

USGS National Hydrography Dataset Newsletter
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by Jeff Simley, USGS

StreamStats NHD Navigation and Event Trace Tools by Pete Steeves

StreamStats has recently added NHD navigation and event-trace tools for a number of States, rounding out the availability of this functionality for most all States that are published on the StreamStats production site. This list includes NH, VT, MA, RI, CT, PA, NJ, DE, MD, OH, IN, IL, TN, KY, NC, AL, OK, MN, ND, CO, UT, NM, ID, WA, and HI (CA and OR are on hold as several other updates have taken priority). The fully implemented NHD-based tools include:

- > Configure Network Trace Tool (which allows the user to select whether to trace up or downstream for reaches and events on either the NHD or NHDPlus)
- > Trace From Outlet Tool (which is used after setting up your configuration and delineating a watershed).
- > Raindrop Trace to Network (which uses NHD at the point where the 'raindrop' connects to the stream network from an upland point)
- > Show Network Path and Profile (click two points on the stream network to get a channel slope elevation profile between them. The points have to be on the same network, but not necessarily on the same stream. For example, the selected points can be on separate tributaries to a larger stream).
- > Estimate Flows Based on Similar Streamgaging Stations (A StreamStats-specific tool that locates gage events on the stream network up and downstream from the point of interest in order to get weighted flows).

More information about these tools is available on the StreamStats main page (under User Instructions) <http://streamstats.usgs.gov/>. For direct support contact Pete Steeves at psteeves@usgs.gov.

Release of WBD ArcGIS Jobs Tool by Stephen Daw

On Wednesday April 24, 2013 the USGS released the WBD ArcGIS jobs tool. This tool allows WBD stewards to get WBD data from the USGS, edit the WBD data, assign proper metadata to the edits and return the job to the USGS for review and posting to the national WBD. With the release of the WBD ArcGIS Jobs tool, full stewardship of the WBD can begin after the year and a half moratorium on edits while stewardship and day to day management of the WBD moved from the NRCS to the USGS.

The full process begins at the stewardship website where WBD state stewards create a profile, log in and select areas within their respective states for editing. Information about the job is collected at the time of check-out and then the data is extracted from the WBD database. The steward is then notified via email that the job is ready and from there, the steward uses the WBD Jobs tool to get and complete any needed edits. This release represents the culmination of over 4 years of effort to join the WBD with the NHD and move both national datasets forward. For more information please contact Stephen Daw, sgdaw@usgs.gov, 303-202-4418.

Announcing the myUSGS “Hydrographic Data Community” and changes in myUSGS by David Anderson

USGS is changing the software used to manage the myUSGS site. The new myUSGS software is called Atlassian Confluence and is an open source project. The new myUSGS requires users outside of the DOI to establish a new account from the one they used in myUSGS 3.0, which was under the Alfresco software. Attached to this newsletter you should find a document entitled “myUSGS First Time Users.”

This document will help you establish the account and give contact information that will allow you to see the “*Hydrographic Data Community*” within myUSGS Confluence.

The “*Hydrographic Data Community*” is the concept developed by the USGS to expand communication to our end users by conglomerating the groups interested in the NHD and WBD datasets into one community. In the previous myUSGS software, there were multiple group pages and places spread out among the myUSGS site. The “*Hydrographic Data Community*” puts all those independent groups into one space for ease of access to the users. Included in this space are the NHD, WBD, HEM, and GeoConflation Communities. Also included in the space is a *USGS Hydrographic Project Information* page – current list and status of ongoing USGS projects, a *Community Training Sessions* calendar to announce various trainings, and most importantly an *Important Announcements* page. The *Important Announcements* page is a blog that will be used to announce server issues, database issues, and any additional information that is of import to the community. The obligation for keeping up with announcements can be done through “watching” a page using the Confluence software. By watching a page the user is informed of changes to the page. Users can also see what is going on with other groups all within the same space. The hope is that by conglomerating these individual groups into a single area, users will be able to do more and participate more in these groups.

For more information on the “*Hydrographic Data Community*” please contact one of the space administrators: David Anderson (danderson@usgs.gov), Joel Skalet (jskalet@usgs.gov), Stephen Daw (WBD) (sgdaw@usgs.gov), or Ariel Doumbouya (atdoubouya@usgs.gov) for information and assistance.

USGS and NRCS Sign WBD Memorandum by Karen Hanson

On April 18, 2013 signatures were completed for the Memorandum of Understanding between the U.S. Geological Survey and Natural Resources Conservation Service for the Cooperative Maintenance of the Watershed Boundary Dataset. The WBD MOU extends the arrangement over the next 5 years for the Natural Resources Conservation Service (NRCS) and the U.S. Geological Survey (USGS) to cooperatively enhance, maintain, integrate and distribute the Watershed Boundary Dataset (WBD). The first official MOU was established in 2008, however the history of USGS and NRCS working together cooperatively to provide national oversight for creation and certification of the WBD dates back to the late 1990’s.

It is to the mutual advantage of both USGS and NRCS, that both NHD and WBD be replicated and served from the NRCS Gateway as well as from the primary USGS National Geospatial Program. This collaboration will benefit the user community by expanding the available alternatives to acquire WBD and NHD data and will also provide backup and failover sites. Enhanced cooperation and coordination will leverage existing resources of both agencies.

USGS recognizes the value in the continued support of NRCS within the WBD program as participating members of the WBD Steering Committee, the WBD State Stewardship Work Group and as part of the National Technical Support team. Fifty percent of WBD stewardship at the state level is led by NRCS, with NRCS representatives identified in most all other states as WBD secondary contacts to the primary stewards.

NHD Update tool v6.0.1 for ArcGIS 10.1 by Paul Kimsey

A significant effort is underway to Beta test the new and improved version of the NHD Update tool. The new version addresses bugs identified in previous versions and incorporates many enhancements including: 1d-2d masking tool, QC option for running checks against edited/selected features vs. all

features, eliminating desktop interference from data reviewer progress, Get Review Job, Micro-Gap fix tool and ability to manage untracked edits (missing feature to metadata records).

Beta testing will be performed by members of the NGTOC Partner Support team as well as a few stewardship partners outside the USGS firewalls. Beta testing is planned for a two week duration and a final release will immediately follow. New on-line documentation will be available through the NHD stewardship web site and through the NHD Update toolbar.

Downloads of NHD Data from the USGS in March

During March there were 1,829 downloads of state-based high resolution NHD and 217 medium resolution downloads using file geodatabase. There were 1,873 subregion-based high resolution downloads and 481 medium resolution downloads for file based. There were 119 high resolution subbasin and 33 medium resolution subbasin downloads for personal geodatabase. That's a total of 4,552 datasets downloaded by FTP download. To give an idea of the geography this represents, it is the equivalent of over 2,410,000 quadrangles of coverage, all in a single month. Also during the period there were over 3,555 downloads from The National Map viewer, with 2,996 by rectangle extracts of various sizes and 559 by subbasin or county. That brings the download total to 8,109 for March.

April 2013 Status Report for NHD Network Improvements by David Kraemer

This month major progress was made on finishing NHD Regions 11, 12, 13, and 15. Previously NHD Regions 6, 9, 10, 14, 16, 17, and 18 were completed. So the Network Improvement project has now completed the majority of the NHD west of the Mississippi River. The USGS is now primarily working around the Great Lakes and the northern half of the Atlantic coast encompassing NHD Regions 1, 2, 3, and 4. Also as sub-basins become available from editing, the USGS is completing NHD Regions 5 and 7. The subbasins along the northern border with Canada are being put on hold due to editing problems concerning duplicate polygons.

Endangered Rivers

An Associated Press story on April 17, 2013 reports that the group American Rivers has identified the top ten endangered rivers in the U.S. They are: the Colorado River, the Flint River in Georgia, the San Saba River in Texas, the Little Plover River in Wisconsin and the Catawba River in the Carolinas. The 1.1 million-acre Boundary Waters Canoe Area Wilderness in Minnesota ranked sixth on the Endangered Waters list, followed by the Black Warrior River in Alabama, the Rough and Ready and Baldface creeks in Oregon, the Kootenai River in Canada, Montana and Idaho and the Niobrara River in Nebraska, South Dakota and Wyoming. For more see: <http://www.pulse.me/ap/80d0aa28b73848f88915201a99dd1886>

The National Map User's Conference

Due to the mandatory budget cuts from sequestration, the U.S. Geological Survey has postponed [The National Map Users Conference and USGS Community for Data Integration Workshop](#), May 21-24, 2013 in Denver. The USGS regrets any inconvenience this postponement has caused, and look forward to continued service with our data users, partners, customers and the public. More information: http://nationalmap.gov/tnmuc_cdiworkshop/

NHD Photo of the Month

This month's photo was submitted by Pete Steeves of the USGS. This is Beaver Brook in Hollis, New Hampshire near the Massachusetts border. Much of the river and its contributing area is protected open

space. To see the photo of the month go to <ftp://nhdftp.usgs.gov/Hydro/Images/BeaverBrook.jpeg>. Submit your photo for the NHD Photo of the Month by sending it to krisham@usgs.gov. This will allow the program to build a library of real-world photos linked to the NHD.

March Hydrography Quiz / New April Quiz

Al Rea of the U.S. Geological Survey was the first to guess the March NHD Quiz as the Chesapeake and Delaware Canal in Delaware connecting the Chesapeake Bay estuary with the Delaware Bay estuary and serving as part of the Intracoastal Waterway. See <ftp://nhdftp.usgs.gov/Quiz/Hydrography92.jpg>

Al has been a friend and user of NHD since sometime in the last century. These days he divides his time mostly between StreamStats (<http://streamstats.usgs.gov/>) and the NHDPlus, along with a few smaller GIS/Hydrologic projects as well. Al is a Hydrologist, working out of the USGS Idaho Water Science Center in Boise, Idaho. He found the quiz by using the new NHD layers on <http://www.geoplatform.gov/> and looked for north-south trending estuaries, which might be connected by the east-west running canal.

Others with the correct answer (in order received) were: Matt Rehwald, Tom Denslinger, Daniel Button, Ken Koch, Jason Piwarski, Richard Patton, David Straub, David Asbury, and Debbie Sullivan.

This month's hydrography quiz can be found at <ftp://nhdftp.usgs.gov/Quiz/Hydrography93.jpg>. What is the name of this large mountain lake at 1,000 feet in altitude in the eastern U.S. The blue streams are in one subregion and the red streams are in another subregion. Send your guess to jdsimley@usgs.gov.

Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Thanks to Pete Steeves, Stephen Daw, David Anderson, Karen Hanson, Paul Kimsey, David Kraemer, and Kathy Isham.

The NHD Newsletter is published monthly. Get on the mailing list by contacting jdsimley@usgs.gov. You can view past NHD Newsletters at http://nhd.usgs.gov/newsletter_list.html
Jeff Simley, USGS, assumes full responsibility for the content of this newsletter.