



EPP 234 – HEC-RAS - Steady Open Channel Flow Modeling with an Emphasis on Stream Restoration Applications

Course Summary: This course will provide a thorough introduction to the capabilities of the U.S. Army Corps of Engineers Hydrologic Engineering Center River Analysis System (HEC-RAS). The intended audience of this beginning to intermediate level course includes engineers, geoscientists, or biologists who might be required to either perform HEC-RAS analyses or make reliable interpretations of other people's work. The presented material will include a strong river restoration perspective.

This course will provide an overview of the HEC-RAS model with hands-on experience in using the software for modeling a variety of situations. It will include in-depth instruction on using the software to model basic stream networks, river crossings (bridges and culverts), as well as other features of natural streams with an emphasis on stream restoration and fish-passage concerns. It is assumed that participants have a basic understanding of open channel flow and have experience using Windows.

*Course can be used for the Advanced River Restoration Certificate.

Duration: 4 days.

Topics:

- Understand the basic theory and assumptions inherent in one-dimensional open-channel flow modeling using HEC-RAS.
- Use the HEC-RAS software to set up the analysis files (flow and geometry) to solve a variety of applications including basic stream networks, bridges, culverts, and other stream features.
- Understand the output and troubleshoot commonly occurring modeling errors.

Fee: All instruction and program facilitation, resource manual, transportation to/from the field (if applicable), morning coffee/tea; a certificate of completion for this offering is provided.

Available Professional Credit: 3.1 CEU, 31 PDH.