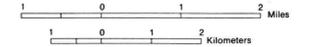


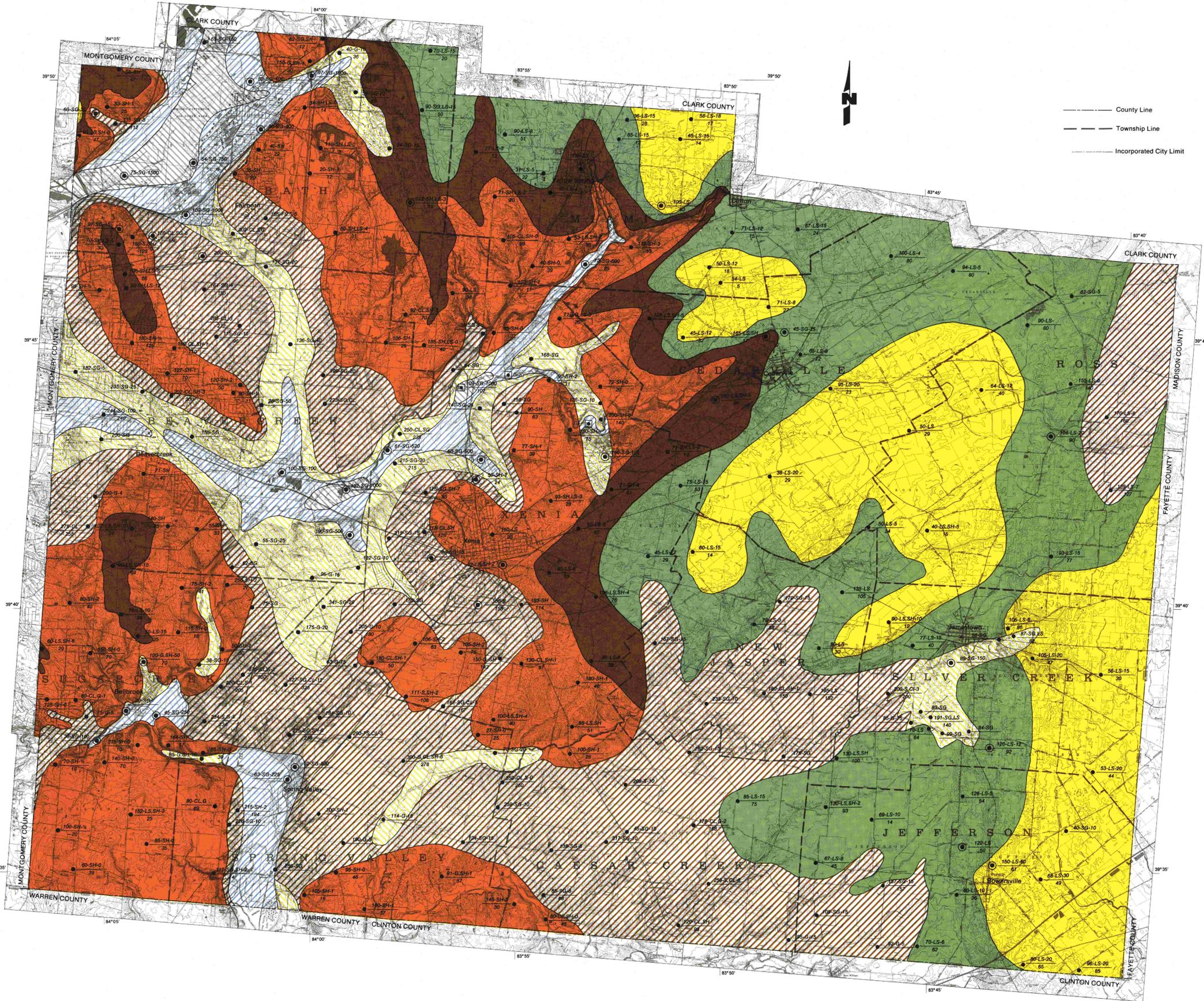
Ground Water Resources of GREENE COUNTY

by
James J. Schmidt



CONTOUR INTERVAL 20 FEET

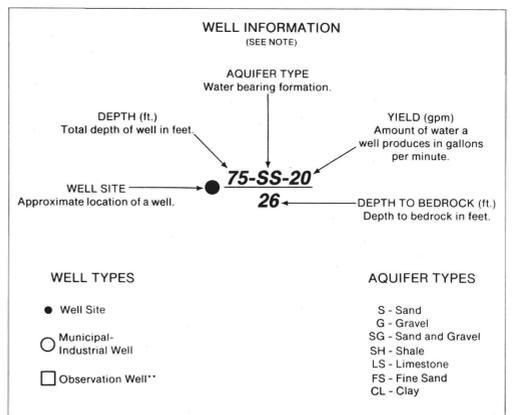
- County Line
- Township Line
- Incorporated City Limit



Well Yields

- AREAS IN WHICH YIELDS OF 500 TO 1,000 OR MORE GALLONS PER MINUTE MAY BE DEVELOPED.**
Best ground water areas in Greene County. Permeable sand and gravel deposits beneath the floodplain of the Little Miami and Mad Rivers. Properly constructed, large diameter drilled wells may yield industrial and municipal supplies at depths ranging from 55 to 135 feet.
- AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS PER MINUTE MAY BE DEVELOPED.**
Regionally extensive, thick, permeable deposits of sand and gravel at depths of about 80 feet. Exploratory test drilling may be necessary to locate coarse deposits at depths ranging from 30 to 190 feet.
- AREAS IN WHICH YIELDS OF AS MUCH AS 75 GALLONS PER MINUTE MAY BE DEVELOPED.**
Niagaran limestone beneath glacial drift. Wells range in depth from 38 to 150 feet, although average well depth is less than 75 feet deep.
Water-bearing deposits of sand, sand and gravel interbedded with thick layers of clayey till. Although glacial deposits may be as much as 235 feet thick, wells are often developed at depths of less than 125 feet.
- AREAS IN WHICH YIELDS OF 10 TO 20 GALLONS PER MINUTE MAY BE DEVELOPED.**
Relatively shallow basal Niagaran limestone aquifer yields as much as 15 gallons per minute at depths of less than 95 feet. Deeper drilling into the underlying non-water-bearing Ordovician shaly limestone is not advisable.
- AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED.**
Average yields for wells developed in basal Silurian limestone bedrock ranges from 3 to 6 gallons per minute. Drilling deeper than 135 feet is not advisable owing to the presence of the non-water-bearing Ordovician bedrock. Cisterns and/or storage may be necessary for peak periods of domestic water demand.
Relatively thick, unconsolidated glacial deposits of silty sand, gravel, and clayey till. Water-bearing deposits may be encountered at depths ranging from 35 to more than 300 feet. Cautious drilling advisable to attempt the development of relatively meager supplies, although potential yields greater than 100 gallons per minute may be developed from properly drilled and screened wells.
- AREAS IN WHICH YIELDS OF LESS THAN 3 GALLONS PER MINUTE MAY BE DEVELOPED.**
Clayey till less than 70 feet thick and overlying the non-water-bearing Ordovician shaly limestone. However, if water is present in the Ordovician strata, it usually occurs in the upper few feet where the rock is weathered and broken. Deep wells are not recommended, and daily water supply may require development of cisterns and/or storage. Occasional lenses of sand and gravel will supply small yields.

Well Site Symbols



Note

The ground water characteristics have been mapped regionally, based upon interpretations of water well records and the area's geology and hydrology. Well sites mapped were selected as typical for the areas shown.
Information regarding specific sites may be obtained from the Division of Water.

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** Observation well sites indicate the location of wells used to collect ground water level information. These wells are part of the State observation well network. Hydrographs of the water levels recorded in these and other State observation wells can be obtained through ODNR-Division of Water.

