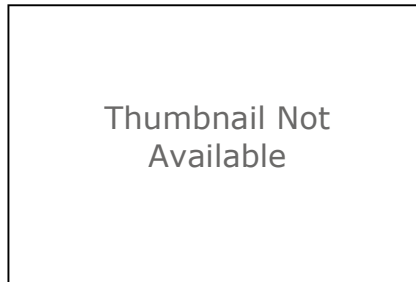


# Potentiometric Surface Map of The Bedrock Aquifers of Whitley County, Indiana

Shapefile



## Tags

Potentiometric surface, static water level, groundwater, water wells, bedrock aquifer, Indiana Department of Natural Resources (IDNR), Division of Water (DOW), Whitley County, Indiana, USA

## Summary

Display and/or analyses requiring spatial distribution of potentiometric surface elevations in Whitley County.

## Description

This file is a digital geospatial polyline coverage of the bedrock potentiometric surface elevations mapped for Whitley 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

**West** -85.644456    **East** -85.331289  
**North** 41.189792    **South** 40.998355

## 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](#)   Whitley County, Indiana, USA

[THEME KEYWORDS](#)   Bedrock

[THEME KEYWORDS](#)   potentiometric surface

[THEME KEYWORDS](#)   static water level

[THEME KEYWORDS](#)   groundwater

[THEME KEYWORDS](#)   water wells

[THEME KEYWORDS](#)   Whitley County

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

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

[Hide Topics and Keywords](#) ▲

## Citation ►

[TITLE](#)   Potentiometric Surface Map of The Bedrock Aquifers of Whitley County, Indiana

[CREATION DATE](#)   2013-06-01 00:00:00

[PUBLICATION DATE](#)   2013-06-01 00:00:00

[EDITION](#)   1

[PRESENTATION FORMATS](#)   \*digital map

[SERIES](#)

[NAME](#)   Bedrock Potentiometric Surface Map

[ISSUE](#)   PSM 27-B

[OTHER CITATION DETAILS](#)   This map was compiled from multiple unpublished work maps based on USGS quadrangles at 1:24,000 scale: Arcola, Churubusco, Columbia City, Ege, Laud, Lorane, Merriam, North Webster, Ormas, Pierceton, South Whitley East, and South Whitley West.

[Hide Citation](#) ▲

## Citation Contacts ►

[RESPONSIBLE PARTY](#)

[ORGANIZATION'S NAME](#)   Indiana Department of Natural Resources, Division of Water

[CONTACT'S ROLE](#)   publisher

CONTACT INFORMATION ►

ADDRESS

TYPE

DELIVERY POINT Indianapolis, Indiana, USA

[Hide Contact information ▲](#)

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 ►

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ADDRESS

TYPE both

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CITY Indianapolis

ADMINISTRATIVE AREA Indiana

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

\*PROCESSING ENVIRONMENT Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; Esri ArcGIS 10.1.1.3143

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\_WHITLEY\_CO\_IN  
\*SIZE 0.058  
\*LOCATION file:///iotfilp19pw\dnr\dow\common\RA\_FILES\_ONLINE\27\_Whitley\ZIP  
FILES\BED\_PSM\_WHITLEY\_CO\_IN.shp  
\*ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

#### EXTENT

##### DESCRIPTION

Extent used for searching

##### GEOGRAPHIC EXTENT

###### BOUNDING RECTANGLE

WEST LONGITUDE -85.644456

EAST LONGITUDE -85.331288

SOUTH LATITUDE 40.998355

NORTH LATITUDE 41.189792

EXTENT CONTAINS THE RESOURCE Yes

#### EXTENT

##### DESCRIPTION

Publication Date

##### TEMPORAL EXTENT

DATE AND TIME 2013-06-01 00:00:00

#### EXTENT

##### GEOGRAPHIC EXTENT

###### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

\*WEST LONGITUDE -85.644456

\*EAST LONGITUDE -85.331289

\*NORTH LATITUDE 41.189792

\*SOUTH LATITUDE 40.998355

\*EXTENT CONTAINS THE RESOURCE Yes

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

\*WEST LONGITUDE 614000.720093

\*EAST LONGITUDE 639949.176555

\*SOUTH LATITUDE 4539907.833129

\*NORTH LATITUDE 4560716.806533

\*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

### CONTACT INFORMATION ►

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TYPE both

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ADMINISTRATIVE AREA Indiana

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 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 not planned

[Hide Resource Maintenance ▲](#)

## Resource Constraints ►

### CONSTRAINTS

#### LIMITATIONS OF USE

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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

##### 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 2013, 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.

ACCESS CONSTRAINTS    other restrictions

##### 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.

[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 7.11.2

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

#### VECTOR ►

\*LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

#### GEOMETRIC OBJECTS

FEATURE CLASS NAME BED\_PSM\_WHITLEY\_CO\_IN  
\*OBJECT TYPE composite  
\*OBJECT COUNT 11

[Hide Vector ▲](#)

#### ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME BED\_PSM\_WHITLEY\_CO\_IN  
\*FEATURE TYPE Simple  
\*GEOMETRY TYPE Polyline  
\*HAS TOPOLOGY FALSE  
\*FEATURE COUNT 11  
\*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 ►

**WHEN THE PROCESS OCCURRED** 2013-04-01 00:00:00

**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

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](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 ▲*

*Hide Process step ▲*

PROCESS STEP ►

WHEN THE PROCESS OCCURRED   2013-05-01   00:00:00

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 ►

WHEN THE PROCESS OCCURRED   2013-06-01   00:00:00

RATIONALE   A polyline coverage was created using the heads-up method and attributed by Ginger C Korinek. Attribute definitions are described below.

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   principal investigator

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](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 ▲*

[Hide Process step ▲](#)

SOURCE DATA ►

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

[Hide Source data ▲](#)

[Hide Lineage ▲](#)

## Geoprocessing history ►

PROCESS

PROCESS NAME

DATE 2013-08-01 13:18:30

TOOL LOCATION c:\program files\arcgis\desktop10.1\ArcToolbox\Toolboxes\Analysis Tools.tbx\Clip

COMMAND ISSUED

Clip J:\!Potentiometric\Whitley\Final\BED\_PSM\_WHITLEY\_CO\_IN\_Draft.shp J:\!  
Potentiometric\Whitley\Shapefiles\Whitley\_boundary.shp J:\!  
Potentiometric\Whitley\Final\BED\_PSM\_WHITLEY\_CO\_IN\_Clip.shp #

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2013-08-01 13:30:18

TOOL LOCATION c:\program files\arcgis\desktop10.1\ArcToolbox\Toolboxes\Analysis  
Tools.tbx\Erase

COMMAND ISSUED

Erase BED\_PSM\_WHITLEY\_CO\_IN\_Clip "Whitley\_PSM2\_BED in No data" J:\!  
Potentiometric\Whitley\Final\BED\_PSM\_WHITLEY\_CO\_IN.shp #

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

## 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

CONTACT INFORMATION ►

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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 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

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 0.058  
UNITS OF DISTRIBUTION Shapefile

#### ONLINE SOURCE

LOCATION <http://www.in.gov/dnr/water/7256.htm>  
DESCRIPTION Data and Maps

*Hide Distribution ▲*

## Fields ►

#### DETAILS FOR OBJECT [BED\\_PSM\\_WHITLEY\\_CO\\_IN](#) ►

\*TYPE Feature Class

\*ROW COUNT 11

#### DEFINITION

Potentiometric Line of Equal Elevation

#### DEFINITION SOURCE

Ginger C. Korinek

#### 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 PSM\_Elev ►

- ALIAS PSM Line
- \*DATA TYPE SmallInteger
- \*WIDTH 4
- \*PRECISION 4
- \*SCALE 0
- FIELD DESCRIPTION  
Potentiometric Line of Equal Elevation
- DESCRIPTION SOURCE  
Ginger C. Korinek

*Hide Field PSM\_Elev ▲*

*Hide Details for object BED\_PSM\_WHITLEY\_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 2013-08-05

#### 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 2013-07-01 13:34:25

LAST MODIFIED IN ARCGIS FOR THE ITEM 2013-08-27 10:15:32

#### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2013-08-27 10:15:14

#### ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2013-07-01 13:34:25

FROM J:\!Potentiometric\Whitley\Review\Final Review\Bedrock\Whitley\_PSM\_BED  
TO \\iotfilp19pw\dnr\dow\TS\Water\_Resources\_and\_Rights\!  
Potentiometric\Whitley\Final\Whitley\_PSM\_BED

[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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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 [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](#)

[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) ▼