Ground Water Resources of CUYAHOGA COUNTY

by

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Well Yields

AREAS IN WHICH 300 OR MORE GALLONS PER MINUTE MAY BE DEVELOPED

Best ground water area in Cuyahoga County. Permeable sand and gravel deposits traversed by Mill Creek. Wells may yield as much as 1500 gallons per minute. Suitable for municipal and large industrial well field development.

AREAS IN WHICH 100 TO 300 GALLONS PER MINUTE MAY BE DEVELOPED

Good ground water areas. Permeable sand and gravel deposits interbedded with silt and clay lie in a buried valley. Yields of as much as 250 gallons per minute are available where sufficient coarse material is found. Exploratory drilling may be required to locate such deposits.

AREAS IN WHICH 25 TO 100 GALLONS PER MINUTE MAY BE DEVELOPED

Ground water obtained from buried valley deposits of sand and gravel beneath thick clay and silt. Wells encountering permeable deposits may yield as much as 100 gallons per minute. Adequate domestic and small subdivision supplies may be available from relatively shallow wells less than 100 feet in depth.

Ground water supplies developed from the Sharon Sandstone encountered at depths less than 75 feet beneath land surface. Wells will produce sustained yields of as much as 40 gallons per minute. Greater yields may be available for short periods of intermittent pumping.

AREAS IN WHICH 10 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED

Ground water obtained from buried valley sand and gravel deposits of limited thickness and extent. Wells developed in permeable deposits may yield from 10 to 25 gallons per minute. Wells not encountering those deposits must be drilled into the underlying bedrock.

Ground water from the Sharon Sandstone. Yields from 10 to 25 gallons per minute may be obtained at less than 50 feet; however, wells of 200 feet or more have been recorded.

Ground water developed in the Berea Sandstone of the Cuyahoga Group. Average well depth is less than 50 feet.

AREAS IN WHICH 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED

Ground water obtained from Cuyahoga Group or Chagrin, Ohio and Bedford Shales. The 3 to 10 gallon per minute aquifer may be encountered less than 30 feet below land surface.

Buried valleys contain 200 to 300 feet of fine sand, silt, and clay. Drilled wells yield meager supplies unless encountering thin, isolated sand and gravel lenses.

AREAS IN WHICH LESS THAN 3 GALLONS PER MINUTE MAY BE DEVELOPED

Impermeable deposits, basically clay overlaying shale or shaley sandstone, provide a very poor area for even minimal domestic supplies. Brackish water and dry wells are common. Storage is necessary to supply peak demands.

AREAS IN WHICH BRACKISH AND SALT WATER HAVE BEEN ENCOUNTERED

Well Site Symbols

WELL INFORMATION
(SEE NOTE)

AQUIFER TYPE
Water bearing formation.

DEPTH (ft.)
Total depth of well in feet.

YIELD (gpm)
Amount of water a well produces in gallons per minute.

WELL SITE
Approximate location of a well.

75-SS-20
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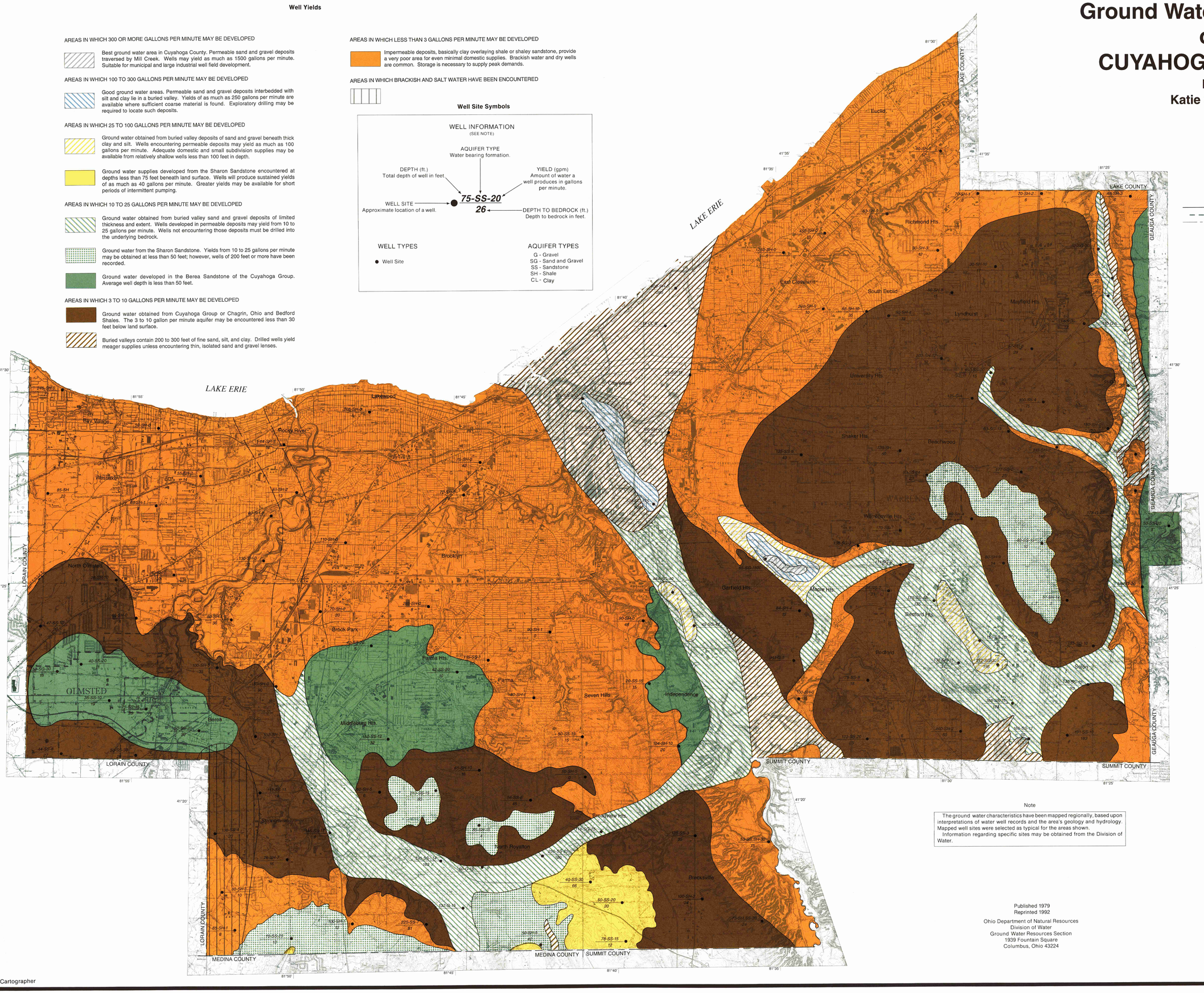
DEPTH TO BEDROCK (ft.)
Depth to bedrock in feet.

WELL TYPES
● Well Site

AQUIFER TYPES
G - Gravel
SG - Sand and Gravel
SS - Sandstone
SH - Shale
CL - Clay



Note

The ground water characteristics have been mapped regionally, based upon interpretations of water well records and the area's geology and hydrology. Mapped well sites were selected as typical for the areas shown.

Information regarding specific sites may be obtained from the Division of Water.

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