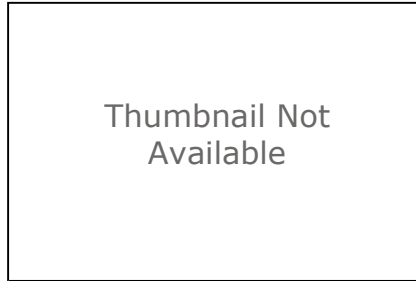


# Potentiometric Surface Map of the Unconsolidated Aquifers of Steuben County, Indiana

Personal GeoDatabase Feature Class



## Tags

Steuben County, Indiana, USA, Unconsolidated Potentiometric Surface Map

## Summary

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

## Description

This file is a digital geospatial polyline coverage of the unconsolidated potentiometric surface elevations mapped for Steuben County Indiana.

## Credits

There are no credits for this item.

## 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** -85.202589    **East** -84.797068  
**North** 41.766195    **South** 41.520313

## Scale Range

**Maximum (zoomed in)** 1:5,000  
**Minimum (zoomed out)** 1:150,000,000

## ArcGIS Metadata ►

### Topics and Keywords ►

\* CONTENT TYPE    Downloadable Data

*Hide Topics and Keywords ▲*

### Citation ►

TITLE Potentiometric Surface Map of the Unconsolidated Aquifers of Steuben County, Indiana

PUBLICATION DATE 2011-10-01

EDITION 1

PRESENTATION FORMATS digital map

#### SERIES

NAME Unconsolidated Potentiometric Surface Map

ISSUE PSM 01-A

#### OTHER CITATION DETAILS

This map was compiled from multiple unpublished work maps based on USGS quadrangles at 1:24,000 scale: Angola East, Angola West, Ashley, Bronson South, California, Camden, Clear lake, Edon, Hamilton, Kinderhook, Orland, and Stroh.

[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 English ( )

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 10.2.0.3348

#### ARCGIS ITEM PROPERTIES

\* NAME UNC\_PSM\_STEUBEN\_CO\_IN

\* SIZE 0.498

\* LOCATION file:///\\iotfilp19pw\dnr\dow\TS\Water\_Resources\_and\_Rights\!

Potentiometric\_Finished\01\_Steuben\2\_Shapefiles\Shapefiles\_FINAL\_Map\Steuben.mdb

\* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE    Extent used for searching

\* WEST LONGITUDE    -85.202589

\* EAST LONGITUDE    -84.797068

\* SOUTH LATITUDE    41.520313

\* NORTH LATITUDE    41.766195

\* EXTENT CONTAINS THE RESOURCE    Yes

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

\* WEST LONGITUDE    649957.104900

\* EAST LONGITUDE    683132.836700

\* SOUTH LATITUDE    4598845.058500

\* NORTH LATITUDE    4625390.437400

\* 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 ►

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CITY    Indianapolis

ADMINISTRATIVE AREA    Indiana

POSTAL CODE    46204

COUNTRY    US

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##### 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

## Resource Constraints ►

### LEGAL CONSTRAINTS

[ACCESS CONSTRAINTS](#)   other restrictions, 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 2011, 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.

### LEGAL CONSTRAINTS

[USE CONSTRAINTS](#)   other restrictions, 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.

### 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.

## 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](#)   10000

[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 8.1.1

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

#### VECTOR ►

\* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

#### GEOMETRIC OBJECTS

FEATURE CLASS NAME UNC\_PSM\_STEUBEN\_CO\_IN  
\* OBJECT TYPE composite  
\* OBJECT COUNT 27

[Hide Vector ▲](#)

#### ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME UNC\_PSM\_STEUBEN\_CO\_IN  
\* FEATURE TYPE Simple  
\* GEOMETRY TYPE Polyline  
\* HAS TOPOLOGY FALSE  
\* FEATURE COUNT 27  
\* 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 2011-01-01 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 ▲](#)

#### PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2011-01-01 00:00:00

##### DESCRIPTION

The hand-drawn work maps (scale 1:24,000) showing lines of equal potentiometric surface elevation were digitized and edge matched in ESRI ArcEdit (ArcScan) by Scott H. Dean. The maps were individually georeferenced using a minimum of 4 tics per map. Projection was UTM, Zone 16, NAD83.

[Hide Process step ▲](#)

SOURCE DATA ▶

DESCRIPTION

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

RESOLUTION OF THE SOURCE DATA

SOURCE CITATION ▶

TITLE PSM, Steuben County, Indiana

PUBLICATION DATE 2011-07-01

EDITION 1

SERIES

NAME Unconsolidated Potentiometric Surface Map

ISSUE PSM 01-A

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, IN

[Hide Contact information ▲](#)

[Hide Source citation ▲](#)

[Hide Source data ▲](#)

[Hide Lineage ▲](#)

**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 ▶

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[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

#### DISTRIBUTION FORMAT

\*NAME Personal GeoDatabase Feature Class

#### TRANSFER OPTIONS

\*TRANSFER SIZE 0.498

#### ONLINE SOURCE

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

[Hide Distribution ▲](#)

## Fields ►

#### DETAILS FOR OBJECT [UNC\\_PSM\\_STEUBEN\\_CO\\_IN ►](#)

\*TYPE Feature Class

\*ROW COUNT 27

#### FIELD [OBJECTID ►](#)

\*ALIAS OBJECTID

\*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 OBJECTID ▲](#)

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 2
- \* PRECISION 0
- \* SCALE 0

*Hide Field STATIC\_E ▲*

FIELD Shape\_Length ►

- \* ALIAS Shape\_Length
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Length of feature in internal units.
- \* DESCRIPTION SOURCE  
Esri
- \* DESCRIPTION OF VALUES  
Positive real numbers that are automatically generated.

*Hide Field Shape\_Length ▲*

*Hide Details for object UNC\_PSM\_STEUBEN\_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 2014-03-27

#### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

METADATA STYLE ISO 19139 Metadata Implementation Specification

STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2013-09-24 12:30:48

LAST MODIFIED IN ARCGIS FOR THE ITEM 2014-03-27 10:55:49

#### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2014-03-27 10:46:59

#### ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2013-09-24 12:30:48

FROM J:\!Potentiometric\_Finished\01\_Steuben\AqSys\_shapefiles\UNC\_PSM\_STEUBEN\_CO\_IN

TO \\iotfilp19pw\dnr\dow\TS\Water\_Resources\_and\_Rights\!

Potentiometric\_Finished\01\_Steuben\2\_Shapefiles\Shapefiles\_FINAL\_Map\UNC\_PSM\_STEUBEN\_CO\_IN

[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 ►

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E-MAIL ADDRESS [rschmidt@dnr.IN.gov](mailto:rschmidt@dnr.IN.gov)

#### HOURS OF SERVICE

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[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

## Metadata Constraints ►

#### LEGAL CONSTRAINTS

[ACCESS CONSTRAINTS](#)   other restrictions

#### OTHER 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 contracting the IDNR Division of Water.

[Hide Metadata Constraints](#) ▲

## FGDC Metadata (read-only) ▼