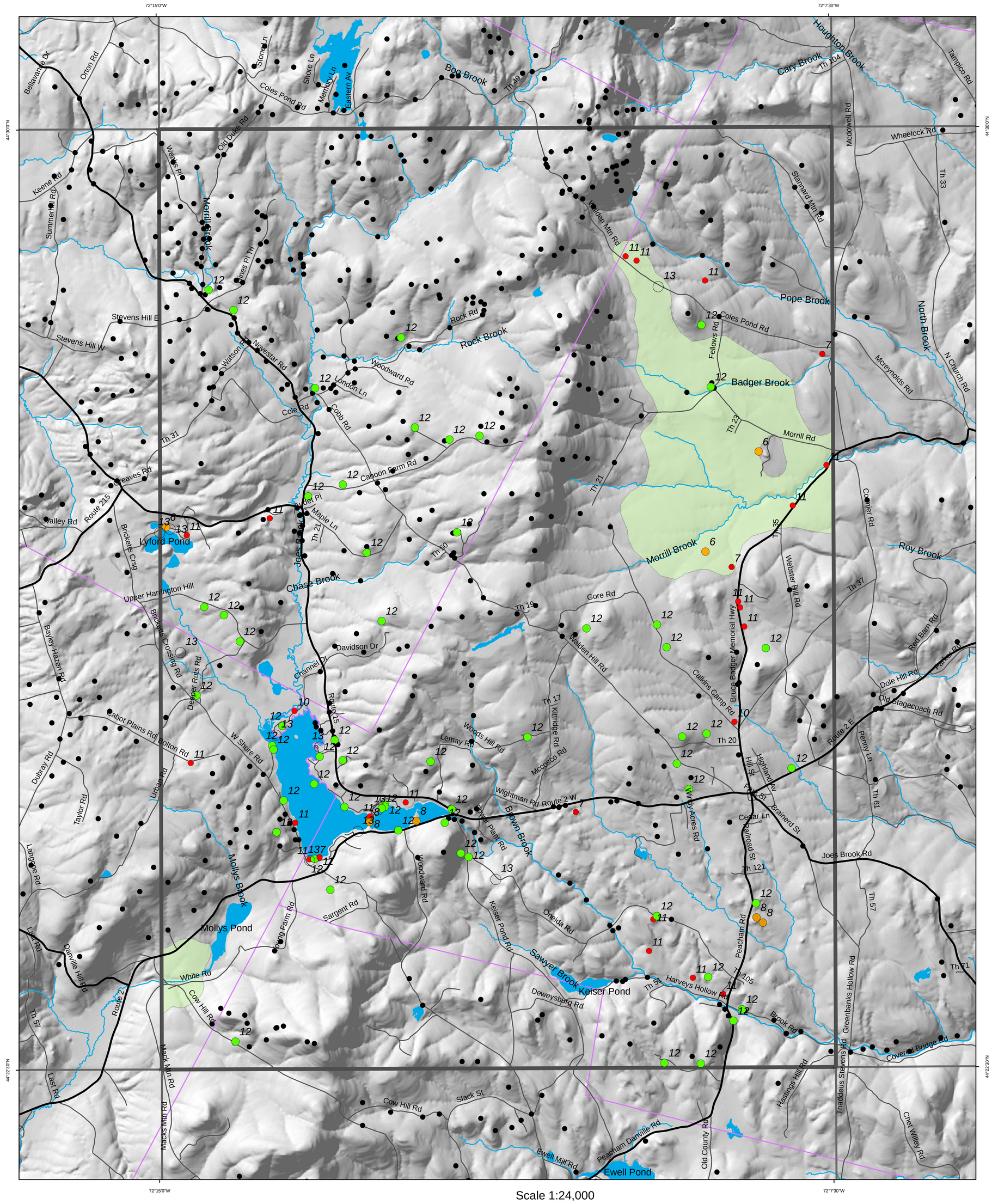


Scale 1:24,000

Miles
0 1 2

Kilometers
0 1 2 3 4

Potential Favorability for Recharge of Groundwater to Bedrock, Joes Pond Quadrangle, Vermont

by

George E. Springston

2018

VERMONT
AGENCY OF NATURAL RESOURCES
Vermont Geological Survey

- High
- Moderate
- Moderate
- Low
- Low
- Low
- Unknown
- Unknown
- Thick Till
- Bedrock Outcrops
- Major Roads
- Minor Roads
- StudyArea
- Quadrangle Boundaries
- Streams
- Town Boundaries
- Water Bodies

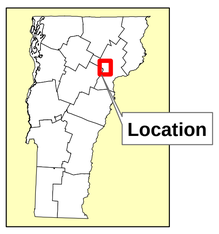
EXPLANATION

This plate contains information on the favorability for recharge to bedrock aquifers. It is based on an interpretation of the hydrogeologic classification of water well logs shown on Plate 7. Hydrogeologic Classes 0, 1, 3 through 5, and 12 are interpreted as having a high bedrock aquifer recharge potential due to the presence of either thick coarse-grained deposits at the base or else the presence of thin surficial deposits. These are shown as green dots. Classes 6 and 8 are interpreted to have a moderate potential. These are shown as orange dots. Classes 2, 7, and 9 through 11 are interpreted to have a low potential for bedrock aquifer recharge as there is thick fine-grained material at the base of the surficial deposits. These are shown as small red dots.

High recharge potential is suggested for 57 of the wells in the study area due to the presence of a thin cover of till over bedrock. Eight wells rank as moderate, and 26 rank as having low recharge potential.

Areas of thick till are shown on the southwestern and northeastern portions of the study area. The areas of thick till shown on the map may be areas of low bedrock aquifer recharge potential, but these areas contain few wells. There are none within the southwestern polygon and of the 9 wells shown in the northeastern thick till polygon, only 5 rank as having low recharge potential.

Actual groundwater recharge will depend heavily on the detailed stratigraphy of the surficial deposits, as well as the bedrock units present and the distribution, length, orientation, spacing, and openness of fractures in the bedrock. The bedrock characteristics are not considered here.



Magnetic declination
14.5 degrees west, 2017

Base map from U.S. Geological Survey.
Coordinate System: Vermont State Plane, meters, NAD 83.
Geographic coordinates shown at topo corners are in NAD 83.

Digital cartography by George Springston, December 31, 2018.
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