## HEC-EFM Plotter 1.1 January 2013 Release Notes

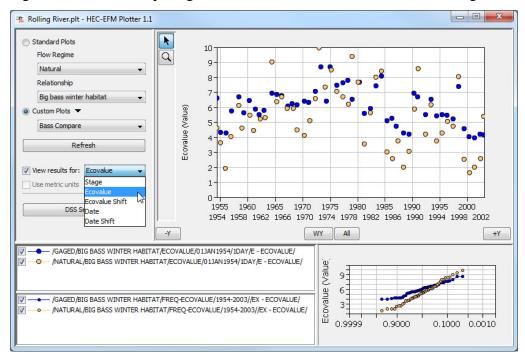
HEC-EFM Plotter is designed to help users view, navigate, and interpret output generated by HEC-EFM. It is important to note that Plotter does not generate new output; Plotter only displays output from EFM. Therefore, it is not important for Plotter to be structured in a way that supports installation of multiple versions of the software. In fact, Plotter is designed with the intention that only one version would be installed per computer.

Version 1.1 supersedes version 1.0, which was released in November 2009. Installing version 1.1 of EFM Plotter <u>will replace</u> any previously installed versions, thereby preempting use of other versions. Also, version 1.1 is backward compatible, which means that any project files created with previous versions are fine and ready for use with version 1.1.

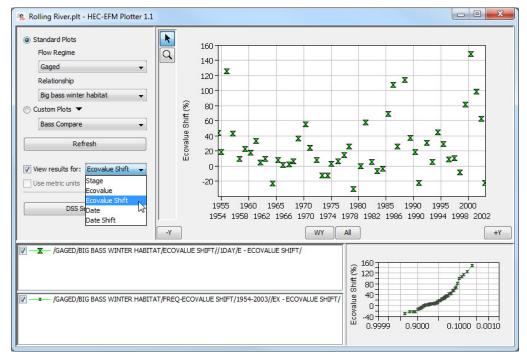
Version 1.1 includes new features, improved software behaviors, and bug fixes for issues that were not detected prior to release of version 1.0. The EFM Quick Start Guide has also been updated and is currently the most complete and comprehensive source of information about Plotter. Changes incorporated in the new versions follow:

## **New Features**

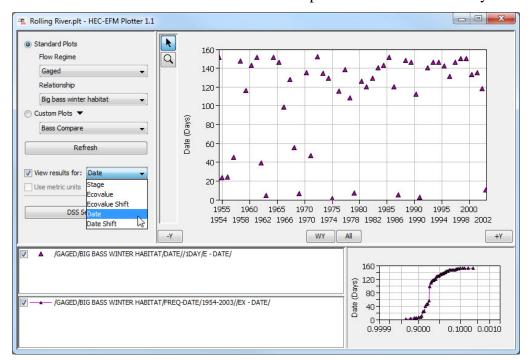
 Added displays of new seasonal ecological value output ("Ecovalues") generated by EFM version 3.0+. Ecovalues are measures of how well flow regimes met the needs of ecological communities and are generated for each pairing of flow regime and relationship. Figure below shows ecovalues for two flow regimes.



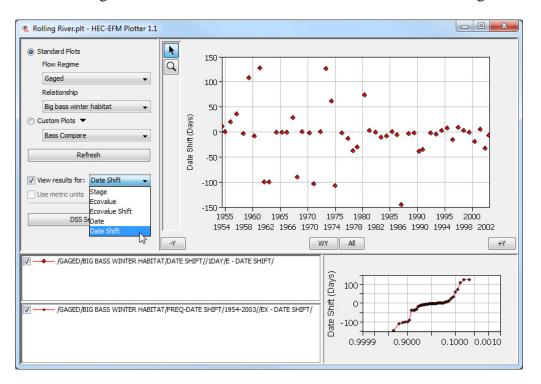
• Added displays of new "Ecovalue Shift" output, expressed as a percent change in ecovalue, provides a comparison between ecovalues generated by the reference flow regime and each other flow regime considered. Figure below shows ecovalue shifts for one non-reference flow regime.



• Added displays of "Date" output. Timing of habitat availability is an important consideration in ecosystem analyses. Date values marks the calendar day on which statistical criteria of an EFM relationship were met for each water year.



• Added displays of "Date Shift" output. Date shifts provide a comparison between the habitat dates generated by the reference flow regime and each other flow regime considered. Assessing data shifts is useful in determining how the timing of habitat availability has changed under different management or restoration scenarios. Figure below shows date shifts for one non-reference flow regime.



## **Improved Behaviors**

- Units management of XY Markers has been improved by making the handling of values entered by the user more consistent when adding new XY markers and editing existing XY markers.
- Due to a java runtime environment versioning incompatibility, EFM Plotter 1.0 was not compatible with Windows 7. This has been fixed.

## **Documentation**

• The description of EFM Plotter and how it is applied was updated in the HEC-EFM Quick Start Guide - Version 3.0. That document is available for download on HEC's website and is also included as part of the install package for EFM versions 3.0 and 3.0.NET.