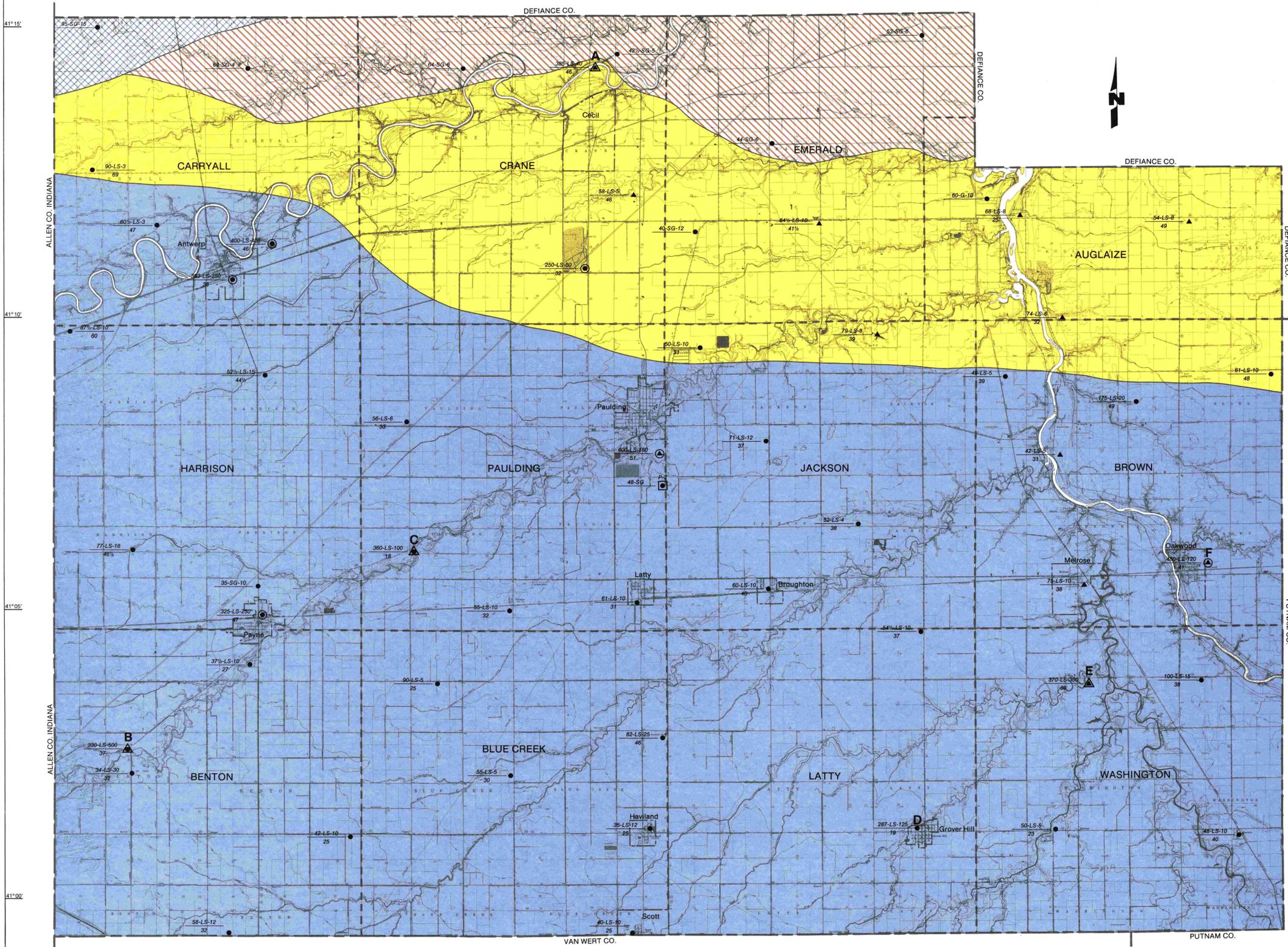


Ground-Water Resources of PAULDING COUNTY

by James M. Raab



- Well Yields**
- AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS PER MINUTE MAY BE DEVELOPED.**
 - Principal aquifer is the limestone bedrock. Yields up to 500 gallons per minute have been obtained at depths exceeding 300 feet. Farm and domestic supplies of about 10 to 15 gallons per minute are usually developed at depths of less than 90 feet. Shallower wells are often attempted to obtain sulfur-free water.
 - AREAS IN WHICH YIELDS OF 25 TO 100 GALLONS PER MINUTE MAY BE DEVELOPED.**
 - Limestone aquifer beneath 25 to 64 feet of glacial drift may yield as much as 90 gallons per minute. Some wells are developed in sand and gravel deposits to avoid hydrogen sulfide which is encountered in many limestone wells in the northern portion of the county. Wells developed at depths exceeding 235 feet may yield in excess of 50 gallons per minute, although hardness, high hydrogen sulfide and sulfate content may deter its use.
 - AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED.**
 - Thin lenses of sand and gravel beneath layers of fine sand and silty clay. Yields of as much as 10 gallons per minute may be obtainable at depths ranging from 40 to 65 feet. The shale bedrock deters drilling deeper.

- Well Site Symbols**
- Depth (ft.) - Water-bearing Formation - Yield (gpm)
- 290-SG-10
224
- Depth to Bedrock (ft.)
- S - Sand
 - G - Gravel
 - LS - Limestone
- Well Site
 - ▲ Well Site - H₂S Noted
 - Municipal-Industrial Well
 - △ Test Well*
 - Observation Well**
 - A Chemical Analyses

Chemical Analysis Table

Well Site	A	B	C	D	E	F
Depth (feet)	385	330	360	287	370	480
Aquifer	LS	LS	LS	LS	LS	LS
Hardness total as CaCO ₃	463	345	442	535	650	438
Dissolved Solids	682	504	570	744	942	570
Iron	12	.03	.18	.32	.31	.35
Sulfates	93	216	190	238	402	98
Chloride	115	37	18	23	34	88
Fluoride	2.3	1.9	1.6	—	1.8	2.1
Hydrogen Sulfide	27	3.1	8.7	—	30	—
pH	7.4	7.6	7.3	—	7.1	—

Chemical constituents as milligrams per liter (mg/l).

Remarks

* 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.

** 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.

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.