

Download Watershed Data from USGS

Usage Guide

These instructions apply to the *Download Watershed Geodatabase* python scripting tool in the NHD toolbox. The script was created by Shannon Smith at Eastern Illinois University as part of coursework on GIS programming. The script and tool are licensed under a [Creative Commons Attribution 4.0 International License](#).

The purpose of this script is to make it easy to download watershed-level hydrography data from the USGS National Hydrography Dataset (NHD). NHD data is publicly distributed online at <ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/Hydro/FileGDB101/>, but it can be hard to locate data for a desired geographic region.

Using this scripting tool, the user needs only to select a watershed on a map. NHD data for the selected watershed is downloaded and extracted to a geodatabase in a user-specified directory (folder). The geodatabase will contain hydrography feature datasets including NHD flowline, point, and area data, and flowline data will be added to the current map document. The tool currently handles HU4 and HU8 watersheds in the United States and US controlled territories.

For more information on NHD data, visit: <http://nhd.usgs.gov/data.html>

Prerequisites:

- ❖ You will need ArcMap and Python on your computer to run the scripting tool.

To download data for your selected watersheds:

1. Download and unzip the scripting tool from the EIU GIScience Center website (<https://www.eiu.edu/gisci/>)
2. Open the ArcMap document provided, or create a new document and add the HU4 or HU8 watersheds shapefile.
3. Select the watershed(s) of interest.
 - **At least one watershed must be selected.**
 - **Selecting too many watersheds will result in a very large download.**
4. Locate and run the *Download Watershed Geodatabase* from ArcCatalog.
 - For *Selected Watersheds*, select the WBDHU4 or WBDHU8 shapefile which contains the watersheds you selected in (3).
 - Specify an output folder.
 - Enter the Watershed Level to match your *Selected Watersheds* shapefile (either "4" or "8")
5. Press OK to run the script.

Your watershed(s) data will be downloaded and unzipped. Progress will be reported in the Interpreter window.