

# Auxiliary Water Supply System (AWS)

Way Out West Community Coalition

# What is the Auxiliary Water Supply System (AWSS)?

The AWSS is a separate, non-potable emergency firefighting water supply system that at present consists of approximately 135 miles of high-pressure (HP) pipelines, 230 cisterns, two above-ground storage tanks, a reservoir, and two salt-water pumping stations.

Unlike the Municipal Water Supply System (MWSS), AWSS pipelines were designed to withstand movement from an earthquake.

# Existing AWSS

## Upper Zone

### Twin Peaks Reservoir

10.5 million US gallon; elevation 758 feet

### Ashbury tank

500,000 US gallons; elevation 494 feet

### Jones Street tank

750,000 US gallons; elevation 369 feet

## Lower Zone

### Pump stations

Pumping Station No. 1

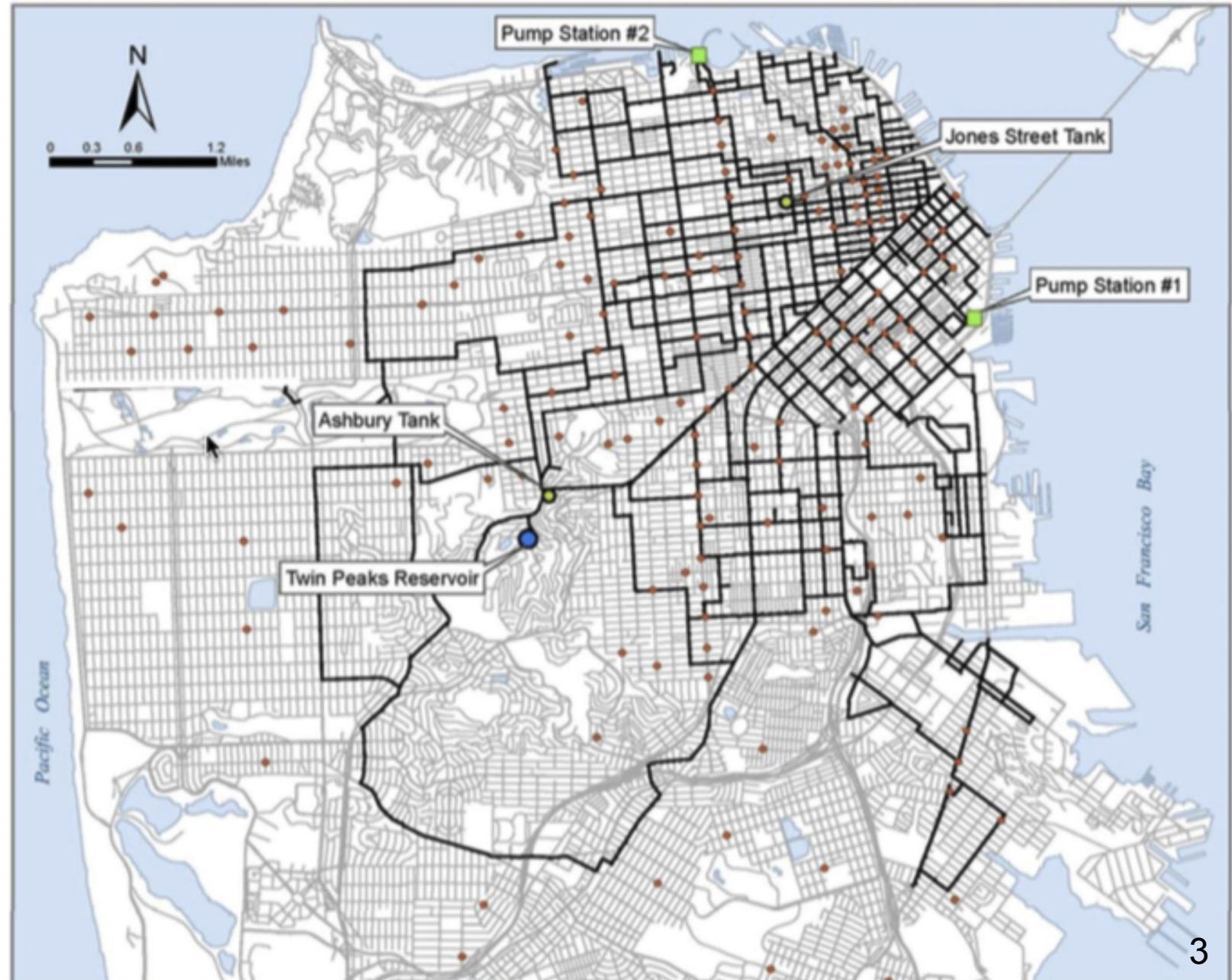
Pumping Station No. 2

10,000 US gallons per minute of salt water at a pressure of 300 psi with on-site generators.

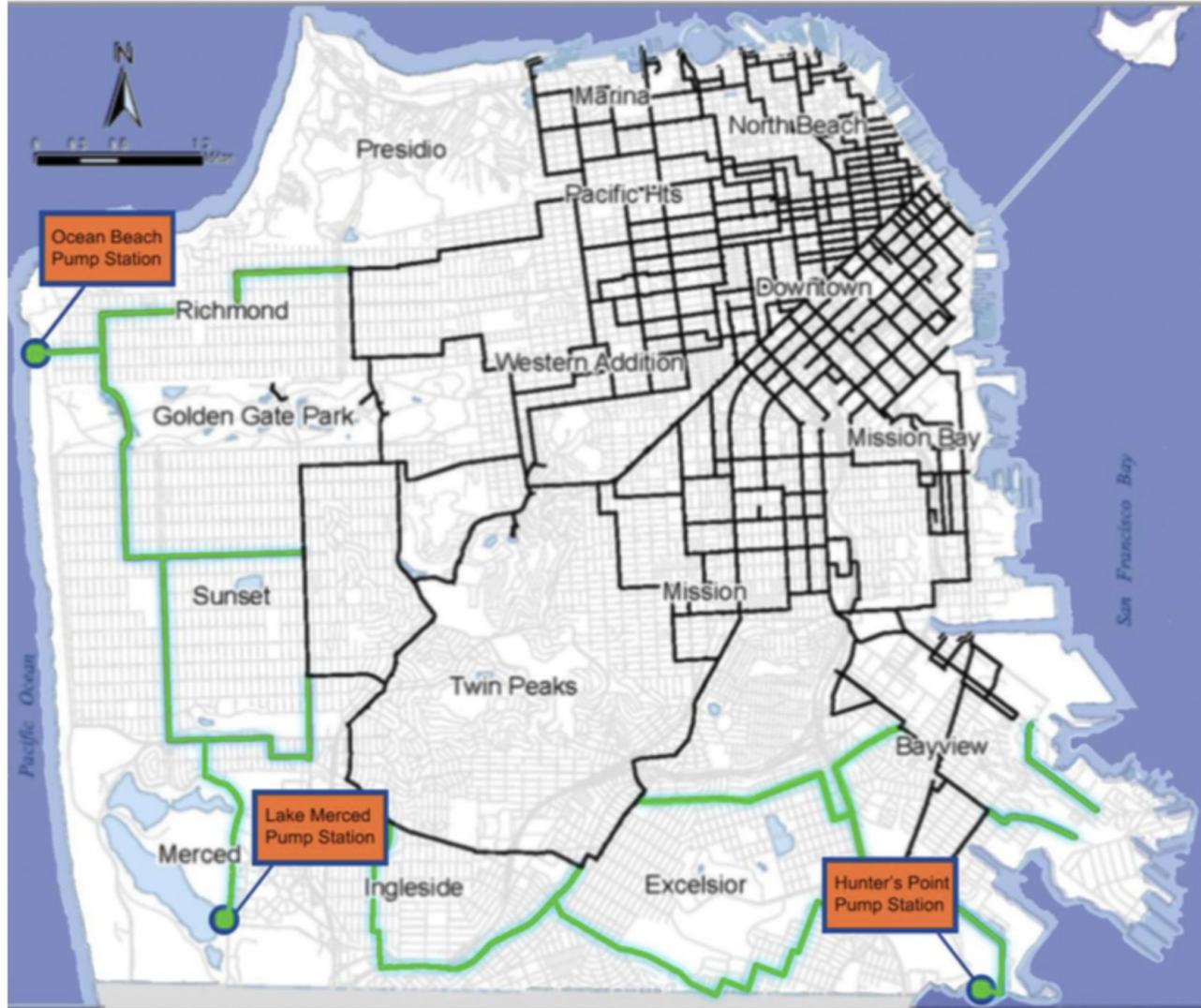
### Fireboats

Phoenix  
St Francis

### Cisterns



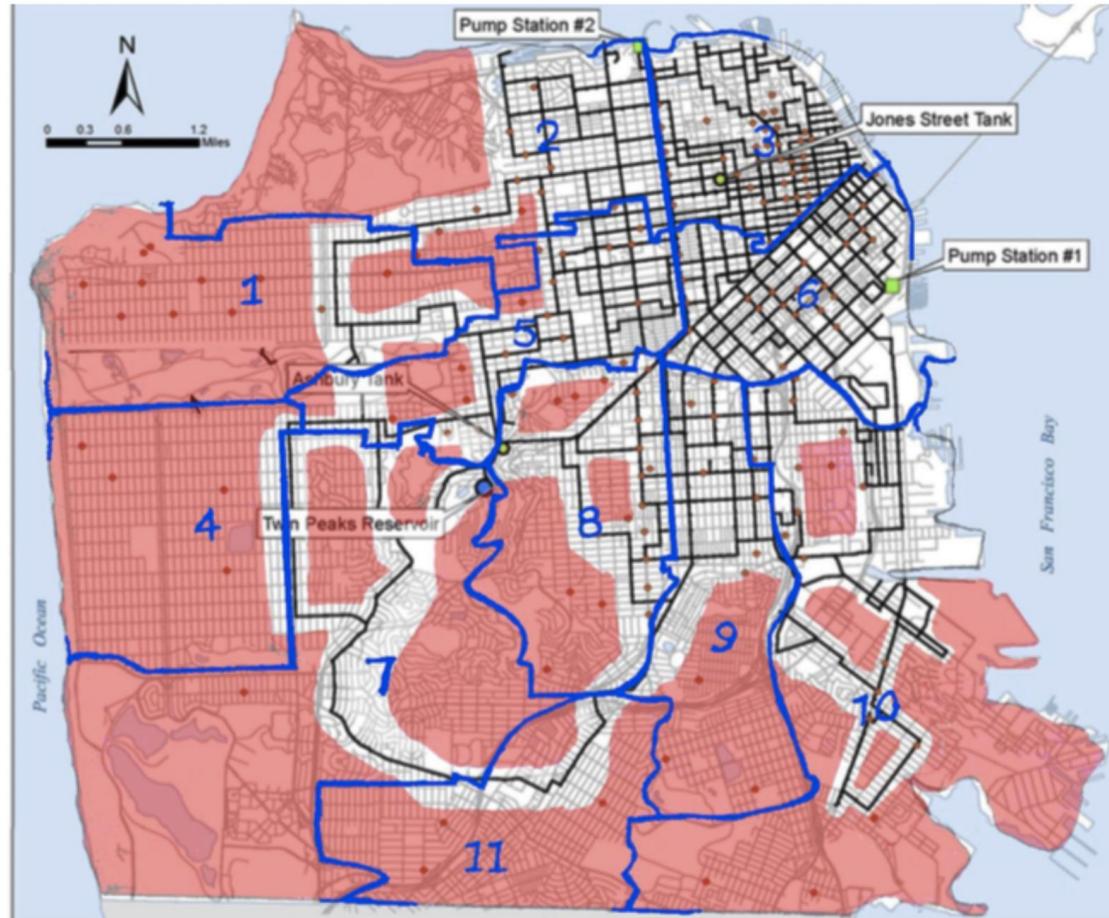
# Map of existing AWSS (black lines) and necessary extensions (in green)



This map shows the existing AWSS (black lines) and the necessary extensions (green) into the currently unprotected neighborhoods, as recommended by the 2009 study done for the Capital Bond Committee by the engineering firm of Metcalf & Eddy. The study did not include the three non-potable water pump stations (Ocean Beach, Lake Merced, and Hunter's Point) that will be required to provide the necessary pressure and volume to serve the hydrants along the pipelines in the western and southern neighborhoods. During the 2010 and 2014 ESER Bond campaigns, the voters were led to believe that these extensions of the existing AWSS would take place as a result of the passage of these and subsequent ESER bonds. Following the passage of the 2014 Bond, the SFPUC, without seeking public input, abandoned this plan.

# Safety redlining: 9 of 11 Supervisorial Districts are not protected by the current AWSS

**Supervisorial Districts areas of the City NOT PROTECTED by the current AWSS.**



**An expansion to all 15 unprotected neighborhoods will require an unlimited supply of water from the Pacific Ocean.**

**The SFPUC prefers a piecemeal approach and, after nine years of AWSS ownership, has no plan for almost one third of the City.**

# Breakdown of High Pressure AWSS Hydrants and Miles of Mains by District

**Table 3**  
**HP AWSS Hydrants and Miles of Main by District**

<b>Supervisory District</b>	<b># of AWSS Fire Hydrants</b>	<b>Miles of AWSS Mains</b>
1	42	5
2	170	14
3	327	23
4	3	0
5	188	16
6	366	27
7	79	7
8	110	9
9	110	9
10	222	18
11	24	1
<b>TOTAL</b>	<b>1641</b>	<b>130</b>

Districts 1, 4, 7, 8, 9 and 11, each have less than 10 miles of AWSS mains; Districts 1, 4, and 11 each have less than 50 AWSS fire hydrants.

The areas not protected by the HP AWSS would need to rely primarily on getting emergency firefighting water supplies from the City's MWSS through its low-pressure hydrants or from cisterns.

These resources are unlikely to provide adequate water to protect residents from fires after a major earthquake.

# San Francisco Hydrants – distinguishing colors



One of the 1500 high-pressure hydrants of the AWSS, fed by the Twin Peaks Reservoir, the 2 salt-water pump stations, and the fireboats. Because these hydrants are high pressure, fire hoses can be directly connected, no need for a pump truck.

- Black-topped hydrants are in the West of Twin Peaks zone and are fed by the Twin Peaks Reservoir.
- Red-topped hydrants are in the upper zone and are fed by the Ashbury Street tank.
- Blue-topped hydrants are in the lower zone and are fed by the Jones Street tank.



One of the 9000 low pressure hydrants, fed by the domestic water mains, which also have service connections in every building in SF. Engineers tell us that during a major quake tens of thousands of these service connections will break, resulting in insufficient pressure in the mains and render the low-pressure hydrant system useless for fighting multiple conflagrations that are expected.

In 2010, Mayor Newsom transferred the AWSS from SFFD to SFPUC.

Three Earthquake Safety and Emergency Response (ESER) voter-approved bond measures were passed in 2010, 2014, and 2020 for \$312M to expand AWSS across San Francisco.

Two Civil Grand Juries have been convened, one in 2003 and one in 2018.

Both recommended AWSS be expanded and to do it urgently.

In the 15 years that SFPUC has owned the AWSS, not a single mile of mains has been laid, not a single hydrant.

What have they been doing?

SFPUC has PUC has produced a series of alternate, and often bizarre, plans to avoid AWSS expansion.

All of these proposals will be ineffective in fighting post-earthquake fires.

# PUC's proposal relies on the use of potable water for emergency firefighting

## Problem: Limited Supply

What is the rationale to rely on potable water, a limited water supply, vs. the Pacific Ocean, an unlimited water supply?

Replenishment from Hetch Hetchy will take 24h and crosses 3 major fault lines.

Tapping into Lake Merced will contaminate the potable water supply, setting up San Francisco for a cholera epidemic in 3 days.

## Problem: Low Pressure System

In order to adequately pressurize the system to adequately fight post-earthquake fires, more than 60 valves will need to automatically close. The engineering schema is far too complex and relies on automation that may not be functional after an earthquake.

The time to pressurize the system is not known.

Hetch Hetchy Regional Water System  
Crosses Major Bay Area Earthquake Faults



This map shows that the Hetch Hetchy transmission mains that bring San Francisco's drinking water 167 miles from the Sierras cross three major Bay Area Earthquake faults (before crossing under the Bay) and closely parallel a fourth, the San Andreas Fault, before reaching terminal reservoirs (Sunset, Merced Manor, and University Mound) in the Southern area of the City. Although the SFPUC states that following a major earthquake, Sunset Reservoir "can be refilled within 24 hours," this is clearly not a statement of fact, but mere speculation. Does it make sense to bet the preservation of the entire neighborhoods on such pipelines when the entire Pacific Ocean is immediately available for post earthquake firefighting?

# Appeal of the Preliminary Negative Declaration Findings for Westside Potable Emergency Firefighting Water System

Notice from the Planning Department received on October 29, 2025

Public comment period ended on December 1, 2025

Deadline for appeal was also December 1, 2025 (within 30 days from notice from Planning Department)

We submitted comments and have filed an appeal

Deferred to Planning Commission meeting on March 26, 2026

Topic will go to BOS after Planning Commission

# Inform neighborhood groups about AWSS

Conduct informational road shows to neighborhood and community groups

Do you belong to a neighborhood or community group that we can come and talk to?

# What can you do?

Inform neighborhood groups about AWSS

Do you belong to any neighborhood or community groups we can talk to?

Sign the Open Letter supporting expansion of AWSS

<https://www.wayoutwestsf.com/>

Help influence our elected officials

Contact the BOS and the Mayor

Make public comments at the Planning Commission and BOS meetings