



U.S. Department of Agriculture  
Natural Resources Conservation Service  
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# Fact Sheet

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## Connecticut Watershed Boundary Dataset

### What is the Watershed Boundary Dataset?

It is a nationwide, seamless database of watershed and sub-watershed boundaries that will not reflect political boundaries, except where they follow natural ridges. It is being digitized in accordance with a multi-agency federal standard that strives to make separate state efforts compatible. Although all states have not completed digitization, Connecticut and the surrounding New England states are finished and have been certified to meet the standard. New York's database is being created by a number of agencies; however, sub-watersheds that cross the Connecticut border into New York are complete.

### Who Created It, and How?

Database creation and integration are being managed by the Natural Resources Conservation Service (NRCS) throughout the U.S., who has worked closely with the U.S. Geological Survey (USGS). Methodology for database assembly varies due to differences in state size, state agency-based watershed digitizing progress, year of project initiation, and the availability of accessory geospatial databases such as elevation. Connecticut's Watershed Boundary Dataset (WBD) layer has its roots in the Connecticut Department of Environmental Protection's (DEP) 1:24,000 scale sub-regional basins layer that existed prior to WBD project initiation. WBD development in Connecticut was a process of re-working that layer to meet the federal standard. Digitizing accuracy was high, so all possible arcs from the original layer were retained. New arcs were digitized only where necessary. NRCS cooperated in designing the new database with the DEP Geographic Information System (GIS) staff.

### How Does It Differ From Connecticut Regional/Sub-Regional Basins?

The federal standard mandates that sub-watersheds (WBD's smallest units) fall within the range of 10,000 to 40,000 acres. This standard does not apply in the Sub-regional Basin Database, so some mainstem sub-regional basins, such as the Quinnipiac River, were split into sequential blocks (splits were made just above major tributary confluences where possible). Other sub-regional basins were somewhat smaller than the standard's size range (some were less than 3,000 acres), due to more specific water-quality concerns. These basins were aggregated, as needed, to arrive at larger subwatersheds. Thus, they can still be considered physically nested within the sub-watershed layer structure. Subwatershed coding (see *Attributes* section, below) is different from coding used in the Connecticut DEP layers. It follows the original USGS nested coding scheme of two digits per level of detail, and adds 10- and 12-digit codes to represent the 5<sup>th</sup> and 6<sup>th</sup> levels of the nested Hydrologic Unit Coding (HUC) scheme.

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**What Are The Attributes?**

The most important attributes of the WBD are polygon attributes. These include the 8-, 10- and 12-digit codes, the names of units at each level, codes for the next-most downstream watershed and sub-watershed units, notes about any water control/diversion structures or modifications within the unit, acreage calculated by the GIS software, and the states that a sub-watershed falls within. In addition to the standard attributes, all polygons in Connecticut carry an attribute that shows which DEP sub-regional basin the current sub-watershed used to be a part of.

**Does It Match Adjoining States' Data?**

Yes, the data were developed with this goal in mind, and polygons and arcs cross state boundaries where necessary to complete a sub-watershed.

**Where Can We Get The Data? Does It Cost Anything?**

The data can be downloaded or ordered on CD from the USDA Lighthouse Data Gateway, a spatial data server (node) on the National Spatial Data Infrastructure network (NSDI). Other useful data can be obtained for a state, county, or other geographic area at the same time. The Lighthouse Data Gateway URL is: <http://www.lighthouse.nrcs.usda.gov/gateway/NextPage.asp>

