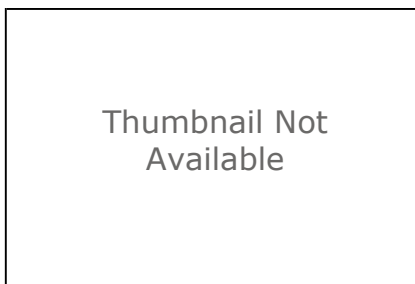


# Potentiometric Surface Map of the Unconsolidated Aquifers of Clay County, Indiana

Shapefile



Tags

Potentiometric surface, static water level, groundwater, water wells, water tables, Clay County, Indiana, USA

## Summary

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

## Description

This file is a digital geospatial polyline coverage of the unconsolidated potentiometric surface elevations mapped for Clay County, 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

**West** -87.239942    **East** -86.947923  
**North** 39.551417    **South** 39.305459

## Scale Range

**Maximum (zoomed in)** 1:5,000

**Minimum (zoomed out)** 1:150,000,000

## 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 Clay County, Indiana, USA

THEME KEYWORDS Potentiometric surface, static water level, groundwater, water wells, water tables

*Hide Topics and Keywords ▲*

### Citation ►

TITLE Potentiometric Surface Map of the Unconsolidated Aquifers of Clay County, Indiana

CREATION DATE 2016-11-01 00:00:00

EDITION 1

PRESENTATION FORMATS \* digital map

SERIES

NAME Unconsolidated Potentiometric Surface Map

ISSUE PSM 63-A

OTHER CITATION DETAILS

This map was compiled from multiple unpublished work maps based on USGS quadrangles at 1:24,000 scale: Brazil East, Brazil West, Center Point, Clay City, Coal City, Jasonville, Patricksburg, Poland, Saline City, and Staunton.

*Hide Citation ▲*

### Citation Contacts ►

RESPONSIBLE PARTY

INDIVIDUAL'S NAME Glenn E. Grove

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

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE originator

CONTACT INFORMATION ►

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TYPE both

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

[Hide Contact information ▲](#)

#### RESPONSIBLE PARTY

ORGANIZATION'S NAME Indiana Department of Natural Resources, Division of Water  
 CONTACT'S ROLE publisher

#### CONTACT INFORMATION ►

ADDRESS  
 DELIVERY POINT Indianapolis, Indiana, USA

[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

\* 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\_Clay\_CO\_IN  
 \* SIZE 0.140  
 \* LOCATION file:///\\iotisip01pa\dnrgis\$!\Potentiometric\Clay\1\_Web\_Products\63\_Clay\_PSM\_Shapefiles\UNC\_PSM\_Clay\_CO\_IN.shp  
 \* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

#### EXTENT

DESCRIPTION  
 Latitude Longitude

#### EXTENT

GEOGRAPHIC EXTENT  
 BOUNDING RECTANGLE

EXTENT TYPE    Extent used for searching  
 \* WEST LONGITUDE    -87.239942  
 \* EAST LONGITUDE    -86.947923  
 \* NORTH LATITUDE    39.551417  
 \* SOUTH LATITUDE    39.305459  
 \* EXTENT CONTAINS THE RESOURCE    Yes

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

\* WEST LONGITUDE    479385.141900  
 \* EAST LONGITUDE    504474.240400  
 \* SOUTH LATITUDE    4350701.859400  
 \* NORTH LATITUDE    4377970.807600  
 \* EXTENT CONTAINS THE RESOURCE    Yes

[Hide Extents ▲](#)

## Resource Points of Contact ►

#### POINT OF CONTACT

INDIVIDUAL'S NAME    Glenn E. Grove  
 ORGANIZATION'S NAME    Indiana Department of Natural Resources, Division of Water  
 CONTACT'S POSITION    Resource Assessment Section  
 CONTACT'S ROLE    author

#### CONTACT INFORMATION ►

##### PHONE

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##### ADDRESS

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 DELIVERY POINT    402 W. Washington Street W264  
 CITY    Indianapolis  
 ADMINISTRATIVE AREA    Indiana  
 POSTAL CODE    46204  
 COUNTRY    UNITED STATES  
 E-MAIL ADDRESS    [ggrove@dnr.IN.gov](mailto:ggrove@dnr.IN.gov)

##### 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 ►

#### 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.

#### LEGAL CONSTRAINTS

ACCESS CONSTRAINTS    other restrictions

#### OTHER CONSTRAINTS

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 2016, 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.

[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\_Clay\_CO\_IN  
 \* OBJECT TYPE composite  
 \* OBJECT COUNT 50

[Hide Vector ▲](#)

## ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME UNC\_PSM\_Clay\_CO\_IN  
 \* FEATURE TYPE Simple  
 \* GEOMETRY TYPE Polyline  
 \* HAS TOPOLOGY FALSE  
 \* FEATURE COUNT 50  
 \* 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 ►

DIMENSION horizontal

## 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 ►

DIMENSION horizontal

**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**

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.

*Hide Process step ▲*

**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.

*Hide Process step ▲*

**PROCESS STEP ►****DESCRIPTION**

A polyline coverage was created using the heads-up method and attributed by Glenn E. Grove. Attribute definitions are described below.

*Hide Process step ▲*

**SOURCE DATA** ▶**DESCRIPTION**

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

**SOURCE CITATION** ▶

**TITLE** Potentiometric Surface Map of the Unconsolidated Aquifers of Clay County, Indiana  
**CREATION DATE** 2016-11-01 00:00:00

**EDITION** 1

**SERIES**

**NAME** Unconsolidated Potentiometric Surface Map  
**ISSUE** PSM 63-A

**RESPONSIBLE PARTY**

**INDIVIDUAL'S NAME** Glenn E. Grove  
**ORGANIZATION'S NAME** Indiana Department of Natural Resources, Division of Water  
**CONTACT'S POSITION** Resource Assessment Section  
**CONTACT'S ROLE** originator

**RESPONSIBLE PARTY**

**ORGANIZATION'S NAME** Indiana Department of Natural Resources, Division of Water  
**CONTACT'S ROLE** publisher

*Hide Source citation* ▲

*Hide Source data* ▲

*Hide Lineage* ▲

**Distribution** ▶**DISTRIBUTOR** ▶**CONTACT INFORMATION**

**INDIVIDUAL'S NAME** Glenn E. Grove  
**ORGANIZATION'S NAME** Indiana Department of Natural Resources, Division of Water  
**CONTACT'S POSITION** Resource Assessment Section  
**CONTACT'S ROLE** distributor

**CONTACT INFORMATION** ▶**PHONE**

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**FAX** 317-233-4579

**ADDRESS**

**TYPE** both  
**DELIVERY POINT** 402 W. Washington Street W264  
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**ADMINISTRATIVE AREA** Indiana  
**POSTAL CODE** 46204  
**COUNTRY** UNITED STATES



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#### HOURS OF SERVICE

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

[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

#### DISTRIBUTION FORMAT

\* NAME Shapefile

#### TRANSFER OPTIONS

\* TRANSFER SIZE 0.140

#### ONLINE SOURCE

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

[Hide Distribution ▲](#)

## Fields ►

#### DETAILS FOR OBJECT [UNC\\_PSM\\_Clay\\_CO\\_IN ►](#)

\* TYPE Feature Class

\* ROW COUNT 50

#### DEFINITION

polyline

#### DEFINITION SOURCE

ESRI

#### 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 elevation in feet mean sea level

*Hide Field static\_e ▲*

*Hide Details for object UNC\_PSM\_Clay\_CO\_IN ▲*

*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 2016-11-18

### 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 2016-11-07 10:46:16  
 LAST MODIFIED IN ARCGIS FOR THE ITEM 2016-11-18 11:42:53

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
 LAST UPDATE 2016-11-18 11:42:53

*Hide Metadata Details ▲*

## Metadata Contacts ►

### METADATA CONTACT

INDIVIDUAL'S NAME Glenn E. Grove  
 ORGANIZATION'S NAME Indiana Department of Natural Resources, Division of Water  
 CONTACT'S POSITION Resource Assessment Section  
 CONTACT'S ROLE point of contact

### CONTACT INFORMATION ►

#### PHONE

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 CITY Indianapolis  
 ADMINISTRATIVE AREA Indiana  
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 COUNTRY UNITED STATES  
 E-MAIL ADDRESS ggrove@dnr.IN.gov

#### HOURS OF SERVICE

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

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

## Metadata Maintenance ►

### MAINTENANCE

UPDATE FREQUENCY as needed

[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) ▼