Recharge Potential to Shallow Aquifers, Rutland, Vermont

Legend

Recharge Potential

- I - Highest
- II - High
- III - Moderate
- IV - Low
- V - Lowest
- Shallow Aquifer

Explanation

Type I = thick deposits of ice contact sediment; primarily kame and kame terrace.

Type II = thinner ice contact deposits, fluvial terraces, and alluvium mantling the valley floor.

Type III = deposits of ground moraine, sporadic ice contact deposits on the valley walls, and alluvial fans.

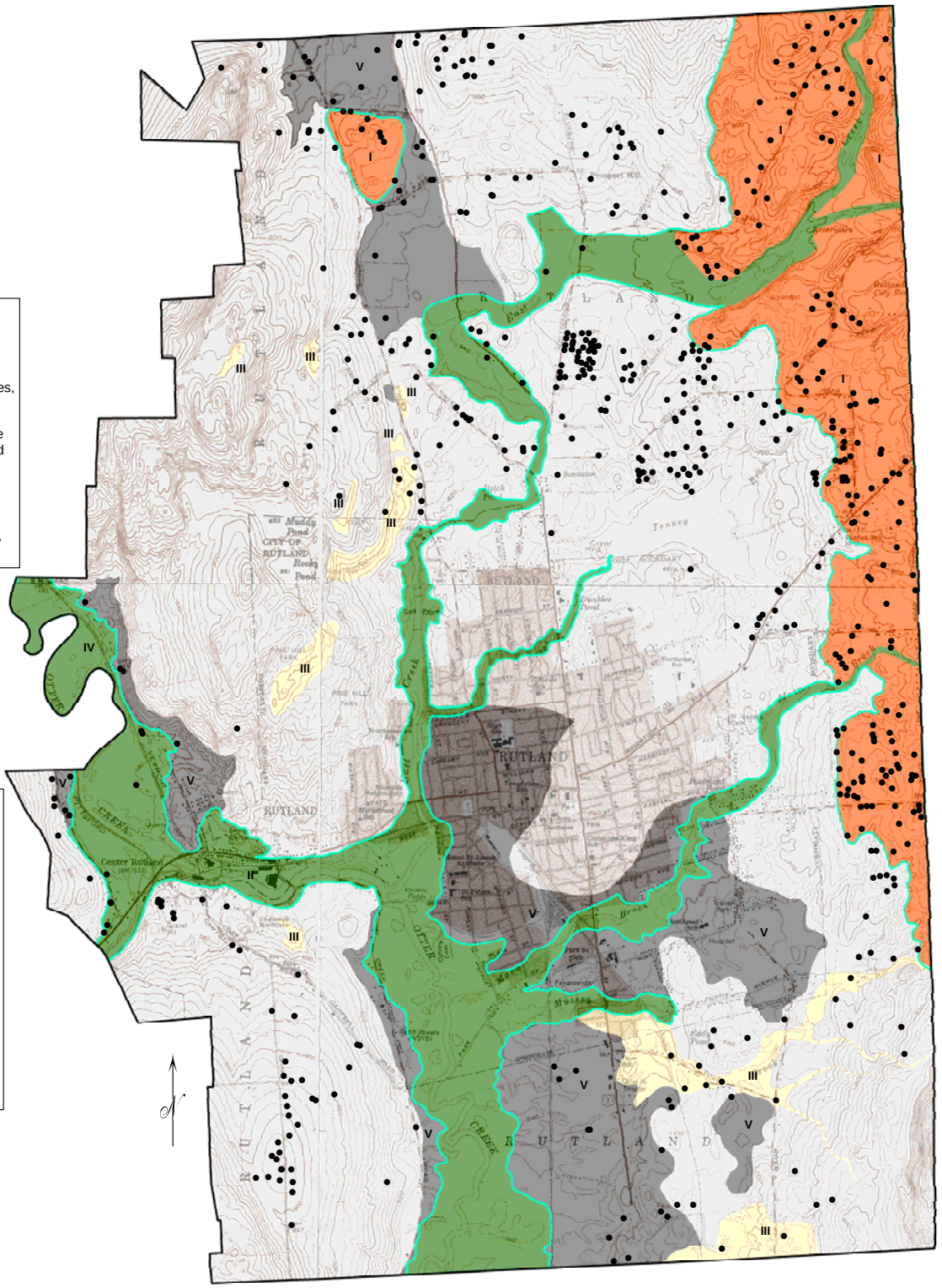
Type IV = areas dominated by wetlands and surface waters.

Type V = areas covered by glacial till and silty/clay lacustrine sediment.

Explanation

Regions of unconsolidated sediment with high porosity and permeability, typically some mixture of sands and gravels, were identified as areas capable of supporting an unconfined shallow aquifer. These aquifers experience recharge through infiltration following precipitation events, melting snow, and losing streams reaches.

These areas were ranked based on their potential for infiltration after looking at well log data, surficial geology and geomorphic position. Those areas with the thickest and most permeable deposits were given the highest ranking (e.g. – extensive ice contact sediments) and those areas covered by thinner less permeable deposits were given a lower ranking (e.g. – thin till and clay-rich lacustrine sediments).



Map Scale = 1:24,000

0 0.15 0.3 0.6 0.9 1.2 Miles

0 0.5 1 Kilometers