



# CA Silver Jackets

## Flood Risk Informational Games & Interactive Tools

### Flood Challenge

Ages 4-10

<http://westsacfloodprotect.com/floodchallenge/?url=/floodchallenge>

Flood Challenge educates kids on the importance of flood preparedness. In this game, the characters Petra the Planner, Pedro the Packer and Polly the Protector teach students:

- The importance of developing a flood emergency plan
- How heavy rainfall can lead to flooding
- What important documents you need to have handy in an emergency
- Why you should have an emergency kit, and what to put in it
- How sandbagging can prevent your home from flooding
- The importance of flood insurance

The game is highly interactive and allows kids to play fun games while emphasizing flood preparedness.



### Nevada Flood VR Simulation

Ages 15+

<https://floodvr.com/>

This 360 virtual reality flood experience video simulates what can happen when driving through moving water during a flash flood.

- Demonstrates to players that just a few inches of water can inhibit a vehicle.
- The immersive platform allows viewers to experience the danger of driving through a flood.
- Can be viewed in Google Cardboard, on a computer, or with Oculus



# River Basin Balancer

Ages 12+

<https://www.nwd.usace.army.mil/Basin-Balancer/>

This game allows users to experience the unique challenges associated with managing a river basin. Players must balance the diverse needs of:

- Flood control
- Navigation
- Hydropower
- Irrigation
- Water supply
- Recreation
- Fish and wildlife
- Water quality

The basin must be managed across geographic zones and weather conditions. This game illustrates the diversity of water needs.

# Don't Flood the Fidgets!

Ages 4-10

[https://pbskids.org/designsquad/games/dont\\_flood/](https://pbskids.org/designsquad/games/dont_flood/)

Designed by Global PBS.

In this game kids will learn:

- How flooding can affect towns and cities
- Green infrastructure like green roofs
- Important of levees and bio swales
- How permeable surfaces can help prevent flooding

In this game the player gets to design a city and see how their design will fare in a large rainstorm event.



# The Ocean Game

Ages 12+

<https://www.latimes.com/projects/la-me-climate-change-ocean-game/>

The Ocean Game was developed by The L.A. Times in response to sea level rise across California's coast. It illustrates how coastal towns will be affected by sea level rise and possible infrastructure or policy decisions that can help mitigate it. The game is challenging to balance communities needs with safety and budget constraints. The player is given a certain amount of funding to start off the game and they must decide the best course of action to prevent homes from flooding while maintaining a vibrant beach town to sustain tourism. This game is based on interviews with coastal scientists, planning officials, homeowners, relators, and environmentalists.



# Nevada Flood Fighter

[http://nevadafloods.org/flood\\_fighter.htm](http://nevadafloods.org/flood_fighter.htm)

Ages 12+



In Nevada Flood Fighter, the play simulates being a water management engineer. The game demonstrates what goes into reservoir management, and the water management engineer must construct a levee and reservoir system that will withstand a heavy rain event and not flood the town.



## Flood Map

<http://flood.firetree.net/?ll=43.3251,-101.6015&z=13&m=7>

Ages 16+

Flood Map is an interactive map platform that projects flood inundation in response to sea level rise. Users can zoom into an area of interest and adjust the height of sea level rise. The map will reflect the expected amount of inland flooding based on the level selected. This is a useful tool for demonstrating the danger of sea level rise and the possibility of metropolitan areas being completely inundated.



## Platte River Floodwalk

<https://denver.cbslocal.com/2019/06/23/fema-floodwalk-app-denver-flood-hazard-risks-south-platte-river/>

Ages 16+

This is an app that users can download into their smartphones. It shows the impacts of prior floods in Denver's Confluence Park. Users can visualize what a high water level looks like amongst present-day infrastructure. The Floodwalk App, developed by the Federal Emergency Management Agency (FEMA), provides information on flood risk management measures that have been implemented in the area.