HEC-RAS 2D MODELING COURSE
June 27th – 29th, 2023
8am-5pm

Course Description

WEST's hands-on seminar and computer workshop provides practical training in two-dimensional modeling using HEC-RAS. Participants gain intensive experience constructing two-dimensional HEC-RAS models from scratch. This hands-on experience also highlights methods in which the one-dimensional components of HEC-RAS can be connected to two-dimensional meshes. Lectures on 2D flow theory, an introduction to the new capabilities and features of HEC-RAS, and procedures for creating a stable and calibrated 2D model will be covered. Workshops focus on giving students experience with building and pre-processing the computational mesh, performing offline and inline 2D projects, and using the built-in feature RAS Mapper to spatially analyze results.

Attendees should bring their own laptop with latest version of HEC-RAS

Learning Outcomes:

1. Obtain a working understanding of the theory behind HEC-RAS 2D.
2. Develop a stable and calibrated 2D model.
3. Build and pre-process computational mesh.
5. Understand how to use RASmapper to spatially analyze results.

Cost:

Early Registration (by June 9th): $825
Late Registration (after June 9th): $925

Date:

June 27th – 29th, 2023 8AM-5PM
Lunch will be provided

Location:

MERRICK®

5970 Greenwood Plaza Blvd., Greenwood Village, CO 80111

Register:

Registration opening May 15th

Questions?

Contact Katie Kerstiens at MHFD
303-653-3220 | kkerstiens@mhfd.org

We will be offering a certificate that will provide 7 CECs per day for this course
(Registrants are responsible for submitting CECs to ASFPM)

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Two-dimensional Modeling Using HEC-RAS
3-Day Course Outline

Presented by:

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Day 1

Event	Time
Introduction	8:00 AM - 8:15 AM
Lecture: Introduction to Unsteady Flow Modeling with HEC-RAS	8:15 AM - 9:15 AM
Break	9:15 AM - 9:30 AM
Lecture: Modeling Inline and Lateal Structures and Storage Areas	9:30 AM - 10:30 AM
Workshop: Lateral Structures and Storage Areas	10:30 AM - 12:00 PM
Lunch	12:00 PM - 1:00 PM
Lecture: Introduction to 2D Modeling in HEC-RAS	1:00 PM - 2:15 PM
Lecture: 2-D Theory	2:15 PM - 3:30 PM
Break	3:30 PM - 3:45 PM
Lecture: RAS Mapper	3:45 PM - 5:00 PM

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Day 2

Event	Time	
Lecture: Creating 2D Areas	8:00 AM -	9:30 AM
Break	9:30 AM -	9:45 AM
Workshop and Review: Creating a 2D Flow Area	9:45 AM -	12:00 PM
Lunch	12:00 PM -	1:00 PM
Lecture: Viewing 2D Output and Results	1:00 PM -	2:00 PM
Break	2:00 PM -	2:15 PM
Workshop and Review: Adding an Offline 2D Area	2:15 PM -	4:00 PM
Workshop and Review: Inline 2D Project	4:00 PM -	5:00 PM

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Day 3

Event	Time
Workshop and Review: Inline 2D Project (continued)	8:00 AM - 9:00 AM
Lecture: 2D Culverts and Bridges	9:00 AM - 10:15 AM
Break	10:15 AM - 10:30 AM
Workshop and Review: 2D Culverts and Bridges	10:30 AM - 12:00 PM
Lunch	12:00 PM - 1:00 PM
Lecture: Miscellaneous New Features of HEC-RAS 6.2 15:	1:00 PM - 2:00 PM
Lecture: Troubleshooting and Calibration	2:00 PM - 3:00 PM
Break	3:00 PM - 3:15 PM
Workshop and Review: Troubleshooting	3:15 PM - 5:00 PM