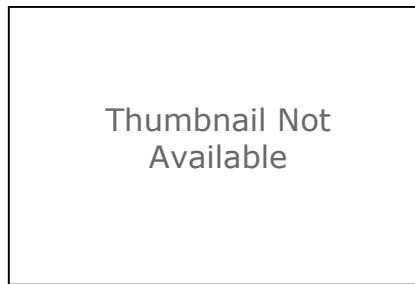


Potentiometric Surface Map of the Bedrock Aquifers of Clay County, Indiana

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 bedrock 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	-87.242090	East	-86.940022
North	39.607159	South	39.168716

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 Bedrock Aquifers of Clay County, Indiana

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

EDITION 1

PRESENTATION FORMATS * digital map

SERIES

NAME Bedrock Potentiometric Surface Map

ISSUE PSM 63-B

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 ►

PHONE

VOICE 317-232-4160

FAX 317-233-4579

ADDRESS

TYPE both

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

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 BED_PSM_Clay_CO_IN
 * SIZE 0.979
 * LOCATION file:///\\iotisip01pa\dnrgis\$!\Potentiometric\Clay\1_Web_Products\63_Clay_PSM_Shapefiles\BED_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 -87.242090
 * EAST LONGITUDE -86.940022
 * NORTH LATITUDE 39.607159
 * SOUTH LATITUDE 39.168716
 * EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 479217.284900
 * EAST LONGITUDE 505148.884100
 * SOUTH LATITUDE 4335526.970500
 * NORTH LATITUDE 4384157.239200
 * 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

VOICE 317-232-4160
 FAX 317-233-4579

ADDRESS

TYPE both
 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

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 BED_PSM_Clay_CO_IN
 * OBJECT TYPE composite
 * OBJECT COUNT 139

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME BED_PSM_Clay_CO_IN
 * FEATURE TYPE Simple
 * GEOMETRY TYPE Polyline
 * HAS TOPOLOGY FALSE
 * FEATURE COUNT 139
 * 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 Bedrock Aquifers of Clay County, Indiana
CREATION DATE 2016-11-01 00:00:00

EDITION 1

SERIES

NAME Bedrock Potentiometric Surface Map
ISSUE PSM 63-B

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**

VOICE 317-232-4160
FAX 317-233-4579

ADDRESS

TYPE both
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

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 [0.979](#)

ONLINE SOURCE

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

[Hide Distribution](#) ▲

Fields ►

DETAILS FOR OBJECT [BED_PSM_Clay_CO_IN](#) ►

* TYPE [Feature Class](#)

* ROW COUNT [139](#)

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 BED_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 2016-11-01

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 2016-11-07 08:20:49
 LAST MODIFIED IN ARCGIS FOR THE ITEM 2016-11-18 11:42:04

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
 LAST UPDATE 2016-11-18 11:42:04

ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2016-11-07 08:20:49

FROM M:\!Potentiometric\Clay\2_Shapefiles\Shapefiles_Final_Map\BED_PSM_Clay_CO_IN
 To \\iotisip01pa\dnrgis\$\!
 Potentiometric\Clay\1_Web_Products\63_Clay_PSM_Shapefiles\BED_PSM_Clay_CO_IN

[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

VOICE 317-232-4160
 FAX 317-233-4579

ADDRESS

TYPE both
 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

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) ▼