USGS National Hydrography Dataset Newsletter Vol. 2, No. 4, February 2003 By Jeff Simley, USGS

Kentucky is Done!

The State of Kentucky now has complete border-to-border coverage of the high resolution National Hydrography Dataset. Kentucky is covered with 42 subbasins, including 5 partial subbasins where the data ends at the state line area. The data was produced as the result of a partnership between the Kentucky Office of Geographic Information and the U.S. Geological Survey. The USGS Mid-Continent Mapping Center produced the data in an arrangement where each party contributed one-half of the funding. The high resolution NHD was based on 1:24,000-scale Digital Line Graphs recently revised using new Digital Orthophoto Quarter-Quadrangles. The NHD will be a component of the Kentucky statewide basemap initiative. This is the first state to be completed in the conterminous U.S., with the National honor having been taken one year ago by Hawaii's 8 subbasins.

The NHD Status Map on the Web

The USGS National Hydrography Dataset status map is now available online at: http://rockys9.cr.usgs.gov/nhdstatus/viewer.htm. This capability is based on ArcIMS technology and uses many familiar functions. Here are some notes on using the viewer:

- 1) The information will be updated at the beginning and middle of the month.
- 2) You can zoom in to your area of interest by drawing a box with the "magnifying glass +" icon.
- 3) You can see the subbasin 8-digit label at a certain point when you zoom in.
- 4) Clicking the uppermost left icon in the left tablet will display the color code legend.
- 5) Full information is currently only available for subbasins programmed for work (colored). Make sure the "Subbasin Status" "Active" radio button is clicked (default) on the right tablet to see this information
- 6) You can see the non-programmed subbasin perimeters by checking the "Visible" box on the "All Subbasins" feature and refreshing the map.
- 7) You can get information on the subbasin by clicking the "Identify (i)" icon on the left tablet and then clicking on a subbasin in the map. An information box will appear. You can scroll the information box, but if you try to shrink the box, the information will be lost (this is a bug).
- 8) You can also get information on a subbasin, or a group of subbasins, by using the "Select" icon, then drawing a box on the map. The subbasin(s) will then be highlighted on the map.
- 9) Included in the information box is the name, email, and phone number of a person you can contact about (a) USGS coordination and requirements issues, and (b) issues on problems or the maintenance of the subbasin.
- 10) You can also find out information on a subbasin using the "Query (?)" icon. Select (a) an information category, e.g. "Subbasin", (b) an operator, e.g. "=", and (c) a value, e.g. "10080001". Then click on "Add to Query String" and then "Execute". The subbasin(s) will be highlighted on the map and the information displayed.

This service will be enhanced over time to make it more useful and easier to use.

Distributable Status

The status map described above gives a snapshot of subbasin availability, but does not give up-to-the-minute information on the "distributable" status of a subbasin. A subbasin is declared distributable when the final quality assurance checks have been completed and available inter-subbasin connections have been made. Users should not use a subbasin until it has been made distributable. Prior to being made distributable, a subbasin will receive a "not-distributable" status. This means that the subbasin has been

converted to the Arc coverage format, but is not yet ready for public use. It is possible to download and use a not-distributable subbasin, but this is not advised. To check for the latest distributable status, go to the NHD home page http://nhd.usgs.gov and click on "data." Then click on "Obtaining NHD Data." This will lead to the distributable status map. Check for the distributable status as indicated. You can also get a numerically ordered list of subbasins and their distributable status at http://edc.usgs.gov/pub/data/nhd/fod_cache/high_resolution/arc/ and clicking on the "0000 CU STATUS LIST" item, the second item on the list.

Recent Workshops

The State of Utah Automated Geographic Reference Center hosted a daylong workshop on how to use the NHD. This was held at the USGS office in Salt Lake City on February 6 and was attended by 40 people from throughout the GIS community in Utah and additional attendees from Idaho and Wyoming. The workshop covered (1) the NHD program, (2) the NHD model and file structure, (3) downloading the NHD and making it ready for use, (4) using multiple subbasins, (5) navigation methods, (6) reach indexing, and (7) flow editing. As a demonstration project, gaging station locations and flow rates were obtained from the USGS National Water Inventory System and linked to the NHD as events. Then, using navigation, a flow map was made where the line weight represented the steam flow. The Bureau of Land Management Wyoming State Office hosted a similar workshop in Cheyenne on February 28 for 16 attendees. Upcoming workshops will be held in New Mexico and Colorado in April and May.

Stream Miles

With the 1:100,000-scale based medium-resolution NHD complete for the United States, except for Alaska, it is possible to compile some statistics on this data. The main statistic of note is the total length of the flow network, which is 2,661,755 miles. This is composed of 899,346 miles of perennial streams, 1,594,359 miles of intermittent streams, and 168,050 miles of artificial paths.

Recent Completions in Support of the U.S. Forest Service

Monongahela NF (WV), Flathead NF (MT), Ouachita NF (AR-OK), Inyo-Toiyabe NF (CA), Tahoe NF (CA), and Shoshone project (MT-WY).

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Jeff Simley, USGS, assumes full responsibility for the content of this newsletter.