

Managing Water in California - Living in the extremes

Water in California is a tale of the extremes. The differences in the location and timing of precipitation and water demand in California have always been an exciting problem for water resources engineers and planners for over 100 years. With the recent changes in legislation and the ongoing drought of the century, water resources in California have entered a new era, where proper sustainable and integrated management of surface and groundwater resources is targeted.

In the process of planning for the management actions, numerical models are the most important tools to inform the decision-making process before testing in real life. For this purpose, California Department of Water Resources and the local agencies develop and use several models applied across the state at the watershed or regional scales.

In this seminar, I will present a general picture of water resources in California, and talk about some of the most used numerical models in light of the latest development in the field such as Groundwater Substitution Transfers, Flood-Managed Aquifer Recharge (Flood-MAR), and Sustainable Groundwater Management Act (SGMA).

The estimated time is 40 to 90 minutes depending on the level of detail and discussion.

By: Sercan Ceyhan

Sercan Ceyhan is a water resources engineer with around 10 years of experience in regional scale integrated hydrologic modeling, model calibration, and hydrologic data analysis. Sercan has an undergraduate degree from METU Environmental Engineering and graduate degrees from University of Stuttgart and University of California, Davis. Coming from an academic background, he is a believer in continuous learning and sharing of knowledge. Currently, he is working as a consultant in Sacramento to help the sustainable management of the water resources in California.