

Groundwater Resource Maps Presented to the Town of Dorset

Towns in Vermont are requesting maps that identify groundwater resources to provide a base for planning and protection. For long-term planning, characterization of the resource is a basic tool to support sound water supply and protection decisions for wise use, growth, and sustainability that encompasses both quantity and quality. Groundwater is both an economic resource for health and well being and as well as a precious one that requires protection.

A federally funded program with town partners that focuses on the geology – the vessel that holds the resource – and employs existing located water wells is underway. Thick and extensive saturated sand and gravel in the overburden and open and interconnected fractures in bedrock are the targets for identifying potential higher yield. A Town's glacial overburden and bedrock geology is examined. In combination with the subsurface information that includes such parameters as yield, depth, nature of the overburden and bedrock, the areas of potential higher and lower yield can be shown with sufficient information. Overburden thickness maps and townwide groundwater flow directions are developed. Analysis of the bedrock aquifer focuses on rock type, yield, and other well parameters. The geologic map of surface deposits also serves as a source for percolation rates, soils information, and land use capability for planning purposes.

On October 14, the Vermont Geological Survey (Division of Geology and Mineral Resources) within DEC presented preliminary groundwater resource findings to the Town of Dorset. Dorset is also noted for abundant spring resources and twenty five spring locations were visited. These springs were located with GPS and the geology was mapped within the vicinity of the springs especially for the 13 higher and moderate flow discharges.

To view another town mapping project:

<http://www.anr.state.vt.us/dec/geo/WillistonWaterPoster/WillistonWater.htm>