National Hydrography Dataset/Watershed Boundary Dataset Background Information

The National Hydrography Dataset (NHD) is a comprehensive set of digital spatial data representing surface water features and it provides a system for linking to attribute information housed in other databases. The Bureau of Land Management (BLM) Oregon State Office, working in concert with the U.S. Geological Survey (USGS) and other State and Federal partners, has developed the Hydrography Event Management (HEM) tool to support the creation and maintenance of attribution associated with the NHD. The HEM tool has passed the BLM's national Configuration Management (CM) process and is now available for use. The HEM tool will be used to support the implementation of the Bureau's Riparian Database System.

The Watershed Boundary Dataset (WBD) is a set of nested hydrologic unit boundaries mapped down to what is termed the "12-digit Hydrologic Unit" (10-50,000 acres). Each unit defines surface water drainage to a specific "pour" point. These boundaries segregate areas of land into discrete units that can be monitored and easily compared to similar units. These boundaries serve as an important normalizing tool for analysis and reporting units for the BLM.

The BLM has been an active partner and strong supporter of development of the NHD and the WBD. The agency has invested significant fiscal and staff resources and now, with its State and Federal partners, is beginning to realize the benefits of their efforts across the nation. The NHD and the WBD are already widely used within the BLM. Therefore, the agency needs to protect its investment in these datasets by working collaboratively with its partners to improve data quality, accuracy, and completeness.

For the purposes of this guidance, the NHD and WBD are considered together. This follows a decision by the national stewards, the USGS and Natural Resources Conservation Service, to integrate these datasets into a single Geographic Information Systems (GIS) data model and stewardship strategy. The USGS hosts a NHD website that provides access information for the NHD and WBD datasets as well as important information regarding stewardship, edit tools, and training opportunities. The website can be accessed at http://nhd.usgs.gov/.

There are a number of methods available for providing edits back to the national NHD and WBD datasets at USGS. Some BLM states have chosen to send one or more of their GIS specialists to USGS training and to obtain authorized editing software to complete the edits. Other states have chosen to enter into a partnership with other Federal or State agencies and to provide funding to that organization to perform the editing. Other states have hired a dedicated GIS specialist through their NHD/WBD Stewardship Team to complete edits for all cooperating agencies. And finally, some states have funded the USGS to process their edits. All state offices should plan for this work and submit it as part of their annual budget.