

HEC-EFM 2.0
November 2009
Release Notes

Version 2.0 supersedes version 1.0, which was released in July 2008. Installing version 2.0 will not overwrite any previous versions. Also, version 2.0 is backward compatible, which means that any HEC-EFM project files created with version 1.0 are fine and ready for use with version 2.0.

During numerical testing performed at HEC, version 2.0 exactly reproduced quantitative results generated with version 1.0, but users are encouraged to verify this for their existing applications.

Version 2.0 includes new features, improved software behaviors, and bug fixes for minor issues that were not detected prior to release of version 1.0. The Quick Start Guide has also been updated and is currently the most complete and comprehensive source of information about the software. Changes incorporated in version 2.0 follow:

New Features

- A new accessory was created to help users view, navigate, and interpret output generated by HEC-EFM. It is called HEC-EFM Plotter and displays output as a series of “Standard Plots” for flow regimes and relationships being analyzed by HEC-EFM and user-defined “Custom Plots”. HEC-EFM Plotter is available for download via HEC’s website.
- Metric units enabled. Please note that HEC-EFM handles units passively. It relies on the user to define the units system, assumes input data are provided in the defined units system, performs its computations, and outputs results in the defined units system.
- The “Duration” statistical query was changed from a set of radio buttons to a pair of drop down lists. This increased the number of options associated with this query from 4 to 25, which significantly expanded the statistical capabilities of HEC-EFM.

Improved Behaviors

- Version 1.0 required users to define a “working directory” for each project that would contain all input and output files. This requirement was intended to make applications more easily transferable between different users and computer locations, but proved to be limiting for users who wanted to analyze data from multiple existing archives. This requirement was removed in version 2.0.

- User controlled output options. In version 1.0 and when requested by the user, computation arrays output were stored redundantly to XML and DSS. In version 2.0, options were added that allow users to select XML, DSS, or Both. This provides more flexibility for the user and will reduce compute times by generating output only in the format(s) requested by the user.

Documentation

- A new chapter entitled “HEC-EFM Math” was added. It includes a description of all statistical queries in HEC-EFM and has figures that illustrate the process used by HEC-EFM to compute statistical results.
- A new section entitled “Using HEC-EFM Plotter” was added. It details how to initiate and use HEC-EFM Plotter.