



## PURPOSE OF THIS FACT SHEET

In response to the 2017 crisis at the Oroville Spillway and resulting amendments to State law, the SFPUC has submitted updated inundation maps and Emergency Action Plans for its regulated dams to DSOD for review and approval. All final DSOD-approved inundation maps will be published on the DSOD website at [water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Inundation-Maps](http://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Inundation-Maps).

### It is our goal to tell our neighbors:

- What you need to know in case of an emergency;
- Which dams under DSOD jurisdiction are located in your neighborhoods and;
- What the SFPUC has been doing, and will continue to do, to protect public safety and the integrity of our dams in the City.

### What you can do to prepare for an Emergency

- Sign up on [SF72.org](http://SF72.org) to receive emergency notifications, public service announcements and email alerts, and emergency preparedness tips.
- Store emergency supplies such as drinking water, non-perishable food, first aid kit, clothes and shoes, critical contact information, and medications in a “go-bag.”

## DAM SAFETY

The SFPUC has a robust dam safety monitoring and maintenance program to ensure the integrity of our dams in San Francisco and to protect the public. We use precise on-line instrumentation and alarms monitoring, conduct regular field inspections of the facilities, and perform emergency response planning to monitor the integrity of these structures.

SFPUC staff regularly monitor water levels within the reservoirs, and how much water is flowing into and out of them to ensure the operations at the dam remain safe.

We measure underdrain systems to monitor for any indication of crack development in the floor or walls of a reservoir. Intrusion alarms also notify staff quickly of a potential security breach.

In addition to these measurements and routine visual observations by our workers, we perform a complete visual inspection of each of our dams and reservoirs on a regular basis and after any significant nearby earthquakes. In addition, DSOD inspects all DSOD-regulated dams annually.

We also monitor the other reservoirs and tanks in San Francisco that are not classified as dams on a monthly basis to ensure safety, as required by the State Water Resources Control Board Division of Drinking Water.

Using all of these tools, SFPUC crews can be forewarned of facility conditions that could warrant further investigation before the dam integrity is compromised.

## EMERGENCY PLANNING AND RESPONSE

### SFPUC Emergency Planning and Coordination

- SFPUC maintains Emergency Action Plans for each of our dams; in San Francisco these plans include notification procedures and contacts with the Department of Emergency Management and other first responders needed in the unlikely case of a dam emergency.
- SFPUC’s Emergency Planning and Security Division coordinates and conducts regular exercises of the Emergency Action Plans.
- SFPUC staff regularly train and practice using these plans.

## San Francisco Reservoirs that are Classified as Dams by DSOD

Reservoir Name	Type/ When Built / Capacity
Stanford Heights	Concrete 1923/2009 Seismic Upgrade 11.1 Million Gallons
Summit	Concrete 1954/2006 Upgrade 13.2 Million Gallons
Sunset North Basin	Concrete 1938/2009 Seismic Upgrade 87 Million Gallons
Sunset South Basin	Concrete 1960 81.3 Million Gallons
Sutro	Concrete 1952 31.4 Million Gallons
University Mound North Basin	Below Ground Concrete 1885/2010 Seismic Upgrades 55.7 Million Gallons
University Mound South Basin	Below Ground Concrete 1937/2001 Upgraded 76.6 Million Gallons

### DAM SAFETY AND EMERGENCY PLANNING

The San Francisco Public Utilities Commission (SFPUC) water system includes 18 dams that are monitored by the Division of Safety of Dams (DSOD). The SFPUC submitted Emergency Action Plans for all 18 of our dams to DSOD. The plans and the inundation maps they contain, serve as guides and action plans to be used in the unlikely event of a complete failure or partial failure of one of these dams. Seven of the dams owned and maintained by the SFPUC and regulated by DSOD are located in the City and County of San Francisco, and you may live near one of them. All potable water reservoirs in San Francisco that are classified as DSOD-regulated dams are covered structures and therefore are not impacted by extreme weather events, such as heavy rain.

Staff control the water levels inside these reservoirs by adjusting the inflow and outflow to maintain operations.

### THE SYSTEM WE OPERATE

The Hetch Hetchy Regional Water System collects surface runoff from rivers and creeks in three major watersheds that is stored in reservoirs that are created by dams, both large and small, for municipal water supply and hydropower generation. These dams and reservoirs are essential elements of our water delivery system.

A dam is a structure (usually an earthen embankment or concrete) designed to hold back water, together with appurtenant works (such as a spillway).

The California Division of Safety of Dams (DSOD) provides oversight to the design, construction and maintenance of dams under its jurisdiction. Dams in California that are of a certain size (generally above 25 feet high with a storage capacity of greater than 50 acre- feet) are under the jurisdiction of DSOD. There are 1,249 of these dams in California.

The SFPUC's water system has a total of 18 dams under DSOD jurisdiction, seven of which are located in San Francisco.

The seven San Francisco dams that impound potable water storage reservoirs have one or more walls constructed of an embankment and thus meet DSOD's criteria for being regulated as dams.

### INUNDATION MAPS

Inundation maps show the area that would be inundated by flooding and the degree of flooding from an uncontrolled breach of a dam and/or the failure of an appurtenant structure, such as a spillway. The flooding portrayed in the map simulates the effect of an immediate release of all of the water behind a dam. This would be caused by the extremely unlikely scenario of a complete failure of the dam.

These maps are essential tools for emergency response planning because they help determine which communities downstream of a dam might be impacted from a complete dam failure so they and first responders can better prepare.