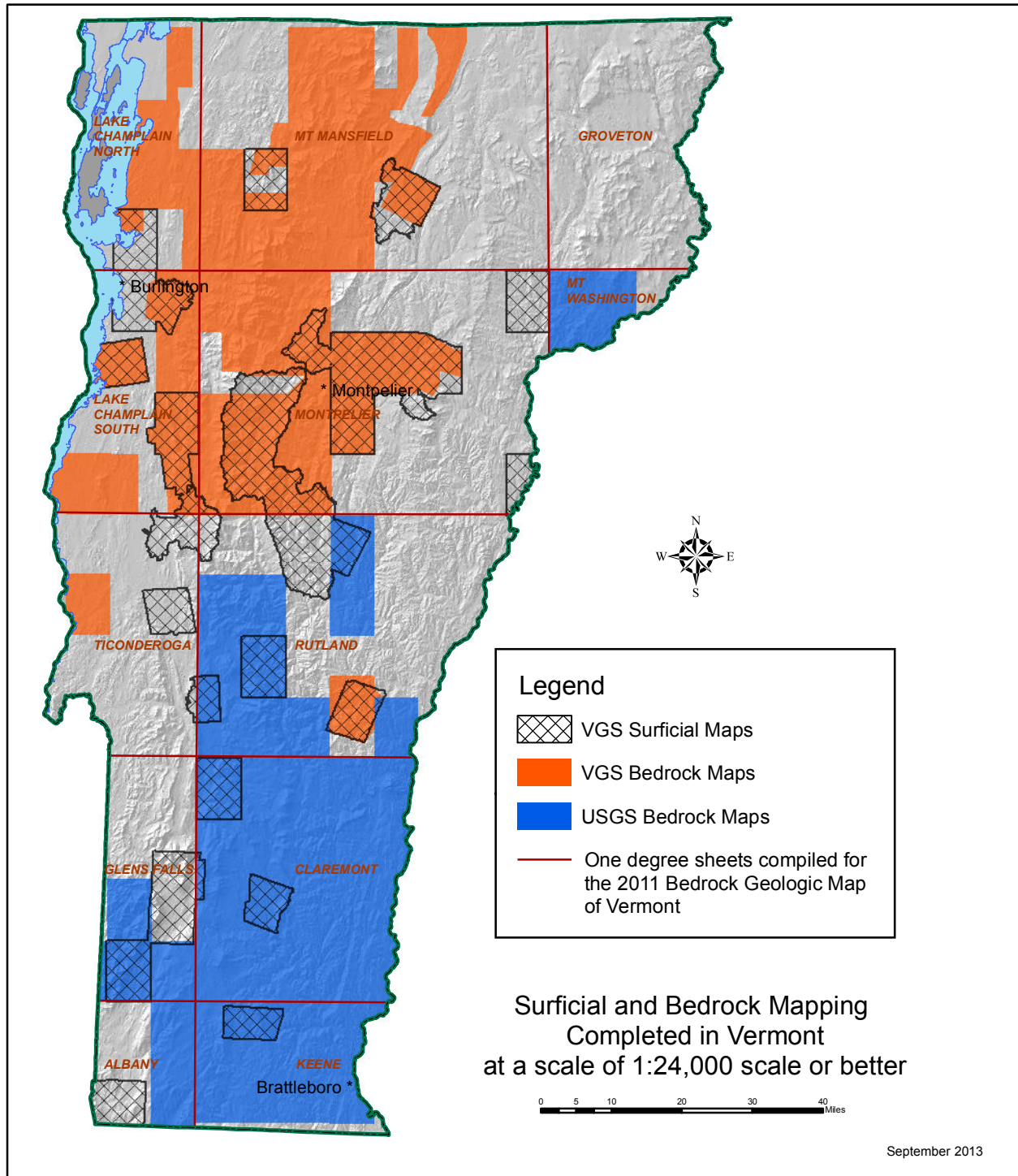


National Cooperative Geologic Mapping Program STATEMAP Component



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Federal Fiscal Year	Vermont Project Title - Scale 1:24,000	State Dollars	Federal Dollars	Total Project Dollars
2008	Bedrock & Surficial Maps – Towns of Charlotte and Rutland	\$81,395	\$81,395	\$162,790
2009	Surficial & Bedrock Maps –Towns of Randolph and Craftsbury	\$79,035	\$79,035	\$158,070
2010	Surficial& Bedrock Maps – Plainfield Quadrangle Surficial Map - Dover Town	\$84,680	\$84,680	\$169,360
2011	Surficial Map - Pico Peak Quadrangle Bedrock Map – Essex Junction Quadrangle Digital legacy data – NW VT & Northfield Quad	\$81,396	\$81,396	\$162,792
2012	Surficial & Bedrock Maps of the Bristol Quadrangle	\$70,223	\$70,223	\$140,446

As a Division in the Department of Environmental Conservation, the Vermont Geological Survey (VGS) is guided by the mission to protect human health and safety. To match state resources, STATEMAP is a valuable cooperative program. The VGS-USGS joint project to produce the 2011 Bedrock Geologic Map of Vermont drew upon the 1:24,000 scale maps funded through STATEMAP and COGEOGMAP. The VGS is currently focused on public service mapping - bringing our science to bear on solutions to Vermont’s environmental problems and public health issues. Bedrock and surficial maps have been used to address such issues as radioactivity and arsenic in groundwater, groundwater recharge potential and to mitigate landslide hazards. The VGS seeks to involve communities at a grassroots level and address issues specific to town and state needs. Maps, presentations from professional meetings, and other publications are posted on the VGS web site for easy access by Vermont communities.

Map Uses: Surficial geologic map data for the Burlington and Colchester, VT 7.5 minute Quadrangles were integral to development of a Seismic Amplification and Liquefaction Map for the Burlington and Colchester area. The project, funded through FEMA’s Earthquake Hazard Reduction State Assistance Program, used the geologic maps in conjunction with shear wave velocity measurements and analysis of borings as the scientific underpinning for the hazard maps. The outcome is building public safety for critical facilities by supporting decisions to mitigate for the risk from seismic events where surficial geologic materials have the potential to enhance shaking. The outreach plan is to hold a public meeting for critical facility managers to present the implications of the hazard map and follow with FEMA 74 training - Earthquake Hazard Mitigation for Nonstructural Elements.

Recently released open file reports:

VG13-2: Kim, J., Weber, E., and Klepeis, K., 2013, Bedrock Geologic Map of the Bristol Quadrangle.

VG13-2: Springston, G. and Kim, J., 2013, Surficial Geologic Map of the Bristol Quadrangle, Vermont.

VG12-1: Wright, S., 2012, Surficial Geologic Map of the Pico Peak, Vermont Quadrangle.

VG12-3: Gale, M., Kim, J., and Ruksznis, A., 2012, Bedrock Geologic Map of the Essex Junction, Vermont 7.5 Minute Quadrangle.

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