## Watershed Boundary FAQs

- 1. What is NRIS (soon to become NRM) using for watershed boundaries in the Aquatic Survey application? *Answer*: The U.S. Forest Service respects the cooperative, interagency, national, standard methodologies of the Natural Resources Conservation Service (NRCS) as the accepted maintenance and distribution system for hydrologic unit delineations. Part of the National Hydrography Dataset (NHD) data that we rely on in the Aquatic Survey application includes a data structure for that nested watershed hierarchy (e.g. Region, Subregion, Basin, Subbasin, Watershed, and Subwatershed) of data. NRIS will store the six hierarchical watershed delineation levels as GIS feature classes at the Corporate Data Warehouse (CDW) in Kansas City for general use in the Aquatic Survey application.
- 2. Where can I learn more about NRCS' Watershed Boundary Delineation system? *Answer:* The NRCS website that delves deeper in to those standard delineation methodologies may be found at: http://www.ncgc.nrcs.usda.gov/products/datasets/watershed/
- 3. How current are the watershed boundaries that are available at the CDW Production? Answer: The watershed boundaries were collected from NRCS as certified as of April, 2007. NRCS had a national extent, 4<sup>th</sup> level (Subbasin) map product that was downloadable from their FTP site. NRIS began with that map. At that time, only half of the states had made it through the extensive certification process for finer boundary delineations. Most of the remaining (uncertified) states were collected individually as draft products from each state coordinator during the summer of 2007. In most cases, these drafts were very far along in the certification process, and represented delineations at the fifth and sixth hydrologic unit level. NRCS calls these 10-digit and 12-digit Hydrologic Units. A map will be prepared that illustrates the certified vs. draft status that NRIS used for each state.
- 4. When will we have final watershed boundaries? *Answer:* NRCS expects to complete final review of each state by fall, 2008. Their review will include examination of state boundaries to ensure that products from each state are properly edge-matched. When the entire country is certified, NRIS will obtain the final edge-matched version of each of the six levels, and post them to the Corporate Data Warehouse. Data products like this are rarely ever "done."
- 5. **How often will the Hydrologic Unit boundaries be updated?** *Answer:* It depends on the stewardship actions of each individual state to produce a new delineation. After the fully certified set is released by NRCS late this year, NRIS will update any watershed boundary changes as NRCS makes them available.

- 6. I've noticed that the Hydrologic Unit feature dataset attributes are different than those that the NRCS uses. Why is that? Answer: As mentioned in the first question above, part of the National Hydrography Dataset (NHD) data that we rely on in the Aquatic Survey application delivers watershed delineations that include an attribute structure for the nested hydrologic units. The U. S. Geological Service (that provides the NHD data) relies on the Subbasin boundaries from NRCS to clip and manage its hydrography data. As part of that distribution of the NHD, the USFS receives Subbasin boundary maps that are useful in separating one NHD Subbasin from another. The distribution has a well-know attribute format that many NHD users have become familiar with over the years, and NRIS has continued to use the NHD's attribute format, populating NHD attribute structures with a subset of the attributes that are found in the NRCS structure.
- 7. What is the future of NRCS watershed boundary stewardship? Answer: Many individual USGS and NRCS data stewards have frequently found themselves stewarding the editing of streams, lakes, and points for USGS, while also concurrently stewarding the edits of watershed boundaries for the NRCS. As these two currently separate stewardship groups grow closer together, many of the differences between the stewardship responsibilities, and even between the NRCS attribute structure and the NHD's hydrologic unit attribute structure (both include delivery of the same line locations) will be worked out. Until a standard is agreed on between these two groups, the USFS will continue to use the USGS attribute standards. USGS has indicated that as certified boundaries become available at all levels, the NHD will eventually and automatically provide the watershed delineations with every delivery of the NHD data. Until USGS begins to automatically deliver all watershed delineations with their datasets, NRIS will monitor changes to the watershed delineations and provide them to the USFS Corporate Data Warehouse as they become available. The Forest Service will continue to have an important cooperative presence in watershed boundary stewardship within the 43 states that contain USFS land.
- 8. Who is my Watershed Boundary steward? *Answer*: NRCS maintains the list of state coordinators at the following website: <a href="http://www.ncgc.nrcs.usda.gov/products/datasets/watershed/coordinators.html">http://www.ncgc.nrcs.usda.gov/products/datasets/watershed/coordinators.html</a>
  Many states have more than one contact name. Each state operates as a separate stewardship unit so it is important to check in with your state stewardship contact to understand how your state accepts improvements or changes to the watershed boundaries.

