

100-Year Flood Risk Map Information Sheet and FAQs

BACKGROUND

To gain a better understanding about flood risk from storm runoff in the City and County of San Francisco, the San Francisco Public Utilities Commission (SFPUC) has developed a 100-Year Storm Flood Risk Map (Flood Map). This Flood Map is an informational tool to illustrate flooding from storm runoff in a 100-year storm.

The term "100-year storm" is used by climatologists, hydrologists, and civil engineers to simplify the definition of an intense storm event that statistically has a 1% chance of occurring in a given year. A 100-year storm event may have a lower statistical likelihood of happening than your average storm, but they can and do happen, sometimes within just a few years of each other.

The Flood Map delineates 100-Year Storm Flood Risk Zones (Flood Risk Zones). Parcels within the Flood Risk Zones are highly likely to experience "deep and contiguous" flooding during a 100-year storm. "Deep and contiguous flooding" means flooding that is at least six inches deep spanning an area at least the size of half an average city block.

PURPOSE

The purpose of the Flood Map is to inform existing and future property owners about flood risk on their properties. This information will enable property owners to take steps to protect their property from stormwater flood risk. It also promotes a transparent process for determining and disclosing flood risk at the point of sale and for new leases in a manner that is consistent with existing State law that requires sellers and lessors to disclose natural hazards, including flood risk.

The City is pursuing legislation that would require sellers or lessors of property to disclose to buyers or tenants if the property is located within the Flood Risk Zones.

ADDITIONAL QUESTIONS?

Contact us at (415) 695-7326 or rainreadysf@sfgov.org

Visit our webpage at sfgov.org/floodmaps

FREQUENTLY ASKED QUESTIONS

How did the SFPUC develop the Flood Map?

To delineate the boundaries of the Flood Risk Zones, SFPUC staff:

- Used a hydrologic and hydraulic computer model to simulate flooding occurring citywide during a 100-year storm. This sophisticated computer model uses information about the SFPUC's sewer collection system (drains, pipes, pump stations, and other infrastructure), topography, and buildings to map where surface water and/or flooding is expected in storms of varying intensity. The City uses the same model to plan capital infrastructure projects.
- Drew boundaries around those parcels and properties affected by "deep and contiguous" flooding, as defined above (i.e., "Flood Risk Zones").

The map shows flood risk from storm runoff only. It does not show the risk of flooding from San Francisco Bay or the Pacific Ocean, including the effects of inundation from future sea-level rise. The Flood Map also does not show the exact depth of flooding at a given location. Property owners and other users of the Flood Map should be aware that areas outside of the Flood Risk Zones shown on the Flood Map may experience shallower or more localized flooding in a 100-year storm or flooding in storms larger than a 100-year storm.

Which properties are included in the Flood Risk Zones?

There are about 2,140 parcels in the Flood Risk Zones shown on the Flood Map (this figure represents 1% of parcels citywide). Approximately half of these are residential parcels, while the rest are a combination of commercial, industrial, and public parcels. Many of the properties in the Flood Risk Zones are built along historical waterways that used to be creeks or wetlands.

Why do I need to know if my property is subject to flooding during a storm that has only a 1% chance of occurring in a given year?

A 100-year storm, while an uncommon event, has occurred in certain San Francisco neighborhoods in the past decade.

What are the potential impacts of flooding on properties located in the Flood Risk Zones?

The Flood Map shows parcels that are likely to experience at least six inches of flooding. Some parcels in the Flood Risk Zones could be subject to more than six inches of flooding during a 100-year storm. This level of flooding could take place anywhere on the street and/or sidewalk in areas shown on this map. How such flooding would impact a property depends upon the characteristics of the given property. For example, if a building has steps up to a door, the water may not enter the building via that door, but it could otherwise enter the building through cracks, a garage, or the sanitary sewer system (if there is no backflow preventer). A door at the street level could also allow a significant amount of water to enter the house.



Can I purchase flood insurance for my property?

Yes. San Francisco participates in the National Flood Insurance Program (NFIP), which is administered by the Federal Emergency Management Agency (FEMA). The program provides federally backed, affordable flood insurance for homeowners, renters, and businesses in all areas of San Francisco. Flood insurance under the NFIP provides coverage for flood damage to buildings and contents, and can be purchased through many private property and casualty insurance companies. As of 2017, NFIP annual premiums for properties not in FEMA-designated floodplains started at \$40/year for a ground-floor renter who is insuring contents only, and \$127/year for a residential property owner with a basement who is insuring both contents and structure. As with any other type of insurance, it is important to know what a policy does and does not cover. Check with your insurance agent for more specific information. Further information about purchasing flood insurance is available on the FEMA webpage at [fema.gov/national-flood-insurance-program](https://www.fema.gov/national-flood-insurance-program).

What is the relationship between the City's Flood Map and the FEMA maps?

FEMA's maps show potential flooding from lakes, rivers, bays, and oceans. The preliminary map that FEMA has prepared for San Francisco shows flood hazards associated with San Francisco Bay and the Pacific Ocean; it does **not** show flood hazards associated with storm runoff. SFPUC's Flood Map only shows flooding from storm runoff. In most areas, the flood hazards identified by SFPUC and FEMA are separate. There are a few areas near the shoreline of San Francisco where SFPUC's Flood Risk Zones overlap with the FEMA-designated floodplains.

What steps can I take to reduce flood risk at my property?

In addition to **purchasing flood insurance**, many San Francisco residents have taken advantage of the SFPUC's various programs to help them prepare and better protect their properties from major rain events, including the following:

- Certain properties may be eligible for the SFPUC [Floodwater Grant Program](#), which reimburses property owners up to \$100,000 for floodproofing projects. For more information and to review eligibility criteria, please visit sfwater.org/floodwatergrant.
- Review the [Flood Preparedness Brochure](#) and refer to the [Floodwater Grant Program – Example Concepts brochure](#).
- Contact **311** to report issues such as flooding, clogged catch basins, sewer backups, and displaced manhole covers.
- Participate in [Adopt a Drain SF](#), which promotes efforts to clear away leaves and debris from the top of catch basin grates regularly in order to help keep stormwater flowing smoothly.
- Monitor the weather reports carefully and elevate belongings in their garages and any low-lying areas on their property if they live in a flood-prone area.

Visit our webpage for more information on these programs and other storm preparation tips are available on our website: sfwater.org/RainReadySF.



FREQUENTLY ASKED QUESTIONS CONTINUED

I am a renter and live in a Flood Risk Zone. Are there actions I can take to protect myself from flooding?

As previously stated, low-cost flood insurance is available for renters that can help protect your personal belongings. For additional information on flood insurance for renters, visit the FEMA webpage at [fema.gov/national-flood-insurance-program](https://www.fema.gov/national-flood-insurance-program).

I believe my property was incorrectly included in a Flood Risk Zone. Is there a process for review of the Final Map's inclusion of my property?

The SFPUC has established a parcel review process through which parcels will be assessed and, if justified, removed from the Flood Risk Zones shown on the Flood Map. This process is specific to parcels and does not apply to portions of parcels or structures/units within a parcel. A parcel owner would undertake this process to be removed from the Flood Risk Zone and relieved of the associated disclosure requirement. Removal of a parcel from the Flood Risk Zone does not mean the property is no longer at risk of flooding.

The physical characteristics or criteria that form the basis for removing a parcel are as follows:

- Parcel ground elevations (not buildings or units) are entirely above the 100-year storm flood elevation
- Barriers (e.g. walls or solid fences) divert stormwater from the entire parcel, such that no part is within the 100-year storm flood extent

The process for reviewing and removing a parcel from the Flood Risk Zone is as follows:

The process for reviewing and potentially removing a parcel from the 100-year Storm Flood Risk Zone is as follows:

- Property owner submits this parcel review request form to the SFPUC.
- SFPUC staff will perform a preliminary desktop review and site visit to the parcel to determine if additional data is needed.
- The parcel owner shall cooperate and assist SFPUC in such review efforts, including but not limited to, providing SFPUC with access to the parcel to conduct site inspections and/or surveys.
- Following all necessary site assessment activities, SFPUC will determine whether one or more of the Removal Criteria have been satisfied.
- SFPUC will send the parcel owner written notice of its parcel determination.
- The Map will be updated on an annual basis to incorporate and reflect all property review determinations that have been made.

Please visit sfwater.org/floodmaps to obtain a Flood Map – Parcel Review Request Form or contact (415) 695-7326 or rainreadysf@sfwater.org.

