



The Base Level Engineering database is broken into a number of pieces for download through the Estimated Base Flood Elevation (EstBFE) Viewer available at:

<https://webapps.usgs.gov/infrm/estBFE/>

But what is included in each download and what software do I need to review and interact with the information I download? If you have these questions, this flash card can help you.

Name of Data Set	File Name	Description
HECRAS models	HUC8#_Models.zip	HEC-RAS hydraulic models for all streams studied in Base Level Engineering assessment. Use HOW2 Find the Right HEC-RAS Model for tips to find the model you need. Detailed models from FIRMs are not included.
1% event depths, raster	HUC8#_Depth01.zip	Flood depth elevations in a gridded format for the 1% storm event .
0.2% event depths, raster	HUC8#_Depth002.zip	Flood depth elevations in a gridded format for the 0.2% storm event .
1% event elevations, raster	HUC8#_Elev01.zip	Top of water surface elevations in a gridded format for the 1% storm event .
0.2% event elevations, raster	HUC8#_Elev002.zip	Top of water surface elevations in a gridded format for the 0.2% storm event .

Name of Data Set	File Name	Description
Vector spatial data, file geodatabase	HUC8_VectorData.zip	This database is a collection of spatial data used and created during Base Level Engineering assessment. Use HOW2 Find the Spatial Files for more details.
Reports and Documents	HUC8#_Documents.zip	This download element included the BLE Report to detail terrain, hydrology and other modeling details. This file may also include work maps and/or kmz (Google Earth) files if created.

The following tools can be used to assist you in reviewing and interacting with the data that is downloaded from the Estimated BFE Viewer.

Download HEC-RAS software at: <https://www.hec.usace.army.mil/software/hec-ras/download.aspx>

HOW2 tips sheets are available at: <https://go.usa.gov/xsGvJ>. (HOW2 Find the Right HEC-RAS Model, HOW2 Find the Right Spatial File)

ArcReader can be downloaded at: <https://www.esri.com/en-us/arcgis/products/arcreader> (ArcReader is free software that will allow the GIS files to be viewed and interacted with)

Detailed HEC-RAS and other data shown on FIRMs is available through **FEMA's Engineering Library**, at <https://www.fema.gov/engineering-library>.

