NATURAL DRAINAGE BASINS

MAJOR, REGIONAL, SUBREGIONAL AND LOCAL
BRIDGEWATER, CONNECTICUT

LEGEND

Basin Boundary

- Major Basin
- Regional Basin
- Subregional Basin
- Local Basin

Local Drainage Basin Direction

- Outlet Direction
- Main Stem Direction
- Coastal Direction

Elevation

- 100 ft Contour Line
- 20 ft Contour Line

EXPLANATION

This map shows the location and identification number of major, regional, subregional, and local drainage basins. It is intended to serve as a municipal guide for drainage basin delineation and identification. Local basins make up larger subregional, regional, and major drainage basin areas and are differentiated by their drainage basin boundary type and identification numbers. Arrows on the map represent general direction of surface water flow within local drainage basins. Local outlet direction is shown in purple. Main stem direction is shown in red. Coastal direction is shown in blue.

A 7-digit drainage basin number such as 4302-02 uniquely identifies local drainage basin areas shown on this map. Drainage basin areas are numbered sequentially beginning upstream and proceeding downstream. The identification numbers are hierarchical. The first digit (column 1) identifies the major basin, the first two digits (columns 1-2) identify the regional basin, the first 4 digits (columns 1-4) identify the subregional basin, and the first seven digits (columns 1-7) identify the local basin. For example, 4, 43, and 4302 are the major, regional and subregional basin numbers for local basin number 4302-02. As illustrated in the diagram below, this signifies that local basin number 4302-02 is part of subregional basin 4302, which is part of regional basin 43, which is part of major basin 4.

Drainage basin boundaries shown on this map were manually delineated by interpreting the 10 foot contour lines and hydrography features shown on USGS 1:24,000-scale topographic quadrangle maps. Only limited field checking was conducted to verify the location of these basin boundaries. Basin boundaries may not be accurate in areas that have been diked for flood control, upland wetland and reservoirs having outlets into two basins, areas where topographic mapping is not up to date, is inaccurate, or is not detailed enough to adequately define local drainage. Residential and commercial development, highway construction, and other changes to the landscape may have resulted in local modifications to the natural drainage pattern since the time these basin boundaries were delineated.

The elevation contour lines shown on this map are more accurate than those used to originally delineate the drainage basin boundaries so, in certain areas, the basin boundaries may not exactly reflect the shape of the land surface depicted by the contour lines shown on this map. These contour lines are based on information from a statewide collection of ground elevation LiDAR data for the year 2000. This information is only suitable for general planning and informational purposes. It is not intended for exact determinations of elevation where a survey is normally required, or for detailed engineering, building, or design purposes. With this information, a general sense of the lay of the land can be ascertained. Gentle slopes are characterized by widely spaced contour lines, while steep slopes are represented by closely spaced contour lines. Contour lines that cross streams flowing through valleys of noticeable relief will form a V-shaped deflection with the apex of the V pointing upstream. However, river and stream features and watershed delineations that are based on USGS topographic quadrangle maps at 1:24,000 scale may not align exactly with the terrain of stream valleys and elevation of hills and ridges depicted by these contour lines.

Note: The major, regional and subregional drainage basin boundaries shown on this map are the same as those published on the 1:125,000-scale state map entitled Natural Drainage Basins in Connecticut, McElroy, 1981. The basin boundaries shown on this town map were digitized from the 1:24,000-scale compilation sheets used to publish the state map of Natural Drainage Basins in Connecticut, 1981.

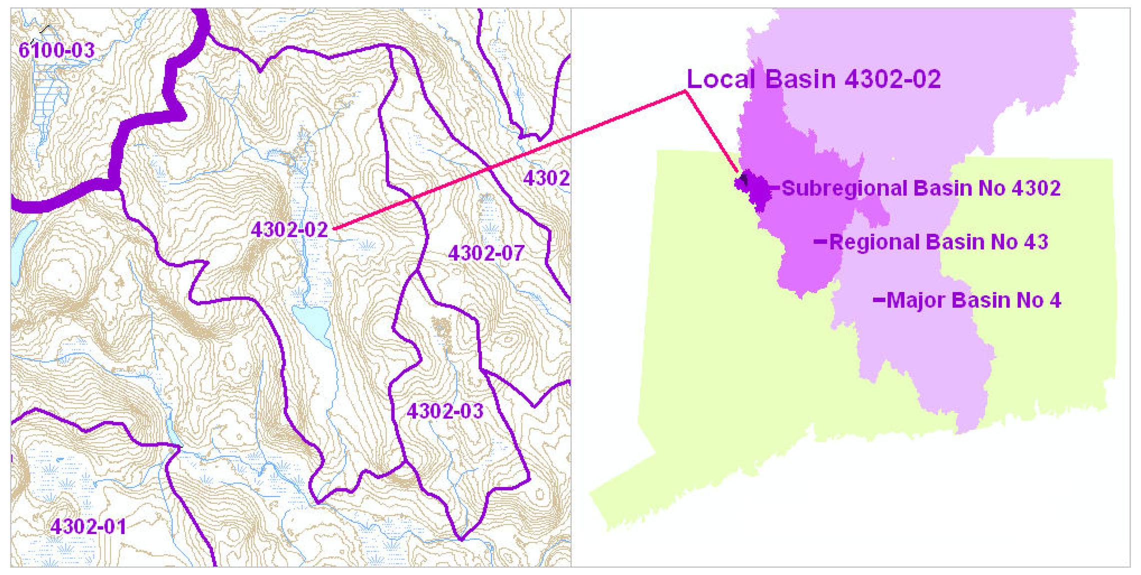


Figure 1. Example showing a typical local drainage basin and the subregional, regional, and major drainage basin it is part of.

DATA SOURCES

LOCAL DRAINAGE BASIN DATA – The drainage basin information shown on this map is based on the following digital spatial datasets: Connecticut Local Basin Line and Local Basin Poly. These two datasets were developed by CT DEP and depict major, regional, subregional, and local basin drainage areas and boundaries at 1:24,000-scale. These data depict drainage areas for Connecticut rivers, streams, brooks, lakes, reservoirs and ponds published on 1:24,000-scale 7.5 minute topographic quadrangle maps prepared by the USGS between 1969 and 1984.

ELEVATION CONTOUR DATA – The elevation contour line information shown on this map was derived from a statewide 10-foot Digital Elevation Model (DEM) surface. The DEM was based on the Connecticut LiDAR dataset for 2000, which captured ground elevation every 20 feet at a horizontal accuracy of approximately 3 feet on the ground. For unknown reasons, data was collected unevenly in some areas, which resulted in data gaps. The University of Connecticut, Center for Land Use Education and Research (CLEAR) created the DEM and edited it to fill in data gaps with information from contour lines on USGS 1:24,000-scale topographic maps. However, some inaccuracies remain and the data should be used within the known limitations of the source data.

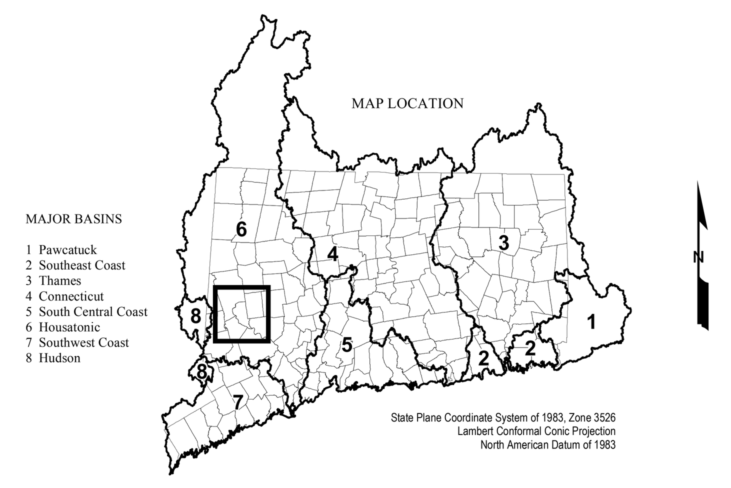
BASE MAP DATA - Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

RELATED INFORMATION

This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).

To identify either all upstream basins draining to or all downstream basins flowing from a particular location, refer to the Gazetteer of Drainage Basin Areas of Connecticut, Nosal, 1977, CT DEP Water Resources Bulletin 15, for the hydrologic sequence, headwater to outfall, of drainage basins.

MAPS AND DIGITAL DATA - Visit the CT ECO website for this map and a variety of others in PDF format. Visit the CT DEP website to download the digital spatial data shown on this map.



0 1,250 2,500 5,000 7,500 10,000 Feet

0 0.2 0.4 0.8 1.2 1.6 2 Miles

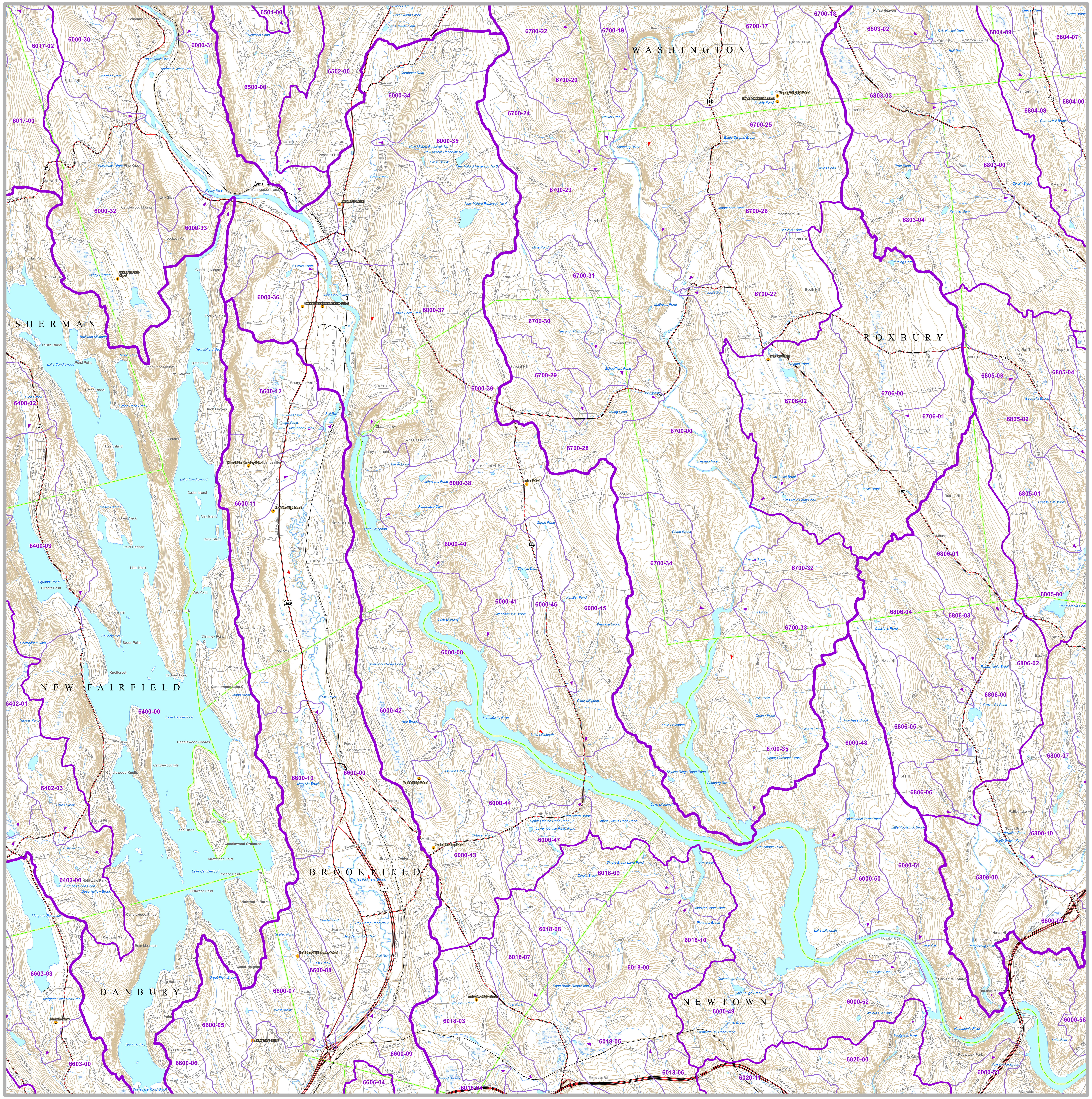
0 0.15 0.3 0.6 0.9 1.2 1.5 Kilometers

SCALE 1:24,000 (1 inch = 2000 feet) when map is printed at original size (48 x 36 in)

Map created by CT DEP
May 2011

This map replaces a similar natural drainage basins map dated January 2010

STATE OF CONNECTICUT
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

University of Connecticut
College of Agriculture and Natural Resources

CLEAR
Center for Land Use Education & Research