

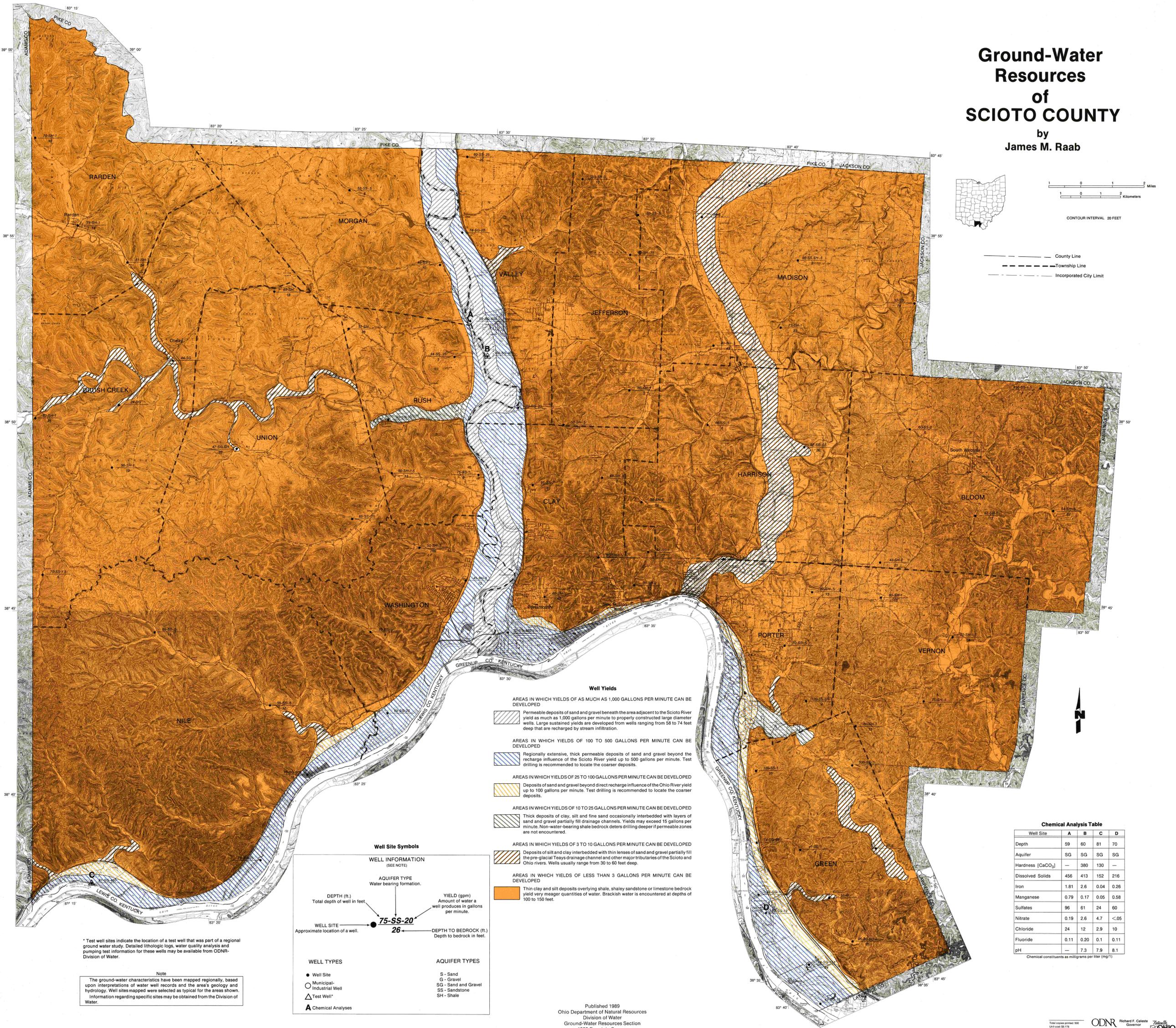
Ground-Water Resources of SCIOTO COUNTY

by James M. Raab



CONTOUR INTERVAL 20 FEET

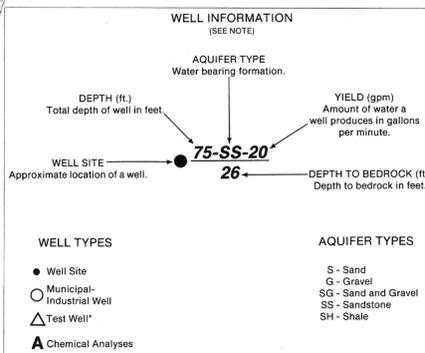
- County Line
- - - Township Line
- Incorporated City Limit



Well Yields

- AREAS IN WHICH YIELDS OF AS MUCH AS 1,000 GALLONS PER MINUTE CAN BE DEVELOPED**
 Permeable deposits of sand and gravel beneath the area adjacent to the Scioto River yield as much as 1,000 gallons per minute to properly constructed large diameter wells. Large sustained yields are developed from wells ranging from 50 to 74 feet deep that are recharged by stream infiltration.
- AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS PER MINUTE CAN BE DEVELOPED**
 Regionally extensive, thick permeable deposits of sand and gravel beyond the recharge influence of the Scioto River yield up to 500 gallons per minute. Test drilling is recommended to locate the coarser deposits.
- AREAS IN WHICH YIELDS OF 25 TO 100 GALLONS PER MINUTE CAN BE DEVELOPED**
 Deposits of sand and gravel beyond direct recharge influence of the Ohio River yield up to 100 gallons per minute. Test drilling is recommended to locate the coarser deposits.
- AREAS IN WHICH YIELDS OF 10 TO 25 GALLONS PER MINUTE CAN BE DEVELOPED**
 Thick deposits of clay, silt and fine sand occasionally interbedded with layers of sand and gravel partially fill drainage channels. Yields may exceed 15 gallons per minute. Non-water-bearing shale bedrock deters drilling deeper if permeable zones are not encountered.
- AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE CAN BE DEVELOPED**
 Deposits of silt and clay interbedded with thin lenses of sand and gravel partially fill the pre-glacial Teays drainage channel and other major tributaries of the Scioto and Ohio rivers. Wells usually range from 30 to 60 feet deep.
- AREAS IN WHICH YIELDS OF LESS THAN 3 GALLONS PER MINUTE CAN BE DEVELOPED**
 Thin clay and silt deposits overlying shale, shaly sandstone or limestone bedrock yield very meager quantities of water. Brackish water is encountered at depths of 100 to 150 feet.

Well Site Symbols



* Test well sites indicate the location of a test well that was part of a regional ground water study. Detailed lithologic logs, water quality analysis and pumping test information for these wells may be available from ODNR-Division of Water.

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.

Chemical Analysis Table

Well Site	A	B	C	D
Depth	59	60	81	70
Aquifer	SG	SG	SG	SG
Hardness [CaCO ₃]	—	380	130	—
Dissolved Solids	456	413	152	216
Iron	1.81	2.6	0.04	0.26
Manganese	0.79	0.17	0.05	0.58
Sulfates	96	61	24	60
Nitrate	0.19	2.6	4.7	<.05
Chloride	24	12	2.9	10
Fluoride	0.11	0.20	0.1	0.11
pH	—	7.3	7.9	8.1

Chemical constituents as milligrams per liter (mg/l)