



How the Flood Risk Management System Works

Despite its complexity, the flood risk management system in California consists of only a few major components – primarily dams, levees, weirs, and bypasses. No single piece can work alone. The system works by moving water away from places where people live and into natural basins, which are low areas of land.

Dam

A dam is simply a barrier, typically made of earth or concrete, that holds back the flow of water. Dams are built for many purposes, including flood risk reduction, hydroelectric power and water storage for irrigation or human consumption. Dams store water during a major storm and release it over time, in amounts downstream levees can hold.

Levee

A levee is an extension of the river banks, made to contain floodwater. Some levees are made of earth. Others are reinforced with gravel, concrete, or other materials.

Bypass

A bypass helps move floodwater around an area, just like a highway bypass goes around a city. In a flood, the weirs spill water into bypasses. Bypasses provide habitat for birds and fish, and they can also be used for farming. However, bypasses must be kept clear enough to accommodate floodwater conveyance.

Weir

A weir is a small dam designed to allow water to flow over it at a certain level. Engineers often use weirs to accurately measure the flow of water in cubic feet per second, or CFS.



Watch the Animation
youtube.com/SacramentoDistrict