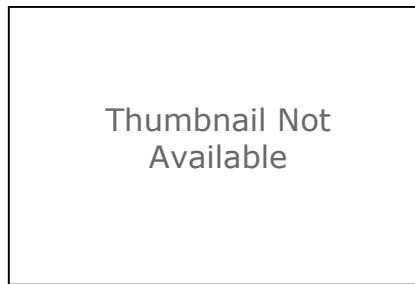


Potentiometric Surface Map of the Unconsolidated Aquifers of Knox County, Indiana

Shapefile



Tags

Potentiometric surface, static water level, groundwater, water wells, water tables, unconsolidated, Indiana Department of Natural Resources (IDNR), Division of Water (DOW), Knox County, Indiana, USA

Summary

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

Description

This file is a digital geospatial polyline coverage of the unconsolidated potentiometric surface elevations mapped for Knox 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	-87.618056	East	-87.327812
North	38.902978	South	38.491358

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

PLACE KEYWORDS Knox County, Indiana, USA

THEME KEYWORDS unconsolidated

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 Potentiometric Surface Map of the Unconsolidated Aquifers of Knox County, Indiana

PUBLICATION DATE 2017-04-26 00:00:00

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

EDITION 1

PRESENTATION FORMATS digital map

SERIES

NAME Unconsolidated Potentiometric Surface Map

ISSUE PSM 64-A

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 Robert K. Schmidt, IDNR Division of Water, Resource Assessment Section

CONTACT'S ROLE originator

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 Undetermined ()

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 UNC_PSM_Knox_Co_IN

* SIZE 0.077

* LOCATION file:///\\iotisip01pa\dnrgis\$\\!Potentiometric\Knox\1_Web_Products\Zip products\UNC_PSM_Knox_Co_IN.shp

* ACCESS PROTOCOL Local Area Network

Hide Resource Details ▲

Extents ►

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -87.618056

* EAST LONGITUDE -87.327812

* NORTH LATITUDE 38.902978

* SOUTH LATITUDE 38.491358

EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 446407.356123

* EAST LONGITUDE 471412.501879

* SOUTH LATITUDE 4260513.329272

* NORTH LATITUDE 4306061.719324

* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

Resource Points of Contact ►

POINT OF CONTACT

INDIVIDUAL'S NAME Robert K. Schmidt
 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

DELIVERY POINT 402 W. Washington Street W264
 CITY Indianapolis
 ADMINISTRATIVE AREA Indiana
 POSTAL CODE 46204
 COUNTRY US
 E-MAIL ADDRESS rschmidt@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 not planned

[Hide Resource Maintenance ▲](#)

Resource Constraints ►

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 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.

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.

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.

[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 UNC_PSM_Knox_Co_IN

* OBJECT TYPE composite

* OBJECT COUNT 34

Hide Vector ▲

ARCGIS FEATURE CLASS PROPERTIES ▶

FEATURE CLASS NAME UNC_PSM_Knox_Co_IN

* FEATURE TYPE Simple

* GEOMETRY TYPE Polyline

* HAS TOPOLOGY FALSE

* FEATURE COUNT 34

* 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 ►

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 2016-10-01 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.

[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 Unconsolidated Potentiometric Surface Map Knox County, Indiana

PUBLICATION DATE 2017-04-26 01:00:00

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

EDITION 1

SERIES

NAME Unconsolidated Potentiometric Surface Map

ISSUE PSM 64-A

RESPONSIBLE PARTY

ORGANIZATION'S NAME IDNR Division of Water, Resource Assessment Section

INDIVIDUAL'S NAME Robert K. Schmidt
CONTACT'S ROLE originator

RESPONSIBLE PARTY

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

CONTACT INFORMATION ►

ADDRESS

DELIVERY POINT Indianapolis, IN

[Hide Contact information ▲](#)

[Hide Source citation ▲](#)

[Hide Source data ▲](#)

[Hide Lineage ▲](#)

Geoprocessing history ►

PROCESS

PROCESS NAME

DATE 2017-04-17 11:31:19

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.4\ArcToolbox\Toolboxes\Analysis Tools.tbx\Clip

COMMAND ISSUED

```
Clip "UNCONSOLIDATED DATA\Knox_PSM_UNC_Contours_smooth" County_Boundary_Knox
M:\!
Potentiometric\Knox\2_Shapefiles\Shapefiles_FINAL_Map\Knox_UNC_PSM_Contours.shp
#
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2017-04-17 11:33:35

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.4\ArcToolbox\Toolboxes\Analysis Tools.tbx\Erase

COMMAND ISSUED

```
Erase "UNCONSOLIDATED DATA\Knox_UNC_PSM_Contours" "UNCONSOLIDATED
DATA\Knox_UNC_No_Data_Zone" "M:\!
Potentiometric\Knox\2_Shapefiles\Shapefiles_FINAL_Map\Knox_UNC_PSM_Contours
Erased.shp" #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

Distribution ►

DISTRIBUTOR ►

CONTACT INFORMATION

INDIVIDUAL'S NAME Robert K. Schmidt

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

DELIVERY POINT 402 W. Washington Street W264

CITY Indianapolis

ADMINISTRATIVE AREA Indiana

POSTAL CODE 46204

COUNTRY US

E-MAIL ADDRESS rschmidt@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 0.077

ONLINE SOURCE

LOCATION <http://www.in.gov/dnr/water/7256.htm>[Hide Distribution ▲](#)**Fields ►**DETAILS FOR OBJECT [UNC_PSM_Knox_Co_IN ►](#)

* TYPE Feature Class

* ROW COUNT 34

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
Bedrock contour lines of static water levels.

*Hide Field Static_E ▲***FIELD SHAPE_Leng ▶**

- * ALIAS SHAPE_Leng
- * DATA TYPE Double
- * WIDTH 19
- * PRECISION 0
- * SCALE 0

*Hide Field SHAPE_Leng ▲**Hide Details for object UNC_PSM_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 2017-05-17

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 2017-05-17 11:15:07
 LAST MODIFIED IN ARCGIS FOR THE ITEM 2017-05-17 11:18:55

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
 LAST UPDATE 2017-05-17 11:18:55

ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2017-05-17 11:15:07
 FROM M:\!
 Potentiometric\Knox\2_Shapefiles\Shapefiles_FINAL_Map\Knox_UNC_PSM_Contours
 To \\iotisip01pa\dnrgis\$!\Potentiometric\Knox\1_Web_Products\Zip
 products\Knox_UNC_PSM_Contours

[Hide Metadata Details ▲](#)

Metadata Contacts ►

METADATA CONTACT

INDIVIDUAL'S NAME Robert K. Schmidt
 ORGANIZATION'S NAME Indiana Department of Natural Resources, Division of Water
 CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

PHONE

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

ADDRESS

DELIVERY POINT 402 W. Washington Street W264
 CITY Indianapolis
 ADMINISTRATIVE AREA Indiana
 POSTAL CODE 46204
 COUNTRY US
 E-MAIL ADDRESS rschmidt@dnr.IN.gov

HOURS OF SERVICE

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

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

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) ▼