Michael R. Pence, Governor

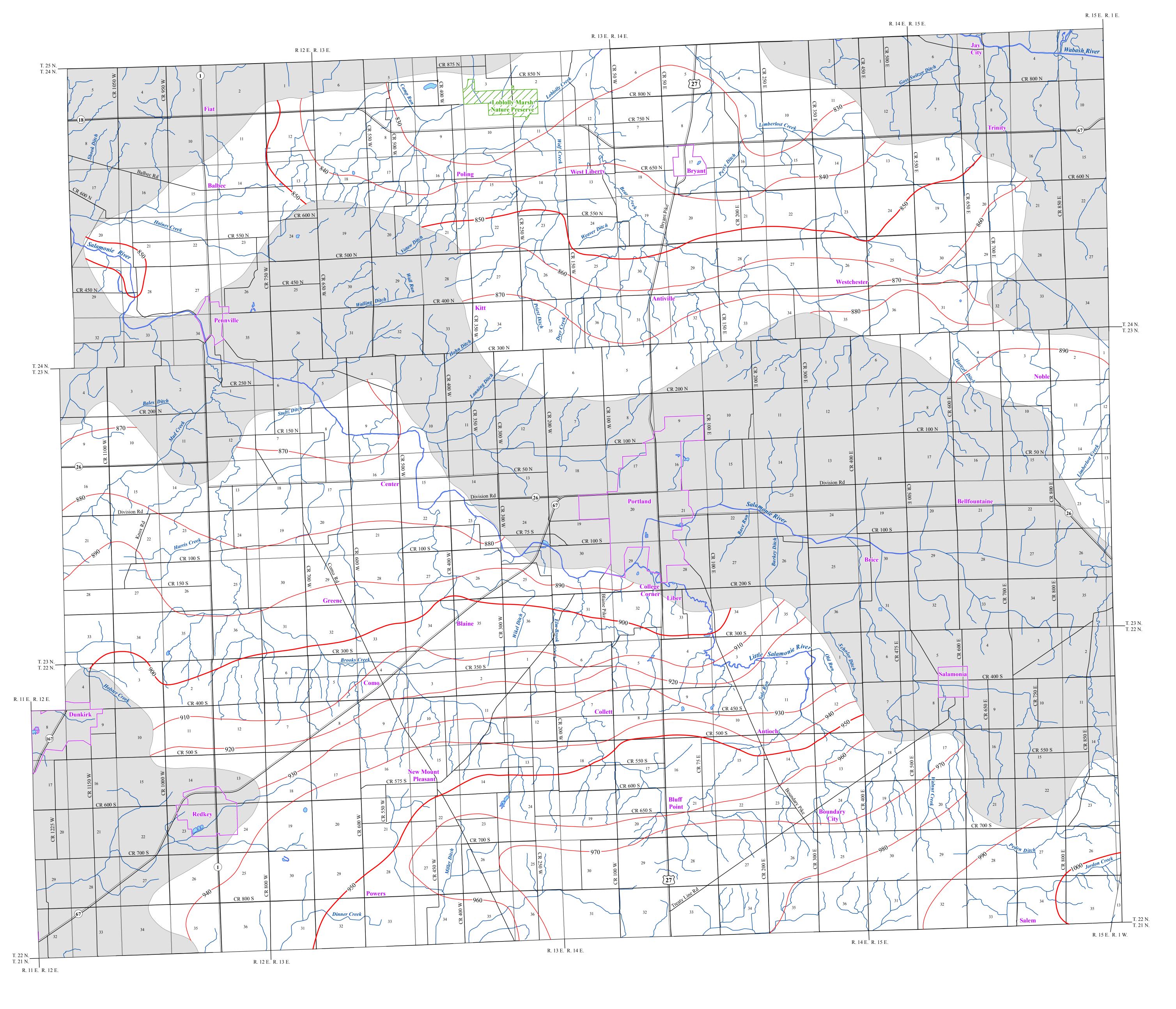
Department of Natural Resources

Division of Water

Cameron F. Clark, Director

Potentiometric Surface Map

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



Jay County, Indiana is located in the east-central portion of the state with all of the areal extent of the county situated within the Upper Wabash River Basin.

The potentiometric surface mapped (PSM) contour elevations represent lines of equal elevation relative to the measured groundwater levels in wells. In general, wells completed in a confined aquifer system are bound by impermeable layers and will have static water levels under hydrostatic pressure causing the water level to rise above the elevation of the aquifer resource. In contrast, an unconfined aquifer system is not bound by impermeable layers; therefore, the water level will not be under hydrostatic pressure and will not rise above the aquifer resource. 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.

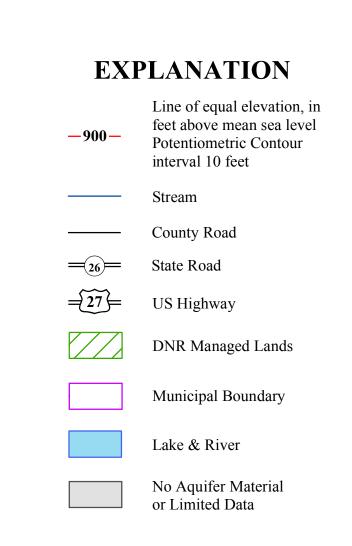
Coordinate locations of water well records were physically obtained in the field, determined through address geocoding, or reported on water well records. Elevation data were obtained from a digital elevation model (DEM). Elevation and location quality control/quality assurance procedures were utilized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

In Jay County well depths 100 feet or less were a priority in mapping the potentiometric surface. However, about 175 deeper wells were used to complement the mapping in areas where wells at depths of less than 100 feet were sparse. There are approximately 200 located unconsolidated water well records in the county that are within the priority depth range. Portions of Jay County are lacking in data and/or are covered by thin or uproductive deposits. Therefore, potentiometric surface elevations contours have not been extended

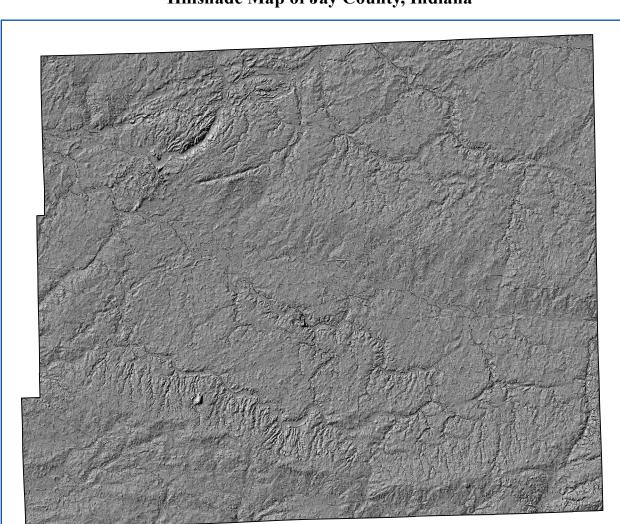
through these areas.

Potentiometric surface elevations range from a high of 1000 feet mean sea level (msl) in the southeast corner of the county, to a low of 830 feet msl in the north-central part of the county. Generalized groundwater flow direction for Jay County is towards major drainage relevant to the basin. Therefore, groundwater flow is northwest towards the Salamonie River for much of the county south of the Salamonie River and north towards Loblolly Creek and Limberlost Creek for the northern third of Jay County.



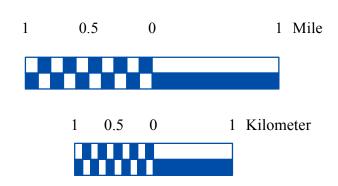


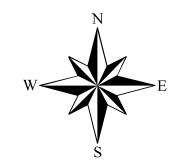












This map was created from several existing shapefiles. Township and Range Lines of Indiana (line shapefile, 20020621), Land Survey Lines of Indiana (polygon shapefile, 20020621), and County Boundaries of Indiana (polygon shapefile, 20020621) were all from the Indiana Geological Survey and based on a 1:24,000 scale. Draft road shapefiles, System1 and (line shapefiles, 2003) and Roads_2005_INDOT_IN (line_shapefile, 2005) 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 (NHD) (line shapefile, 20081218), Rivers (NHD) (polygon shapefile, 20081218), and Lakes (NHD) (polygon shapefile, 20081218) were 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) is from the Indiana Department of Natural Resources and based on a 1:24,000 scale. Digital Elevation Model image was derived from the Indiana Ortho/LiDAR Statewide Collection Program (2011). No Aquifer Material or Limited Data (polygon shapefile, Maier, 2013) and Potentiometric Surface Map of the Unconsolidated Aquifers of Jay County, Indiana (line shapfile, Maier, 2013) were based on a 1:24,000 scale.

Potentiometric Surface Map of the Unconsolidated Aquifers of Jay County, Indiana by

Randal D. Maier Division of Water, Resource Assessment Section