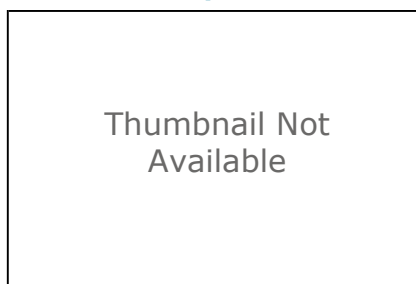


# Potentiometric Surface Contours of the Unconsolidated Aquifers of Putnam County, Indiana

## Shapefile



## Tags

Potentiometric surface, static water level, groundwater, water wells, water tables, unconsolidated, Indiana Department of Natural Resources (IDNR), Division of Water (DOW), Putnam County, Indiana, USA, Revised 2016.

## Summary

Display and/or analyses requiring spatial distribution of potentiometric surface elevations in Putnam County, Indiana.

## Description

This file is a digital geospatial polyline coverage of the unconsolidated potentiometric surface elevations mapped for Putnam County in Indiana.

## Credits

It is requested that the Indiana Department of Natural Resources, Division of Water be cited in any products generated from this data.

## Use limitations

Acknowledgement of the following agency in products derived from these data: 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. The maps are intended for use only at the published scale. The information on these media is proprietary to the State of Indiana, Indiana Department of Natural Resources, Division of Water. Any copying, adaptation, or distribution of these data without the express written consent of IDNR-DOW is discouraged. It is not recommended that these data be used for purposes other than general estimate of static water level elevations. Site specific conditions may vary considerably from mapped estimates.

## Extent

<b>West</b>	-87.009741	<b>East</b>	-86.652069
<b>North</b>	39.866005	<b>South</b>	39.469911

## Scale Range

**Maximum (zoomed in)** 1:50,000

**Minimum (zoomed out)** 1:5,000,000

## ArcGIS Metadata ►

### Topics and Keywords ►

[THEMES OR CATEGORIES OF THE RESOURCE](#) geoscientificInformation

\* [CONTENT TYPE](#) Downloadable Data

[EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION](#) No

[PLACE KEYWORDS](#) Putnam County, Indiana, USA

[THEME KEYWORDS](#) Unconsolidated

[THEME KEYWORDS](#) potentiometric surface

[THEME KEYWORDS](#) static water level

[THEME KEYWORDS](#) groundwater

[THEME KEYWORDS](#) water wells

[THEME KEYWORDS](#) water table

[THEME KEYWORDS](#) Indiana Department of Natural Resources (IDNR)

[THEME KEYWORDS](#) Division of Water (DOW)

[THEME KEYWORDS](#) Revised 2016

[Hide Topics and Keywords ▲](#)

### Citation ►

[TITLE](#) Potentiometric Surface Contours of the Unconsolidated Aquifers of Putnam County, Indiana

[PUBLICATION DATE](#) 2015-12-30 00:00:00

[CREATION DATE](#) 2015-10-01 00:00:00

[EDITION](#) 1 (Revised 9/2016)

[EDITION DATE](#) 2016-09-01

[PRESENTATION FORMATS](#) digital map

[FGDC GEOSPATIAL PRESENTATION FORMAT](#) vector digital data

#### [SERIES](#)

[NAME](#) Unconsolidated Potentiometric Surface Map

[ISSUE](#) PSM 57-A

#### [OTHER CITATION DETAILS](#)

This map was compiled from multiple unpublished work maps based on USGS quadrangles at 1:24,000 scale: BELLMORE, BRAZIL EAST, CATARACT, CENTER POINT, CLINTON FALLS, CLOVERDALE, COATESVILLE, EMINENCE, GREENCASTLE, MANSFIELD, NORTH SALEM, POLAND, QUINCY, REELSVILLE, ROACHDALE, and RUSSELLVILLE.

[Hide Citation ▲](#)

## Citation Contacts ►

### RESPONSIBLE PARTY

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water

INDIVIDUAL'S NAME Ginger C. Korinek

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE originator

### CONTACT INFORMATION ►

#### PHONE

VOICE (317) 234-1102

FAX (317) 233-4579

#### ADDRESS

TYPE both

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POSTAL CODE 46204

COUNTRY US

E-MAIL ADDRESS [gkorinek@dnr.in.gov](mailto:gkorinek@dnr.in.gov)

### ONLINE RESOURCE

LOCATION [//www.in.gov/dnr/water/7256.htm](http://www.in.gov/dnr/water/7256.htm)

FUNCTION PERFORMED information

### HOURS OF SERVICE

8:15am - 4:15pm M-F except Government Holidays

[Hide Contact information ▲](#)[Hide Citation Contacts ▲](#)

## Resource Details ►

DATASET LANGUAGES English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

STATUS completed

SPATIAL REPRESENTATION TYPE vector

### SUPPLEMENTAL INFORMATION

Minor revision by Glenn Grove, contours around Cory Creek removed.

\* **PROCESSING ENVIRONMENT** Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.1.4959

### CREDITS

It is requested that the Indiana Department of Natural Resources, Division of Water be cited in any products generated from this data.

### ARCGIS ITEM PROPERTIES

\* **NAME** UNC\_PSM\_PUTNAM\_CO\_IN\_revised\_2016

\* SIZE 0.770  
 \* LOCATION file:///iotisip01pa\dnrgis\$!\Potentiometric\Putnam\1\_Web\_Products\Web revised\_2016\zipfiles\UNC\_PSM\_PUTNAM\_CO\_IN\_revised\_2016.shp  
 \* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

### EXTENT

#### DESCRIPTION

publication date

#### TEMPORAL EXTENT

DATE AND TIME 2015-12-30 00:00:00

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

\* WEST LONGITUDE -87.009741

\* EAST LONGITUDE -86.652069

\* NORTH LATITUDE 39.866005

\* SOUTH LATITUDE 39.469911

\* EXTENT CONTAINS THE RESOURCE Yes

#### EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE 499166.853900

\* EAST LONGITUDE 529757.470800

\* SOUTH LATITUDE 4368982.355200

\* NORTH LATITUDE 4412885.281800

\* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

## Resource Points of Contact ►

### POINT OF CONTACT

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water

INDIVIDUAL'S NAME Ginger C. Korinek

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE point of contact

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FUNCTION PERFORMED download

## HOURS OF SERVICE

8:15am - 4:15pm M-F except Government Holidays

[Hide Contact information ▲](#)[Hide Resource Points of Contact ▲](#)**Resource Maintenance ►**

## RESOURCE MAINTENANCE

UPDATE FREQUENCY as needed

[Hide Resource Maintenance ▲](#)**Resource Constraints ►**

## LEGAL CONSTRAINTS

## LIMITATIONS OF USE

The Indiana Department of Natural Resources, Division of Water has compiled this data set using data believed to be reasonably accurate. However, the Division makes no representation as to the accuracy, completeness, or usefulness of the data or data set. A degree of error is inherent in all maps. This map is intended for use only at the published scale. Reference to any specific commercial product, process, or service does not constitute an endorsement, recommendation, or favoring by the Division. Copyright 2015, Indiana Department of Natural Resources, Division of Water All Rights Reserved Any copying, adaptation, or distribution of these data without the express written consent of the Indiana Department of Natural Resources, Division of Water is discouraged.

## OTHER CONSTRAINTS

This file is available to anyone, but access may be contingent on written request, specific terms relevant to the agency or person making the request, and/or current freedom of information statutes in the State of Indiana.

## CONSTRAINTS

## LIMITATIONS OF USE

Acknowledgement of the following agency in products derived from these data: 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. The maps are intended for use only at the published scale. The information on these media is proprietary to the State of Indiana, Indiana Department of Natural Resources, Division of Water. Any copying, adaptation, or distribution of these data without the express written consent of IDNR-DOW is discouraged. It is not recommended that these data be used for purposes other than general estimate of static water level elevations. Site specific conditions may vary considerably from mapped estimates.

[Hide Resource Constraints ▲](#)**Spatial Reference ►**

## ARCGIS COORDINATE SYSTEM

\* TYPE Projected  
 \* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983  
 \* PROJECTION NAD\_1983\_UTM\_Zone\_16N  
 \* COORDINATE REFERENCE DETAILS  
 PROJECTED COORDINATE SYSTEM  
 WELL-KNOWN IDENTIFIER 26916  
 X ORIGIN -5120900  
 Y ORIGIN -9998100  
 XY SCALE 450445547.3910538  
 Z ORIGIN -100000  
 Z SCALE 10000  
 M ORIGIN -100000  
 M SCALE 10000  
 XY TOLERANCE 0.001  
 Z TOLERANCE 0.001  
 M TOLERANCE 0.001  
 HIGH PRECISION true  
 LATEST WELL-KNOWN IDENTIFIER 26916  
 WELL-KNOWN TEXT PROJCS["NAD\_1983\_UTM\_Zone\_16N",GEOGCS  
 ["GCS\_North\_American\_1983",DATUM["D\_North\_American\_1983",SPHEROID  
 ["GRS\_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT  
 ["Degree",0.0174532925199433]],PROJECTION["Transverse\_Mercator"],PARAMETER  
 ["False\_Easting",500000.0],PARAMETER["False\_Northing",0.0],PARAMETER  
 ["Central\_Meridian",-87.0],PARAMETER["Scale\_Factor",0.9996],PARAMETER  
 ["Latitude\_Of\_Origin",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",26916]]

## REFERENCE SYSTEM IDENTIFIER

\* VALUE 26916  
 \* CODESPACE EPSG  
 \* VERSION 8.6.2

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

### VECTOR ►

\* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

## GEOMETRIC OBJECTS

FEATURE CLASS NAME UNC\_PSM\_PUTNAM\_CO\_IN\_revised\_2016  
 \* OBJECT TYPE composite  
 \* OBJECT COUNT 236

[Hide Vector ▲](#)

### ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME UNC\_PSM\_PUTNAM\_CO\_IN\_revised\_2016  
 \* FEATURE TYPE Simple  
 \* GEOMETRY TYPE Polyline  
 \* HAS TOPOLOGY FALSE  
 \* FEATURE COUNT 236  
 \* SPATIAL INDEX TRUE  
 \* LINEAR REFERENCING FALSE

[Hide ArcGIS Feature Class Properties ▲](#)

[Hide Spatial Data Properties ▲](#)

## Data Quality ►

SCOPE OF QUALITY INFORMATION ►

RESOURCE LEVEL    **dataset**

[Hide Scope of quality information ▲](#)

DATA QUALITY REPORT - COMPLETENESS OMISSION ►

MEASURE DESCRIPTION

In conducting the mapping, the author(s) evaluated hundreds of water well records, especially those having relatively complete information on well location, static water level, well depth, ground elevation, and lithology. There were areas in the county with sparse information because of lack of well records or incomplete records.

[Hide Data quality report - Completeness omission ▲](#)

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ►

MEASURE DESCRIPTION

The mapping was conducted after a thorough documentation of well locations and water well record details.

[Hide Data quality report - Quantitative attribute accuracy ▲](#)

DATA QUALITY REPORT - ABSOLUTE EXTERNAL POSITIONAL ACCURACY ►

MEASURE DESCRIPTION

The locations of many wells were field checked and the locations posted on 7.5 minute topographic maps. Visual confirmation of wells was not always possible. Many locations were based only on the street address, driving directions, or other location information provided on the well record.

[Hide Data quality report - Absolute external positional accuracy ▲](#)

[Hide Data Quality ▲](#)

## Lineage ►

PROCESS STEP ►

DESCRIPTION

After selection of water well records was complete, specific well data and other maps and reports were considered in the mapping process. For example, ground elevation, static water level, well depth, aquifer top and bottom elevation and lithology were obtained from well records. Other maps and reports included regional potentiometric surface elevations, hydrogeologic settings, groundwater availability, bedrock topography, and surface topography.

## PROCESS CONTACT

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water  
 INDIVIDUAL'S NAME Ginger C. Korinek  
 CONTACT'S POSITION Resource Assessment Section  
 CONTACT'S ROLE owner

## CONTACT INFORMATION ►

## PHONE

VOICE 317-234-1102  
 FAX 317-233-4579

## ADDRESS

TYPE both  
 DELIVERY POINT 402 W Washington Street W264  
 CITY Indianapolis  
 ADMINISTRATIVE AREA Indiana  
 POSTAL CODE 46204  
 COUNTRY US  
 E-MAIL ADDRESS gkorinek@dnr.in.gov

## ONLINE RESOURCE

LOCATION [www.in.gov/dnr/water/7256.htm](http://www.in.gov/dnr/water/7256.htm)  
 FUNCTION PERFORMED download

*Hide Contact information ▲*

## SOURCE DATA ►

RELATIONSHIP TO THE PROCESS STEP used

## SOURCE CITATION ►

ALTERNATE TITLES IDNR-DOW water well records for domestic and other supply wells submitted by water well drillers from 1959-2013

*Hide Source citation ▲*

*Hide Source data ▲*

*Hide Process step ▲*

## PROCESS STEP ►

## DESCRIPTION

Data were selected by careful evaluation of water well records to determine if the wells were field located and if they contained complete and reasonable information.

## PROCESS CONTACT

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water  
 INDIVIDUAL'S NAME Ginger C. Korinek  
 CONTACT'S POSITION Resource Assessment Section  
 CONTACT'S ROLE processor

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## ONLINE RESOURCE

LOCATION www.in.gov/dnr/water/7256.htm

FUNCTION PERFORMED download

[Hide Contact information ▲](#)[Hide Process step ▲](#)

## PROCESS STEP ►

## DESCRIPTION

Lines of equal potentiometric surface elevation were generated based on static elevation from selected data. Lines were generated and reviewed prior to publication.

## PROCESS CONTACT

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water

INDIVIDUAL'S NAME Ginger C. Korinek

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE point of contact

## CONTACT INFORMATION ►

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E-MAIL ADDRESS gkorinek@dnr.in.gov

## ONLINE RESOURCE

LOCATION www.in.gov/dnr/water/7256.htm

FUNCTION PERFORMED download

[Hide Contact information ▲](#)[Hide Process step ▲](#)

## SOURCE DATA ►

## DESCRIPTION

Water well records from the IDNR-DOW well record database; USGS topography maps; various consultant geotechnical reports

## RESOLUTION OF THE SOURCE DATA

SCALE DENOMINATOR 48000

*Hide Source data ▲*

*Hide Lineage ▲*

**Distribution ►**

## DISTRIBUTOR ►

## CONTACT INFORMATION

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water

INDIVIDUAL'S NAME Ginger C. Korinek

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE originator

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COUNTRY US

E-MAIL ADDRESS [gkorinek@dnr.in.gov](mailto:gkorinek@dnr.in.gov)

## ONLINE RESOURCE

LOCATION [www.in.gov/dnr/water/7256.htm](http://www.in.gov/dnr/water/7256.htm)

FUNCTION PERFORMED download

*Hide Contact information ▲*

## AVAILABLE FORMAT

NAME VPF

FILE DECOMPRESSION TECHNIQUE no compression applied

*Hide Distributor ▲*

## DISTRIBUTION FORMAT

\* NAME Shapefile

## TRANSFER OPTIONS

\* TRANSFER SIZE 0.770

## ONLINE SOURCE

LOCATION <http://www.in.gov/dnr/water/7256.htm>

DESCRIPTION Data and Maps

[Hide Distribution](#) ▲**Fields** ►DETAILS FOR OBJECT [UNC\\_PSM\\_PUTNAM\\_CO\\_IN\\_revised\\_2016](#) ►

\* TYPE Feature Class

\* ROW COUNT 236

FIELD [FID](#) ►

\* ALIAS FID

\* DATA TYPE OID

\* WIDTH 4

\* PRECISION 0

\* SCALE 0

\* FIELD DESCRIPTION

Internal feature number.

\* DESCRIPTION SOURCE

Esri

\* DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

[Hide Field FID](#) ▲FIELD [Shape](#) ►

\* ALIAS Shape

\* DATA TYPE Geometry

\* WIDTH 0

\* PRECISION 0

\* SCALE 0

FIELD DESCRIPTION

Feature geometry.

DESCRIPTION SOURCE

ESRI

DESCRIPTION OF VALUES

Coordinates defining the features.

[Hide Field Shape](#) ▲FIELD [Static\\_E](#) ►

\* ALIAS Static\_E

\* DATA TYPE SmallInteger

\* WIDTH 5

\* PRECISION 5

\* SCALE 0

#### FIELD DESCRIPTION

Potentiometric surface contours are developed and displayed here based on the static water levels from the unconsolidated aquifer systems with 10-foot contours and 50-foot index contours.

#### DESCRIPTION SOURCE

Author

[Hide Field Static\\_E ▲](#)

[Hide Details for object UNC\\_PSM\\_PUTNAM\\_CO\\_IN\\_revised\\_2016 ▲](#)

[Hide Fields ▲](#)

## Metadata Details ►

METADATA LANGUAGE English (UNITED STATES)

METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2016-11-01

#### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

METADATA STYLE FGDC CSDGM Metadata

STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2016-08-15 11:33:40

LAST MODIFIED IN ARCGIS FOR THE ITEM 2016-11-01 08:48:02

#### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2016-11-01 08:48:02

#### ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2016-09-06 15:03:04

FROM M:\!Potentiometric\Putnam\Revised\_2016\UNC\_PSM\_PUTNAM\_CO\_IN\_revised\_2016

TO \\iotisip01pa\dnrgis\$\!Potentiometric\Putnam\1\_Web\_Products\WEB

Rvised\zipfiles\UNC\_PSM\_PUTNAM\_CO\_IN\_revised\_2016

[Hide Metadata Details ▲](#)

## Metadata Contacts ►

#### METADATA CONTACT

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water

INDIVIDUAL'S NAME Ginger C. Korinek

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE originator

#### CONTACT INFORMATION ►

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LOCATION //www.in.gov/dnr/water/7256.htm  
 FUNCTION PERFORMED information

#### HOURS OF SERVICE

8:15am - 4:15pm M-F except Government Holidays

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

## Metadata Maintenance ►

#### MAINTENANCE

UPDATE FREQUENCY not planned

#### OTHER MAINTENANCE REQUIREMENTS

Revised by Glenn Grove (9/2016).

#### MAINTENANCE CONTACT

ORGANIZATION'S NAME IDNR Division of Water, Resource Assessment Section  
 INDIVIDUAL'S NAME Glenn E. Grove,  
 CONTACT'S ROLE custodian

[Hide Metadata Maintenance ▲](#)

## Metadata Constraints ►

#### LEGAL CONSTRAINTS

ACCESS CONSTRAINTS other restrictions

#### OTHER CONSTRAINTS

Access constraints: This metadata file is intended to accompany the subject geospatial set. This file may be updated, and the most recent version is available by contacting the IDNR Division of Water.

[Hide Metadata Constraints ▲](#)

## FGDC Metadata (read-only) ▼