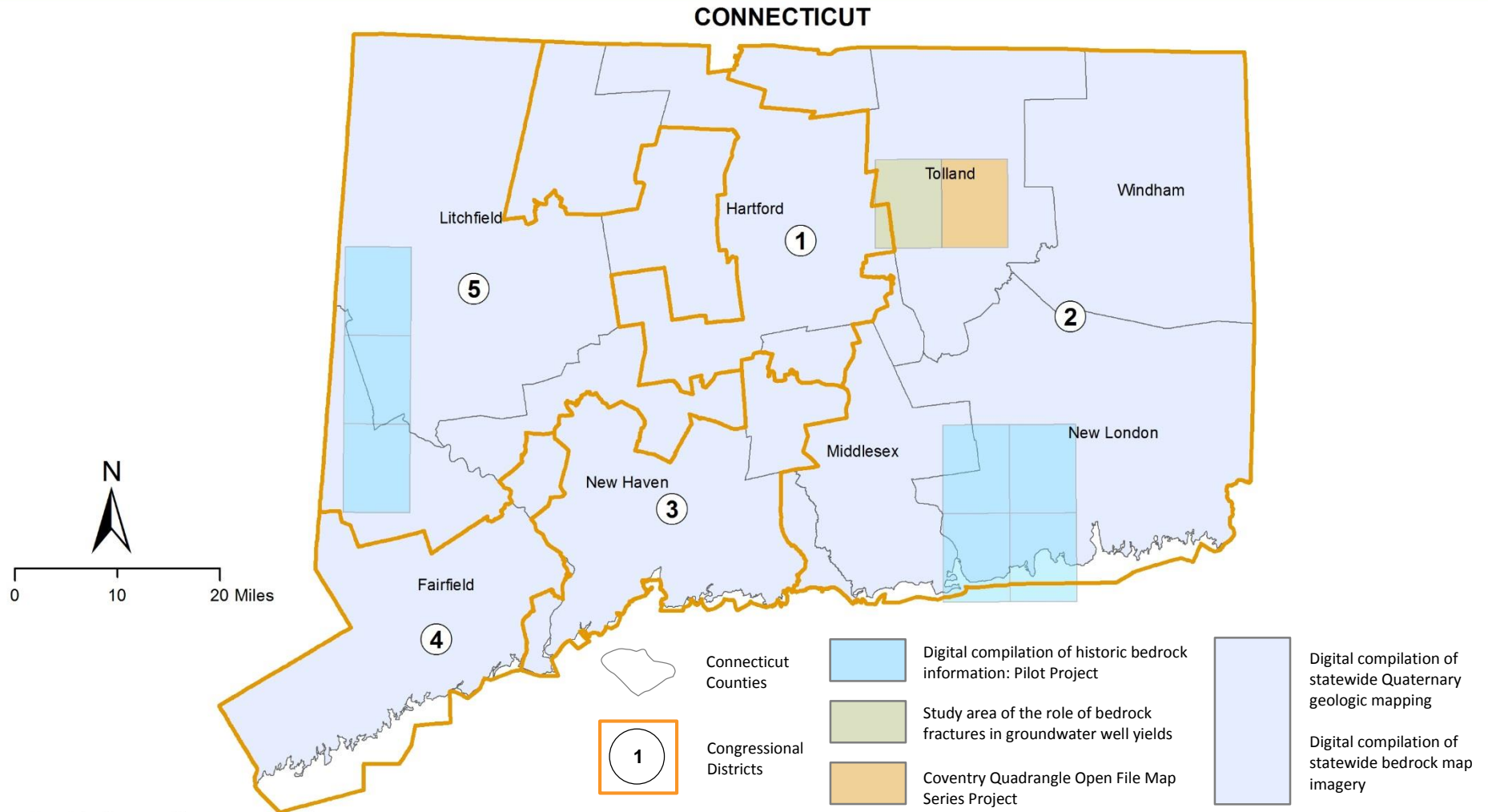


Connecticut Geological and Natural History Survey  
**National Cooperative Geologic Mapping Program**

STATEMAP Component: States compete for federal matching funds for geologic mapping



**Contact Information**

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**USGS Geologic Mapping Program Office:**  
Program Coordinator: Peter T. Lyttle (703-648-6943)  
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<http://ncgmp.usgs.gov>

**SUMMARY OF STATEMAP  
GEOLOGIC MAPPING PROGRAM IN CONNECTICUT**

<b>Federal Fiscal Year</b>	<b>Project Title</b>	<b>Federal Dollars</b>	<b>State Dollars</b>	<b>Total Project Dollars</b>
1996	Geologic Mapping of the Rockville quadrangle, 1:24,000 scale	\$30,000	\$30,000	\$60,000
	Quaternary Geologic Mapping (Digital Compilation Project) 1:24,000 and 1:100,000 scales	59,459	69,522	128,981
2001	Digital Compilation of Historic Bedrock Information and National Geologic Map Database Cooperative	59,719	60,735	120,454
2002	Digital Compilation of Historic Bedrock Mapping for Connecticut. Geologic Imagery	85,610	85,863	171,473
2006	Digital Compilation of Surficial Geologic Map and Bedrock Contours for the Coventry Quadrangle, Eastern Connecticut	81,595	81,595	163,190
<b>TOTALS</b>		<b>\$316,383</b>	<b>\$327,715</b>	<b>\$644,038</b>

### **Benefits and Uses of Geologic Maps**

Connecticut is faced with high population density, sprawl, and increasing demands on finite land and water resources. Effective strategies for managing attendant economic, political, and quality of life issues require access to timely, relevant geologic information. Our STATEMAP initiatives have been designed to provide direct support to policy development in the areas of water supply and aggregate resource utilization because these potentially competing interests are critical to the Connecticut's future economic and environmental well-being.

### **Project Descriptions**

Geologic mapping of the Rockville Quadrangle was conducted to help determine the role of bedrock fractures in ground-water well yields. A newly created database of located water wells was used to analyze trends in both localized and regional ground-water flow within the bedrock.

The Digital compilation of the Quaternary Geologic Mapping involved the development of a state scale (1:100,000) digital map from quadrangle (1:24,000) scale compilation sheets. Both of these mapping projects provide useful tools for assessment of Connecticut ground-water resources and aquifer protection.

The Digital Compilation of Historic Bedrock Information produce a comprehensive desktop resource for bedrock quadrangle mapping. A fully indexed set of CDs were developed for an eight quadrangle area as a prototype product of CT GIS digital geologic data.

Geologic Imagery for all bedrock quadrangles was compiled and geo-referenced to provide a statewide image base for Connecticut geology compatible with GIS analyses and field mapping requirements.

Digital Compilation of Surficial Geologic Map and Bedrock Contours for the Coventry Quadrangle including Bedrock Surface Elevation, Depth to Bedrock, and Bedrock Elevation Confidence Isopleths maps (1:24,000) generated using geospatial analyses involving a bedrock well records database and LiDAR data. Open File Publications (available as pdf documents and through the Connecticut Geological Survey). Meyer, T.H., Metcalf, M.J., Robbins, G.A. and Thomas, M.A., 2008, CGNHS Open File Maps 2008-01; 2008-02; 2008-03 [Coventry Quadrangle Open File Map Series Project].

Digital geologic data and survey publications are available through the Connecticut Geological and Natural History Survey, Department of Energy and Environmental Protection. <http://www.ct.gov/deep/gisdata> , <http://ctdeepstore.com>