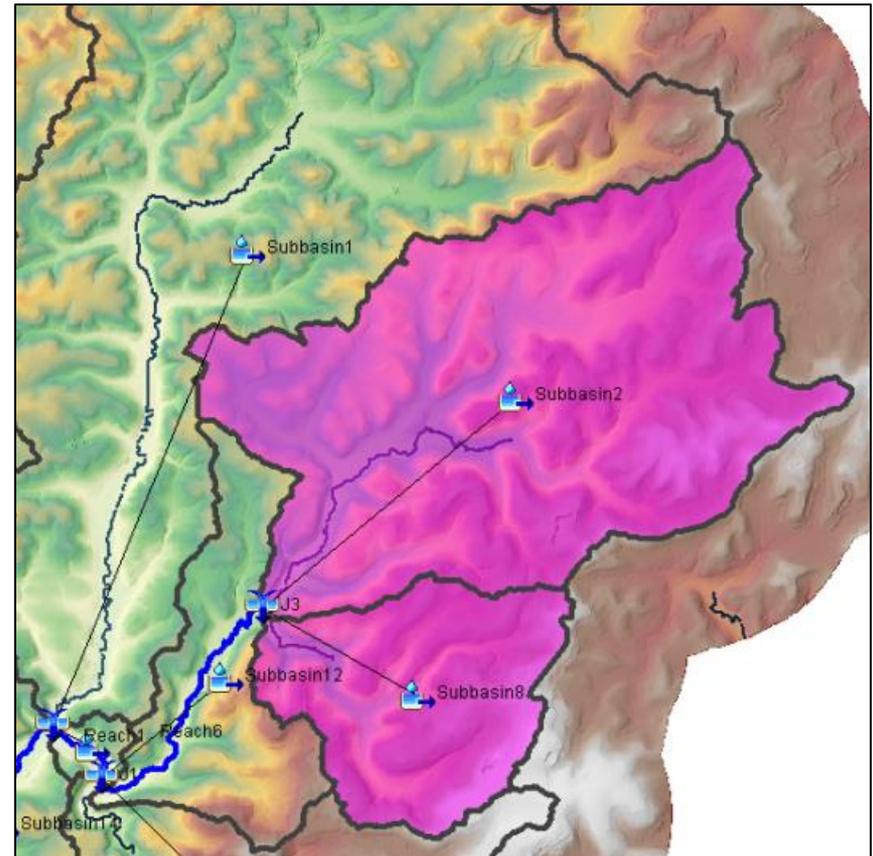


OVERVIEW

- Introduction
- HEC-HMS Overview
- Updated Documentation
- Demo of Recently Added Features
 - GIS
 - Expression Calculator
 - Gridded Data Processing
 - Automated Forecast
 - Results
 - 2D Flow
- Upcoming Enhancements



HEC-HMS

- Free!
- ~50,000 downloads per year
- Windows, MacOS, and Linux versions
- Latest Release
 - Version 4.8

The screenshot shows the HEC-HMS download page. The header includes the US Army Corps of Engineers logo and navigation links: About, Newsletters, Software, Publications, Training, Visitors, Links, Contact. A search bar is located in the top right corner. The main content area is titled "HEC-HMS" and includes a navigation menu with links for Features, Downloads, Documentation, Training, Known Issues, Bug Report, Suggestions, Email List, and Support Policy. The "Downloads" section is active, showing information for Windows and macOS. The Windows section includes a description of the setup package, a "Beta Version" link for HEC-HMS 4.9 Beta 4 (242 MB), and "Current Version (Primary Download Site)" links for HEC-HMS 4.8 for Windows (199 MB) and HEC-HMS 4.8 Portable Version (232 MB). The macOS section includes a description of the disk image, a note about testing on macOS Mojave, Catalina, and Big Sur, and a "Beta Version" link for HEC-HMS 4.9 Beta 4 (260 MB).

HEC-HMS Download



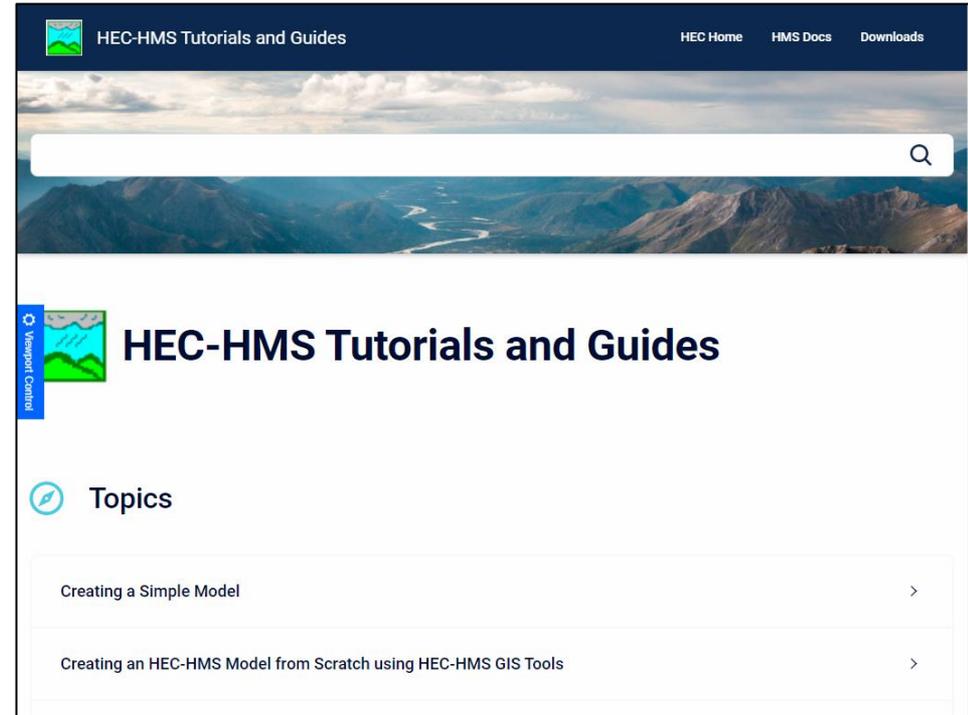
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DOCUMENTATION

- Everything is online and continuously updated
 - Quick Start Guide
 - User's Manual
 - Applications Guide
 - Technical Reference Manual
 - Release Notes
 - Validation Guide
 - **Tutorials and Guides**
 - YouTube videos



Tutorials and Guides

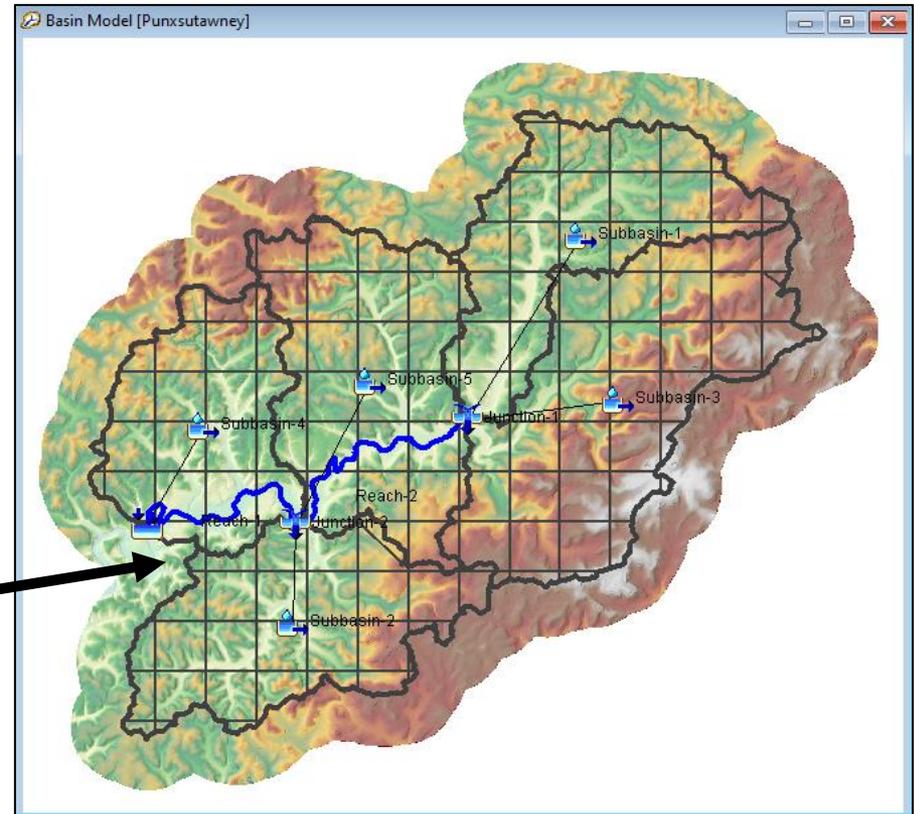
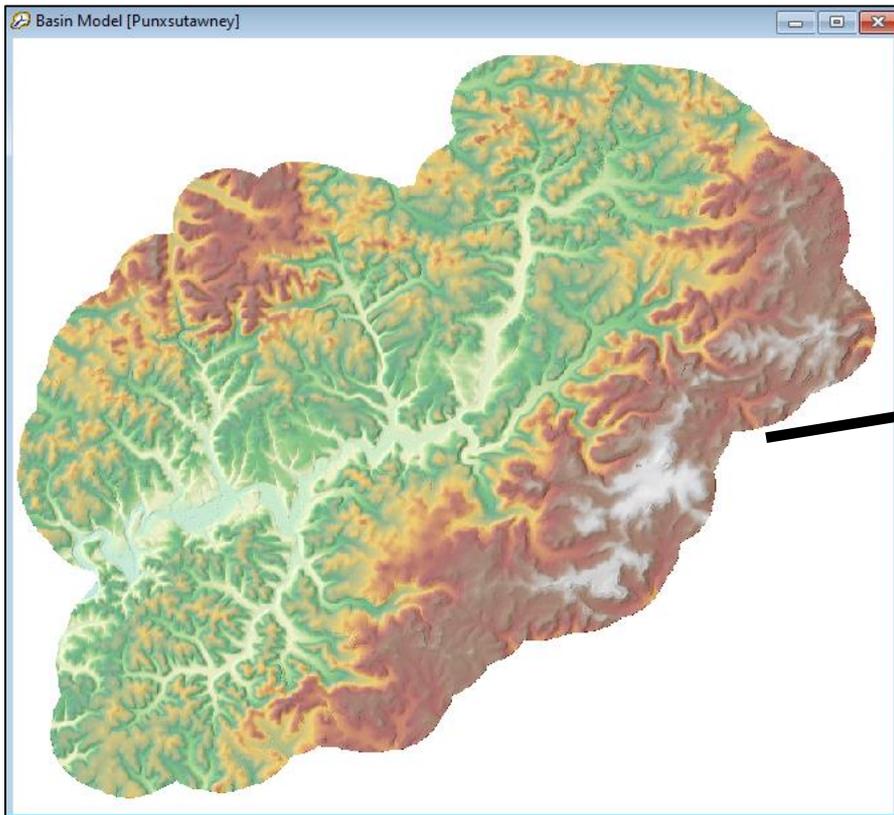


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DEMO: NEW GIS FEATURES



Tutorial: [GIS Tutorials and Guides](#)

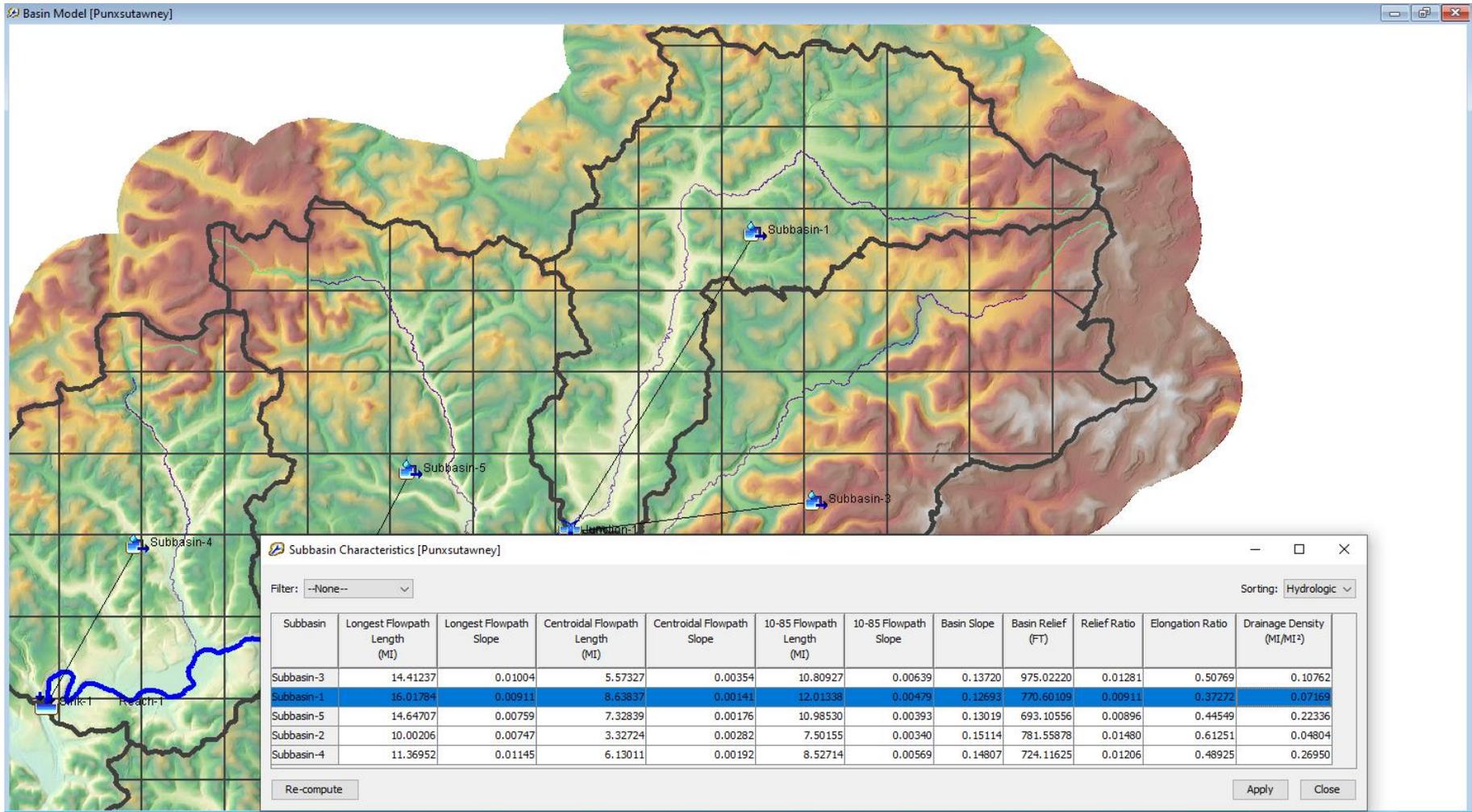


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DEMO: CHARACTERISTICS



Tutorial: Computing Subbasin and Reach Characteristics



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DEMO: PARAMETERIZATION

The screenshot displays a GIS application window titled 'Basin Model [Punxsutawney]'. The main view is a topographic map of a watershed, divided into several subbasins. A blue line represents a stream network. Two windows are open over the map:

- ModClark [Punxsutawney]:** A table showing parameters for different subbasins. The 'Filter' is set to '--None--' and 'Sorting' is 'Hydrologic'.

Subbasin	Time of Concentration (HR)	Storage Coefficient (HR)
Subbasin-3	4.84	
Subbasin-1	5.95	
Subbasin-5	5.68	
Subbasin-2	4.08	
Subbasin-4	4.72	
- Expression Calculator:** A window for creating a field calculation. The 'Field' is 'Time of Concentration'. The 'Variables' list includes: Longest Flowpath Length (MI), Longest Flowpath Slope, Longest Flowpath Slope (FT/MI), Centroidal Flowpath Length (MI), Centroidal Flowpath Slope, Centroidal Flowpath Slope (FT/MI), 10-85 Flowpath Length (MI), 10-85 Flowpath Slope, 10-85 Flowpath Slope (FT/MI), Basin Slope, and Basin Slope (FT/MI). The 'Functions' list includes: Abs(), Atn(), Cos(), Pow(), Fix(), Int(), Log(), Sin(), Sqr(), and Tan(). The expression entered is:
$$2.2 * (\text{pow}([\text{Longest Flowpath Length (MI)}] * [\text{Centroidal Flowpath Length (MI)}]) / (\text{pow}([\text{10-85 Flowpath Slope (FT/MI)}], 0.5)), 0.3)$$

Tutorial: [Estimating Parameters with GIS Datasets](#)



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DEMO: AUTOMATED FORECAST

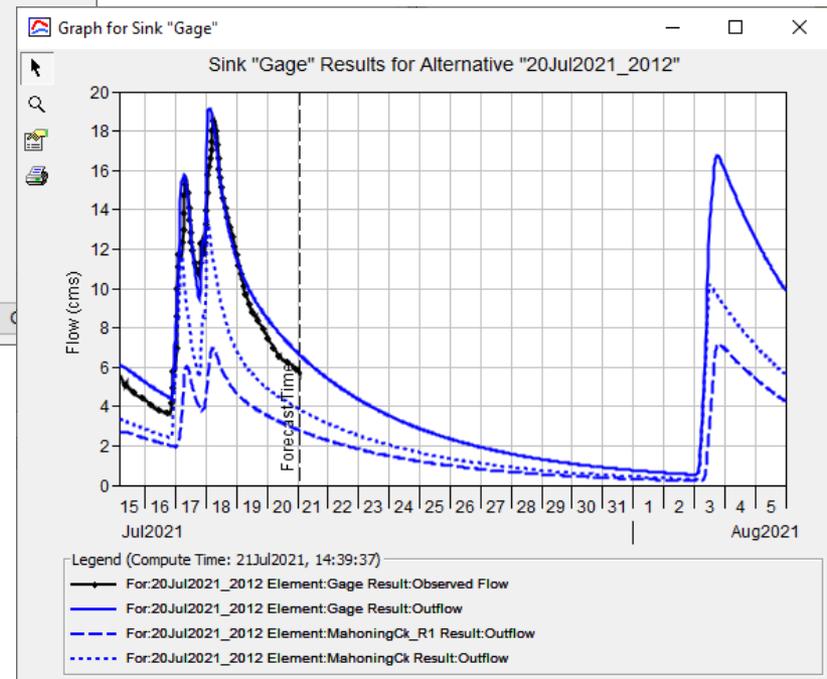
Create a Forecast Alternative [Step 4 of 4] ✕

A Forecast alternative includes a forecast period. Select data sources from the list below. Sources are listed in order of precedence. If data overlaps the source with highest precedence will prevail.

- High-Resolution Rapid Refresh, 0 to 0.75 days
- North American Mesoscale, 0 to 3.5 days
- Global Forecast System, 0 to 16 days

To continue, select data sources and click Next.

< Back Next > Cancel

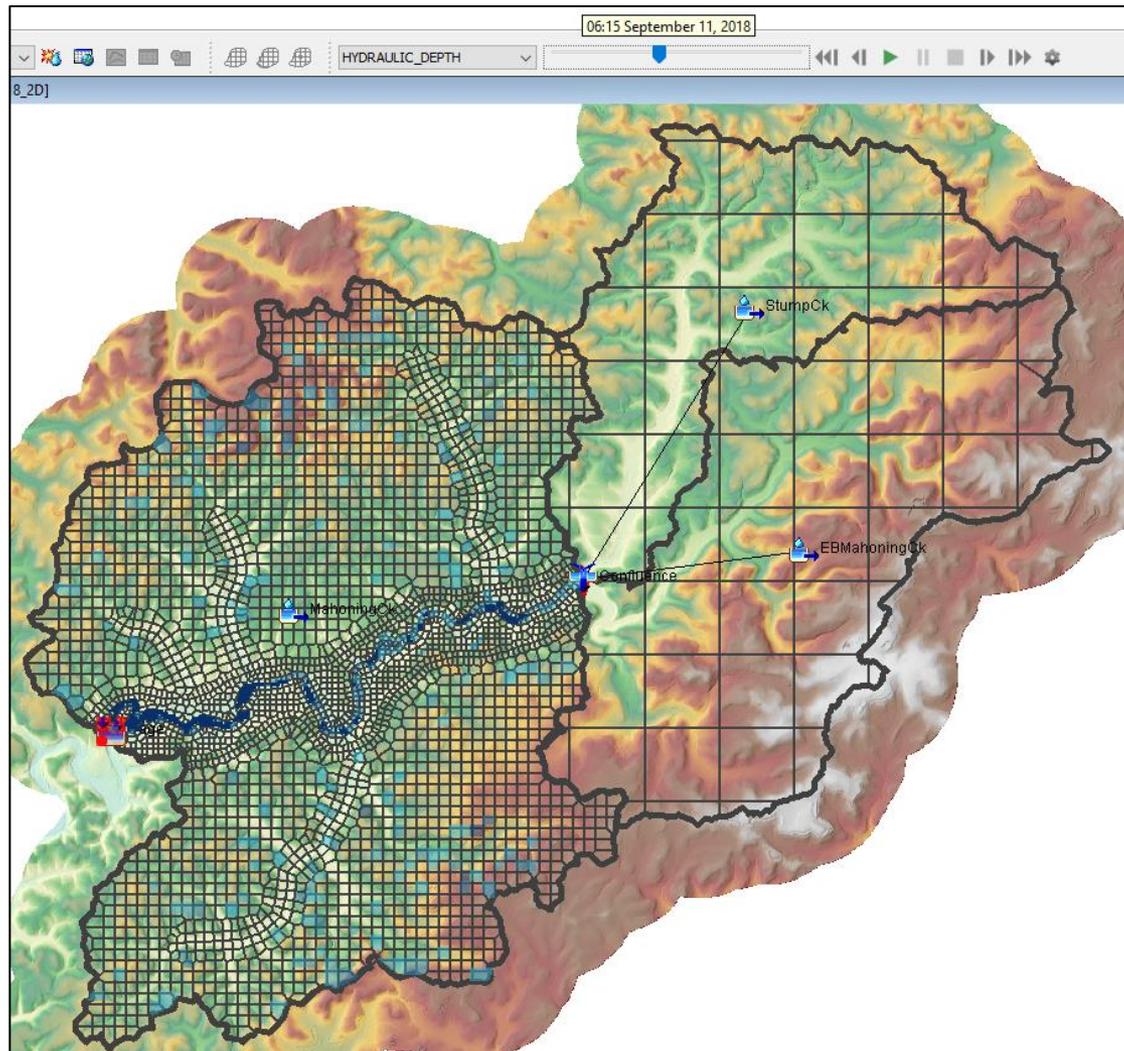


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DEMO: 2D FLOW



Tutorial: [Using 2D Flow within HEC-HMS](#)

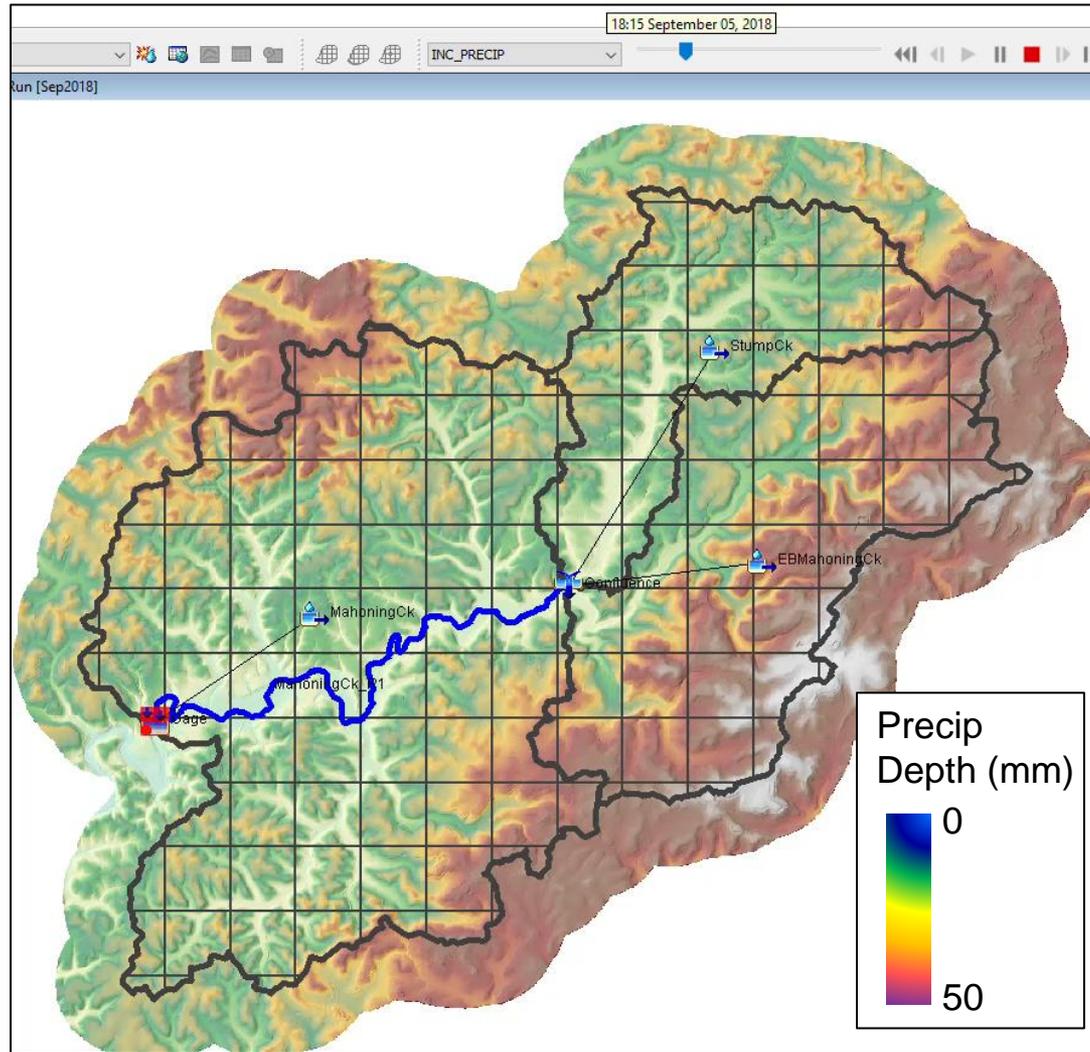


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DEMO: SPATIAL RESULTS

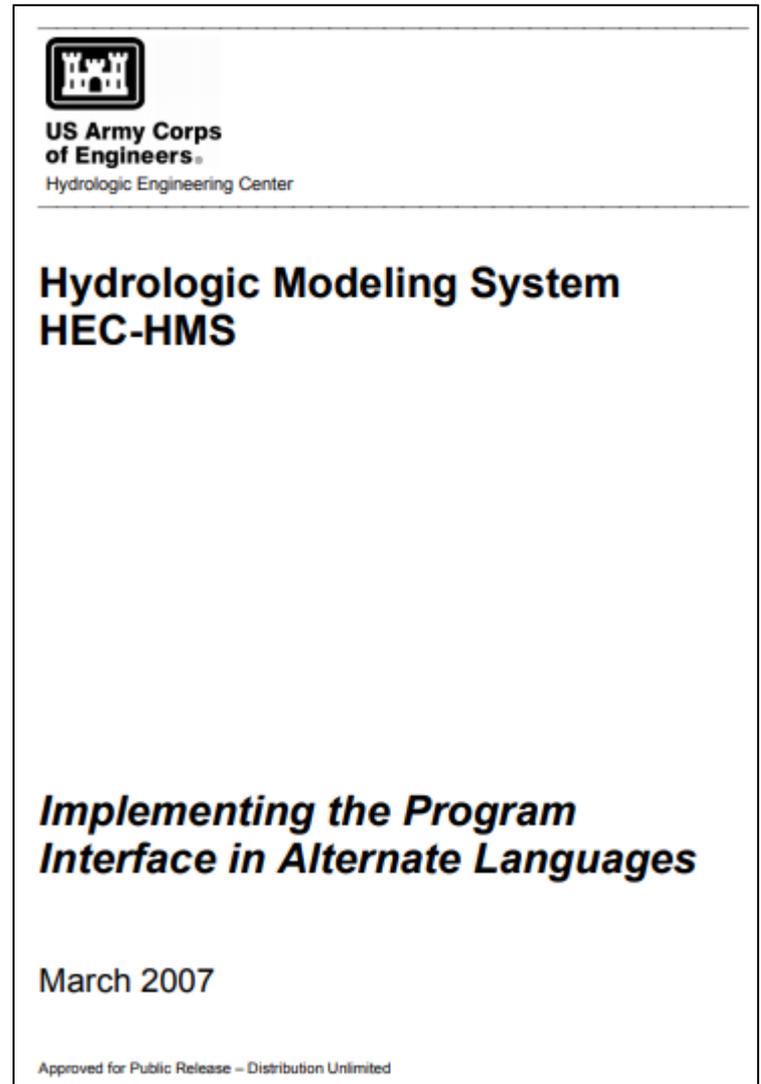


Tutorial: [Viewing Spatial Results for a Structured Discretization](#)

INTERFACE TRANSLATION

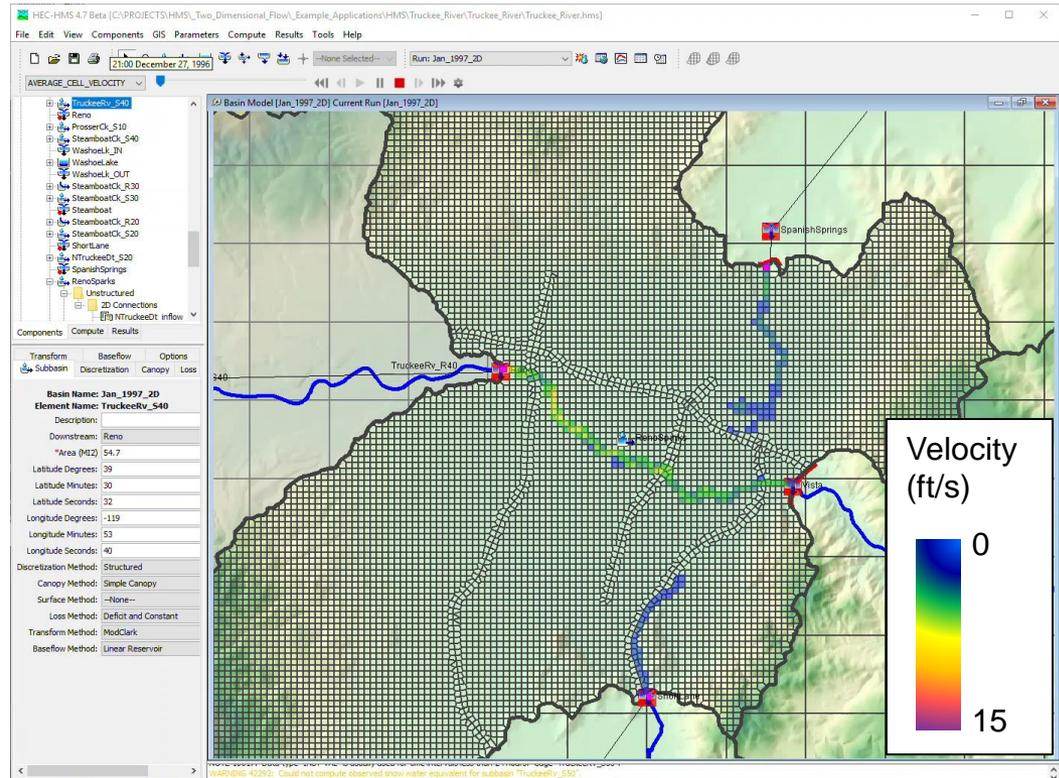
- HEC-HMS was designed to operate independent of regional and language settings on a user's computer
- 95+ language, countries, and/or locales are supported

[Interface Translation Guide](#)



UPCOMING ENHANCEMENTS

- More GIS tools
- Better gridded data handling
- 2D sediment transport
- Additional optimization and uncertainty analysis tools
- Hypothetical Storm enhancements
- Improved spatial results
- Faster computes



FOR MORE INFO...

The screenshot displays the HEC-HMS 4.4 software interface. The top navigation bar includes links for About, Newsletters, Software, Publications, Training, Visitors, Links, and Contact, along with a search box for HEC. The main content area is divided into a left sidebar and a central workspace. The sidebar contains a 'HOME > SOFTWARE > HEC-HMS' breadcrumb and a list of links: HEC-HMS, HEC-HMS, Features, Downloads, Documentation, Training, Known Issues, Bug Report, Suggestions, Email List, and Support Policy. The central workspace shows a 3D topographic map of a watershed with a network of rivers and junctions. A legend on the left lists various elements like 'Beardsridge', 'TruckeeRv_R70', 'Parad', etc. The main window title is 'HEC-HMS 4.4 [C:\PROJECTS\HMS\Projects\Truckee_River\Truckee_River.hms]'. Below the map, a 'Graph for Junction "Farad"' is displayed, showing 'Junction "Farad" Results for Run "Jan_1997"'. The graph plots Flow (cfs) on the y-axis (ranging from 0 to 16,000) against time on the x-axis (from Dec 27, 1996 to Jan 14, 1997). The graph shows a sharp peak in flow around Jan 1, 1997, reaching approximately 15,000 cfs. The legend indicates four data series: 'Run_Jan_1997 Element Farad Result Observed Flow' (solid black line), 'Run_Jan_1997 Element Farad Result Outflow' (solid blue line), 'Run_Jan_1997 Element TruckeeRv_R70 Result Outflow' (dashed blue line), and 'Run_Jan_1997 Element TruckeeRv_S70 Result Outflow' (dotted blue line).

The Hydrologic Modeling System (HEC-HMS) is designed to simulate the complete hydrologic processes of dendritic watershed

<https://www.hec.usace.army.mil/software/hec-hms/>



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