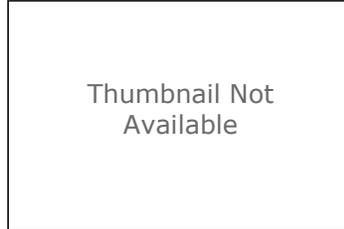


# Potentiometric Surface Map of the Bedrock Aquifers of Jefferson County, Indiana

## Shapefile



## Tags

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

## Summary

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

## Description

This file is a digital geospatial polyline coverage of the bedrock potentiometric surface elevations mapped for Jefferson 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** -85.672532    **East** -85.230118  
**North** 38.915095    **South** 38.583106

## 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    Jefferson 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 Jefferson County, Indiana  
PUBLICATION DATE 2018-04-27 00:00:00

EDITION 1

PRESENTATION FORMATS \* digital map

### SERIES

NAME Bedrock Potentiometric Surface Map  
ISSUE PSM 77-B

### OTHER CITATION DETAILS

This map was compiled from multiple unpublished work maps based on USGS quadrangles at 1:24,000 scale: Bennington, Bethlehem, Blocher, Canaan, Carrollton, Clifty Falls, Cross Plains, Deputy, Kent, Madison East, Madison West, New Washington, Rexville, San Jacinto, Vernon, and Volga.

[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](mailto: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 10.5.1.7333

#### 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\_Jefferson\_Co\_IN  
\* SIZE 0.394  
\* LOCATION file:///state.in.us/file1/dnr/shared/dnr1  
\\dow\common\RA\_FILES\_ONLINE\77\_Jefferson\_County\_PSM\_shapefiles\BED\_PSM\_Jefferson\_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 -85.672532  
\* EAST LONGITUDE -85.230118  
\* NORTH LATITUDE 38.915095  
\* SOUTH LATITUDE 38.583106  
\* EXTENT CONTAINS THE RESOURCE Yes

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

\* WEST LONGITUDE 615612.378400  
\* EAST LONGITUDE 653457.918100  
\* SOUTH LATITUDE 4271986.819800  
\* NORTH LATITUDE 4308199.849400  
\* 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](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 2018, 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 ►

### ARC GIS 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 6.13(3.0.1)

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

#### VECTOR ►

- \* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

#### GEOMETRIC OBJECTS

- FEATURE CLASS NAME BED\_PSM\_Jefferson\_Co\_IN
- \* OBJECT TYPE composite
- \* OBJECT COUNT 83

[Hide Vector ▲](#)

#### ARCGIS FEATURE CLASS PROPERTIES ►

- FEATURE CLASS NAME BED\_PSM\_Jefferson\_Co\_IN
- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Polyline
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 83
- \* 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 Jefferson County, Indiana

**PUBLICATION DATE** 2018-04-27 00:00:00

**EDITION** 1

##### SERIES

**NAME** Bedrock Potentiometric Surface Map

**ISSUE** PSM 77-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](mailto: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 0.394

ONLINE SOURCE

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

[Hide Distribution ▲](#)

## Fields ►

DETAILS FOR OBJECT [BED\\_PSM\\_Jefferson\\_Co\\_IN ►](#)

\* TYPE Feature Class

\* ROW COUNT 83

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 Integer
- \* WIDTH 10
- \* PRECISION 10
- \* SCALE 0
- FIELD DESCRIPTION  
Static water elevation based on subtracting the ground surface elevation (Lidar data) from the static water level given on the water well record.
- DESCRIPTION SOURCE  
Lidar data and water well records

[Hide Field static\\_e ▲](#)

[Hide Details for object BED\\_PSM\\_Jefferson\\_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 2018-04-26

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 2018-03-23 15:06:47  
LAST MODIFIED IN ARCGIS FOR THE ITEM 2018-04-26 12:48:35

AUTOMATIC UPDATES  
HAVE BEEN PERFORMED Yes  
LAST UPDATE 2018-04-26 12:48:35

ITEM LOCATION HISTORY  
ITEM COPIED OR MOVED 2017-12-18 10:22:11  
FROM C:\!poteniometric\Jefferson\PSM\_Jefferson\_BED  
TO \\state.in.us\file1\DNR\HOME\ggrove\\_potentiometric\Jefferson\PSM\_Jefferson\_BED

[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) ▼