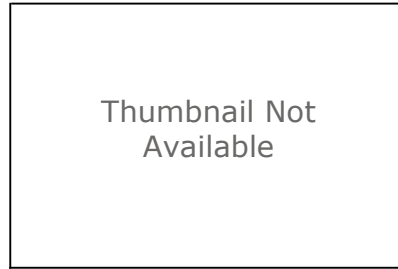


St. Marys AOC Boundary, U.S. EPA Great Lakes National Program Office

Shapefile



Tags

Michigan, Environment, Remediation, Great Lakes, Area of Concern, 020:057

Summary

The main use of the delineated AOC boundaries is for EPA and State governments to locate those sites listed on the U.S. Area of Concerns list in the Great Lakes Water Quality Agreement, or other sites that are in close proximity or may have contributed to the pollution within each AOC. These analyses are completed on a relatively small scale of the areas in and around each AOC. Attributes only include the AOC name and the predominant state in which the AOC is located. The locations of features and boundaries shown on this map are approximate and are intended for planning and visualization purposes only. This is not intended for survey, statistical, engineering, or legal purposes.

Description

This shapefile provides a polygon boundary for the St. Marys River AOC in Michigan. In general, the following steps were taken in developing the shapefile:

1. The previous AOC shapefile was obtained from EPA.
2. Shoreline data from NOAA, called Continually Updated Shoreline Product (CUSP), was downloaded for the full extent of the AOC.
3. A narrative of the AOC was obtained taken from the AOC webpage (see narrative below).
4. The AOC shoreline (river and lake as applicable) of the previous shapefile was updated using the data from Step #2.
5. The extent of the AOC was determined from the narrative in Step #3 and/or the extent from the previous boundary and applied. Further discussion with the State and Canadian agencies determined that the southeastern boundary on the Canadian side of the AOC should terminate at Hay Point on St. Joseph Island.
6. Utilizing aerial imagery (current and historic) and best professional judgement, manual edits to the shoreline were made if significant deviations were apparent due to man-made changes or possible errors.

Narrative: EPA's AOC Webpage, 3/7/2022. "The AOC includes the area of the river that extends from Whitefish Bay between Point Iroquois, Mich., and Gros Cap, Ontario, downstream to Quebec Bay, Ontario - Humbug Point, Ontario, in the St. Joseph Channel, and De Tour Passage, Michigan and Ontario."

Representatives of EPA, EGLE, Environment and Climate Change Canada, and MECP Ontario reviewed and approved the boundary.

Credits

Sources of digital information used in the development of the AOC include: NOAA (<https://www.ngs.noaa.gov/CUSP/>), IBC U.S./Canada boundary v1.3 (<https://www.internationalboundarycommission.org/en/maps-coordinates/coordinates.php>), ESRI World Imagery (http://goto.arcgisonline.com/maps/World_Imagery), and Google Earth historic

imagery (<https://www.google.com/earth/>).

St. Marys AOC Webpage: <https://www.epa.gov/great-lakes-aocs/st-marys-river-aoc>

Use limitations

Any hardcopies utilizing EPA data sets shall clearly indicate their source. The licensee specifically agrees not to misrepresent EPA data sets, nor to imply that changes they made were approved by EPA.

Extent

West -84.633551 **East** -83.866033
North 46.549994 **South** 45.982257

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:50,000

ArcGIS Metadata ►

Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE inlandWaters, boundaries

* CONTENT TYPE Downloadable Data
 EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS Michigan

THESAURUS'S LANGUAGE English (UNITED STATES)

THESAURUS ►

TITLE EPA Place Names
 PUBLICATION DATE 2015-01-31 00:00:00

RESOURCE LOCATION ONLINE

LOCATION https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/taxonomies/search.do?search=&searchString=&taxonomyName=WB%20-%20Geographic%20Locations
 NAME Web Taxonomy - Geographic Locations
 FUNCTION PERFORMED information

Hide Thesaurus ▲

THEME KEYWORDS Environment, Remediation

THESAURUS ►

TITLE EPA GIS Keyword Thesaurus
 PUBLICATION DATE 2007-11-02 00:00:00

RESOURCE LOCATION ONLINE

LOCATION <https://www.epa.gov/geospatial/epa-metadata-technical-specification>
 NAME EPA Metadata Technical Specification
 FUNCTION PERFORMED information

Hide Thesaurus ▲

THEME KEYWORDS Great Lakes, Area of Concern

THESAURUS ►

TITLE User

PUBLICATION DATE 2020-06-29 00:00:00

[Hide Thesaurus ▲](#)

THEME KEYWORDS 020:057

THESAURUS ►

TITLE Federal Program Inventory

PUBLICATION DATE 2013-09-16 00:00:00

RESOURCE LOCATION ONLINE

LOCATION <https://www.performance.gov/federalprograminventory>

NAME Federal Program Inventory

FUNCTION PERFORMED information

[Hide Thesaurus ▲](#)

[Hide Topics and Keywords ▲](#)

Citation ►

TITLE St. Marys AOC Boundary, U.S. EPA Great Lakes National Program Office

PUBLICATION DATE 2022-02-28

PRESENTATION FORMATS digital map

[Hide Citation ▲](#)

Resource Details ►

DATASET LANGUAGES English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE vector

* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.7.0.10450

CREDITS

Sources of digital information used in the development of the AOC include: NOAA (<https://www.ngs.noaa.gov/CUSP/>), IBC U.S./Canada boundary v1.3 (<https://www.internationalboundarycommission.org/en/maps-coordinates/coordinates.php>), ESRI World Imagery (http://goto.arcgisonline.com/maps/World_Imagery), and Google Earth historic imagery (<https://www.google.com/earth/>).

St. Marys AOC Webpage: <https://www.epa.gov/great-lakes-aocs/st-marys-river-aoc>

ARCGIS ITEM PROPERTIES

* NAME AOC_MI_StMarys_2022

* SIZE 1.629

* LOCATION file:///F:\F5160-78SW8C3-L\C\$\Users\justin.telech\OneDrive -

GDIT\Documents\Legacy\aoe boundary work\St Marys\Edits\Finalized\AOC_MI_StMarys_2022.shp

* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

Extents ▶

EXTENT

DESCRIPTION

The St. Marys River AOC was designated an AOC in 1987.

TEMPORAL EXTENT

BEGINNING DATE 1987-01-01 00:00:00

ENDING DATE

INDETERMINATE DATE unknown

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -84.633551

* EAST LONGITUDE -83.866033

* NORTH LATITUDE 46.549994

* SOUTH LATITUDE 45.982257

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE -84.633551

* EAST LONGITUDE -83.866033

* SOUTH LATITUDE 45.982257

* NORTH LATITUDE 46.549994

* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents](#) ▲

Resource Points of Contact ▶

POINT OF CONTACT

INDIVIDUAL'S NAME Mark Loomis

ORGANIZATION'S NAME U.S. Environmental Protection Agency Great Lakes National Program Office

CONTACT'S POSITION Federal AOC Taskforce Lead

CONTACT'S ROLE publisher

CONTACT INFORMATION ▶

ADDRESS

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POSTAL CODE 60604

COUNTRY US

E-MAIL ADDRESS Loomis.Mark@Epa.gov

[Hide Contact information](#) ▲

[Hide Resource Points of Contact](#) ▲

Resource Maintenance ▶

RESOURCE MAINTENANCE

UPDATE FREQUENCY as needed

[Hide Resource Maintenance](#) ▲

Resource Constraints ▶

CONSTRAINTS

LIMITATIONS OF USE

Any hardcopies utilizing EPA data sets shall clearly indicate their source. The licensee specifically agrees not to misrepresent EPA data sets, nor to imply that changes they made were approved by EPA.

[Hide Resource Constraints ▲](#)

Spatial Reference ►

ARCGIS COORDINATE SYSTEM

- * TYPE **Geographic**
- * GEOGRAPHIC COORDINATE REFERENCE **GCS_North_American_1983**
- * COORDINATE REFERENCE DETAILS
 - GEOGRAPHIC COORDINATE SYSTEM
 - WELL-KNOWN IDENTIFIER **4269**
 - X ORIGIN **-400**
 - Y ORIGIN **-400**
 - XY SCALE **11258999068426.238**
 - Z ORIGIN **-100000**
 - Z SCALE **10000**
 - M ORIGIN **-100000**
 - M SCALE **10000**
 - XY TOLERANCE **8.9831528411952133e-09**
 - Z TOLERANCE **0.001**
 - M TOLERANCE **0.001**
 - HIGH PRECISION **true**
 - LEFT LONGITUDE **-180**
 - LATEST WELL-KNOWN IDENTIFIER **4269**
 - WELL-KNOWN TEXT **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],AUTHORITY["EPSG",4269]]**

REFERENCE SYSTEM IDENTIFIER

- DIMENSION **horizontal**
- VALUE **4269**
- * CODESPACE **EPSG**
- * VERSION **6.12(3.0.1)**

[Hide Spatial Reference ▲](#)

Spatial Data Properties ►

VECTOR ►

- * LEVEL OF TOPOLOGY FOR THIS DATASET **geometry only**

GEOMETRIC OBJECTS

- FEATURE CLASS NAME **AOC_MI_StMarys_2022**
- * OBJECT TYPE **composite**
- * OBJECT COUNT **1**

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

- FEATURE CLASS NAME **AOC_MI_StMarys_2022**
- * FEATURE TYPE **Simple**
- * GEOMETRY TYPE **Polygon**
- * HAS TOPOLOGY **FALSE**
- * FEATURE COUNT **1**

- * 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 ▲](#)

[Hide Data Quality ▲](#)

Lineage ►

LINEAGE STATEMENT
This shapefile supersedes the previous version, AOC_MI_StMarys.shp

[Hide Lineage ▲](#)

Distribution ►

DISTRIBUTION FORMAT
* NAME Shapefile
VERSION 2022

TRANSFER OPTIONS
TRANSFER SIZE 0.012

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT [AOC_MI_StMarys_2022 ►](#)

- * TYPE Feature Class
- * ROW COUNT 1

DEFINITION
The AOC extent and other possible applicable areas

DEFINITION SOURCE
U.S. EPA Great Lakes National Program Office

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 Name ►

* ALIAS Name

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Feature name

DESCRIPTION SOURCE

U.S. EPA Great Lakes National Program Office

LIST OF VALUES

VALUE AOC Name

DESCRIPTION The AOC name is the official name given by the U.S. EPA Great Lakes National Program Office

ENUMERATED DOMAIN VALUE DEFINITION SOURCE U.S. EPA Great Lakes National Program Office

Hide Field Name ▲

FIELD State ►

* ALIAS State

* DATA TYPE String

* WIDTH 2

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Location of feature as 2-character state code

DESCRIPTION SOURCE

U.S. EPA Great Lakes National Program Office

LIST OF VALUES

VALUE 2-character state code

DESCRIPTION State postal code

ENUMERATED DOMAIN VALUE DEFINITION SOURCE U.S. EPA Great Lakes National Program Office

[Hide Field State ▲](#)[Hide Details for object AOC_MI_StMarys_2022 ▲](#)[Hide Fields ▲](#)**Metadata Details ▶**

METADATA LANGUAGE English (UNITED STATES)

METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

METADATA IDENTIFIER E684F785-3782-4FA4-A450-74A262230F6D

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset

SCOPE NAME * dataset

LAST UPDATE 2022-03-08

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

METADATA STYLE EPA Metadata Specification NAP ISO19115 2003

STANDARD OR PROFILE USED TO EDIT METADATA NAP

CREATED IN ARCGIS FOR THE ITEM 2022-03-07 18:52:20

LAST MODIFIED IN ARCGIS FOR THE ITEM 2022-03-08 16:33:31

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2022-03-08 16:30:52

[Hide Metadata Details ▲](#)**Metadata Contacts ▶**

METADATA CONTACT

INDIVIDUAL'S NAME Justin Telech

ORGANIZATION'S NAME GDIT

CONTACT'S POSITION Environmental Scientist

CONTACT'S ROLE author

CONTACT INFORMATION ▶

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ADMINISTRATIVE AREA NC

POSTAL CODE 27709

COUNTRY US

E-MAIL ADDRESS justin.telech@gdit.com[Hide Contact information ▲](#)[Hide Metadata Contacts ▲](#)

Metadata Maintenance ▶

MAINTENANCE

UPDATE FREQUENCY as needed

Hide Metadata Maintenance ▲

FGDC Metadata (read-only) ▼