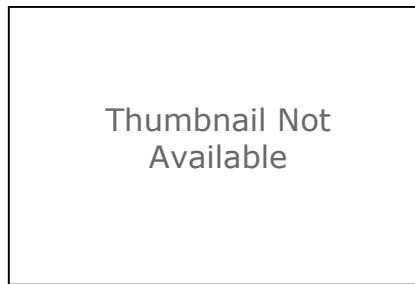


# Bedrock Limited Data and Nonaquifer Areas for Knox County, Indiana

## Shapefile



## Tags

No data zone, water wells, bedrock aquifer, Indiana Department of Natural Resources (IDNR), Division of Water (DOW), Knox County, Indiana, USA

## Summary

Display and/or analyses requiring spatial distribution of lack of static water levels in the bedrock aquifers of Knox County.

## Description

This file is a digital geospatial polygon coverage of the lack of available aquifer static water level data within bedrock aquifers for Knox 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>	-87.761718	<b>East</b>	-87.090055
<b>North</b>	38.908093	<b>South</b>	38.414038

## 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 Knox County, Indiana, USA

THEME KEYWORDS bedrock

THEME KEYWORDS static water level

THEME KEYWORDS groundwater

THEME KEYWORDS water wells

THEME KEYWORDS Indiana Department of Natural Resources (IDNR)

THEME KEYWORDS Division of Water (DOW)

*Hide Topics and Keywords ▲*

### Citation ►

TITLE Bedrock Limited Data and Nonaquifer Areas for Knox County, Indiana

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

PUBLICATION DATE 2017-04-27 00:00:00

EDITION 1

PRESENTATION FORMATS \* digital map

#### SERIES

NAME Bedrock Potentiometric Surface Map

ISSUE PSM 64-B

#### OTHER CITATION DETAILS

This map was compiled from multiple unpublished work maps based on USGS quadrangles at 1:24,000 scale: Bicknell, Bucktown, Carlisle, Decker, East Mount Carmel, Epsom, Fritchton, Heathsville, Iona, Lyons, Monroe City, Mount Carmel, Oaktown, Patoka, Plainville, Russellville, Saint Francisville, Sandborn, Sandy Hook, Union, Vincennes, Washington, Wheatland.

*Hide Citation ▲*

### Citation Contacts ►

## 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 ▲*

## RESPONSIBLE PARTY

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water  
 INDIVIDUAL'S NAME Robert K. Schmidt  
 CONTACT'S POSITION Resource Assessment Section  
 CONTACT'S ROLE originator

## CONTACT INFORMATION ►

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POSTAL CODE 46204

COUNTRY US

E-MAIL ADDRESS [rschmidt@dnr.in.gov](mailto:rschmidt@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 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.4.1.5686

## 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\_Limited\_Data\_Nonaquifer\_Knox\_Co\_IN
- \* SIZE 0.263
- \* LOCATION file:///iotisip01pa\dnrgis\$!\Potentiometric\Knox\1\_Web\_Products\Zip products\BED\_Limited\_Data\_Nonaquifer\_Knox\_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

## GEOGRAPHIC EXTENT

## GEOGRAPHIC DESCRIPTION

DESCRIPTION CONTAINS THE RESOURCE No

## TEMPORAL EXTENT

DATE AND TIME 2015-03-01 00:00:00

## EXTENT

## GEOGRAPHIC EXTENT

## BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

\* WEST LONGITUDE -87.761718

\* EAST LONGITUDE -87.090055

\* NORTH LATITUDE 38.908093

\* SOUTH LATITUDE 38.414038

\* EXTENT CONTAINS THE RESOURCE Yes

## EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE 433953.593800

\* EAST LONGITUDE 492138.375000

\* SOUTH LATITUDE 4252026.000000

\* NORTH LATITUDE 4306581.500000

\* 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 Robert K. Schmidt  
 CONTACT'S POSITION Resource Assessment Section  
 CONTACT'S ROLE point of contact

**CONTACT INFORMATION** ►**PHONE**

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**ADDRESS**

TYPE both  
 DELIVERY POINT 402 W Washington Street W264  
 CITY Indianapolis  
 ADMINISTRATIVE AREA Indiana  
 POSTAL CODE 46204  
 COUNTRY US  
 E-MAIL ADDRESS [rschmidt@dnr.in.gov](mailto:rschmidt@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**

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**

**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 2017, 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**   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\_Limited\_Data\_Nonaquifer\_Knox\_Co\_IN

\* OBJECT TYPE composite

\* OBJECT COUNT 5

*Hide Vector* ▲

**ARCGIS FEATURE CLASS PROPERTIES** ▶

FEATURE CLASS NAME BED\_Limited\_Data\_Nonaquifer\_Knox\_Co\_IN

\* FEATURE TYPE Simple

\* GEOMETRY TYPE Polygon

\* HAS TOPOLOGY FALSE

\* FEATURE COUNT 5

\* 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. This layer is based on areas in the county with sparse information because of lack of well records or incomplete records, or poorly producing aquifers.

*Hide Data quality report - Completeness omission* ▲

**DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY** ▶**MEASURE DESCRIPTION**

The layer was created 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 2016-10-01 00:00:00

#### DESCRIPTION

Coverage was selected by careful evaluation of the lack of water well records within an area by determine a minimum of one mile from available data. Using field located wells that contained complete and reasonable information a half mile buffer was applied. Areas outside of the compiled buffer were considered a no data zone and delineated as such.

### PROCESS CONTACT

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

INDIVIDUAL'S NAME Robert K. Schmidt

CONTACT'S POSITION Resource Assessment Section

CONTACT'S ROLE processor

#### CONTACT INFORMATION ►

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POSTAL CODE 46204

COUNTRY US

E-MAIL ADDRESS [rschmidt@dnr.in.gov](mailto:rschmidt@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 ▲](#)

## Distribution ►

### DISTRIBUTOR ►

#### CONTACT INFORMATION

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water  
 INDIVIDUAL'S NAME Robert K. Schmidt  
 CONTACT'S POSITION Resource Assessment Section  
 CONTACT'S ROLE originator

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##### ONLINE RESOURCE

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 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

UNITS OF DISTRIBUTION Shapefile  
 \* TRANSFER SIZE 0.263

### ONLINE SOURCE

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

[Hide Distribution ▲](#)

## Fields ►

DETAILS FOR OBJECT [BED\\_Limited\\_Data\\_Nonaquifer\\_Knox\\_Co\\_IN](#) ►

- \* TYPE Feature Class
- \* ROW COUNT 5

## DEFINITION

No Data Limited Aquifer Zone

## DEFINITION SOURCE

Robert K. Schmidt

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 [Zone](#) ►

- \* ALIAS Zone
- \* DATA TYPE String
- \* WIDTH 50
- \* PRECISION 0
- \* SCALE 0

[Hide Field Zone](#) ▲

[Hide Details for object BED\\_Limited\\_Data\\_Nonaquifer\\_Knox\\_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 2017-04-27

### 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 2017-04-26 12:48:39  
LAST MODIFIED IN ARCGIS FOR THE ITEM 2017-04-27 74:30:70

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
LAST UPDATE 2017-04-27 07:36:08

### ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2017-04-26 12:48:39  
FROM M:\!  
Potentiometric\Knox\2\_Shapefiles\Shapefiles\_FINAL\_Map\Knox\_Bed\_No\_Data\_Zone  
TO \\iotisip01pa\dnrgis\$\!Potentiometric\Knox\1\_Web\_Products\Zip  
products\Knox\_Bed\_No\_Data\_Zone

[Hide Metadata Details](#) ▲

## Metadata Contacts ►

### METADATA CONTACT

ORGANIZATION'S NAME Indiana Department of Natural Resources Division of Water  
INDIVIDUAL'S NAME Robert K. Schmidt  
CONTACT'S POSITION Resource Assessment Section  
CONTACT'S ROLE originator

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FAX (317) 233-4579

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CITY Indianapolis  
ADMINISTRATIVE AREA Indiana

POSTAL CODE 46204  
COUNTRY US  
E-MAIL ADDRESS [rschmidt@dnr.in.gov](mailto:rschmidt@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 ▲](#)

METADATA CONTACT  
ORGANIZATION'S NAME Robert K. Schmidt, IDNR Division of Water, Resource Assessment Section

[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) ▼