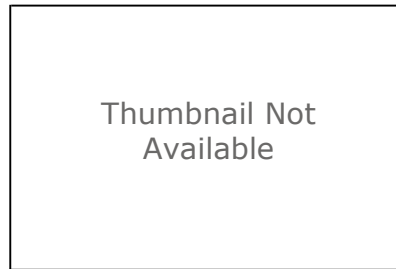


# Clinton River AOC Boundary, U.S. EPA Great Lakes National Program Office

## 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 Clinton River AOC in southeast Michigan. In general, the following steps were taken in developing the shapefile:

1. The current shapefile was downloaded from the AOC website on EPA.gov.
2. Shoreline data from NOAA, Continually Updated Shoreline Product (CUSP) (<https://www.ngs.noaa.gov/CUSP/>), were downloaded for the full extent of the AOC.
3. A narrative of the AOC (included below) was taken from the AOC webpage.
4. The AOC shoreline (river and lake as applicable) of the current shapefile was updated using the data from Step #2.
5. The extent of the AOC was determined from the description in Step #3 and/or the extent in the current boundary.
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: AOC Webpage, 6/17/2021. "The Clinton River AOC encompasses the entire watershed and includes:

- The mainstem and its tributaries.
- The Spillway, a two-mile long canal that connects the Clinton River to Lake St. Clair.
- The nearshore area of Lake St. Clair between the Clinton River mouth and the Spillway outlet."

Representatives of both EPA and EGLE reviewed and approved the boundary. In instances where the AOC includes a watershed, those boundaries were delineated from data obtained through EPA's National Hydrography Dataset Plus (NHDPlus) Version 2.1.

Note: Private canals and marinas are excluded from the official Clinton River AOC. Edits to the CUSP were made to remove these areas. Any private canals or marinas still remaining within the Clinton River AOC boundary are unintended.

## Credits

Sources of digital information used in the development of the AOC include: NOAA (<https://www.ngs.noaa.gov/CUSP/>), ESRI World Imagery ([http://goto.arcgisonline.com/maps/World\\_Imagery](http://goto.arcgisonline.com/maps/World_Imagery)), Google Earth historic imagery

(<https://www.google.com/earth/>), and EPA's NHDPlus Version 2.1 (<https://www.epa.gov/waterdata/get-nhdplus-national-hydrography-dataset-plus-data>).

### 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** -83.521705    **East** -82.767156  
**North** 42.946255    **South** 42.369896

### 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=WBT%20-%20Geographic%20Locations](https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/taxonomies/search.do?search=&searchString=&taxonomyName=WBT%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 Clinton River AOC Boundary, U.S. EPA Great Lakes National Program Office  
 PUBLICATION DATE 2021-07-06

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/>), ESRI World Imagery ([http://goto.arcgisonline.com/maps/World\\_Imagery](http://goto.arcgisonline.com/maps/World_Imagery)), Google Earth historic imagery (<https://www.google.com/earth/>), and EPA's NHDPlus Version 2.1 (<https://www.epa.gov/waterdata/get-nhdplus-national-hydrography-dataset-plus-data>).

**ARCGIS ITEM PROPERTIES**

\* NAME AOC\_MI\_Clinton\_2021  
 \* SIZE 0.167  
 \* LOCATION file://\\F5160-78SW8C3-L\C\$\Users\justin.telech\OneDrive - GDIT\Documents\Legacy\AOC boundary work\Clinton\Edits\Finalized\AOC\_MI\_Clinton\_2021.shp  
 \* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

**Extents** ▶

## EXTENT

## DESCRIPTION

The Clinton 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 -83.521705

\* EAST LONGITUDE -82.767156

\* NORTH LATITUDE 42.946255

\* SOUTH LATITUDE 42.369896

\* EXTENT CONTAINS THE RESOURCE Yes

## EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE -83.521705

\* EAST LONGITUDE -82.767156

\* SOUTH LATITUDE 42.369896

\* NORTH LATITUDE 42.946255

\* 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

DELIVERY POINT 77 W. Jackson Blvd G-17J

CITY Chicago

ADMINISTRATIVE AREA IL

POSTAL CODE 60604

COUNTRY US

E-MAIL ADDRESS [Loomis.Mark@Epa.gov](mailto: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\_Clinton\_2021
- \* OBJECT TYPE composite
- \* OBJECT COUNT 1

[Hide Vector ▲](#)

## ARCGIS FEATURE CLASS PROPERTIES ►

- FEATURE CLASS NAME AOC\_MI\_Clinton\_2021
- \* 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\_CLINTON.shp

[Hide Lineage ▲](#)

## Distribution ►

DISTRIBUTION FORMAT  
\* NAME Shapefile  
VERSION 2021

TRANSFER OPTIONS  
TRANSFER SIZE 0.012

[Hide Distribution ▲](#)

## Fields ►

DETAILS FOR OBJECT [AOC\\_MI\\_Clinton\\_2021](#) ►

\* 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

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\\_Clinton\\_2021 ▲](#)

[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 2021-07-20

### 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 2021-07-19 18:40:13  
LAST MODIFIED IN ARCGIS FOR THE ITEM 2021-07-20 10:14:27

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
LAST UPDATE 2021-07-20 10:12:29

[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 ►

ADDRESS  
DELIVERY POINT 79 TW Alexander Drive  
CITY Research Triangle Park  
ADMINISTRATIVE AREA NC  
POSTAL CODE 27709  
COUNTRY US  
E-MAIL ADDRESS [justin.telech@gdit.com](mailto:justin.telech@gdit.com)

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)



## Metadata Maintenance ▶

MAINTENANCE

UPDATE FREQUENCY as needed

*Hide Metadata Maintenance ▲*

## FGDC Metadata (read-only) ▼