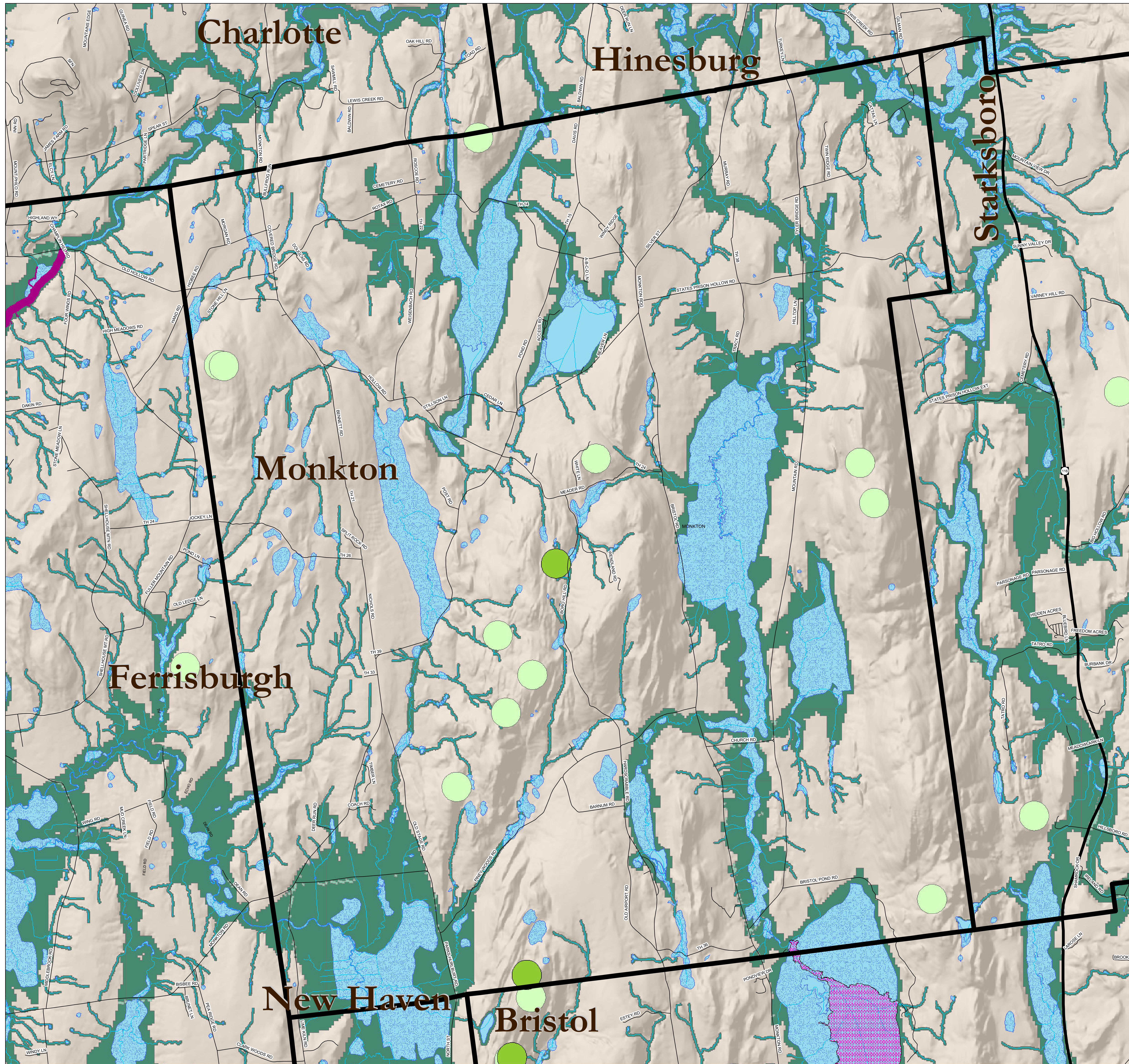


# MAP 5: WATER

# MONKTON, VT



**Town Boundary**

**Roads**

- Primary
- Secondary

**Representative Lakes**

**Exemplary Surface Waters**

**Vernal Pools**

- Unconfirmed Vernal Pools

**Rivers & Streams**

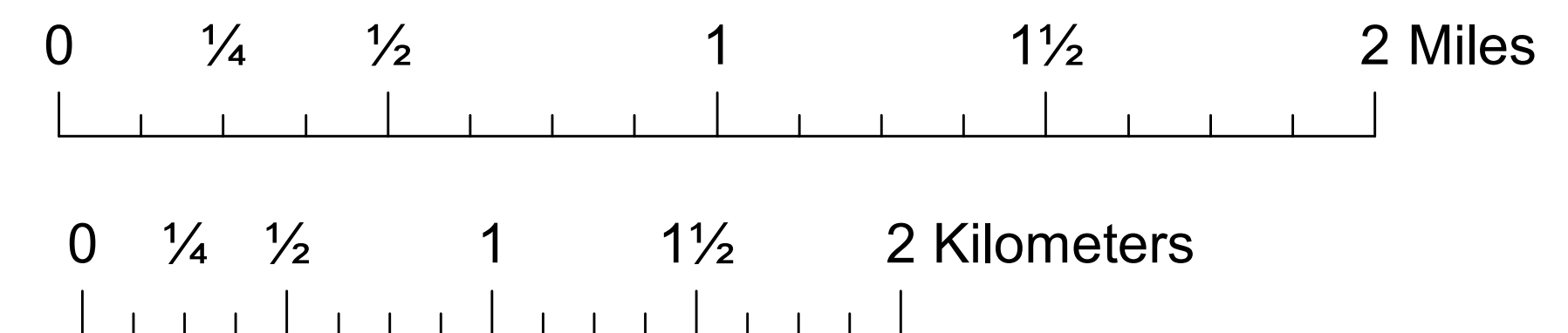
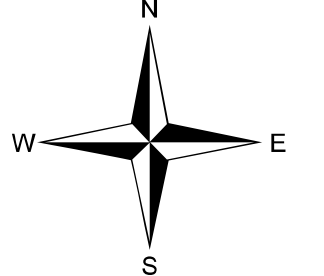
**Lakes & Ponds**

**Wetlands**

**Priority Surface Waters and Riparian Areas**

**Highest Priority Surface Waters and Riparian Areas**

**Data Source:**  
 Vermont Center for Geographic Information  
 Vermont State Plane Projection  
 NAD1983 Datum  
 Map by Monica Przyperhart  
 December 2017



Water is an important resource for both wildlife and human communities. While not particularly scarce in the Northeast, water-based ecosystems can be both highly valued and highly vulnerable. With the exception of confirmed vernal pools, the information on this map is not intended to be accurate at a fine scale but rather to provide an overall picture of where water appears on the landscape. Because waterways are dynamic by nature, their exact boundaries or extent can be expected to change, both seasonally and over time.

**Riparian Areas:** The Riparian Areas dataset builds on the centerlines depicted on the "Rivers and Streams" layer to estimate a more accurate width for each water body; a buffer is then extended around every water body to capture the floodplain. These widths and buffers are based on a combination of land type association data and stream order. This model was created at the state level; there is no way to depict at this scale the specific area that functions as important habitat or protects water quality. Local factors play a large role, such as steepness of slope and the quality of surrounding habitat.

**Wetlands:** This map layer uses the most comprehensive source of information on wetlands available: the National Wetlands Inventory (NWI). It was created to provide a broad-scale overview of where wetlands exist on the landscape, based on aerial photography. Wetlands that are hard to see on aerial photos—such as those that are forested—may therefore not show up.

**Vernal Pools:** The data from this layer were collected through the Vermont Vernal Pool Project, a statewide effort to map the locations of vernal pools. "Unconfirmed" vernal pools have been mapped purely using aerial photographs. Other pools have been visited and enough data has been collected to say for certain that these pools exist and are used by wildlife. The locations of confirmed pools are therefore accurate to a fine scale and can be used down to a parcel level.

**Representative Lakes:** To create this dataset, lakes and ponds in Vermont were classified into 20 types, based on alkalinity (the acidity of the water) and trophic status (referring to the productivity of the lake, generally related to the concentration of nutrients such as nitrogen and phosphorus). High quality examples of lakes and ponds of each type were then selected based on condition criteria, including naturalness of the outlet, water quality, milfoil abundance, degree of acid impairment, and lack of seasonal drawdown.

**Exemplary Surface Waters:** The Vermont Fish and Wildlife Department and Vermont Department of Environmental Conservation each maintain a database on the location of fish species found in Vermont waters. Biologists and ecologists from the two departments combined their databases and together selected the lakes, ponds, rivers, and streams with exceptionally high-quality habitat, rare groups of species, or particularly high biodiversity. Selections were based almost entirely on fish data, since statewide datasets of other biotic factors are lacking.