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

DAMS IN ALAMEDA COUNTY, SAN MATEO COUNTY AND TUOLUMNE COUNTY

PURPOSE OF THIS FACT SHEET

In response to recent changes in State law brought about due to the February 2017 crisis at the Oroville Spillway, the SFPUC has submitted updated inundation maps and Emergency Action Plans for each of the 18 dams overseen by 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**.

It is our goal to tell our neighbors:

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

What you can do to prepare for an Emergency

- Sign up with your local emergency notification system to recieve public service announcements, text messages and email alerts, and emergency preparedness tips.
- San Francisco: **SF72.org**
- Alameda County: **acgov.org/ready/**
- San Mateo County: **smcready.org/**
- Tuolumne County: **https://www.tuolumnecounty.ca.gov/308/Office-of-Emergency-Services**
- 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 and to protect the public. We use precise instrumentation and monitoring, conduct regular field inspections of the facilities, and perform emergency response planning to monitor the integrity of these structures.

We place instruments called piezometers in dams and foundations to monitor water pressure and the presence of water seepage. We are also on the lookout for changes in the rate of flow and changes in the turbidity of the water in the seepage which may indicate a developing structural issue for the dam.

We measure survey markers to check for any potential change in the shape or dimensions of the dam as result of potential weaknesses. Measurements of the instruments are compared to long term data and trends to evaluate the condition of the dams and appurtenances.

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.

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

SFPUC's Dams Regulated by DSOD (With Hazard Ratings, which denote proximity to populated areas)		
Tuolumne County	**Alameda County**	**San Mateo County**
Cherry (High)	**Calaveras** (Extremely High)	**Lower Crystal Springs** (Extremely High)
Eleanor (High)	**Turner** (Extremely High)	**Pilarcitos** (Extremely High)
Early Intake (Low)		**San Andreas** (Extremely High)
Moccasin (High)		
O'Shaughnessy (Extremely High)		
Priest (High)		

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.

EMERGENCY PLANNING AND RESPONSE

- We maintain Emergency Action Plans for each of our dams; these plans include notification procedures and contacts with the Office of Emergency Services in each respective county, and other first responders needed in the unlikely case of a dam emergency.
- Our Emergency Planning and Security Division coordinates and conducts regular exercises of the Emergency Action Plans.
- Staff regularly train and practice using these plans.

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, constructions and maintenance of dams in California that are of a certain size (generally above 25 feet high with a storage capacity of greater than 50 acre-feet). There are 1,249 dams in California overseen by DSOD.

The SFPUC's water system has 18 dams overseen by DSOD, 11 of which are located in the Regional Water System in Tuolumne, Alameda, and San Mateo counties.

Of our 18 DSOD overseen dams, 13 are classified as "extremely high hazard," six are classified as "high hazard" and one is classified as "low hazard". These hazard classifications are based solely on proximity to populated areas and have nothing to do with the condition of the dams or likelihood of failure.

WHO ARE WE?

The San Francisco Public Utilities Commission (SFPUC) owns and operates the Hetch Hetchy Regional Water System, which delivers high-quality drinking water to 2.7 million customers in four Bay Area counties. Our major water source originates from the Tuolumne River watershed in Yosemite National Park. This water is supplemented with surface water from watersheds in Alameda and San Mateo counties and from groundwater.