

# Ohio Sole Source Aquifers Metadata

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## **Identification Information:**

*Citation:*

*Citation\_Information:*

*Originator:* Division of Drinking and Ground Waters, Ohio EPA

*Publication\_Date:* Unknown *Title:* Ohio Sole Source

*Aquifers Geospatial\_Data\_Presentation\_Form:* vector  
digital data

*Publication\_Information:*

*Publisher:* Ohio EPA Division of Drinking and Ground Waters

*Online\_Linkage:*

<[http://epa.ohio.gov/Portals/28/documents/swap/oh\\_ssa.zip](http://epa.ohio.gov/Portals/28/documents/swap/oh_ssa.zip)>

*Description:*

*Abstract:*

These data consist of the boundaries of the designated sole source aquifers in Ohio. The boundaries were digitized from source maps and digital data provided to Ohio EPA by the petitioners for sole source aquifer designation. The sources used to create these boundaries were created by a variety of methods and at different scales.

The Sole Source Aquifer Program is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974. According to USEPA, a sole source aquifer is defined as "a sole or principal source aquifer as one which supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) which could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. For convenience, all designated sole or principal source aquifers are referred to as "sole source aquifers" (SSA)." The designation of an aquifer as a sole source aquifer "provides EPA with the authority to review federal financially assisted projects planned for the area to determine their potential for contaminating the aquifer. Federally funded projects reviewed by EPA under the SSA program may include, but not be limited to, highway improvements and new road construction, public water supply wells, transmission lines, wastewater treatment facilities, construction projects involving disposal of storm water, and agricultural projects involving management of animal waste."

*Purpose:*

Illustrate the USEPA designated Sole Source Aquifer Areas in Ohio.

*Supplemental\_Information:*

For information on the Sole Source Aquifer Program, and the petition documents and maps, contact Ground Water Branch, US EPA Region 5, 77 W. Jackson Blvd. Chicago, IL 60604; phone: (312)353-4374. Federal Register citations for Ohio Sole Source Aquifers include: Pleasant City Aquifer - Federal Register Citation - 52 FR 32342, 08/27/87; Bass Island Aquifer, Catawba Island - Federal Register Citation - 52 FR 37009, 10/02/87; Miami Valley Buried Aquifer - Federal Register Citation - 53 FR 15876, 05/04/88; OKI extension of the Miami Buried Valley Aquifer - Federal Register Citation - 53 FR 25670, 07/08/88; Allen County Area Combined Aquifer System - Federal Register Citation - 57 FR 53111, 11/06/92 .

*Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Range\_of\_Dates/Times:*

*Beginning\_Date:* 8/27/1987

*Ending\_Date:* 11/06/1992

*Currentness\_Reference:* publication date

*Status:*

*Progress:* Complete

*Maintenance\_and\_Update\_Frequency:* None planned

*Spatial\_Domain:*

*Bounding\_Coordinates:*

*West\_Bounding\_Coordinate:* -84.903715

*East\_Bounding\_Coordinate:* -81.505067

*North\_Bounding\_Coordinate:* 41.588679

*South\_Bounding\_Coordinate:* 39.027372

*Keywords: Theme:*

*Theme\_Keyword\_Thesaurus:* None

*Theme\_Keyword:* Sole Source Aquifer

*Theme\_Keyword:* Aquifers

*Theme\_Keyword:* Public Drinking Water

*Theme\_Keyword:* Source Water Protection

*Theme\_Keyword:* Downloadable Data

*Theme\_Keyword:* environment

*Place: Place\_Keyword:* Ohio

*Place\_Keyword:* Miami Valley

*Place\_Keyword:* Allen

*Place\_Keyword:* Pleasant City

*Place\_Keyword:* Catawba Island

*Place\_Keyword:* Bass Islands

*Place\_Keyword:* Hamilton

*Place\_Keyword:* Bulter

*Place\_Keyword:* Clermont

*Place\_Keyword:* Warren

*Place\_Keyword:* Montgomery

*Access\_Constraints:*

REQUIRED: Restrictions and legal prerequisites for accessing the data set.

*Use\_Constraints:*

These data are provided for informational purposes only. The Ohio Environmental Protection Agency (OEPA) provides this geographic data "as is." OEPA makes no guarantee or warranty concerning the accuracy of information contained in the geographic data. OEPA further makes no warranties, either expressed or implied, as to the condition of the product, or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the user. Although these data have been processed successfully on computers of OEPA, no warranty, expressed or implied, is made by OEPA regarding the use of these data on any other system, nor does the fact of distribution constitute or imply any such warranty. In no event shall the OEPA have any liability whatsoever for payment of any consequential, incidental, indirect, special, or tort damages of any kind, including, but not limited to, any loss of profits arising out of use of or reliance on the geographic data.

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:*

GIS Unit - The Division of Drinking and Ground Waters of the Ohio Environmental Protection Agency

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* 122 South Front Street

*City:* Columbus

*State\_or\_Province:* OH

*Postal\_Code:* 43215

*Country:* United States of America

*Contact\_Voice\_Telephone:* 614-644-2752

*Data\_Set\_Credit:* Ohio EPA Division of Drinking and Ground Waters

*Native\_Data\_Set\_Environment:*

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 9.1.0.722

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***Data\_Quality\_Information:***

*Logical\_Consistency\_Report:*

Sole Source Aquifer areas were derived from hard copy maps and digital source materials. Hard copy sources of aquifer boundaries were manually digitized using a digitizing table from 1:24,000 scale topographic maps supplied by petitioners, or obtained from the supporting materials and maps submitted to US EPA.

*Completeness\_Report:*

The data include areas for all designated Sole Source Aquifers in Ohio as of March of 2004.

*Lineage:*

*Source\_Information:*

*Source\_Citation:*

*Citation\_Information:*

*Originator:* OKI Regional Council of Governments

*Title:*

Ohio Kentucky Indiana Regional Council of Governments Sole Source Aquifers for the Lower Great Miami Aquifer

*Source\_Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Single\_Date/Time:*

*Source\_Citation\_Abbreviation:* OKI Sole Source Aquifers

*Source\_Contribution:*

OKI provided Ohio EPA with electronic files in (DXF), of the sole source aquifer boundaries. The Ohio-Kentucky-Indiana Regional Council of Governments (OKI) prepared the detailed petition required by U.S. EPA in making the "sole source" designation. Similarly, the Miami Valley Regional Planning Commission (MVRPC) in Dayton, Ohio successfully petitioned EPA to designate the northern portion of of the GMVBAS.

*Source\_Information:*

*Source\_Citation:*

*Citation\_Information:*

*Originator:*

Dumpbuster Inc. of Spencerville / Bennett & Williams Inc. Consulting Geologists

*Publication\_Date:* Unpublished Material

*Title:* Allen County Sole Source Aquifer Petition

*Source\_Scale\_Denominator:* 1:24,000

*Type\_of\_Source\_Media:* Topographic Maps

*Source\_Contribution:*

Bennett & Williams Inc. Consulting Geologists, prepared potentiometric and bedrock topography maps for the area. The final boundaries are based on the following criteria, (according to correspondence to USEPA from the consultants on April 16, 1992.) Eastern Boundary - the top of the western bedrock valley wall of the north-south bedrock valley that underlies the communities of Lima, Cridersville and Wapakoneta; Southern Boundary - the top of the east-west trending bedrock divide between the buried valley underlying Grand Lake St. Mary's and the regional northern dip on the regional bedrock; Western Boundary in Mercer County - the top of the eastern bedrock valley wall of the northwest-southeast bedrock valley underlying Mercer, Ohio; Western boundary, Van Wert County, the east bank of the Little Auglaize River: Northern Boundary - the boundary determined by US EPA in 1991.

*Process\_Step:*

*Process\_Description:*

Lower Portion of Great Miami Valley Aquifer: The present boundaries of the GMBVAS in Butler, Clermont, Hamilton and Warren counties are based on productivity data primarily as shown on the Ohio Department of Natural Resources (ODNR) Groundwater Resources Maps for each county. The sole source aquifer features in Butler, Clermont, Hamilton and Warren counties were manually digitized on a digitizer table by OKI's CAD department. Aquifer boundaries were obtained from GROUND-WATER POLLUTION POTENTIAL hard copy maps published by the Ohio Department of Natural Resources (ODNR) in 1989 at a scale of 1"=1 mile. OKI's Environment & Water department transferred the aquifer boundaries from the ODNR hard copy maps to 7.5 minute U.S.G.S. hard copy maps by "eyeballing" the boundaries from the hard copy ODNR maps. The boundaries were manually digitized by OKI's CAD department using the corners of the quad map as control points. Ground Water Pollution Potential Map Publication dates by county; Butler: 9-1991 Clermont: 8-1993 Hamilton: 6-1989 Warren: 9-1990.

*Source\_Used\_Citation\_Abbreviation:* OKI's Sole Source Aquifers

*Process\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* Ohio-Kentucky-Indiana Regional Council of Governments

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* 720 East Pete Rose Way

*City:* Cincinnati

*State\_or\_Province:* OH

*Postal\_Code:* 45202

*Country:* USA

*Contact\_Voice\_Telephone:* 513-621-6300

*Contact\_Facsimile\_Telephone:* 513-621-9325

*Process\_Step:*

*Process\_Description:*

Allen County Sole Source Aquifer - Aquifer boundaries were digitized at Ohio EPA using a digitizing table from boundaries drawn on 1:24,000 scale USGS topographic maps. The source maps were copies of maps provided to USEPA as supporting materials to the sole source aquifer petition. The source maps were created by Bennett & Williams Inc. Consulting Geologists.

*Source\_Used\_Citation\_Abbreviation:* OKI's Sole Source Aquifers for the Lower Great Miami Aquifer

*Process\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* David Wilburn, Dick McClish

*Contact\_Organization:* Ohio EPA, Division of Drinking and Ground Waters

*Contact\_Position:* GIS

*Process\_Step:*

*Process\_Description:* Metadata imported.

Source\_Used\_Citation\_Abbreviation: C:\WINDOWS\TEMP\xml8.tmp

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**Spatial\_Data\_Organization\_Information:**

Direct\_Spatial\_Reference\_Method: Vector

Point\_and\_Vector\_Object\_Information:

SDTS\_Terms\_Description:

SDTS\_Point\_and\_Vector\_Object\_Type: G-polygon

Point\_and\_Vector\_Object\_Count: 4

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**Spatial\_Reference\_Information:**

Horizontal\_Coordinate\_System\_Definition:

Planar:

Grid\_Coordinate\_System:

Grid\_Coordinate\_System\_Name: State Plane Coordinate System 1983

State\_Plane\_Coordinate\_System:

SPCS\_Zone\_Identifier: 3402

Lambert\_Conformal\_Conic:

Standard\_Parallel: 38.733333

Standard\_Parallel: 40.033333

Longitude\_of\_Central\_Meridian: -82.500000

Latitude\_of\_Projection\_Origin: 38.000000

False\_Easting: 1968500.000000

False\_Northing: 0.000000

Planar\_Coordinate\_Information:

Planar\_Coordinate\_Encoding\_Method: coordinate pair

Coordinate\_Representation:

Abscissa\_Resolution: 0.002048

Ordinate\_Resolution: 0.002048

Planar\_Distance\_Units: survey feet

Geodetic\_Model:

Horizontal\_Datum\_Name: North American Datum of 1983

Ellipsoid\_Name: Geodetic Reference System 80

Semi-major\_Axis: 6378137.000000

Denominator\_of\_Flattening\_Ratio: 298.257222

Vertical\_Coordinate\_System\_Definition:

Altitude\_System\_Definition:

Altitude\_Resolution: 1.000000

Altitude\_Encoding\_Method:

Explicit elevation coordinate included with horizontal coordinates

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**Entity\_and\_Attribute\_Information:**

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: OEPA.aquifers\_sole\_source

Attribute:

Attribute\_Label: SSA\_NAME

*Attribute\_Definition:* Name of the Sole Source Aquifer Area  
*Attribute\_Definition\_Source:* Petition to USEPA for sole source aquifer designation  
*Attribute:*  
*Attribute\_Label:* OBJECTID  
*Attribute\_Definition:* Internal feature number.  
*Attribute\_Definition\_Source:* ESRI  
*Attribute\_Domain\_Values:*  
*Unrepresentable\_Domain:*  
Sequential unique whole numbers that are automatically generated.  
*Attribute\_Label:* SHAPE  
*Attribute\_Definition:* Feature geometry.  
*Attribute\_Definition\_Source:* ESRI  
*Attribute\_Domain\_Values:*  
*Unrepresentable\_Domain:* Coordinates defining the features.  
*Attribute:*  
*Attribute\_Label:* SHAPE.AREA  
*Attribute\_Label:* Shape  
*Attribute\_Definition:* Feature geometry.  
*Attribute\_Definition\_Source:* ESRI  
*Attribute\_Domain\_Values:*  
*Unrepresentable\_Domain:* Coordinates defining the features.  
*Attribute:*  
*Attribute\_Label:* SHAPE.LEN

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***Distribution Information:***

*Distributor:*  
*Contact\_Information:*  
*Contact\_Person\_Primary:*  
*Contact\_Person:* David White  
*Contact\_Organization:*  
GIS Unit. The Division of Drinking and Ground Waters of the Ohio Environmental Protection Agency  
*Contact\_Position:* Environmental Specialist III  
*Contact\_Address:*  
*Address\_Type:* mailing and physical address  
*Address:* 122 South Front Street  
*City:* Columbus  
*State\_or\_Province:* OH  
*Postal\_Code:* 43215  
*Contact\_Voice\_Telephone:* 614-644-3677  
*Resource\_Description:* Downloadable Data  
*Standard\_Order\_Process:*  
*Digital\_Form:*

*Digital\_Transfer\_Information:*  
*Format\_Name:* Shapefile  
*Transfer\_Size:* 1.084  
*Digital\_Transfer\_Option:* Online\_Option:  
*Computer\_Contact\_Information:*  
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*Network\_Resource\_Name:*  
<[http://epa.ohio.gov/Portals/28/documents/swap/oh\\_ssa.zip](http://epa.ohio.gov/Portals/28/documents/swap/oh_ssa.zip)>  
*Ordering\_Instructions:*

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***Metadata\_Reference\_Information:***

*Metadata\_Date:* 20061016  
*Metadata\_Contact:*  
*Contact\_Information:*  
*Contact\_Organization\_Primary:*  
*Contact\_Organization:* Division of Drinking and Ground Waters Ohio  
EPA  
*Contact\_Person:* REQUIRED: The person responsible for the metadata  
information.  
*Contact\_Address:*  
*Address\_Type:* physical address  
*Address:* 122 South Front Street  
*City:* Columbus  
*State\_or\_Province:* OH  
*Postal\_Code:* 43215  
*Country:* United States  
*Contact\_Voice\_Telephone:* 614-644-2752  
*Metadata\_Standard\_Name:* FGDC Content Standards for Digital Geospatial  
Metadata  
*Metadata\_Standard\_Version:* FGDC-STD-001-1998  
*Metadata\_Time\_Convention:* local time  
*Metadata\_Extensions:*  
*Online\_Linkage:* <<http://www.esri.com/metadata/esriprof80.html>>  
*Profile\_Name:* ESRI Metadata Profile  
*Metadata\_Extensions:*  
*Online\_Linkage:* <<http://www.esri.com/metadata/esriprof80.html>>  
*Profile\_Name:* ESRI Metadata Profile