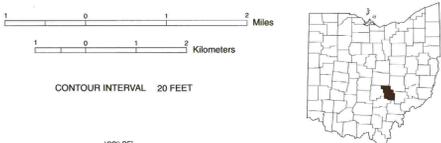


Ground Water Resources of PERRY COUNTY

by Paul N. Spahr



--- County Line
- - - Township Line
- - - - - Incorporated City Limit

Well Site Symbols

WELL INFORMATION
(SEE NOTE)

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

WELL SITE
Approximate well location

WELL TYPES
● Well Site
○ Municipal-Industrial Well

AQUIFER TYPE
Water-bearing formation

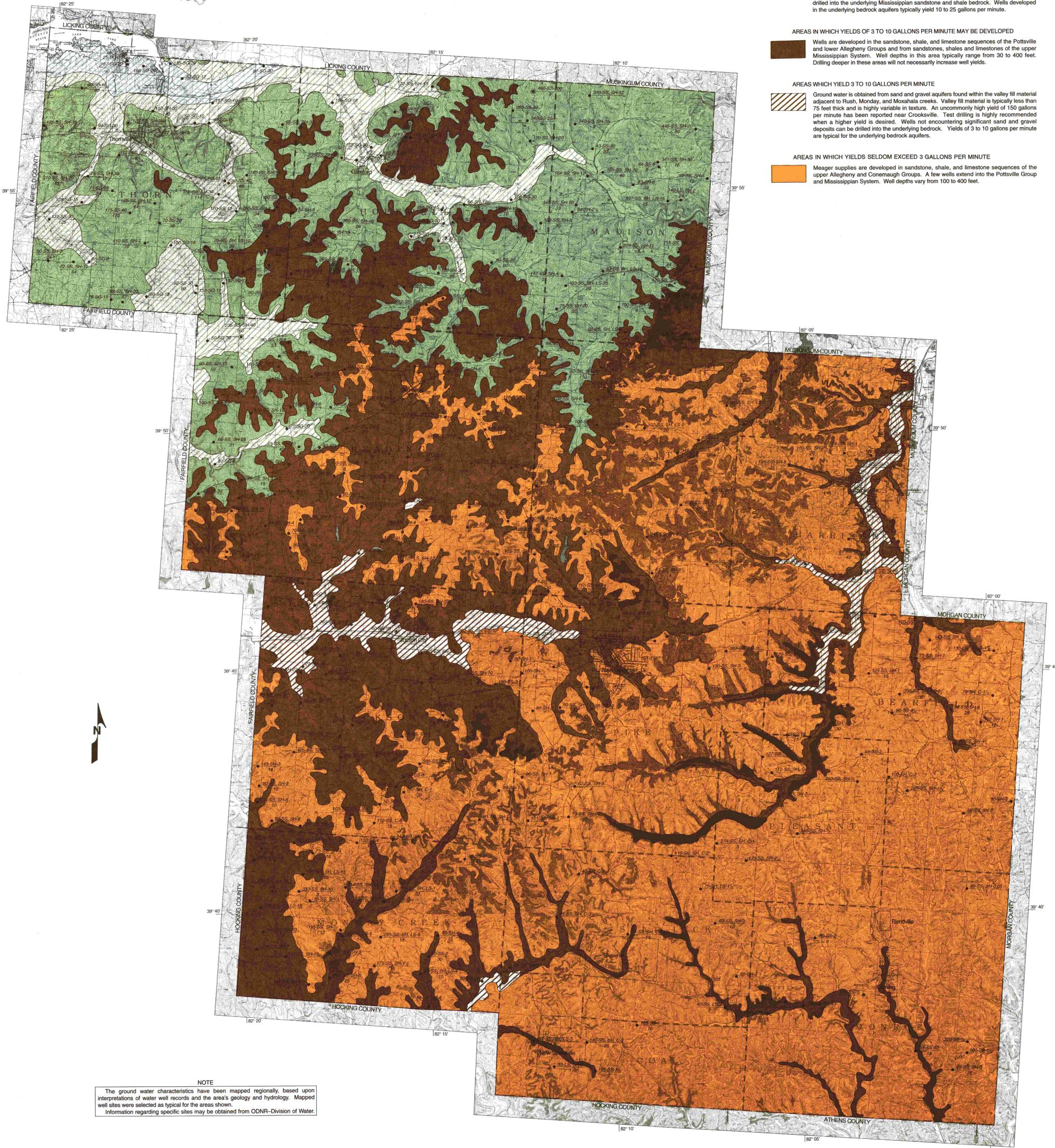
YIELD (gpm)
Amount of water a well produces in gallons per minute.

DEPTH TO BEDROCK (ft.)
Depth to bedrock in feet.

AQUIFER TYPES
SG - Sand & Gravel
SS - Sandstone
SH - Shale
C - Coal
LS - Limestone

Well Yields

- AREAS IN WHICH YIELDS UP TO 200 GALLONS PER MINUTE MAY BE DEVELOPED**
Ground water is obtained from sand and gravel aquifers of varying thicknesses that fill the deepest portion of the Buckeye Lake/Jonathon Creek buried valley aquifer system. The buried valley contains up to 270 feet of fill material. Test drilling is recommended when large yields are desired.
- AREAS IN WHICH YIELDS OF 10 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED**
Wells are developed in the sandstone, shale, and limestone sequences of the lower Pennsylvanian Pottsville Group and the upper Mississippian System. Well depths range from 30 to over 300 feet. Deeper wells are more common in the northeastern portion of the county (Hopewell and Madison Townships) where wells penetrate the overlying low-yielding Pennsylvanian aquifers to reach the deeper, more productive Mississippian zones. Uncommonly high yields of up to 285 gallons per minute have been obtained from a few wells that penetrate this system of rocks.
- AREAS IN WHICH YIELDS OF 10 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED**
Ground water is obtained from sand and gravel aquifers that are located within buried valleys in the north and northwestern portion of the county. Depth to bedrock varies from 50 to over 200 feet. Some wells in this area have reported yields up to 40 gallons per minute. Wells that do not encounter developable sand and gravel aquifers can be drilled into the underlying Mississippian sandstone and shale bedrock. Wells developed in the underlying bedrock aquifers typically yield 10 to 25 gallons per minute.
- AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED**
Wells are developed in the sandstone, shale, and limestone sequences of the Pottsville and lower Allegheny Groups and from sandstones, shales and limestones of the upper Mississippian System. Well depths in this area typically range from 30 to 400 feet. Drilling deeper in these areas will not necessarily increase well yields.
- AREAS WHICH YIELD 3 TO 10 GALLONS PER MINUTE**
Ground water is obtained from sand and gravel aquifers found within the valley fill material adjacent to Rush, Monday, and Moxahala creeks. Valley fill material is typically less than 75 feet thick and is highly variable in texture. An uncommonly high yield of 150 gallons per minute has been reported near Crooksville. Test drilling is highly recommended when a higher yield is desired. Wells not encountering significant sand and gravel deposits can be drilled into the underlying bedrock. Yields of 3 to 10 gallons per minute are typical for the underlying bedrock aquifers.
- AREAS IN WHICH YIELDS SELDOM EXCEED 3 GALLONS PER MINUTE**
Meager supplies are developed in sandstone, shale, and limestone sequences of the upper Allegheny and Conemaugh Groups. A few wells extend into the Pottsville Group and Mississippian System. Well depths vary from 100 to 400 feet.



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 ODNR-Division of Water.