

Fact Sheet: Flooding

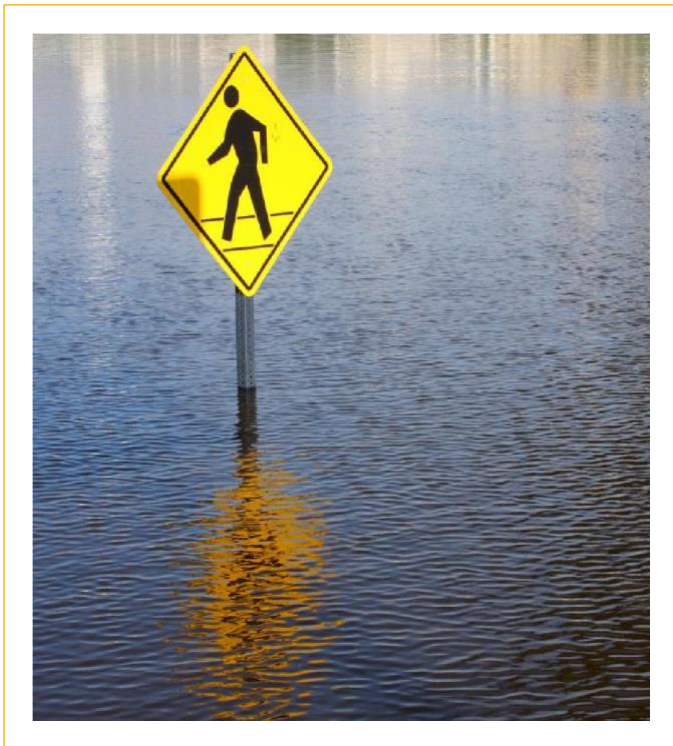
In a time of severe droughts, many California residents do not recognize the risk of flooding. California is at risk for both extreme floods and flash flooding.

Flooding

Flooding is the temporary overflow of water on land that is typically dry. Floods are the most commonly occurring natural disaster in the United States. There are a variety of, primarily unpreventable, causes of flooding:

- Rain
- Snow
- Coastal storms
- Storm surges
- Overflows of dams and other water systems

California has had multiple large floods and is at risk for flooding in the future.



Extreme Floods

A prediction model known as “ARkStorm”, short for atmospheric river 1,000k storm, is based on historical floods. It predicts a scenario with an extreme storm leading to extreme flood events.

- An extreme flood has the potential to cause more economic damage than a major earthquake.

ARkStorm has been developed into two new scenarios ARkHist and ARkFuture as part of ARkStorm 2.0.

- ARkStorm 2.0 accounts for climate change and new scientific advances.
- Climate change has led to predictions there will be more extreme floods in California.
- It is estimated that due to climate change, the likelihood of an event capable of producing catastrophic flooding has already doubled.

Day to Day Flooding

Even without an extreme storm event, there is still a risk of flooding in California. Isolated storms, burn scars, and changed environment all create significant chances for flash flooding.

- Flash floods are sudden and without warning. A flood can happen in minutes.

Flood Preparedness

Get flood insurance: Most home insurance does not cover floods.

- Additional flood insurance policies are needed.

Keep important documents safe: Place important documents in a waterproof and fireproof container.

- Create password-protected digital copies.

Prepare your home: Many homes are not ready to handle sudden floods. Preventative measures are the best strategy to deal with future potential floods.

- Clean gutters and drains
- Move valued items to higher locations
- Prepare with sandbags when flooding is anticipated.

During a Flood

Determine the best course of action: This depends on the type of flooding. Local authorities will typically provide instructions.

- Evacuation
- Moving to higher ground
- Staying where you are

Avoid driving: Stay off the roads, unless it is an emergency or you are directed to evacuate.

Seek shelter: Find a safe place to shelter.

- Remain in place until the water has receded

Turn around, don't drown: Do not attempt to drive, walk, or swim through flood waters.

- As little as six inches of moving water can knock a person down, and one foot of moving water can sweep a vehicle away.
- Drowning is the number one cause of death in floods.

Stay off bridges: Bridges that are over fast moving water can be especially dangerous.

Beware of electrocution: Electrical currents can travel through standing water.

- Electrocution is the second leading cause of death in floods.

After a Flood

Ensure water is safe to use: Water supplies can be contaminated during floods.

- Listen to local officials prior to resuming to use water.

Clean surfaces that were exposed to flood waters: Use a mixture of 1 cup bleach and 1 gallon water to disinfect.

- Discard items that cannot be disinfected.

Protect yourself while cleaning: Wear rubber and plastic gloves.

Thoroughly dry flooded areas of your home: Use fans, air conditioning units, and dehumidifiers for to dry wet areas.

References

Centers for Disease Control and Prevention. (n.d.). *Be ready: Floods*.

https://www.cdc.gov/orr/infographics/00_doc/s/beready_floods.pdf

Contra Costa County. (n.d.). *Reducing flood damages*.
<https://www.contracosta.ca.gov/5896/Reducing-Flood-Damages>

Federal Emergency Management Agency. *Be prepared for a flood*. (March 2018).

https://www.ready.gov/sites/default/files/2020-03/flood_information-sheet.pdf

Huang, X., & Swain, D. L. (2022). Climate change is increasing the risk of a California megaflood. *Science Advances*, 8(32).

<https://doi.org/10.1126/sciadv.abq0995>

Ready. (9 December, 2021). *Floods*.

<https://www.ready.gov/floods>