



Technical Workshop

MODFLOW 6 and Python workflows for developing MODFLOW models

June 25-26, 2026 - 8:30am to 4:30pm
Woodard and Curran, Inc. Office
801 T Street, Sacramento, CA 95811

This workshop is open to CWEMF members only

Workshop Fee: \$100 or \$25 for students
Refreshments included. Lunch not included.

Please email cwemf@cwemf.org to reserve your seat and include "CWEMF MODFLOW6 Workshop" in the subject line

Payment can be made by PayPal online or by check to: CWEMF, 3697 Mt. Diablo Blvd, Suite 150,
Lafayette, CA 94549.

Please go to www.cwemf.org for information on renewing your CWEMF membership or becoming a CWEMF member

MODFLOW is a three-dimensional hydrologic simulator that is developed and maintained by the U.S. Geological Survey and cooperating partners. MODFLOW 6 is the current "core" version of MODFLOW that is actively supported, developed, and maintained by the USGS. Newly developed capabilities extend MODFLOW from a groundwater flow simulator into a hydrologic simulator with many features not available in prior versions. FloPy is a python scripting language package for MODFLOW that can be used to build, edit, postprocess, and visualize MODFLOW simulations.

In this workshop, participants will learn the basic concepts of MODFLOW 6 and FloPy. These concepts will be coupled with in-depth activities that teach participants how to build models from scratch. Participants will learn how to construct, edit, and post-process models in a Python environment with FloPy using geospatial data. The topics and workflows covered in this course can be directly applied or adapted for constructing complex, real-world, MODFLOW models.

Workshop participants will need to bring a laptop computer with several programs installed, including Miniforge Python, MS Excel and a powerful text editor such as Notepad++. Participants should have a basic understanding of hydrology and some familiarity with Python. Before the workshop participants will need to download workshop materials from a course repository and follow installation instructions that are outlined in the repository to install Miniforge with a Python environment for this course.

Major course topics will include

- Overview of MODFLOW 6
- Introduction to FloPy
- MODFLOW 6 model construction with FloPy
- Workflows for constructing Structured and Unstructured model discretization
- Python workflows for translating geospatial and temporally varying data into model inputs
- MODFLOW output: post-processing and analysis
- Class project: building a MODFLOW 6 model in Python from disparate data

Course Instructors:

Josh Larsen, Hydrologist, U.S. Geological Survey, California Water Science Center

Eric Morway, Research Hydrologist, U.S. Geological Survey, Nevada Water Science Center