



HEC-RPT

Software for defining and assessing ecological flow recommendations

HEC-RPT (Regime Prescription Tool) is a new software tool designed to help different interest groups reach consensus about how rivers should be managed. The idea for this software was conceived during a workshop for the Savannah River, where nearly 50 scientists worked together to formulate a set of environmental flow recommendations. Throughout the workshop, many hydrographs were created, discarded, and morphed. Facilitators lacked an easy and efficient way to present the recommendations. It was noted that a tool capable of rapidly displaying, adjusting, and documenting hydrographs would improve the process and more effectively capture the products of the workshop. HEC-RPT is designed to meet these needs by facilitating entry, display, and documentation of flow recommendations and their justifications in real-time, public settings.



HEC-RPT main interface. Flow recommendations are entered/edited in the text along the left side.

How it Works

The tool plots and compares desired river flows for a range of objectives including flood damage reduction, water supply, hydropower, navigation, and ecosystem maintenance. These flows are defined by the interest groups and presented in a common format, which provides the foundation for resolving areas of conflict.

It is primarily a visualization tool and is not intended to perform the detailed quantitative analyses (e.g., reservoir and river routings) already performed by

other software packages. Instead, HEC-RPT seeks to complement those packages by making it easier to create flow times series that other software can import and use in their analyses.

Recommendations scripted in HEC-RPT can be exported for immediate analysis in other software, including reservoir system simulation, river hydraulics, and ecosystem functions.

Partnership in Action

HEC-RPT is the first joint software development by the Hydrologic Engineering Center (HEC) and The Nature Conservancy and was created in support of the Sustainable Rivers Project - an ongoing nation-wide partnership between the Corps of Engineers and The Nature Conservancy to improve the health and life of rivers by changing the operations of Corps



Information about HEC-RPT.

dams. For more information about Sustainable Rivers, please go to http://www.nature.org/initiatives/freshwater/partnership/.

Getting the Software

HEC-RPT is available free of charge to anyone who is interested. To download a copy, please go to <u>http://www.hec.usace.army.mil/software/hec-rpt/index.html</u> or <u>http://www.nature.org/initiatives/freshwater/conservationtools/hecrpt.html</u>. For more information about HEC-RPT, please contact John Hickey at the Hydrologic Engineering Center (john.t.hickey@usace.army.mil).