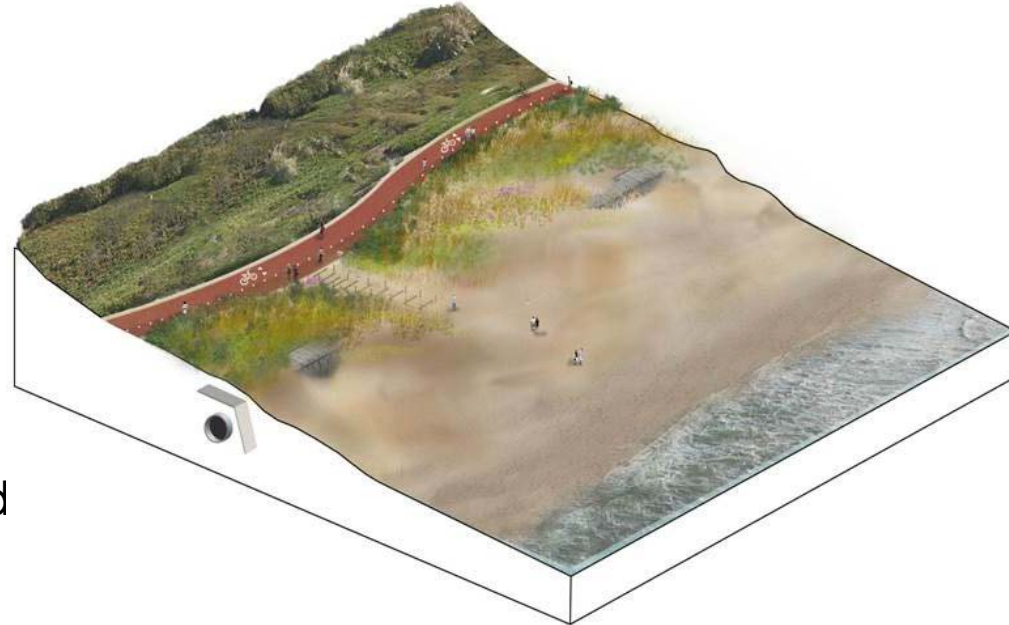
■ Planning through Bid & Award ■ Construction ■ Close Out

Ocean Beach Climate Change Adaptation Project

Budget: \$170M

Milestones:

- 2018/22** Planning, Environmental
- 2021** Complete Design, CM/GC Contract, CM Contract
- 2023** Start Construction
- 2026** Substantial Completion Grand Opening
- 2027** Final Completion, Closeout

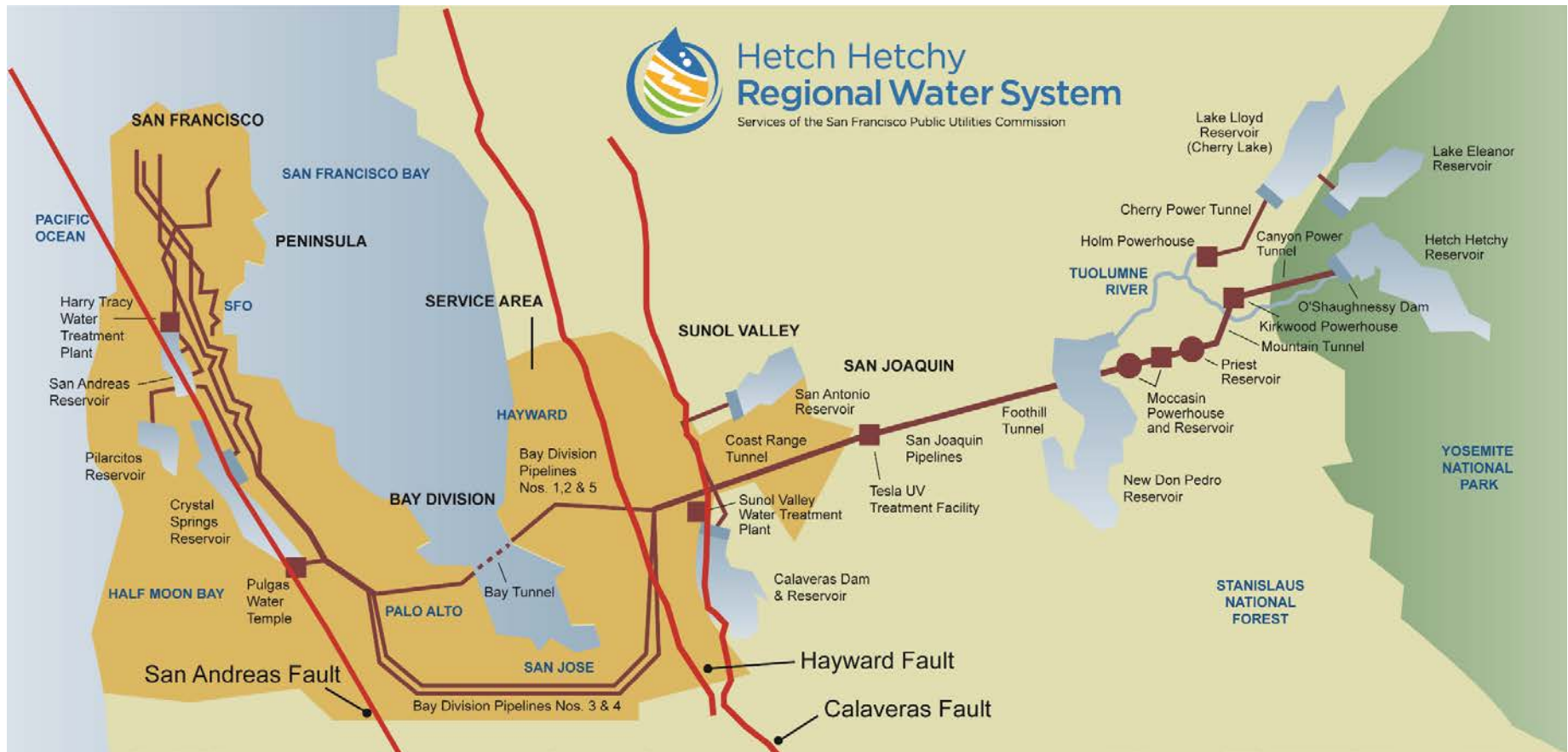


Project Timeline:



■ Planning through Bid & Award
 ■ Construction
 ■ Close Out

Water Enterprise



FY2020-21 to FY2021-22 Water Capital Budget

| Program/Project (Millions) | FY 2019-20 Approved | FY 2020-2021 Two - Year Proposed | FY 2021-22 |
|--|------------------------|-------------------------------------|-----------------|
| <u>Uses</u> | | | |
| Regional Costs | | | |
| Water Treatment Program | \$ 14.5 | \$ 9.2 | \$ 12.5 |
| Water Transmission Program | 45.1 | - | - |
| Water Supply & Storage Program | 7.1 | - | 29.8 |
| Watersheds & Land Management | 1.0 | 37.7 | 14.9 |
| Communication & Monitoring Program | 0.5 | 0.5 | 0.5 |
| Buildings And Grounds Programs | 33.5 | 18.0 | 7.1 |
| Long Term Monitoring & Permit | 11.5 | 4.0 | 4.0 |
| Regional Subtotal | 113.2 | 69.5 | 68.9 |
| Local Costs | | | |
| Water Supply Projects | - | 2.7 | 6.7 |
| Local Water Conveyance/Distribution System | 68.2 | 34.6 | 72.8 |
| Local Reservoir Tank Improvement | 3.2 | 3.5 | 5.3 |
| Pump Station Improvement | 2.3 | - | 0.2 |
| Recycled Water Projects | 0.5 | 5.1 | 4.7 |
| Automated Meter Reading System | - | 4.2 | 3.0 |
| Bulding & Ground Improvement | 0.4 | 15.2 | 34.5 |
| Auxiliary Water Supply System | - | 153.0 | - |
| Local Subtotal | 74.5 | 218.2 | 127.1 |
| Regional & Local Costs | 187.7 | 287.7 | 195.9 |
| Financing Cost | 18.9 | 15.1 | 24.2 |
| Total | \$ 206.6 | \$ 302.8 | \$ 220.1 |
| <u>Sources</u> | | | |
| Water Revenue | \$ 51.8 | \$ 47.6 | \$ 57.1 |
| Capacity Fee | 1.5 | 1.6 | 1.5 |
| Water Revenue Bonds | 153.3 | 100.6 | 161.5 |
| General Obligation Bonds | - | 153.0 | - |
| Total | \$ 206.6 | \$ 302.8 | \$ 220.1 |



Regional Water 2-Year Capital Improvement Program Highlights

Water Treatment request is \$21.8 million

- \$20.6 million: Sunol Valley Water Treatment Plant projects

Water Supply and Storage request is \$29.8 million

- \$29.8 million: Purified Water and Other Supply projects

Watersheds and Land Management request is \$52.6 million

- \$22 million: Watershed and Right-of-Way land acquisition
- \$20.9 million: 2 major trails in the Peninsula Watershed
- \$8.6 million: road reconstruction in the Peninsula Watershed

Buildings and Grounds request is \$25.1 million

- \$20.7 million: Rollins Road Building Renovation
- \$4.4 million: Millbrae Yard Lab and shops project



Local Water 2-Year Capital Improvement Program Highlights

Water Supply Projects request is \$9.4 million

- \$8.7 million: recycled water projects

Local Water Conveyance request is \$107.1 million

- \$72.5 million: Water Pipeline Replacement projects
- \$20 million: New Services
- \$6 million: Renew Services
- \$3 million: Lead Component Services

Local Reservoir and Tank Improvements request is \$8.7 million

- \$4 million: College Hill Reservoir
- \$2.4 million: Lombard Reservoir

Buildings and Grounds request is \$49.7 million

- \$45.3 million: development of New CDD Headquarters



FY2020-21 to FY2021-22 Hetchy Water & Power Capital Budget

| Program/Project (Millions) | FY 2019-20 Approved | FY 2020-21 Two - Year Proposed | FY 2021-22 |
|---|------------------------|-----------------------------------|-----------------|
| <u>Uses</u> | | | |
| Hetchy Water | | | |
| Water Infrastructure | \$ 26.8 | \$ 20.1 | \$ 33.7 |
| Power Infrastructure | 11.8 | - | 10.6 |
| Joint Projects - Water Infrastructure 45% | 33.6 | 8.3 | 30.2 |
| Joint Projects - Power Infrastructure 55% | 41.1 | 10.1 | 36.9 |
| Hetchy Water Subtotal | 113.3 | 38.5 | 111.5 |
| Hetchy Power | | | |
| Transmission/Distribution | 46.5 | 35.7 | 24.0 |
| Streetlights | 6.0 | - | - |
| Redevelopment | 9.5 | 4.6 | 4.3 |
| Renewable and Generation | 1.0 | 1.0 | 1.0 |
| Energy Efficiency | 1.0 | 1.0 | 1.0 |
| Hetchy Power Subtotal | 64.0 | 42.3 | 30.3 |
| Hetchy Water & Hetchy Power Costs | 177.3 | 80.8 | 141.8 |
| Financing Cost | | | |
| Hetchy Water | 8.5 | 5.0 | 11.3 |
| Hetchy Power | 13.4 | 8.5 | 12.9 |
| Total Financing Costs | 21.9 | 13.5 | 24.2 |
| Total Hetchy Water/Power & Financing Costs | \$ 199.2 | \$ 94.4 | \$ 166.0 |
| <u>Sources</u> | | | |
| Revenue | \$ 39.5 | \$ 4.1 | \$ 4.7 |
| Revenue Bonds | 159.7 | 90.3 | 161.3 |
| Total | \$ 199.2 | \$ 94.4 | \$ 166.0 |



Hetch Hetchy Water 2-Year Capital Improvement Program Highlights

Water 2-year total request is \$53.8 million

- \$42 million: Mountain Tunnel Improvement Project

Power 2-year total request is \$10.6 million

- \$4.3 million: Moccasin Powerhouse and GSU Rehabilitation
- \$1.8 million: Moccasin Powerhouse Bypass Upgrade

Joint 2-year total request is \$85.6 million

- \$36 million: Mountain Tunnel Improvement Project
- \$13.7 million: Moccasin Penstock Rehabilitation
- \$10.1 million: O'Shaughnessy Dam Outlet Works, Phase 1

Power Enterprise



FY2020-21 to FY2021-22 Hetchy Water & Power Capital Budget

| Program/Project (Millions) | FY 2019-20 Approved | FY 2020-21 <i>Two - Year Proposed</i> | FY 2021-22 |
|---|------------------------|--|-----------------|
| <u>Uses</u> | | | |
| Hetchy Water | | | |
| Water Infrastructure | \$ 26.8 | \$ 20.1 | \$ 33.7 |
| Power Infrastructure | 11.8 | - | 10.6 |
| Joint Projects - Water Infrastructure 45% | 33.6 | 8.3 | 30.2 |
| Joint Projects - Power Infrastructure 55% | 41.1 | 10.1 | 36.9 |
| Hetchy Water Subtotal | 113.3 | 38.5 | 111.5 |
| Hetchy Power | | | |
| Transmission/Distribution | 46.5 | 35.7 | 24.0 |
| Streetlights | 6.0 | - | - |
| Redevelopment | 9.5 | 4.6 | 4.3 |
| Renewable and Generation | 1.0 | 1.0 | 1.0 |
| Energy Efficiency | 1.0 | 1.0 | 1.0 |
| Hetchy Power Subtotal | 64.0 | 42.3 | 30.3 |
| Hetchy Water & Hetchy Power Costs | 177.3 | 80.8 | 141.8 |
| Financing Cost | | | |
| Hetchy Water | 8.5 | 5.0 | 11.3 |
| Hetchy Power | 13.4 | 8.5 | 12.9 |
| Total Financing Costs | 21.9 | 13.5 | 24.2 |
| Total Hetchy Water/Power & Financing Costs | \$ 199.2 | \$ 94.4 | \$ 166.0 |
| <u>Sources</u> | | | |
| Revenue | \$ 39.5 | \$ 4.1 | \$ 4.7 |
| Revenue Bonds | 159.7 | 90.3 | 161.3 |
| Total | \$ 199.2 | \$ 94.4 | \$ 166.0 |



Hetch Hetchy Power Two-Year Capital Budget

- \$59.7M: Transmission & Distribution
 - \$4.8M: Customer Programs
 - \$10.4M: Bay Corridor Transmission/ Distribution
 - \$44.6M: Distribution Interface, Redevelopment Projects
- \$8.9M: Redevelopment (Treasure Island)
- \$4.0M: Energy Efficiency & Small Renewables





CleanPowerSF 2-Year Capital Budget & 10-Year Capital Plan

| Program/Project (Millions) | 2- Year Capital Budget | |
|--------------------------------|------------------------|-----------------------|
| | FY 2020-21 Proposed | FY2021-22 Proposed |
| <u>Uses</u> | | |
| CleanPowerSF | | |
| Local Renewable Energy Program | \$ 0.6 | \$ 0.4 |
| CleanPower SF Customer Program | 1.7 | 1.7 |
| CleanPowerSF Subtotal | 2.3 | 2.1 |
| <u>Sources</u> | | |
| Revenue | \$ 2.3 | \$ 2.1 |
| Total | \$ 2.3 | \$ 2.1 |



San Francisco
Water
Power
Sewer

CleanPowerSF Two-Year Capital Budget

- First Capital Budget for CleanPowerSF
- \$3.4M: Customer Programs
- \$946K: Local Renewable Energy Program



Thank You