

File No. 230824

Committee Item No. 6

Board Item No. \_\_\_\_\_

## COMMITTEE/BOARD OF SUPERVISORS

### AGENDA PACKET CONTENTS LIST

Committee: Land Use and Transportation

Date: January 22, 2024

Board of Supervisors Meeting: \_\_\_\_\_

Date: \_\_\_\_\_

#### Cmte Board

- Motion
- Resolution
- Ordinance
- Legislative Digest
- Budget and Legislative Analyst Report
- Youth Commission Report
- Introduction Form
- Department/Agency Cover Letter and/or Report
- MOU
- Grant Information Form
- Grant Budget
- Subcontract Budget
- Contract / DRAFT Mills Act Agreement
- Form 126 – Ethics Commission
- Award Letter
- Application
- Public Correspondence

#### OTHER

- SFPUC Presentation Slides – January 22, 2024
- Referral FYI – July 19, 2023
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Prepared by: John Carroll

Date: January 18, 2024

Prepared by: \_\_\_\_\_

Date: \_\_\_\_\_

Prepared by: \_\_\_\_\_

Date: \_\_\_\_\_



San Francisco  
**Water Power Sewer**  
Services of the San Francisco Public Utilities Commission

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# **SF Emergency Firefighting Water System Capital Project Update to the Land Use and Transportation Committee**

January 22, 2024

Katie Miller, Director, Water Capital Programs, SFPUC  
Brian Strong, Director, Office of Resilience and Capital Planning  
Darius Luttrupp, Deputy Chief, SFFD

# Emergency Firefighting Water System

## Agenda

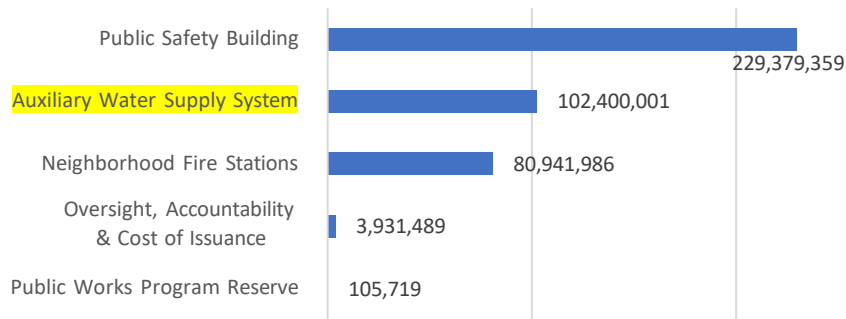
- Accomplishments to Date
- EFWS Future Build-Out
- EFWS Currently Funded Projects
- Financing Study Recommendations
- SFFD Update



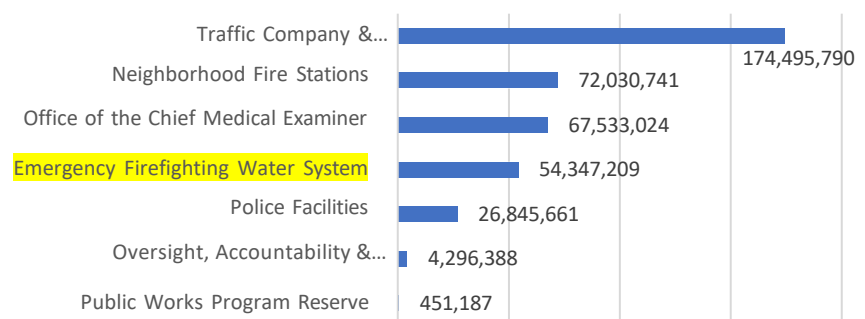


# ESER Bond Program 2010, 2014, & 2020

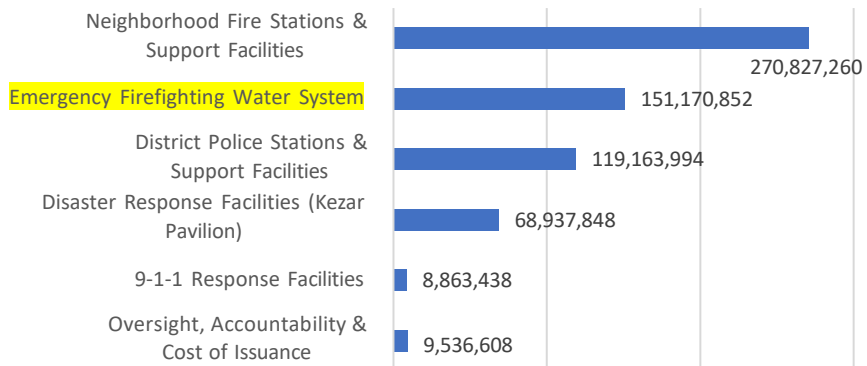
## Overview of ESER 2010 Scope and Budget \$416.7M



## Overview of ESER 2014 Scope and Budget \$400M



## Overview of ESER 2020 Scope and Budget \$628.5M










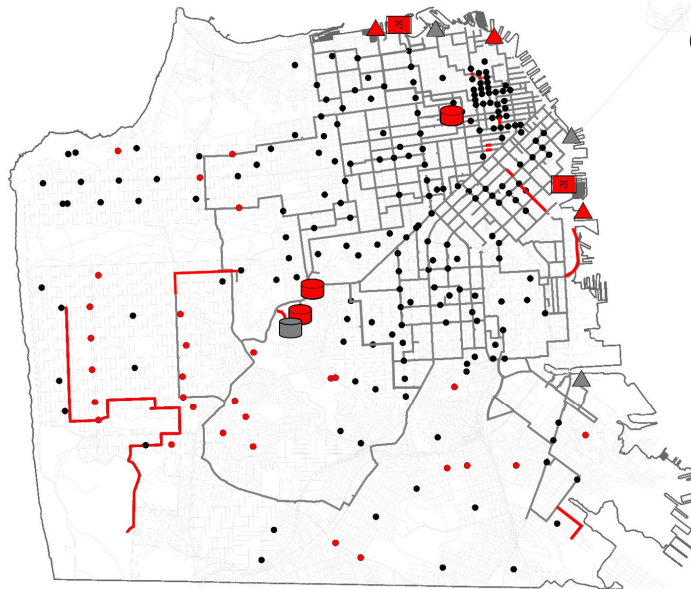
**EFWS System Improvements funded for \$308M representing 21% of ESER Bond Funding (2010-2020)**

Source: Quarterly Status Report, Presented to the Citizens' General Obligation Bond Oversight Committee, Third Quarter of FY22-23, June 2023.



# Accomplishments to Date

-  Pump Stations 1 and 2
-  Storage: Jones, Ashbury, Twin Peaks, Clarendon (Sutro Res.)
-  Fireboat Manifolds
-  Cisterns
-  Existing Conventional EFWS
-  PEFWS and Conventional (Completed and In Progress)
-  Major ESER Bond Funded Improvements (Completed and In Progress)



## EFWS Expansion:

- **Candlestick Point pipeline**
- **Terry Francois & Mariposa EFWS Pipeline**
- **Terry Francois/Mission Rock/Warriors Way EFWS Pipeline**
- **Clarendon Supply connection to Summit Reservoir**
- **19<sup>th</sup> Ave Potable EFWS pipeline (Sloat Blvd to Vicente St)**
- **Vicente Potable EFWS pipeline (19<sup>th</sup> Ave to 23<sup>rd</sup> Ave)**

## Completed Projects:

### Facilities:

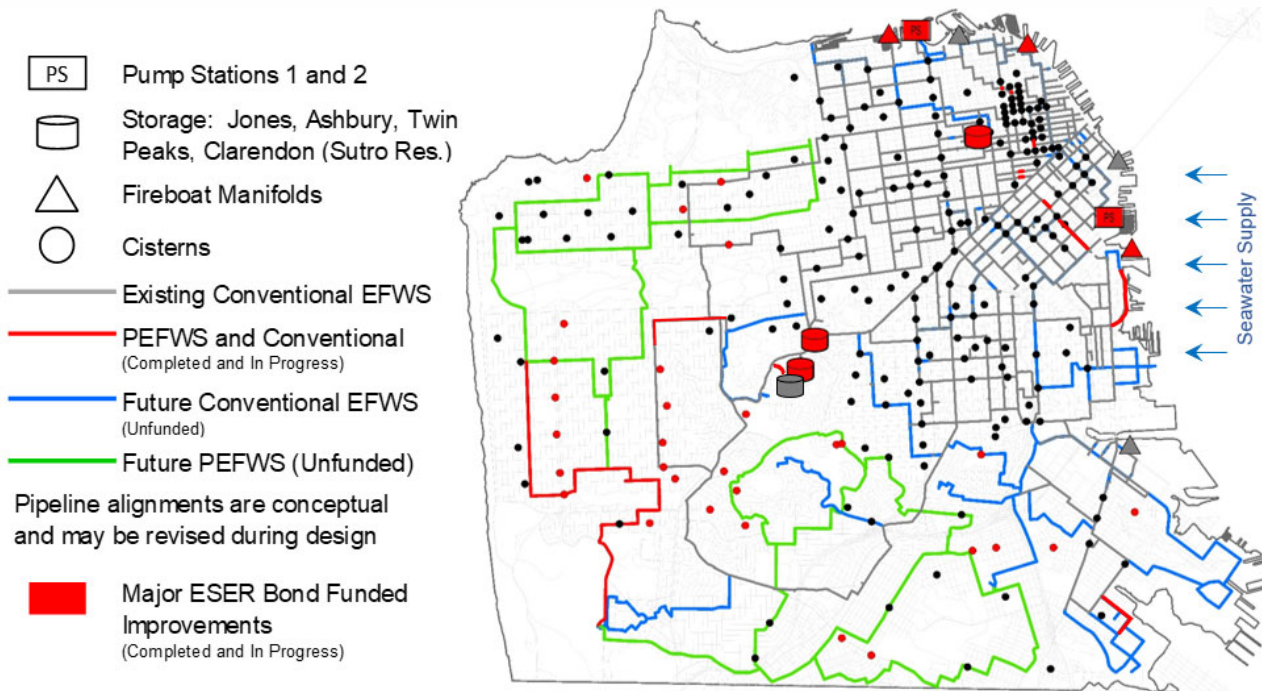
- **30 new cisterns**
- **Twin Peak Reservoir upgrades**
- **Ashbury Tank upgrades**
- **Jones Street Tank, Valves and Controls Improvements**
- **Pump Station No. 1 Upgrades**
- **Pump Station No. 2 Upgrades**

### Existing EFWS Pipeline Improvements:

- **Ashbury Bypass EFWS Pipeline**
- **Fillmore/Haight pipeline**
- **Irving Street EFWS Pipeline**
- **19th Ave EFWS Pipeline (from Irving St to Kirkham St)**
- **Columbus Avenue pipeline**



# EFWS Future Build-out



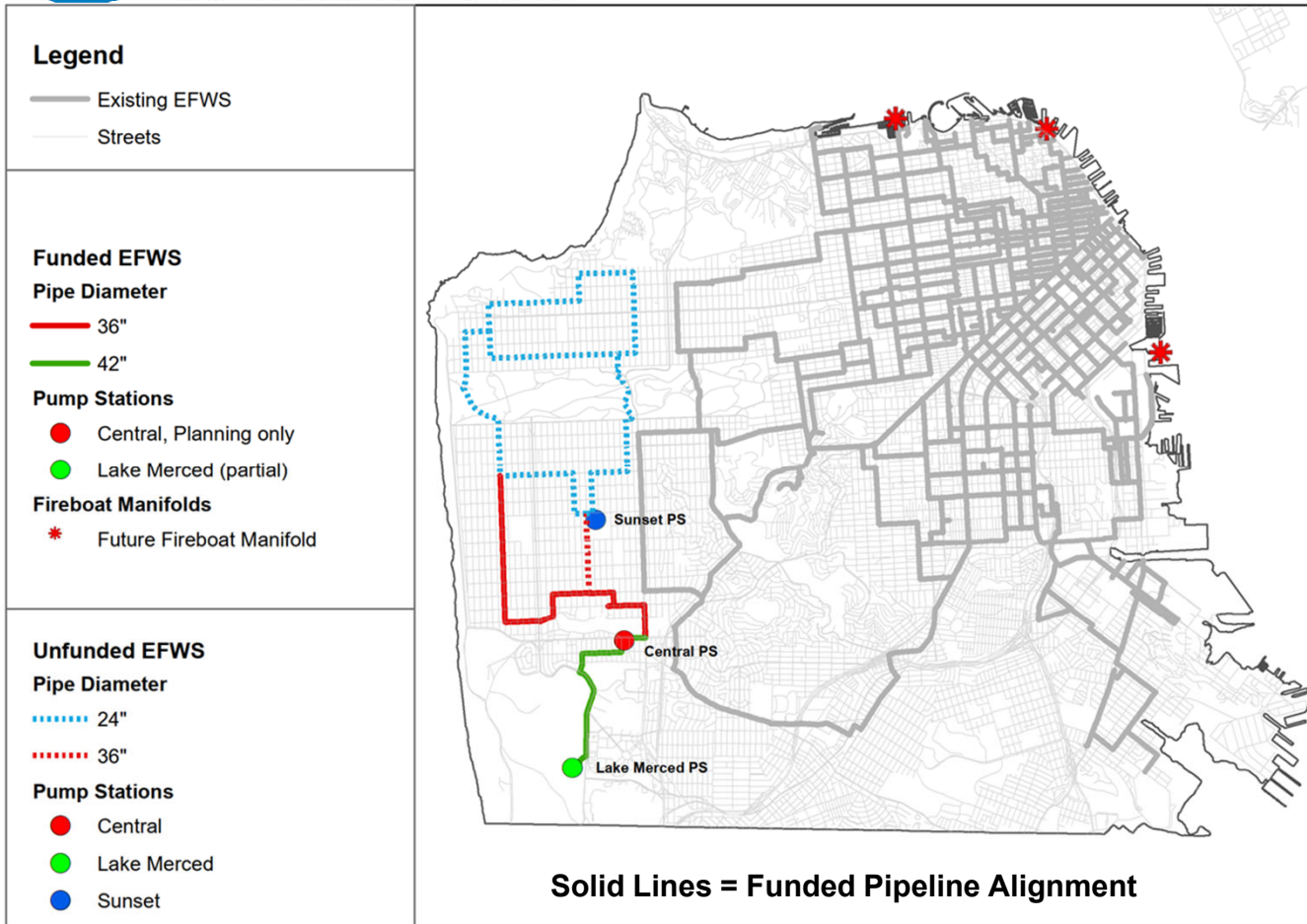
**2050 Planning Study (2021)  
Proposed Future Pipelines  
both EFWS and PEFWS –  
Full Build-Out Citywide**

Full EFWS Build-Out will  
require significant future  
funding commitments

Planning Study estimated cost  
at least \$4B by 2046



# Potable EFWS Current Funding



## May 2023 Draft Conceptual Engineering Report

- Pipeline Cost Increase
- Fireboat Manifold Cost Increase

### Funding Solutions

Cost Saving Alternatives

Prioritization of Projects

Water CIP to fund “fair share:”

- 55% ESER, 45% Water CIP for PEFWS pipeline
- 100% ESER for EFWS components

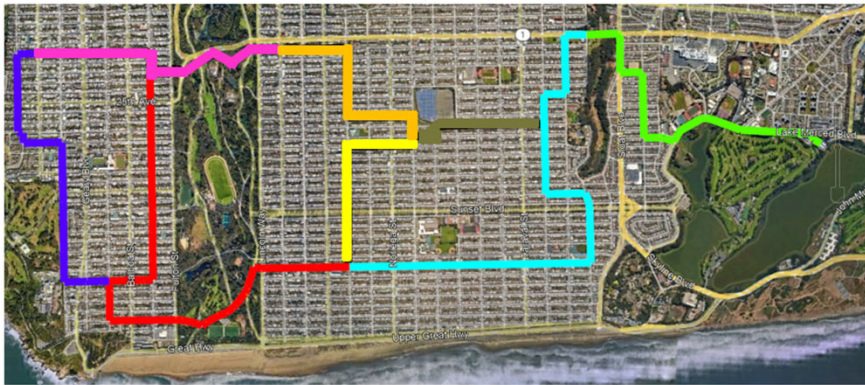
### Schedule Solutions

Water to fund Planning/Design for “shovel ready” projects in 2028

# Potable EFWS Project Schedule

## PEFWS Project Delivery – Forecasted Milestones

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Planni	Contract A Design		Bid &															
	Planni	Contract B Design		Contract A Construction														
				Bid &	Contract B Construction													
		Contracts C & D Planning		Contract C Design	Contract C Construction													
					Central Pump Station Design	Contract D Design		Central PS Construction										
								Contract E Design	Contract E Construction									
									Contract F Design	Contract F Construction								
											Contract G Construction	Contract G Design	Contract G Construction					
													Sunset Reservoir Pump Station D	Sunset Reservoir Construction				
													Contract H Design	Contract H Construction				



 Currently not funded

- Contract A – 42” Welded Steel Pipe
- Contract B – 36” Welded Steel Pipe
- Contract C – 24” ERDIP
- Contract D – 24” ERDIP
- Contract E – 24” ERDIP
- Contract F – 24” ERDIP
- Contract G – 24” ERDIP
- Contract H – 36” Welded Steel Pipe



## Fireboat Manifolds

- 3 Fireboat Manifolds in Planning (Fort Mason, Pier 33-1/2, Mission Bay Ferry Landing)
  - Fort Mason critical with high risk of failure
  - Mission Bay Ferry Landing - high value and low cost
  - Pier 33-1/2 recommend waiting for Sea Wall Improvements



Fort Mason Pier 1

- Recommend funding Design, Construction of new manifolds at Fort Mason & Mission Bay Ferry Landing using ESER 2020
- SFPUC and SFFD implementing Emergency Response protocols for Fort Mason until upgrade completed
- Schedule: Design/Permitting 2024-2026; Construction 2027-2029

# 2050 Planning Study Financing Study Recommendations

- Continue to support EFWS through the ESER G.O. program
- Continue to include EFWS in Development Agreements as new development occurs
- Consider the future formation of a Community Facilities District to support the Westside extension
- Consider public outreach campaign on fire prevention strategies

## The future of EFWS & fire mitigation

Major current and potential funding sources compared:

Source Type	Revenue Generating Potential	Stable Revenue Stream	Long-Term Sustainability	Competition for other City uses	Voter Approval Required	Administrative Complexity
<b>Current Funding Sources</b>						
General Obligation Bonds	Strength	Strength	Neither strength or weakness	Weakness	Weakness	Neither strength or weakness
Water Revenue Bonds	Strength	Neither strength or weakness	Neither strength or weakness	Weakness	Strength	Neither strength or weakness
Developer Agreements	Weakness	Weakness	Weakness	Strength	Strength	Neither strength or weakness
<b>Other Funding Sources</b>						
Mello-Roos Bonds / CFD	Strength	Strength	Strength	Neither strength or weakness	Weakness	Weakness

<b>Key</b>		
Strength	Neither strength or weakness	Weakness

Fire ignition mitigation can include city mandates and/or public outreach on excess flow shut-off valves and automatic circuit breakers

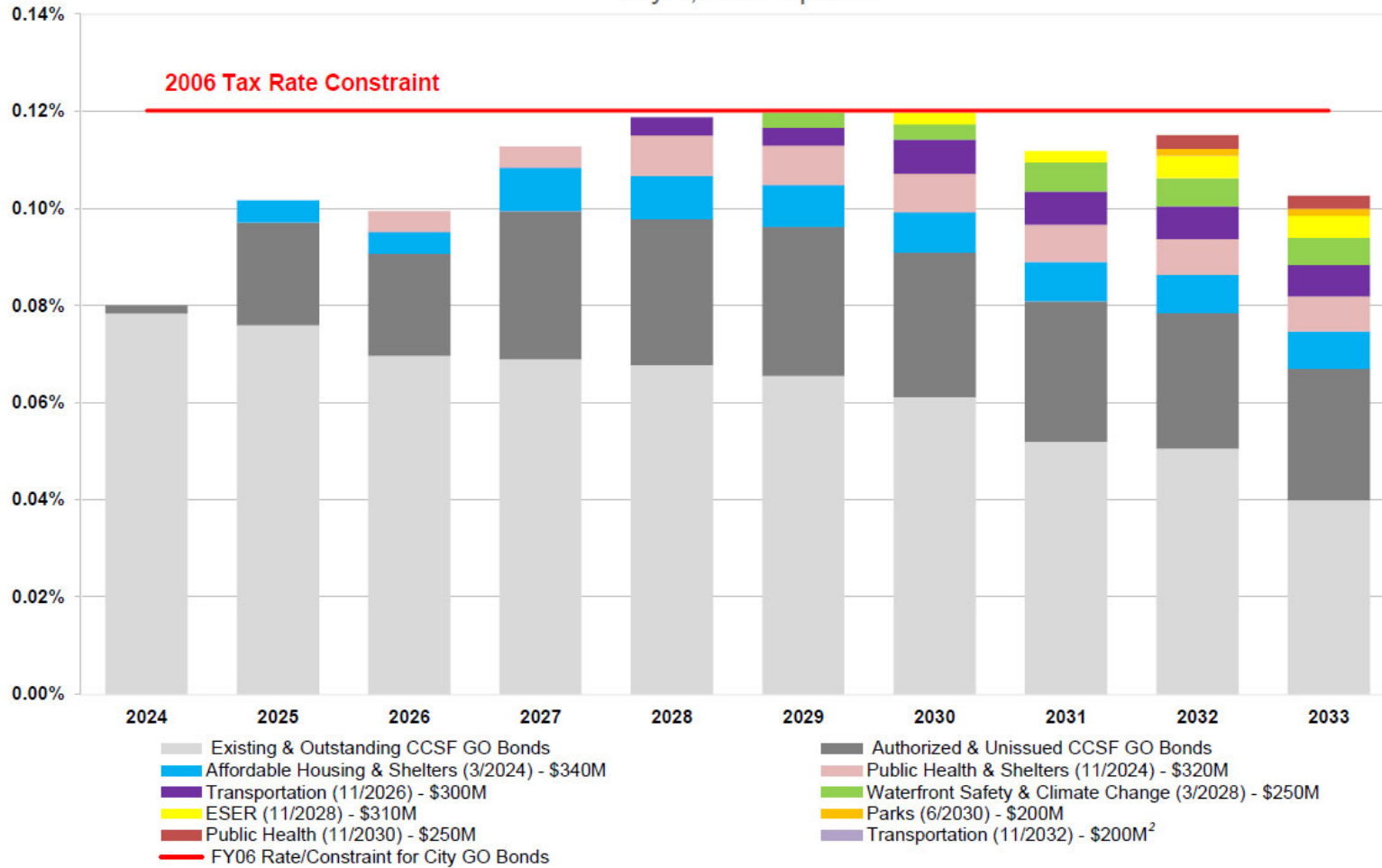
# G.O. Bond Schedule

Election	Proposed Program	Amount (M)	Details
Mar 2024	Affordable Housing	300	<ul style="list-style-type: none"> <li>Contribution to Affordable Housing Pipeline: 300M</li> </ul>
Nov 2024	Public Health & Shelters	360	<ul style="list-style-type: none"> <li>Chinatown Health Clinic: 72M</li> <li>Silver Ave Health Clinic: 35M</li> <li>City Clinic: 29M</li> <li>ZSFG Bldg 3 Retrofit to allow 101 Grove Exit: 51M</li> <li>LHH/ZSFG Critical Renewals: 33M</li> <li>1001 Polk St/260 Golden Gate Shelters: 140M</li> </ul>
Nov 2026	Transportation	300	<ul style="list-style-type: none"> <li>MTA facilities / yards</li> </ul>
Mar 2028	Waterfront Safety & Climate Change	250	<ul style="list-style-type: none"> <li>Seawall resilience: 200M</li> <li>Other climate priorities (flood/heat/GHG, etc.): 50M</li> </ul>
Nov 2028	Earthquake Safety & Emergency Response	310	<ul style="list-style-type: none"> <li>Fire Stations</li> <li>Police Stations</li> <li>Emergency Firefighting Water Supply</li> </ul>
Jun 2030	Parks & Open Space	200	<ul style="list-style-type: none"> <li>10 years since last RPD bond + escalation</li> <li>Renewals, retrofits, and climate projects across the city</li> </ul>
Nov 2030	Public Health	250	<ul style="list-style-type: none"> <li>ZSFG Building 80/90</li> <li>Health Clinics and other projects across the city</li> </ul>
Nov 2032	Transportation	200	<ul style="list-style-type: none"> <li>On-going facility and system-wide needs</li> <li>Projects yet to be defined</li> </ul>
<sup>10</sup> TOTAL		2,170	



## sed Capital Plan - General Obligation Debt Program FY2024-2033

May 1, 2023 Update<sup>1</sup>



<sup>1</sup> Updated size and timing of Affordable Housing & Shelters (3/2024) and Public Health & Shelters (11/2024) authorizations

<sup>2</sup> First tax levy for Transportation (11/2032) authorization does not occur until FY2034

AV growth assumption of 1.14%, 1.03%, 0.87%, 1.01%, 1.48% from FY24-28, 3% per year thereafter

## Hose Tender Update

### 3 new hose tenders

- Station 18, located 1935 32<sup>nd</sup> Ave  
*in service*
- Station 22, located 1290 16<sup>th</sup> Ave  
*Coming summer 2024*
- TBD  
*Coming summer 2024*



Demonstration at Twin Peak on 10-17-2023



Portable Hydrant



## EFWS Operations – Drills & Training

SFPUC & SFFD: joint activities, drills to prepare and train for emergencies:

- Quarterly 5-inch EFWS Hose Tender and Portable Hydrant Drills
  - Test & replace hose as needed
- Quarterly Fireboat and Manifold Drills
- Pressure & Flow Testing for Treasure Island System
- SFFD & SFPUC Joint Agency EFWS Monthly Meetings & Annual Tabletop Exercises
- Upcoming Demonstration at Lake Merced – January 31, 2024



- Inspections & Preventative Actions – Joint with SFFD
  - High Pressure Hydrants
  - Seawater Suction Connection Infrastructure
  - Reservoirs and Cisterns
- Various Pipeline Leak Repairs
- Monthly & Annual Pump and Generator Inspections and Preventive & Corrective Actions at Pump Stations and Reservoirs
- Valve Inspections & Exercising
  - Valves exercised and pressure tests performed around open sewer trenches to verify integrity of pipelines adjacent to construction



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*Questions?*

BOARD of SUPERVISORS



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Fax No. (415) 554-5163  
TDD/TTY No. (415) 554-5227

## MEMORANDUM

TO: Dennis Herrera, General Manager, Public Utilities Commission

FROM: Erica Major, Assistant Clerk, Land Use and Transportation Committee

DATE: July 19, 2023

SUBJECT: HEARING MATTER INTRODUCED

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The Board of Supervisors' Land Use and Transportation Committee has received the following hearing request, introduced by Supervisor Chan on July 11, 2023:

**File No. 230824**

**Hearing on the Emergency Firefighting Water System funding and design on the westside of San Francisco; and requesting the San Francisco Public Utilities Commission to report.**

If you have any comments or reports to be included with the file, please forward them to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

cc: Masood Ordikhani, Public Utilities Commission  
Jeremy Spitz, Public Utilities Commission

## Introduction Form

*(by a Member of the Board of Supervisors or the Mayor)*

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee (Ordinance, Resolution, Motion or Charter Amendment)
- 2. Request for next printed agenda (For Adoption Without Committee Reference)  
*(Routine, non-controversial and/or commendatory matters only)*
- 3. Request for Hearing on a subject matter at Committee
- 4. Request for Letter beginning with "Supervisor [ ] inquires..."
- 5. City Attorney Request
- 6. Call File No. [ ] from Committee.
- 7. Budget and Legislative Analyst Request (attached written Motion)
- 8. Substitute Legislation File No. [ ]
- 9. Reactivate File No. [ ]
- 10. Topic submitted for Mayoral Appearance before the Board on [ ]

The proposed legislation should be forwarded to the following (please check all appropriate boxes):

- Small Business Commission       Youth Commission       Ethics Commission
- Planning Commission       Building Inspection Commission       Human Resources Department

General Plan Referral sent to the Planning Department (proposed legislation subject to Charter 4.105 & Admin 2A.53):

- Yes                       No

*(Note: For Imperative Agenda items (a Resolution not on the printed agenda), use the Imperative Agenda Form.)*

Sponsor(s):

Chan; Melgar

Subject:

Hearing on the Emergency Firefighting Water Supply funding and design

Long Title or text listed:

Hearing on the Emergency Firefighting Water Supply funding and design on the westside, requesting the San Francisco Public Utilities Commission to report.

Signature of Sponsoring Supervisor. \_\_\_\_\_

