



**California Water and Environment Modeling Forum**  
**Promoting Excellence and Consensus in Water and Environment Modeling**

P.O. Box 5051, Vacaville, CA 95696-5051 website: [www.cwemf.org](http://www.cwemf.org) email: [cwemf@cwemf.org](mailto:cwemf@cwemf.org)

**Technical Workshop**  
**IWFM Demand Calculator (IDC) Training**  
**(in cooperation with the California Department of Water Resources)**

April 9 – 10, 2025 8:30am to 4:30pm  
California Natural Resources Headquarters  
715 P Street, Room 2-302  
Sacramento, CA 95814

This workshop is open to CWEMF members only  
Workshop Fee: **\$100** for CWEMF members and **\$25** for students  
Refreshments included both days, lunch not included.

*Registration/Payment can be made online at [www.cwemf.org](http://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](mailto:cwemf@cwemf.org) to reserve your seat and include "IDC Workshop" in the subject line. Go to [www.cwemf.org](http://www.cwemf.org) for information on renewing your CWEMF membership or becoming a CWEMF member.*

IWFM Demand Calculator (IDC) is the stand-alone root zone simulation component of DWR's Integrated Water Flow Model (IWFM). It calculates agricultural, managed wetland, and urban water demands at river-basin scale under user-specified climate, soil, farm-water management and land-use characteristics. It also routes precipitation and irrigation water through the root zone, and simulates land-surface and root zone flow processes. Participants planning to attend the next IWFM workshop are encouraged to attend the IDC workshop since the root zone module of IWFM will be covered in much more detail in this workshop.

The workshop participants will learn the basic concepts and mathematical methods used in IDC, and will have hands-on exercises that will teach them how to build models from scratch. The software tools that are developed to aid IDC users in pre- and post-processing model data and simulation results will also be discussed.

**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 IDC pre- and post-processor tools. Instructions will be provided.

Major topics will include:

- Overview of IDC
- Land-use and soil moisture routing
- Simulation of water demand for "non-ponded" crops
- Simulation of water demand for "ponded" crops (i.e. rice and managed wetlands)
- Simulation of urban water demands
- Mixing dynamic demand computation with user-specified demands
- Simulation of root water uptake from groundwater
- Simulation of deficit irrigation
- Demonstration of pre-processing and post-processor tools

**Course Principal Instructor: Can Dogrul, Ph.D., PE, Senior Engineer WR, California Department of Water Resources**