

# Strong Quadrangle, Maine

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Maine Department of Environmental Protection.



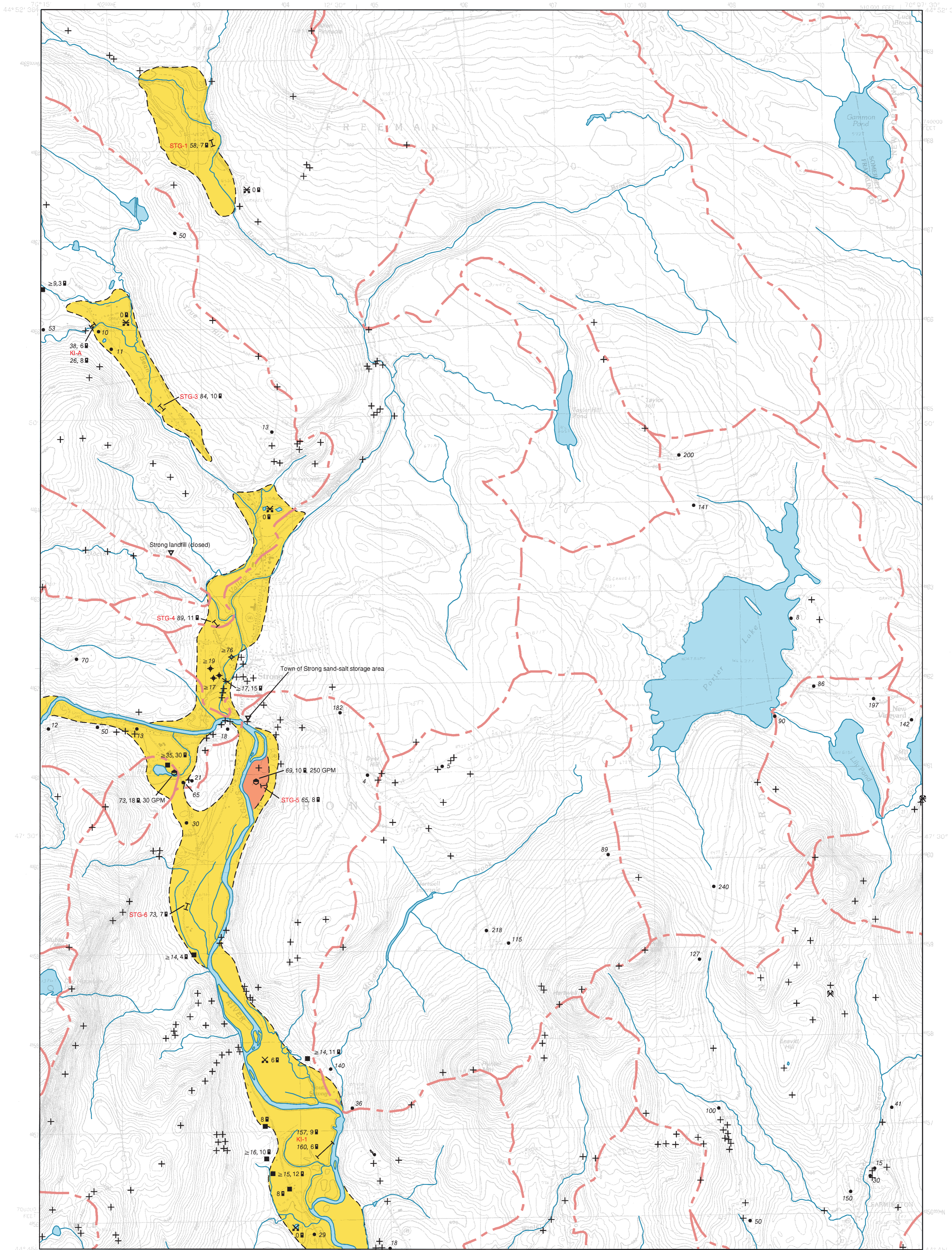
## Maine Geological Survey

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Home page: http://www.maine.gov/doc/nrimc/nrimc.htm

## Open-File No. 03-100 2003

This map supersedes  
Open-File Map 00-32.

# Significant Sand and Gravel Aquifers



Aquifer boundaries modified in 2003 based on field work by C. D. Neil, 2003.  
Aquifer boundaries modified from: Tepper, D. H., and Lancot, E. M., 1985,  
Significant Sand and Gravel Aquifers Map 32. Maine Geological Survey,  
Open-File Map 85-82f, scale 1:50,000.

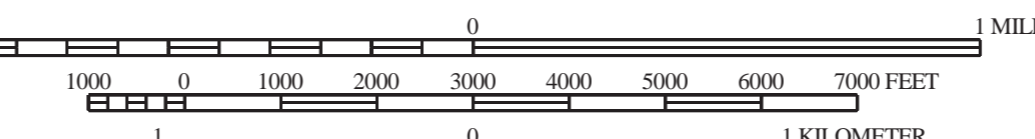
Well inventory data collected by Maine Geological Survey field assistants  
during the 1982 field season.

Drainage basin boundaries compiled by U.S. Geological Survey, Water  
Resources Division, Augusta, Maine, with funding from the Maine Low-Level  
Radioactive Waste Authority.



Quadrangle Location

SCALE 1 : 24,000



CONTOUR INTERVAL 20 FEET



Topographic base from U.S. Geological Survey Strong  
quadrangle, scale 1:24,000 using standard U.S. Geological  
Survey topographic map symbols.

The use of industry, firm, or local government names on  
this map is for location purposes only and does not im-  
pugnate responsibility for any present or potential effects on  
the natural resources.

### SIGNIFICANT SAND AND GRAVEL AQUIFERS (yields greater than 10 gallons per minute)

Approximate boundary of surficial deposits with significant saturated  
thickness where potential ground-water yield is moderate to excellent.



Surficial deposits with good to excellent potential ground-water yield;  
yields generally greater than 50 gallons per minute to a property constructed  
well. Deposits consist primarily of glacial sand and gravel, but can include  
areas of sandy till and alluvium; yield zones are based on subsurface data  
where available, and may vary from mapped extent in areas where data are  
unavailable.



Surficial deposits with moderate to good potential ground-water yield;  
yields generally greater than 10 gallons per minute to a property constructed  
well. Deposits consist primarily of glacial sand and gravel, but can include  
areas of sandy till and alluvium; yields may exceed 50 gallons per minute in  
deposits hydraulically connected with surface-water bodies, or in extensive  
deposits where subsurface data are available.

### SURFICIAL DEPOSITS WITH LESS FAVORABLE AQUIFER CHARACTERISTICS (yields less than 10 gallons per minute)



Areas with moderate to low or no potential ground-water yield (includes  
areas underlain by till, marine deposits, eolian deposits, alluvium, swamps,  
thin glacial sand and gravel deposits, or bedrock); yields in surficial  
deposits generally less than 10 gallons per minute to a property constructed  
well.

### SEISMIC-LINE INFORMATION

Profiles for 12-channel seismic lines are shown in Figure 11 of Open-File Report 85-  
82a (Tepper and others, 1985). Length of 12-channel seismic lines as shown on the  
map is to scale. All single-channel lines ranged from 80 to 300 feet long and are not  
shown to scale.

53 Depth to bedrock, in feet below land surface.

≥53 Depth to bedrock exceeds depth shown (based on calculations).

12 Depth to water level, in feet below land surface.

MAP-7 137, 23 Twelve-channel seismic line, with depth to bedrock and depth to  
water shown at the midpoint of the line, in feet below land surface.

MAP-E 69, 12 Single-channel seismic line, with depth to bedrock and depth to  
water shown at each end of the line, in feet below land surface.  
Unless otherwise indicated, data shown above the line-identifier  
box refers to the northern end of the seismic line.

The 3-letter identifier for a line is an abbreviation for the topographic quadrangle. If  
the 3-letter identifier for the line is followed by a number (ex: MAP - 7, MAP - 4),  
the line is a 12-channel line. If the identifier is followed by a letter (ex: MAP - E,  
MAP - P), the line is a single-channel line. Single-channel seismic interpretations by  
D. H. Tepper. Twelve-channel seismic interpretations by D. H. Tepper and C. D.  
Neil.

### GEOLOGIC AND WELL INFORMATION

50 Depth to bedrock, in feet below land surface

≥13 Penetration depth of boring; ≥ symbol refers to minimum depth to bedrock based  
on boring depth or refusal

6 Depth to water level in feet below land surface (observed in well, spring, test  
boring, pit, or seismic line)

X Gravel pit (overburden thickness noted in feet, e.g. 5-12')

Q Quarry

4 GPM Yield (flow) of well or spring in gallons per minute (GPM)

Spring, with general direction of flow

Drilled overburden well

Dug well

Observation well (project well if labeled; nonproject well if unlabeled)

Test boring (project boring if labeled; nonproject boring if unlabeled)

Driven point

Test pit

Drilled bedrock well

Potential point source of ground-water contamination

Bedrock outcrop

Surface-water drainage-basin boundary; surface-water divides generally cor-  
respond to ground-water divides. Horizontal direction of ground-water flow  
generally is away from divides and toward surface-water bodies.

### OTHER SOURCES OF INFORMATION

- Tepper, D. H., Williams, J. S., Tolman, A. L., and Prescott, G. C., Jr., 1985, Hydrogeology and water quality of significant sand and gravel aquifers in parts of Androscoggin, Cumberland, Franklin, Kennebec, Lincoln, Oxford, Sagadahoc, and Somerset Counties, Maine: Maine Geological Survey, Open-File Report 85-82a, 106 p.
- Neil, C. D., and Locke, D. B., 2003, Surficial materials of the Strong quadrangle, Maine: Maine Geological Survey, Open-File Map 03-63.
- Neil, C. D., 2003, Surficial geology of the Strong 7.5' quadrangle, Maine: Maine Geological Survey, Open-File Map 03-62.

- Caswell, W. B., 1987, Ground water handbook for the state of Maine, Second Edition: Maine Geological Survey, Bulletin 39, 135 p.
- Thompson, W. B., 1979, Surficial geology handbook for coastal Maine: Maine Geological Survey, 68 p. (out of print)
- Thompson, W. B., and Borns, H. W., Jr., 1985, Surficial geologic map of Maine: Maine Geological Survey, scale 1:500,000.