SFPUC Mid Cycle Updates to:

10-Year Capital Plan

Capital Planning Committee

February 8, 2021
Agenda

1. Introduction and overview (*Eric Sandler - CFO*)
2. 10-Year Capital Plan
   - Overview (*Eric Sandler - CFO*)
   - Wastewater (*Greg Norby – AGM Wastewater*)
   - Water (*Steve Ritchie– AGM Water*)
   - Hetch Hetchy Water and Power (*Steve Ritchie and Barbara Hale - AGM Power*)
   - CleanPowerSF (*Barbara Hale - AGM Power*)
10-Year Capital Plan Development

• Annual public hearings required by Charter Section 8B.123 to review, update and adopt Long-Term Capital Plan

• Capital Plan provides: assessment of SFPUC’s capital needs, investments required to meet those needs, and plan to finance them

• Prior approved update in February 2020 a part of comprehensive two-year budget

• Only critical capital changes included in this update

• Next comprehensive review of capital needs Fall 2021
FY 2021-22 to FY 2030-31
10-Year Capital Plan

Total $9.1 Billion

- Wastewater: 60% $5.4B
- Water: 22% $2.0B
- Hetchy Water/Power: 17% $1.6B
- CleanPowerSF: 1% $0.1B
## Mid cycle update to 10-Year Capital Plan FY 2021-22 to FY 2030-31

<table>
<thead>
<tr>
<th>Enterprise ( Millions )</th>
<th>FY 2021-30 Approved</th>
<th>FY 2022-31 Proposed</th>
<th>Change</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater</td>
<td>$5,126.9</td>
<td>$5,423.5</td>
<td>$296.6</td>
<td>5.8%</td>
</tr>
<tr>
<td>Water</td>
<td>2,204.8</td>
<td>2,008.2</td>
<td>(196.6)</td>
<td>-8.9%</td>
</tr>
<tr>
<td>Hetchy Water/Power</td>
<td>1,566.8</td>
<td>1,567.0</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>CleanPowerSF</td>
<td>75.8</td>
<td>75.8</td>
<td>-</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>$8,974.3</td>
<td>$9,074.5</td>
<td>$100.2</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
Wastewater 10 Year Capital Plan Highlights
Wastewater Enterprise Highlights FY22-31

- **Sewer System Improvement Program**
  - 12 projects awarded $1,715 million in State and Federal funds
  - Biosolids Digester Facilities Project - $714 million
  - Treatment - $807 million
  - Collection System - $864 million
  - Stormwater Management and Flood Resilience - $695 million

- **R&R**
  - Collection System - $1,566 million
  - Treatment Plants - $334 million

- **Facilities and Infrastructure**
  - Non-SSIP capital projects - $373 million
## SEP Biosolids Digester Facilities Project

**Project Cost:** $1,680 million  
**Scope:** New solids processing facilities  

### Progress and Status:
- Scope 1 reached substantial completion – relocation of existing utilities and demolition of existing buildings are complete
- Scope II NTP issued on July 1, 2020
- Excavation and pile Installation currently underway
- Closure of Jerrold Ave. to facilitate safe construction – Jan 4, 2021

### Project Schedule:

<table>
<thead>
<tr>
<th>Year</th>
<th>Planning through Bid &amp; Award</th>
<th>Construction</th>
<th>Close Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Yosemite Green Infrastructure

**Project Cost:** $17 million

**Scope:** Daylight the historic creek path, from Yosemite Marsh in McLaren Park to Woolsey and Hamilton Streets

**Progress and Status:**
- Development of an RFP for green infrastructure engineering services is anticipated to be issued Q3 FY20-21
- Design and construction Memorandum of Understanding with the San Francisco Recreation & Park Department is under development

**Project Schedule:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Planning through Bid &amp; Award</th>
<th>Construction</th>
<th>Close Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Renewal and Replacement (R&R)

Treatment Facilities:

- R&R Treatment Program extends the useful life of WWE facility assets
- Projects prioritized based on safety, regulatory compliance, condition assessments, Operation staff recommendations and Levels of Service Goals
- We expect an increase in annual investment

Collection System:

- Goal to award 15 miles of R&R main sewer replacement per year
- Complete Spot Sewer replacement at 700-1000 locations per year in future cycles of investment
- Continue trend towards trenchless technology
Ocean Beach Climate Change Adaptation Project

Project Cost: $170 million

Scope: Shoreline management and protection against bluff erosion and climate-change induced sea level rise south of Sloat Boulevard

Progress and Status:
- 35% Design Phase completed, 65% initiated
- Completed Administrative Draft Environmental Impact Report
- Funding negotiations continue, SF Zoo and CCSF partner agencies for non-SFPUC project components – estimated value $35M+

Project Schedule:

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>...</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Planning through Bid & Award
- Construction
- Close Out
Water 10 Year Capital Plan Highlights
Water Enterprise Highlights: Schematic of the Water System
Water Enterprise Highlights FY22-31

• Regional
  • Alternative Water Supplies - $265 million
  • Water Treatment Improvements - $272 million
  • Dam Safety Measures - $75 million
  • New Laboratory and Offices in Millbrae - $140 million

• Local
  • Main Replacements – $446 million
  • New Services - $82 million
  • Potable Emergency Firefighting Water System - $43 million
  • Lead User Service Line Identification and Replacement - $34 million
  • New City Distribution Division HQ at 2000 Marin - $335 million
Hetch Hetchy Water and Power, and CleanPowerSF 10 Year Capital Plan Highlights
Hetch Hetchy Water Highlights FY22-31

- Mountain Tunnel Rehabilitation - $118 million
- Moccasin Rewind and Transformers - $34 million
- Transmission Lines - $58 million
- Moccasin Powerhouse Bypass - $14 million
- Kirkwood Powerhouse Bypass - $15 million
- Dam Safety Measures - $305 million
Hetchy Power & CleanPowerSF Key Capital Plan Projects

Hetchy Power – Utility of the Future
Customer Growth! $230.4 M + <$42.5M

Replacement Facilities to Retain Customers
$177M + <$42.5M

Clean & Local! $45.8M

CleanPowerSF – Clean & Local! $75.8M