

USGS National Hydrography Dataset Newsletter
Vol. 8, No. 7, May 2009
by Jeff Simley, USGS

Stewardship Conference Caucus

An important part of the NHD/WBD Stewardship Conference was a caucus of the stewardship community that assembled issues and recommendations in stewardship for consideration by the USGS. A NHD and WBD caucus was held. The NHD notes are summarized as follows:

1. The USGS hydrography Point of Contact team is doing a wonderful job of training.
2. There are not enough resources to accomplish hydrography projects top ten list.
3. Need to develop hydrography workgroups to address special topics in hydrography.
4. Need to improve documentation and produce tutorials. Could reduce training time.
5. Need step-by-step setup and tutorial of editing environment.
6. Great working relationships with POCs and USGS Liaisons.
7. Responsiveness of POCs is great.
8. USGS support of conference attendance is appreciated.
9. Would be good to have a NOAA presence at conference (particularly Coastal Services).
10. Concern about cost of LiDAR, particularly cost of derived products.
11. Conference provided a great opportunity for sharing of information.
12. Looking for states that have had success in working with military.
13. Interest in stormwater, particularly requirements for permittees to include NHD.
14. Capture how each state is able to get resources, lessons learned, etc. With Wiki.
15. Great value in NHDPlus tools.
16. Some tools have been produced for specific states, but may be helpful to others
17. Role of WBD in USGS mapping programs recognized.
18. High-resolution NHDPlus is necessary. Need to look at stewards to do it.
19. Question cost-benefit of new updated quad maps.
20. USGS/EPA throws in a bunch of money to one single application, and it goes away
21. Need resources that we can use to develop applications on our own (web services)
22. Need USGS to provide data in web services. Reduces amount of work to be done locally.
23. USGS lacks strategic technology plan.
24. Need a light-weight markup review, web-enabled tool to feed the formal editing process.
25. Concern over lack of long-term funding for things like reach-indexing, design, etc.
26. Imagery for the nation would be great, but concern for impact on resources.
27. Precision is stressed over accuracy.
28. Some of the local densities are not able to be handled currently.
29. Big potential problems with linking to events related to multi-resolution data.
30. Need to focus on what works and is a business requirement, not just what can be done.
31. USGS/EPA does a great job of sharing information about funding opportunities.
32. We wouldn't be able to be here at all if not for the USGS coordination and support.
33. USGS needs an additional FTE for dedicated hydrology work.
34. Contributions by pooling agency funds for the benefit of the community.
35. Link to a states website (if they have a website) on the stewardship page.
36. Good to see what grants were approved and also links to the finished reports or projects.

The NHD caucus notes can be accessed directly at:

ftp://nhdftp.usgs.gov/Stewardship/Stewardship_09/Conference_Presentations/06_Thursday_Afternoon/CaucusNHD2009_notes.doc

ESRI User Conference

Mark your calendar for these NHD related events at the upcoming ESRI International User Conference in San Diego the week of July 13. Learn more at <http://www.esri.com/events/uc/>.

Tuesday, July 14

10:15AM - 11:30AM, Rm. 25C, **Datasets for Water Resources Analyses: Special Topics**

Hydro Geodatabase Development Using the ArcHydro Extension and LiDAR Data

The Curse of LiDAR - Lesson's Learned since 2003

A National Vision for use of Spatially Distributed Precipitation Data

The Role of Time-Series Management in Hydrology

Wednesday, July 15

12:00PM - 1:00PM, Rm. 25C, **Special Interest Group Meeting: NHD Meeting**

This meeting will be a gathering of Water Resources professionals to discuss their current issues and how they are using NHD and ESRI solutions in their work.

Thursday, July 16

8:30AM - 9:45AM, Rm. 25C, **NHD Maintenance and Applications**

Integrating Local Knowledge into the National Hydrography Dataset (NHD)

Improvements in Modeling Water Resources in West Virginia

New Jersey's High Resolution NHD Conflation Project 1:2,400 Scale

Generalization of the National Hydrography Dataset

10:15AM - 11:30AM, Rm. 25C, **NHDPlus in Action**

National Hydrography Dataset Plus (NHDPlus) User Tools

Regional Application of NHDPlus for NAWQA SPARROW Modeling

Web Services and the National Hydrography Dataset Plus

12:00PM - 1:00PM, Rm. 25C, **Water Resources User Group**

See the latest techniques being used in Water Resources through the use of GIS.

Improving Regional Water Quality Assessment

The paper "Improving Regional Water Quality Assessment: Geodatabase improves data management and analysis capabilities" by Jon Becker, U.S. Environmental Protection Agency Region 4 is available from <http://www.esri.com/news/arcuser/0309/h2o.html>. The paper leads off stating: "A geodatabase developed by the U.S. Environmental Protection Agency (EPA) Region 4 Water Management Division (WMD) manages geo-referenced water quality assessment data from the region's eight southeastern states for various years far more efficiently than the previous system."

NHD Video

A video on the NHD produced by the USGS that premiered at the NHD/WBD Stewardship Conference can be downloaded from the URL below. The first file is for Quicktime and the second for Media Player. ftp://nhdftp.usgs.gov/Stewardship/Stewardship_09/Conference_Presentations/USGS_Video/

AWRA Conference – Call for Abstracts

The American Water Resources Association's popular series of conferences on GIS & Water Resources continues with its sixth GIS & Water Resources conference, this time in Orlando, FL in March of 2010. The Call for Abstracts will be online in May 2009. Planning is underway for this important GIS event coming to the southeastern United States. Presentations will cover a broad range of subjects on integrative geospatial hydrologic technologies. Plan to submit an abstract and join us to network and experience what your colleagues are doing with GIS and Water Resources. Meet the leaders of geospatial and hydrologic

technologies using and applying their skills in the sessions, exhibit hall, Opening Reception, luncheon, workshops, field trip, and networking events. AWRA's Spring Conference will be packed with opportunities for you to learn more, network, and be entertained. Visit <http://www.AWRA.org> for the latest information!

April Hydrography Quiz / New May Quiz

David Asbury, Cartography/GIS Analyst, was the first to correctly guess the hydrography quiz <ftp://nhdftp.usgs.gov/Quiz/Hydrography46.pdf> as the confluence of the Mississippi and Ohio Rivers. Many people commented that the Ohio looks larger than the Mississippi on the NHD. On Friday, May 29, at 2:00 PM, the Mississippi was flowing at 473,000 cfs just north of the confluence at Thebes, Illinois. At that same moment, the Ohio was flowing at 324,000 cfs just east of the confluence at Metropolis, Illinois. Meanwhile, down at Baton Rouge, Louisiana, the Mississippi River was flowing at 1,227,000 cfs. By comparison, the mighty Colorado flowing through the Grand Canyon with all of its Spring runoff was at 9,020 cfs. That's less than one-percent of the Baton Rouge reading.

David Asbury works for the Center for Ecosystem Management and Restoration (CEMAR), an environmental non-profit based in Oakland, CA. CEMAR uses the NHD and NHDPlus for cartography, small watershed delineation (with ArcHydro) linear referencing and quantification of habitat stream miles (with PNW Hydro Event Management Tools) for threatened and endangered species along California coastal streams.

Others who identified the area were (in order received): Al Rea, David Straub, Joe North, John Lynam, Roger Barlow, Dave Greenlee, Gerry Daumiller, Matt Rehwald, Richard Patton, Ken Koch, James Sherwood, Calvin Meyer, Tom Denslinger, Barbara Rosenbaum, Matt Jefferson, Mike Sughru, Keith McFadden, Joel Skalet, Jennifer Campbell-Allison, Liz O'Dea, Thom.DeGriselles, and Jim McDonald.

For this month's hydrography quiz, there are five lakes in the United States that have more than 1,500 miles of shoreline (not including the Great Lakes). Which lake has the most shoreline in the United States (as represented by the high-resolution NHD)? In fact, the largest lake has over 2,000 miles of shoreline. Hint: This is a lake you have probably never heard of, unless you are a regular reader of the NHD Newsletter or your name is Steve Shivers. Send your guess to jdsimley@usgs.gov.

Upcoming NHD Applications Training

June 22, Trenton, NJ- New Jersey Department of Environmental Protection, Contact Roger Barlow at rbarlow@usgs.gov, David Anderson (danderson@usgs.gov) or Seth Hackman (Seth.Hackman@dep.state.nj.us)

June 24, Harrisburg, PA- Pennsylvania State University, contact David Terrell at dterrell@usgs.gov or David Anderson (danderson@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 Katy Hattenhauer, Kathy Isham, Mary Simley, and <http://waterdata.usgs.gov>.

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.