USGS National Hydrography Dataset Newsletter
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By Jeff Simley, USGS

First Issue of the NHD Newsletter: This newsletter is intended to keep people associated with the U.S. Geological Survey National Hydrography Dataset project appraised of recent developments and news. I will publish this near the end of each month. Consider this simply to be Jeff Simley communicating to you. It's not an official publication (for now anyway) and is not intended to represent non-USGS organizations, but I will attempt to include as much accurate, timely, and relevant NHD-wide news as possible. The goal is to actively communicate information, and I believe sending this newsletter to an email list is an effective way reach people. Please forward this to others who might be interested. If you would like to add a name to the mailing list, please inform me. Or, conversely, if you don't want to receive this, let me know and I will remove your name. Please send me any news items that should be noted to the group. Otherwise, I will communicate as much as I know and can fit on two-pages. I want to make this newsletter useful for you and the project. If you have updates or corrections to items, let me know. You can reach me at jdsimley@usgs.gov.   To get additional NHD news, also check http://nhd.usgs.gov.

100K NHD Status: The 1:100,000-scale NHD is nearly complete for the U.S. The final few sub-basins (out of over two thousand) are being completed. Stand by for the announcement that the U.S. (except Alaska) is complete.

Progress in Utah: The state of Utah agency responsible for geo-spatial data, the Automated Geographic Reference Center (AGRC), is working with the USGS and the U.S. Forest Service to create a three-way partnership to produce NHD over the state. The extensive Forest Service lands in Utah, and the progress made by the AGRC to create a base hydrography DLG layer, plus the USGS contributions to the NHD program, make such a partnership highly effective by combining three significant programs. Although it is too early to estimate a completion date for statewide coverage, the partnership should make substantial progress over the next two years. A production and funding strategy is currently being documented.

USGS – USFS Meeting: Representatives of the USGS and the U.S. Forest Service met November 6 and 7 to strategize production plans for joint NHD production for the next six months. A number of projects have been slated for the production schedule, but just as importantly, a number of technical and programmatic issues were discussed that will make the implementation of the schedule much smoother. The size and goals of this partnership will be major challenge for each agency, but both organizations have worked hard to make it a success. The program, involving about $9 million in overall funding, serves as a powerful foundation to the geo-spatial data needs of each agency. Forest Service lands involve 40% of the sub-basins in the U.S., and because data needs are basically overlapping, this partnership is a significant boost to each agency. NHD coverage over approximately 30 Forests has been targeted for completion by June, 2001. Each edition of the NHD Newsletter will update progress.

USGS - USFS Progress: Currently, the George Washington-Jefferson, Bridger-Teton, Salmon-Challis, and Payette National Forests are in NHD production. Deliveries will be in the January to April timeframe. Many more Forests are in the initial stages of production where base hydrography data are being prepared. A large project covering USFS lands in southern California is nearing completion.

Technology News: The NHD program has always had it sights on more advanced geo-spatial models that will make data applications and data updating, easier and faster. This has led to an approach using object-oriented models and the Environmental Systems Research Institute (ESRI) Inc. Geodatabase model has shown promise as a pathway towards this goal. The USGS, the Environmental Protection Agency, and ESRI (under contract) are working in partnership to implement NHD in Geodatabase. Primary advantages of NHD in Geodatabase are the geometric networking, data validation rules, data maintenance capabilities, and compatibility with data models advocated by the water resource community. A preliminary model of NHD in Geodatabase has been developed and is undergoing testing. Additionally, there is interest in making the NHD Geodatabase web based to allow the user to exercise applications without having to download the data, and to allow the NHD to be integrated with other web based sites. A prototype of this using ArcIMS has also been developed and undergoing testing.

CFF Converter: The ability to convert non-USGS hydrography data into the NHD production process is particularly critical to successful partnerships. The U.S. Forest Service is providing hydrography data in the form of their Cartographic Feature Files (CFF) and these must be converted into a form directly usable by the NHD process. This conversion software is being improved to combine the capabilities of two previous routines into one, and to also utilize hydrography data produced independently by the local Forests. This allows the NHD to maximize the use of data produced by groups that directly manage resources, and allows the NHD to better meet the data needs of those groups, by incorporating many of their needs. This new CFF converter is expected to be ready for testing in the first week of December.

Alaska News: A large volume of Alaska 1:63,360-scale NHD is in work using an integrated production team of the USGS and two contractors; Horizon Systems Corp., and Titan Systems Corp. With many of the technical issues resolved, production is running smoothly and progress is building rapidly. It is expected that Alaska NHD will be completed by September, 2002.