



## **Emergency Firefighting Water System Upgrade Program**

This independent water supply system consists of a 135-mile pipeline network, a high elevation reservoir as well as two large capacity tanks, two pumping stations, fireboats, underground water tanks (cisterns) and Bay water intakes (suction connections).

This program is funded by the \$412 million San Francisco Earthquake Safety and Emergency Response Bond, which was approved by 79% of voters on the June 8, 2010 ballot. The bond will also seismically retrofit, make safety improvements to neighborhood fire stations and construct a new Public Safety Building that will replace the existing SFPD Headquarters and Southern District Police Station.

This program will enable San Francisco to better protect its citizens, neighborhoods, and businesses in the event of a major earthquake or other disaster.

### **Need More Information?**

**[sfwater.org/efws](http://sfwater.org/efws)  
[info@sfwater.org](mailto:info@sfwater.org)  
415-554-3289**

San Francisco Public Utilities Commission  
525 Golden Gate Avenue, 12th Floor  
San Francisco, CA 94102

## Emergency Firefighting Water System Upgrades



### Projects to Expect During Construction

The Emergency Firefighting Water System Program has three major project categories.

**Core Facilities** – These core facilities deliver water at high pressures for the suppression of multiple-alarm fires. The program will seismically strengthen these five physical plant locations:

- Twin Peaks Reservoir (Sutro Heights) • Ashbury Heights Tank (Twin Peaks)
- Jones Street Tank (Nob Hill) • Firefighting Pump Stations 1 & 2 (SOMA & Ft. Mason)

**Cisterns** - Cisterns are underground water storage tanks currently found throughout San Francisco. The program plans to repair existing cisterns and install new cisterns to improve coverage throughout the City.

**Pipelines and Tunnels** – The current system includes over 135 miles of underground water pipelines and tunnels dedicated to emergency firefighting throughout San Francisco. The program will repair existing pipelines and tunnels and consider adding new pipelines.

### Construction Schedule

Construction is anticipated to begin in summer 2013 and the program completed in 2018.

#### First Phase of Construction

The installation of 16 new cisterns for fire protection is anticipated to begin by summer 2013 in the following neighborhoods: Bayview, Excelsior, Merced Manor, Outer Sunset, Portola, St. Francis Wood, Richmond and Westwood Highlands. Installation of all 16 cisterns will not occur simultaneously and it is anticipated that construction will last approximately 4 months per cistern location. More detailed information will be provided to nearby residents and local businesses prior to construction.

#### What to Expect

The SFPUC will communicate with all nearby residents and businesses prior to and during construction. You may see crews performing survey work in your neighborhood in preparation for construction.

### About the Program

After a major earthquake, the San Francisco Emergency Firefighting Water System (also known as the Auxiliary Water Supply System or AWSS) is vital for protecting against the loss of life, homes and businesses, by providing an additional layer of fire protection to supplement the domestic water system. The system delivers water at high pressure and includes approximately 200 cisterns, two pump stations, two storage tanks, one reservoir, and approximately 135 miles of pipes.

A reliable firefighting water supply system is crucial to the safety and quality of life of all San Franciscans. The San Francisco Public Utilities Commission assumed responsibility of the system in May 2010 and is steadily moving forward with plans to make long-lasting seismic and operational improvements to the 100 year old system.

Improvements to the Emergency Firefighting Water System will be made as part of the \$412 million Earthquake Safety and Emergency Response Bond that was passed by 79 percent of San Francisco voters in June 2010. Additional work funded by the bond includes upgrades to neighborhood fire stations and construction of a new public safety building.

### Program Outcomes

- Improved reliability of the firefighting water supply system, particularly following a major earthquake or other major emergency.
- Repairs, replacement, and improvements to the most vulnerable components of the Emergency Firefighting Water System underground pipe network.
- The addition of approximately 30 cisterns that provide an emergency source of water for firefighting.

### Program Budget

Funding under the current bond measure to upgrade the Emergency Firefighting Water System is approximately \$102.4 million. Of this, approximately \$34.4 million will go toward upgrades to a reservoir, two tanks and two pump stations, while \$36 million is dedicated to improvements to cisterns and \$32 million to the system's pipelines and tunnels.