



Modeling & Analysis

California has complex water management systems with natural features like mountain snowpack, lakes, rivers, and groundwater basins that are managed with engineered features like reservoirs, levees/flood walls, weirs, culverts, bypasses, and canals. Models represent the complex physical interactions between these features in a conceptual way. Models and other analytical tools help water managers make informed decisions about how best to manage water for people, farms, and the environment as well as to protect lives and properties from flooding.

We develop and maintain a number of state-of-the-art models and analytical tools that describe how water flows, flood risk, and water quality in California's rivers, groundwater basins and the Sacramento-San Joaquin Delta, including current and future operations of State and federal projects.

Publications

[Final State Water Project Delivery Capability Report 2019](#)

[Methodology for Flow and Salinity Estimates in the Sacramento-San Joaquin Delta and Suisun Marsh: 2020 Annual Progress Report to the State Water Resources Control Board](#)

[Methodology for Flow and Salinity Estimates in the Sacramento-San Joaquin Delta and Suisun Marsh: 2019 Annual Progress Report to the State Water Resources Control Board](#)

[Final State Water Project Delivery Capability Report 2017](#)

[Estimates of Natural and Unimpaired Flows for the Central Valley of California: Water Years 1922-2014](#)

[Methodology for Flow and Salinity Estimates in the Sacramento-San Joaquin Delta and Suisun Marsh: Annual Progress Report to the State Water Resources Control Board \(Archived\)](#)

Data

[California Data Exchange Center](#)

[California Water Plan](#)

Resources

[U.S. Geologic Survey, Central Valley Hydrologic Model](#)

[U.S. Army Corps of Engineers, Hydrologic Engineering Center](#)

[SCHISM Modeling System](#)

[California Water and Environmental Modeling Form](#)

[Groundwater Interactive Map](#)

User Group

- [Delta Modeling User Group](#)
- [IWFM User Group](#)