Technical Workshop
Integrated Water Flow Model (IWFM) Training
(in cooperation with the California Department of Water Resources)

May 28 − 30, 2025 9:00am to 4:30pm
California Natural Resources Headquarters
715 P Street, Room 2-309
Sacramento, CA 95814

This workshop is open to CWEMF members only.
Workshop Fee: $150 ($40 for student)
Refreshments included all three days, lunch not included.

Registration/Payment can be made online at www.cwemf.org. Payment can also be made via check sent to: CWEMF, P.O. Box 5051, Vacaville, CA 95696-5051. As part of the registration process, please email cwemf@cwemf.org to reserve your seat and include "IWFM Workshop" in the subject line. Go to www.cwemf.org for information on renewing your CWEMF membership or becoming a CWEMF member.

Integrated Water Flow Model (IWFM) is a water resources management and planning tool that simulates land surface and root zone flow processes, groundwater, stream flows, and surface water-groundwater interactions. Tile drains, subsidence, lakes and lake-groundwater interactions can also be simulated. IWFM models groundwater flow as a three-dimensional system and solves the governing flow equation using the Galerkin finite element method. A unique feature of IWFM is the land use based approach of calculating water demands. Agricultural and urban water demands can be pre-specified, or calculated internally based on user-specified land use distribution, soil properties, climatic conditions and farm water management practices.

This is a companion workshop to the *IWFM Demand Calculator (IDC)* workshop which is offered separately, and specifically concentrates on the land-surface and root zone component of IWFM. The workshop participants will learn the basic concepts and mathematical methods used in IWFM, and will have hands-on exercises that will teach them how to build models from scratch.

Workshop participants will need to bring a laptop computer with several programs installed, including MS Excel, and a powerful text editor such as TextPad. Before the workshop, participants will need to download workshop materials (presentations, hands-on examples and guidelines for these examples) and install the IWFM Excel add-in.

Major topics will include:
- Overview of IWFM
- Simulation of groundwater flow
- Stream flows and stream-groundwater interactions
- Lakes and lake-groundwater interactions
- Tile drains, subsidence, pumping and recharge of groundwater
- Land-use and soil moisture routing; computation of agricultural and urban water demands **(these topics will be covered only briefly; *IWFM Demand Calculator (IDC)* workshop covers these topics in more detail)**
- Stream diversions and pumping as water supply
- Automated adjustment of diversions and pumping to meet water demand

Course Instructor: Dr. Can Dogrul, Ph.D. P.E. (Department of Water Resources)