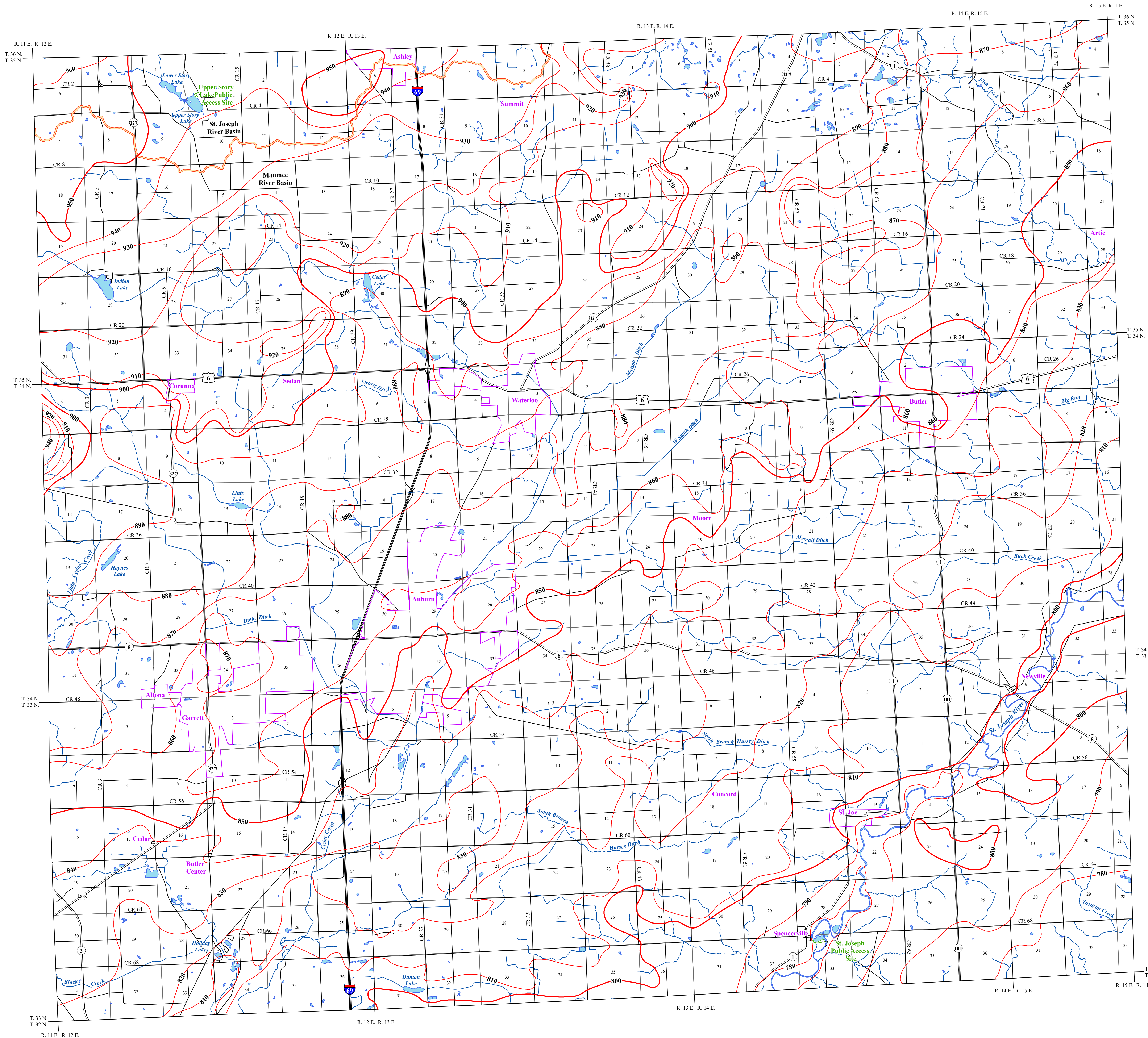


POTENTIOMETRIC SURFACE MAP OF THE UNCONSOLIDATED AQUIFERS OF DEKALB COUNTY, INDIANA



Dekalb County, Indiana is located in the northeastern portion of the state and is situated within two major drainage basins. A small portion of the northwest corner of the county is within the St. Joseph River Basin and the rest of the county is within the Maumee River Basin. Major drainage systems include the St. Joseph River and Cedar Creek along with several tributaries.

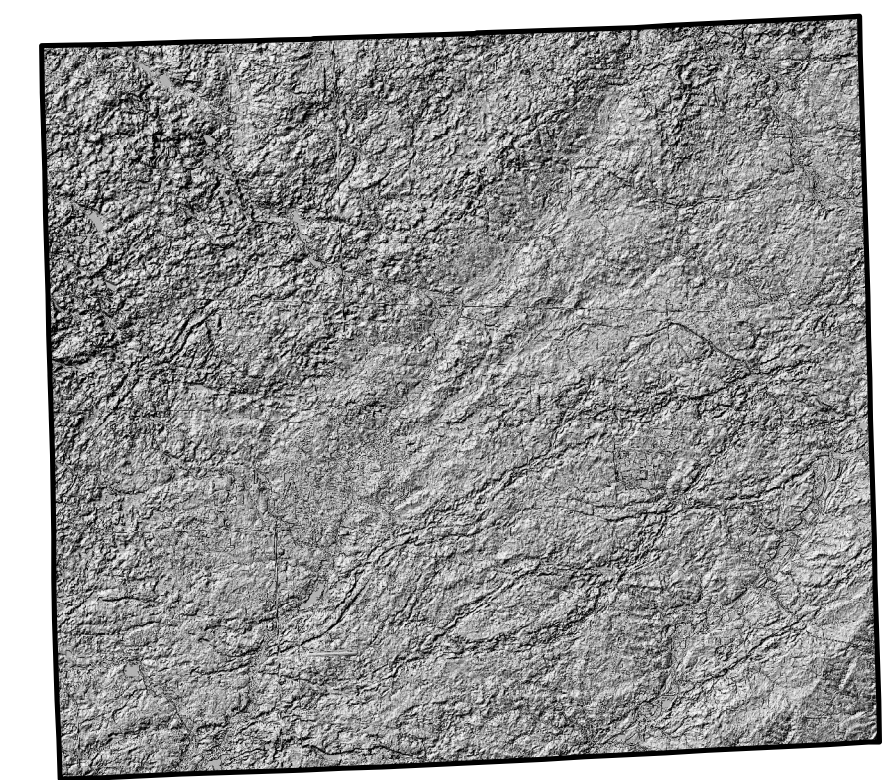
The generalized unconsolidated potentiometric surface map contour elevations represent lines of equal elevation to which groundwater levels will rise in wells. Static water level measurements in individual wells used to construct the potentiometric surface map are indicative of the water level at the time of well completion. Therefore, current site specific conditions may differ due to local or seasonal variations in measured static water levels.

Coordinate locations of water well records were physically obtained in the field, determined through address geocoding, or reported on water well records. Elevation data were either obtained from topographic maps or a digital elevation model (DEM). Elevation and location quality control/quality assurance procedures were utilized to refine or remove data where errors were readily apparent.

In Dekalb County well depths 100 feet or less were a priority in mapping the potentiometric surface. However, deeper wells were often compared and used in areas where data was sparse. There are approximately 4,411 water well records in the county of which, 2,204 (50%) are located. About 1,317 (60%) are wells less than 100 feet in depth. Potentiometric surface elevations range from a high of 960 feet mean sea level (msl) in the northwest, to a low of 780 feet msl in the southeast. Generalized groundwater flow direction, therefore, appears to be from northwest to the southeast for most of the county. Groundwater flow for the extreme northwest portion of the county (that is within the St. Joseph River Basin) appears to be to the northwest. However, this area is a groundwater high and some groundwater flow may be south and east.

In general, most of the potentiometric surface in Dekalb County is under confined conditions. However, some locations, such as positions close to the St. Joseph River, Cedar Creek and some tributaries, may be under semi-confined or unconfined conditions.

Hillshade Map of Dekalb County, Indiana

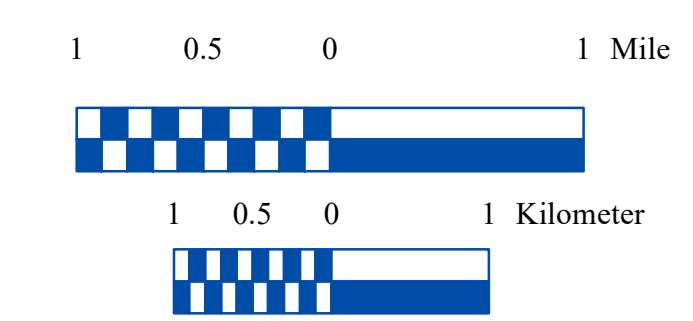
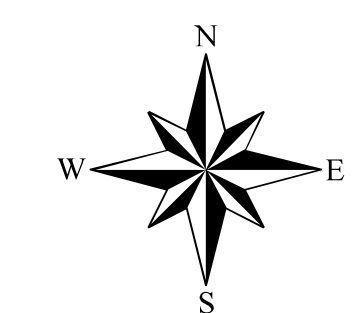
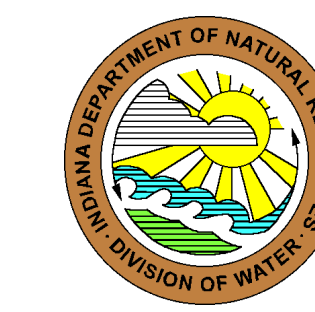


Location Map



EXPLANATION

- 950 Line of equal elevation, in feet above mean sea level
- Potentiometric Contour interval 10 feet
- Stream
- County Road
- State Road
- US Highway
- Interstate
- Basin Boundary
- Municipal Boundary
- State Managed Property
- Lake & River



Map Use and Disclaimer Statement

We request that the following agency be acknowledged in products derived from this map: Indiana Department of Natural Resources, Division of Water.

This map was compiled by staff of the Indiana Department of Natural Resources, Division of Water using data believed to be reasonably accurate. However, a degree of error is inherent in all maps. This product is distributed "as is" without warranties of any kind, either expressed or implied. This map is intended for use only at the published scale.

This map was created from several existing shapefiles. Township and Range Lines of Indiana (line shapefile, 20020621), Land Survey Lines of Indiana (polygon shapefile, 20020621), and County Boundaries of Indiana (polygon shapefile, 20020621), were all from the Indiana Geological Survey and based on a 1:24,000 scale. Draft road shapefiles, System1 and System2 (line shapefiles, 2003), were from the Indiana Department of Transportation and based on a 1:24,000 scale. Populated Areas in Indiana 2000 (polygon shapefile, 20021000) was from the U.S. Census Bureau and based on a 1:100,000 scale. Hydrography, Streams (NHID) (line shapefile, 20081218), Rivers (NHID) (polygon shapefile, 20081218), Lakes (NHID) (polygon shapefile, 20081218) was from the U.S. Geological Survey and the U.S. Environmental Protection Agency and based on a 1:24,000 scale. Managed Lands IDNR IN (polygon shapefile, 20100920) was from IDNR and based on a 1:24,000 scale. County Hillshade image was from the U.S. Geological Survey National Elevation Dataset (raster image, 20100324). Potentiometric Surface Map of the Unconsolidated Aquifers of Dekalb County, Indiana (line shapefiles, Maier, 2011, Modified 2019) was based on a 1:24,000 scale.

Potentiometric Surface Map of the Unconsolidated Aquifers of Dekalb County, Indiana

by
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October 2011

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