

**COURSE NUMBER**

FHWA-NHI-135095A

**COURSE TITLE****SRH-2D Model Data files, Diagnostics & Verifying 2D Model Results WCT**

This course, NHI-135095A SRH-2D Model Data Files, Diagnostics and Verifying 2D Model Results, is a follow-on Web-conference Training (WCT) to NHI-135095 Two-Dimensional Hydraulic Modeling of Rivers at Highway Encroachments, a 3-day Instructor-led Training (ILT). This course provides participants an introduction to the various data files used for SRH-2D input, the files created by SRH-Pre and the output files created by SRH-2D. Participants will become familiar with the file formats, how the files are used and learn about the various diagnostic messages output by SRH-2D. Participants will also learn how to use monitor lines in SRH-2D and how to use the output from the monitor lines to verify model convergence.

This course presents material in a series of three Web-conference training sessions, supplemented by two hands-on exercises. The sessions are as follows: Session 1: Introduction, Course Overview, Data Flow in SRH-2D, Output Files and Diagnostics; Session 2: Monitor Lines; and Session 3: Summary and Exercise Review.

As part of the course materials, a set of independent study exercise data files and demonstration files will be provided. The data files for the independent study sessions are distributed at the end of the corresponding lesson. The demonstration data files are used at designated demonstration times.

Offerings of this course are intended to be delivered within a given work week, with Session 1 typically delivered on a Monday, Session 2 on a Wednesday, and Session 3 on a Friday. Alternate timing for the sessions can be scheduled at the request of the host, but the course is not intended to be conducted over a long period of time.

OUTCOMES

Upon completion of the course, participants will be able to:

- List the data files and file formats used for input to and output from the SRH-2D hydraulic model and state how they can interact with the files
- Identify the diagnostic messages from SRH-2D and explain how each of the messages can help in running and debugging SRH-2D models
- Set up and run an SRH-2D simulation using monitor lines to check model continuity
- Demonstrate the ability to work with SRH-2D files and monitor lines using simulation example exercises

TARGET AUDIENCE

The target audience for this course are FHWA and State Department of Transportation hydraulics personnel and other Federal, State, local or consulting engineers who have responsibility for, or desire to work with, the hydraulic analysis and design of highway river crossings. Course participants should have knowledge of the fundamentals of open channel flow hydraulics. It is suggested (but not required) that course participants take NHI-135091 Basic Hydraulic Principles Review (WBT).

TRAINING LEVEL: Intermediate

FEE: 2019: \$150 Per Person; 2020: N/A

LENGTH: 8 HOURS (CEU: .8 UNITS)

CLASS SIZE: MINIMUM: 0; MAXIMUM: 15

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