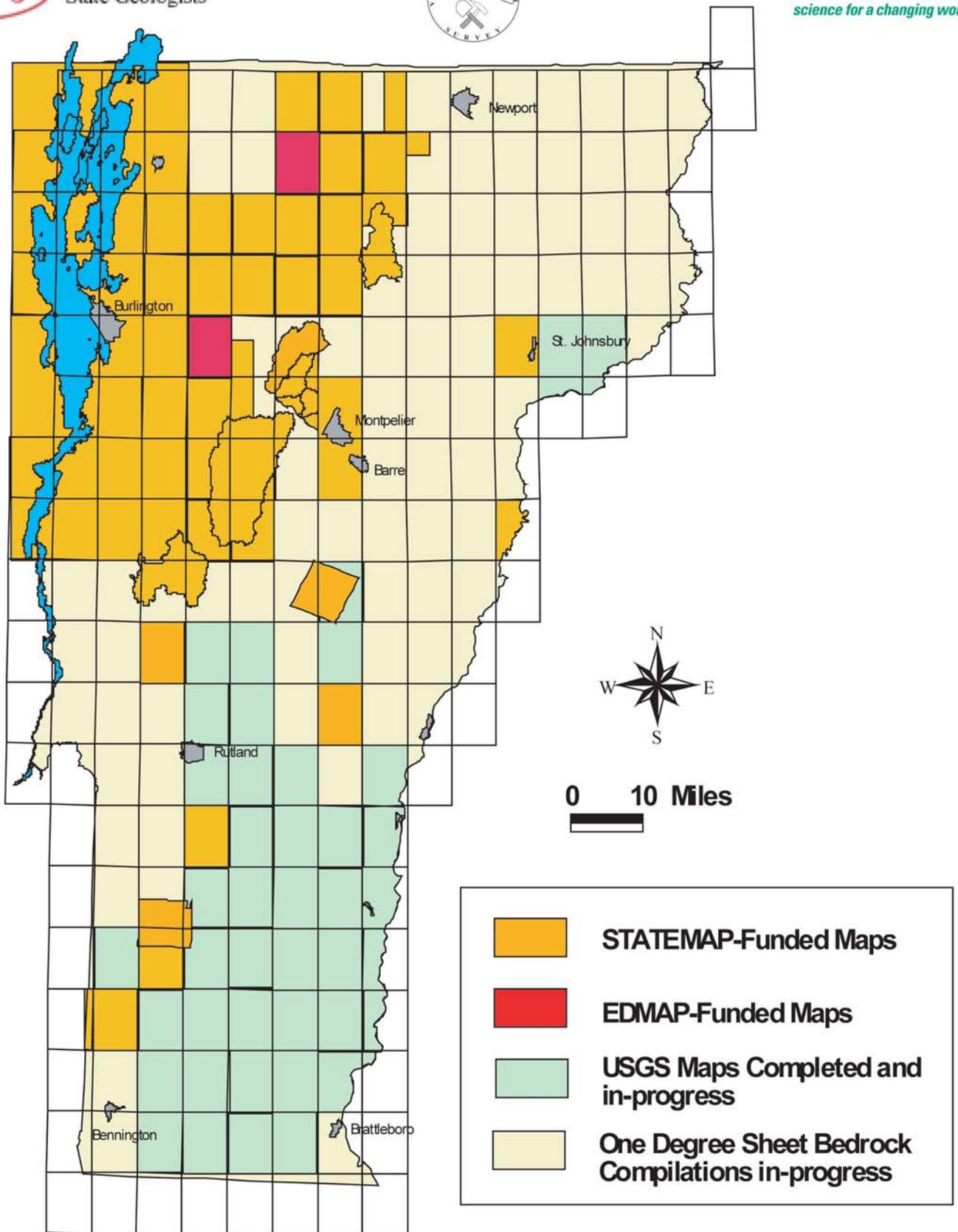




Association of American
State Geologists



Contact Information:

Vermont Geological Survey, Dept. of Environmental Conservation
 Director: Laurence R. Becker (802/241-3496; laurence.becker@anr.state.vt.us)
<http://www.anr.state.vt.us/dec/geo/vgs.htm>

U.S.G.S. Geologic Mapping Program Office
 Program Coordinator: Peter T. Lyttle (703/648-6943)
<http://negmp.usgs.gov>

Federal Fiscal Year	Vermont Project Title - Scale 1:24,000 unless otherwise indicated	State Dollars	Federal Dollars	Total Project Dollars
94-99	Bedrock and Surficial Maps and Digitization – 10 Quadrangles; 1:100000 scale Compilation of Northern Vermont; Digitization of Lake Champlain North and South and USGS Mapped Quadrangles	\$313,850	\$199,479	\$513,329
00	Surficial, Hazard, and Aquifer Maps - 2 Quadrangles and Great Brook Watershed	\$70,820	\$70,210	\$141,030
01	Surficial Map - Third Branch of the White River Bedrock Map - Colchester Quadrangle; Digitization – 3 Quadrangles	\$132,034	\$117,790	\$249,824
02	Surficial & Hazard Maps - Mad River Watershed; Bedrock & Hazard Map - Montpelier Quadrangle	\$104,430	\$104,430	\$208,860
03	Surficial, Aquifer Recharge, and Hazard Maps – Middlebury & Wild Branch Watersheds, & Manchester Quadrangle; Bedrock Map - Hinesburg Quadrangle	\$81,875	\$81,875	\$163,750
04	Surficial, Bedrock and Aquifer Maps – S. Worcester Mtns. Watershed and Wallingford Quadrangle	\$79,099	\$79,099	\$158,198
05	Bedrock, Surficial, and Aquifer Maps – West-Central Worcester Mtns., Brandon Town, and Woodstock Town	\$80,319	\$80,319	\$160,638
06	Bedrock & Surficial Maps - 4 towns (starts June 2006)	\$90,021	\$90,021	\$180,042
TOTAL		\$952,448	\$823,223	\$1,775,671

The Vermont Geological Survey (VGS - a Division of the Vermont Department of Environmental Conservation) conducts surveys and research of the geology, mineral resources, and topography of the State. VGS provides aid and advice to Vermonters. Geologic maps provide the framework for addressing environmental and resource issues. To match state resources, STATEMAP is a valuable cooperative program that expands the effectiveness of the VGS. Current emphasis is on: Mapping the surficial geology on a watershed basis and application of this information to determine the potential for geologic hazards, groundwater resources, infrastructure project siting, ecosystem analysis, highway materials, etc.; Preparation of a new State bedrock geologic map as a cooperative venture with USGS and UVM; and the integration of the bedrock, surficial, and fluvial geomorphological data to produce maps and reports that display the nature of physical and chemical geologic hazards (landslides, erosion, earthquakes, and radionuclides) in Vermont. The VGS provides advice concerning the development and working of rock and mineral deposits suitable for building, road making and economic purposes, and review of projects as they relate to Act 250, Vermont's Land Use and Development Law.

Statement of Outcome

Surficial geologic mapping and groundwater resource derivative maps for Manchester, VT (DeSimone, 2004) led to a funded special project to determine how water may be contributed to the Town wells from the far side of the Battenkill River. The maps were further employed in the review of a proposed development where the relationship between depth to groundwater and a stormwater retention basin was at issue. Static levels from located water wells combined with surficial geologic mapping gave a picture of the water table. Comments to regulators and the Town incorporated lessons learned from the groundwater level monitoring study. Both these science studies relating to groundwater protection issues highlight the importance of understanding the groundwater resource through geologic mapping.

March 2006