

**NSDI Cooperative Agreement Program
Geographic Information Integration and Analysis
Final Report - August 2006**

Cooperative Agreement Number: 05HQAG0138

Project Title: Moving WDNR Statewide Hydrography Layer to Federal NHD Standard in Geodatabase

Project Start/End Date: September 1, 2005 to August 31, 2006

Lead project organization: Wisconsin Department of Natural Resources (WDNR)

Project Lead: Ann Schachte (WDNR)

USGS Mapping State Liaison: Dick Vraga - USGS Madison, WI

Data Theme: Hydrography

PROJECT SUMMARY

a.) Project description: The main objective of this project was to complete hi res NHD for the state of Wisconsin. Out of 13 remaining HUCs, 11 were to be completed by WDNR under the terms of this cooperative agreement. The remaining two HUCs cross into the state of Illinois and are to be completed under USGS's Cartographic Services Contract.

WDNR entered into this agreement with the intention of completing all of this work based on information that was provided suggesting it would take 2-4 weeks to process each HUC. However, the 2-4 week estimate didn't include the additional work it would take to a) familiarize ourselves with the processing programs, b) test and debug the processing programs, c) get trained on the processing steps (documentation was lacking for the last couple of steps of the process) and d) prepare the data for input. Unfortunately, this was a workload that wasn't well understood entering into the contract. As a result, we were only able to complete five of the eleven HUCs by the end of the grant period. We are currently working with Dick Vraga (USGS Liaison - Madison, WI) and Jeff Simley (USGS, Denver, CO) to obtain additional funding (\$30K) to complete an additional 4 HUCs in Wisconsin. The last two HUCs (07070003 and 04030201) are estimated to cost \$40,000 to complete and may be contracted out to a third party due to availability issues with WDNR through June 30, 2007.

The following work is **on schedule to be completed by August 31st, 2006:**

- 1.) 5 HUCs (04030102, 04030203, 07040005, 07050007, 07070002) delivered in NHD in ARC format, including metadata.
 - 2.) A draft WINHDCreate processing document which contains the details of our processing steps and preparatory work on the input data.
- b.) National Map: The resulting data will be made available through the National map and we will work through our USGS Liaison, Dick Vraga, to complete that task.
- c.) Maintenance: Long term stewardship of the NHD remains an open issue. Points of concern are:
- 1.) **The pending consolidation of USGS Mapping Centers** and the potential loss of NHD technical support staff. How will NHD be supported after the consolidation?
 - 2.) **Lack of availability of stewardship funding.** Future funding opportunities have been foreshadowed to be focused on the *development* of more detailed data and not on stewardship of existing data. WDNR cannot currently provide resources to support stewardship of the NHD due to budget and staff cuts. Technical GIS support is provided in a chargeback environment at WDNR and would require a funding source to procure staff to work on NHD stewardship over the long term.

- d.) Issues, difficulties, challenges: One of the main challenges was not having a thorough understanding from the beginning about the real workload involved and whether the amount of funding would adequately cover the resources needed to accomplish the work we agreed to. There was also a change in direction of the stewardship program from the beginning of the grant period to the end of the grant period. Changes at USGS (mapping center consolidation) have had an impact on the partnership funding priorities and as of this writing, all indications are that future funding will not be prioritized for stewardship activities. Rather, it will be geared toward data development partnerships.
- e.) USGS Relationship: Over the course of this grant period we have built a good relationship with our USGS Liaison (Dick Vraga) and continue to work with him on NHD and to a lesser degree, other related projects such as the Watershed Boundary Dataset and National Wetland Database. We have also made many technical GIS contacts at USGS and hope that they are available to continue working on NHD after the mapping center consolidation. Their expertise was extremely valuable in getting us through the NHD conversion process.

The WDNR has similar interests to USGS in pursuing larger scale hydrography data. In order to obtain that goal, it will require many, well developed partnerships with folks like USGS (and other federal agencies), the WI State Geographic Information Officer (GIO), WI State Cartographer's Office, local units of government and private entities. We hope that our relationship with USGS will help foster new, future data development success stories in the state of Wisconsin.