

# MS Stream Gages 2024

## Shapefile



## Tags

Streamflow, Water, Stream Gage, Inland Waters, Hydrology, Drainage, Hydrography, Stream Gauge

## Summary

Streamgage Monitoring Stations are used to collect information from bodies of water, including Temperature, Discharge, Gage height, and Specific conductance.

## Description

This dataset represents all Streamgage Monitoring Stations from the U.S. Geological Survey, for the United States, Puerto Rico, and the U.S. Virgin Islands, in 2024. Gaging stations, or gages, measure the height (stage) and volume of flow at a point location on a water feature. Gages in this map layer were drawn from the National Water Information System (NWIS) Web Interface and linked to the National Hydrography Dataset Plus Version 2 (NHDPlusV2) flowline feature class. Each Streamgage point contains a link to the USGS Water Data site, which provides daily statistics reported from the station. Data pulled from GeoJSON: Release Rebuild with latest NWIS · internetofwater/ref\_gages · GitHub The GeoJSON file references NHDPlusV2 identifiers and the "reference mainstems" which are governed here: [https://github.com/internetofwater/ref\\_rivers/](https://github.com/internetofwater/ref_rivers/)

\*\* October 2024 - MARIS staff download the national layer; then clipped out the Mississippi portion using a 100 meter buffer polygon. \*\*\*\*

## Credits

U.S. Geological Survey (USGS), Environmental Protection Agency (EPA), MARIS

## Use limitations

None (Public Domain Information)

## Extent

**West** -91.686771    **East** -88.151960

**North** 35.001823    **South** 30.178386

## 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    inlandWaters

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

PLACE KEYWORDS Puerto Rico, Continental United States, U.S. Virgin Islands, Alaska, District of Columbia, Hawaii

THEME KEYWORDS Streamflow, Water, Stream Gage, Inland Waters, Hydrology, Drainage, Hydrography, Stream Gauge

[Hide Topics and Keywords ▲](#)

## Citation ►

TITLE MS Stream Gages 2024  
PUBLICATION DATE 2024-10-18 00:00:00

PRESENTATION FORMATS digital map

[Hide Citation ▲](#)

## Citation Contacts ►

RESPONSIBLE PARTY  
ORGANIZATION'S NAME U.S. Geological Survey (USGS) National Atlas of the United States  
CONTACT'S ROLE originator

[Hide Citation Contacts ▲](#)

## Resource Details ►

DATASET LANGUAGES English (UNITED STATES)  
DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE vector

### SUPPLEMENTAL INFORMATION

If you are using this dataset as a shapefile, please be aware that it was converted from a Geodatabase. As a result, this shapefile may have attribution and metadata errors resulting from the conversion process. The following are known issues: null values may have been changed to 0s (zeros) or to blank values, numbers (including latitude and longitude) may have been rounded up or down, there may be issues with Unicode character strings, and time cannot be stored in a date field. Field names may have been truncated to no longer than 10 characters or completely changed, lengthy string attributes may have been truncated to 254 characters, and attribute columns may have been deleted. Shapefiles do not support coded domains and subtypes therefore the original file geodatabase attribution and metadata information for coded domains and subtypes could be incorrect or missing in the shapefile version. Please visit the following ESRI website for more information: <http://pro.arcgis.com/en/pro-app/tool-reference/appendices/geoprocessing-considerations-for-Shapefile-output.htm>

\* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.9.1.28388

### CREDITS

U.S. Geological Survey (USGS), Environmental Protection Agency (EPA), MARIS

#### ARCGIS ITEM PROPERTIES

- \* NAME MS\_StreamGages\_2024
- \* SIZE 0.089
- \* LOCATION file:///\\DESKTOP-TP9LNVL\F\$\DATA\00\_HYDROLOGY\USGS\_Hydro\_Streamgage\_2024\MS\_StreamGages\_2024.shp
- \* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

#### EXTENT

##### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

- WEST LONGITUDE -177.302244189992
- EAST LONGITUDE -53.1676191899999
- SOUTH LATITUDE 13.8718214065742
- NORTH LATITUDE 72.4584647341478

#### EXTENT

##### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

- EXTENT TYPE Extent used for searching
- \* WEST LONGITUDE -91.686771
- \* EAST LONGITUDE -88.151960
- \* NORTH LATITUDE 35.001823
- \* SOUTH LATITUDE 30.178386
- \* EXTENT CONTAINS THE RESOURCE Yes

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

- \* WEST LONGITUDE 323184.179435
- \* EAST LONGITUDE 645879.798478
- \* SOUTH LATITUDE 1044057.433479
- \* NORTH LATITUDE 1577450.940149
- \* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

## Resource Points of Contact ►

#### POINT OF CONTACT

- ORGANIZATION'S NAME U.S. Geological Survey (USGS) National Atlas of the United States
- CONTACT'S POSITION POC
- CONTACT'S ROLE point of contact

#### CONTACT INFORMATION ►

##### PHONE

- VOICE 1-888-ASK-USGS (1-888-275-8747)

##### ADDRESS

- DELIVERY POINT 12201 Sunrise Valley Drive
- CITY Reston
- ADMINISTRATIVE AREA VA

POSTAL CODE 20192  
COUNTRY US  
E-MAIL ADDRESS [atlasmail@usgs.gov](mailto:atlasmail@usgs.gov)

CONTACT INSTRUCTIONS

For questions about this map layer or metadata, please contact the National Atlas using the information above, or through the U.S. Geological Survey contact page at <http://www.usgs.gov/ask/>. For distribution questions, please see the Distribution Information elsewhere in this metadata.

[Hide Contact information ▲](#)

[Hide Resource Points of Contact ▲](#)

## Resource Maintenance ►

RESOURCE MAINTENANCE

UPDATE FREQUENCY irregular

[Hide Resource Maintenance ▲](#)

## Resource Constraints ►

LEGAL CONSTRAINTS

USE CONSTRAINTS other restrictions

OTHER CONSTRAINTS

Other Constraints

LEGAL CONSTRAINTS

ACCESS CONSTRAINTS other restrictions

OTHER CONSTRAINTS

Other Constraints

LEGAL CONSTRAINTS

LIMITATIONS OF USE

Although these data have been processed successfully on a computer system at the U.S. Geological Survey, no warranty expressed or implied is made by the U.S. Geological Survey regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. No responsibility is assumed by the U.S. Geological Survey in the use of these data. Distributor assumes no liability for misuse of data.

OTHER CONSTRAINTS

None (Public Domain Information)

CONSTRAINTS

LIMITATIONS OF USE

None (Public Domain Information)

[Hide Resource Constraints ▲](#)

## Spatial Reference ►

### ARCGIS COORDINATE SYSTEM

- \* TYPE Projected
- \* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983
- \* PROJECTION NAD\_1983\_Mississippi\_TM
- \* COORDINATE REFERENCE DETAILS

#### PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102609

X ORIGIN -5122200

Y ORIGIN -12297100

XY SCALE 450339697.45066422

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 3814

#### WELL-KNOWN TEXT

PROJCS["NAD\_1983\_Mississippi\_TM",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",1300000.0],PARAMETER["Central\_Meridian",-89.75],PARAMETER["Scale\_Factor",0.9998335],PARAMETER["Latitude\_Of\_Origin",32.5],UNIT["Meter",1.0],AUTHORITY["EPSG",3814]]

### REFERENCE SYSTEM IDENTIFIER

- \* VALUE 3814
- \* CODESPACE EPSG
- \* VERSION 6.17.1(10.0.0)

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

### VECTOR ►

- \* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

### GEOMETRIC OBJECTS

FEATURE CLASS NAME MS\_StreamGages\_2024

\* OBJECT TYPE point

\* OBJECT COUNT 3345

[Hide Vector ▲](#)

### ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME MS\_StreamGages\_2024

\* FEATURE TYPE Simple

- \* GEOMETRY TYPE Point
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 3345
- \* 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

This map layer contains selected stream gages in the United States, Puerto Rico, and the U.S. Virgin Islands. Sites were selected only if they were within the terrestrial and coastal boundaries of the U.S., they had a corresponding stream in the National Atlas Streams 1:1M map layer, they had one of the following site types: > Canal > Ditch > Diversion > Estuary > Lake, Reservoir, Impoundment > Spring > Stream > Tidal Stream > Wetland > and they had daily values in the following list of parameters: > 00060 - Streamflow, ft/s > 00065 - Gage height, ft > 00054 - Reservoir storage, acre-ft > 00053 - Surface Area, acres > 00055 - Stream velocity, ft/s > 00059 - Streamflow rate, gal/min > 00062 - Reservoir elevation, ft > 50042 - Discharge, gallons per minute > 50051 - Flow rate, instantaneous, million gallons per day > 72022 - Reservoir contents, M/gal > 99020 - Elevation above NGVD 1929, ft > 99060 - Streamflow, m/s > 99065 - Gage height, m

[Hide Data quality report - Completeness omission ▲](#)

DATA QUALITY REPORT - TOPOLOGICAL CONSISTENCY ►  
EVALUATION METHOD

Stream gage positions were checked against streams in the National Atlas Streams 1:1M 2014 map layer to ensure that each gage has a corresponding 1:1M stream and no gage is associated with more than one stream. Stream\_IDs and ReachCodes were compared to Stream\_IDs and ReachCodes in the National Atlas Streams 1:1M 2014 map layer to ensure that corresponding gages and streams have identical values. Stream gages downloaded from NWIS Web were compared to aerial imagery and topographic maps to ensure they are located on the correct stream. Attributes were checked for nulls and valid values. Stream gages were checked to ensure that they are within national boundaries and coastlines. Stream gage positions were checked against streams in the National Atlas Streams 1:1M 2014 map layer to ensure that each gage has a corresponding 1:1M stream and no gage is associated with more than one stream. Stream\_IDs and ReachCodes were compared to Stream\_IDs and ReachCodes

in the National Atlas Streams 1:1M 2014 map layer to ensure that corresponding gages and streams have identical values. Stream gages downloaded from NWIS Web were compared to aerial imagery and topographic maps to ensure they are located on the correct stream. Attributes were checked for nulls and valid values. Stream gages were checked to ensure that they are within national boundaries and coastlines.

[Hide Data quality report - Topological consistency ▲](#)

#### DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY ►

##### MEASURE DESCRIPTION

Stream gage positions were checked against streams in the National Atlas Streams 1:1M 2014 map layer to ensure that each gage has a corresponding 1:1M stream and no gage is associated with more than one stream. Stream\_IDs and ReachCodes were compared to Stream\_IDs and ReachCodes in the National Atlas Streams 1:1M 2014 map layer to ensure that corresponding gages and streams have identical values. Stream gages downloaded from NWIS Web were compared to aerial imagery and topographic maps to ensure they are located on the correct stream. Attributes were checked for nulls and valid values. Stream gages were checked to ensure that they are within national boundaries and coastlines. Stream gage positions were checked against streams in the National Atlas Streams 1:1M 2014 map layer to ensure that each gage has a corresponding 1:1M stream and no gage is associated with more than one stream. Stream\_IDs and ReachCodes were compared to Stream\_IDs and ReachCodes in the National Atlas Streams 1:1M 2014 map layer to ensure that corresponding gages and streams have identical values. Stream gages downloaded from NWIS Web were compared to aerial imagery and topographic maps to ensure they are located on the correct stream. Attributes were checked for nulls and valid values. Stream gages were checked to ensure that they are within national boundaries and coastlines.

[Hide Data quality report - Conceptual consistency ▲](#)

#### DATA QUALITY REPORT - ABSOLUTE EXTERNAL POSITIONAL ACCURACY ►

##### MEASURE DESCRIPTION

Most gages had their location reviewed during the creation of the NHDPlus version 1 and version 2 source data and therefore reflect the accuracy of those sources. Gages from NWIS Web had their location reviewed during the creation of this data set. Gages were located on (snapped to) streams in the National Atlas Streams 1:1M 2014 map layer. The streams had been generalized, and in some cases moved as much as 300 meters from nearby transportation features, so gages were relocated along with their corresponding stream.

[Hide Data quality report - Absolute external positional accuracy ▲](#)

#### DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ►

##### MEASURE DESCRIPTION

The Gage\_ID and Site\_NO attributes were checked for duplicates and null values. All features have unique values. The values for Site\_TP\_CD, Lat\_NWIS, Long\_NWIS, Lat\_1M, and Long\_1M were checked to ensure that there are no null values and that all values are in the correct domain. Values in the ReachCode field were checked to ensure that there are no null values. They were cross-checked with the Huc8 and Region values, and were checked against the ReachCode for the corresponding stream in the National Atlas Streams 1:1,000,000-scale (1:1M) map layer. Values in the Stream\_ID field were checked to ensure that there are no null values. Stream\_IDs were also compared to Stream\_IDs in the National Atlas Streams 1:1M map layer to ensure that corresponding gages and streams have identical codes. Values in the Region and Huc8 fields were checked to ensure that there are no null values and all values are in the correct domain. Selections by attribute and location were used to ensure the region code matches the region the gage is in. Values in the State and State\_FIPS fields were checked to ensure that there are no null values and all values are in the correct domain. All remaining attribute fields were checked to ensure that there are no null values.

[Hide Data quality report - Quantitative attribute accuracy ▲](#)

[Hide Data Quality ▲](#)

## Lineage ►

### LINEAGE STATEMENT

Data was created from GeoJSON file hosted [https://github.com/internetofwater/ref\\_gages/releases/tag/v0.8](https://github.com/internetofwater/ref_gages/releases/tag/v0.8). The GeoJSON file references NHDPlusV2 identifiers and the "reference mainstems" which are governed here: [https://github.com/internetofwater/ref\\_rivers/](https://github.com/internetofwater/ref_rivers/) It's probably best to just reference NHDPlusV2 as the key spatial data and link to and this service for the registry of mainstem river IDs that the gages are linked to. <https://reference.geoconnex.us/collections/mainstems>

### PROCESS STEP ►

#### DESCRIPTION

Made 'Station\_NM' attribute column all caps and removed extra spaces. Transferred ESRI metadata to FGDC metadata.

### PROCESS CONTACT

ORGANIZATION'S NAME HIFLD Support Team  
CONTACT'S ROLE processor

[Hide Process step ▲](#)

### PROCESS STEP ►

#### DESCRIPTION

Calculation of Review The Review attribute provides information about when the gage location was reviewed, or about what entity reviewed the location of the gage during



data compilation. It was calculated primarily from the Reviewed attribute in the NHDPlus version 1 and version 2 source data sets.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2009-01-01 00:00:00

DESCRIPTION

Selection of Gages from NHDPlus V1 Stream Gages Gages were obtained from the NHDPlus V1 Gages. If the gage's reach code matched a reach code in the National Atlas Streams 1:1M map layer then the gage was included and snapped to the nearest point on the nearest stream. The reach code of the gage was compared to the reach code of the stream the gage snapped to. If the codes were not identical then the station name for the gage was compared to topographic map stream names to determine if the gage should be moved to a different stream with a matching reach code or if the reach code for the gage should be corrected.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2010-01-01 00:00:00

DESCRIPTION

Selection of Gages from the National Water Information System Web Interface The NHDPlus V1 Gages were from 2004. Additional gages were obtained from NWIS Web to supplement the NHDPlus V1 Gages. Gages were downloaded in February 2010, and gages with daily data in the following categories were selected: > > Parameter code = 00060 - Streamflow, ft<sup>3</sup>/s > Parameter code = 00065 - Gage height, ft > Parameter code = 00054 - Reservoir storage, acre-ft > Parameter code = 00053 - Surface Area, acres > Parameter code = 00055 - Stream velocity, ft/s > Parameter code = 00059 - Streamflow rate, gal/min > Parameter code = 00062 - Reservoir elevation, ft > Parameter code = 50042 - Discharge, gallons per minute > Parameter code = 50051 - Flow rate, instantaneous, million gallons > per day > Parameter code = 72022 - Reservoir contents, M gal > Parameter code = 99020 - Elevation above NGVD 1929, ft > Parameter code = 99060 - Streamflow, m<sup>3</sup>/s > Parameter code = 99065 - Gage height, m

[Hide Process step ▲](#)

PROCESS STEP ►

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

DESCRIPTION

Selection of Additional Gages and Streams Gages from the NWIS Web download were snapped to streams in the National Atlas Streams 1:1M. If the gage couldn't be snapped to a 1:1M stream, it was snapped to the NHDPlus V1 NHDFlowlines, or in

Alaska, to the High-Resolution NHDFlowlines. Any gages that could not be snapped to one of these three sources were deleted. To determine if gages were snapped to the correct stream, the station name was compared to stream names from National Atlas Streams 1:1M, NHDPlus V1 NHDFlowline, High-Resolution NHDFlowline, topographic maps, and aerial imagery. The 1:1M gages and streams were edited simultaneously. Gages were used to determine if additional streams should be added to the streams map layer, and streams were used to determine if gages should be added in the gages map layer. Gages were reviewed visually, using topographic maps, aerial imagery, NHDPlus V1 NHDFlowlines, High-Resolution NHDFlowline, and National Atlas Streams 1:1M. Gages were not added to the map layer if adding their corresponding stream was inconsistent with the density of streams in the area, if other gages on similar streams were nearby, if the stream order was lower than other streams in the area, or if the gage was on a canal. At the same time, the stream was added to the National Atlas Streams 1:1M map layer.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Selection of Gages from NHDPlus V2 Gages NHDPlus V2 Gages were checked to see if they had matching reach codes in National Atlas Streams 1:1M 2014. If they had a matching reach code and they were not already in the gages map layer, they were snapped to the stream and added. NHDPlus V2 Gages that did not have a matching reach code in the streams were reviewed if their drainage area was greater than 100 square miles. The station name for the gage was checked against topographic maps, imagery, and stream names to determine if the gage should be moved to a different stream, have its reach code changed, and be added to the gages map layer

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Stream\_ID The Stream\_ID is the unique identifier of the stream that the gage is snapped to. The value comes from the National Atlas Streams 1:1M 2014 map layer and links the two map layers together. There may be more than one gage sharing the same Stream\_ID. No gage has more than one Stream\_ID.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Combination of NHDPlus V2 Gage Locations and Gage Info The NHDPlus V2 Gage Locations and Gage Info files were downloaded from the NHDPlus website. The Gage Info table was joined to the Gage Locations table and the combined data were exported to a new feature class.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Source The value for the Source attribute was determined from the data set from which the gage was obtained.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of State Abbreviation and FIPS codes The gages were intersected with the National Atlas States 1:1M 2014 map layer to transfer the State abbreviations and Federal Information Processing Series (FIPS) codes. The intersected layer was analyzed to determine which gages fell in multiple States. For gages on State boundaries, the State abbreviations and FIPS codes were concatenated with a hyphen to include information from multiple States. Gages outside the boundaries of the States layer were removed.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Region and HUC8 The two-digit region code (Hydrologic Unit Code or HUC) was calculated from the first two digits of the reach code. The eight-digit sub-basin code (Hydrologic Unit Code or HUC) was calculated from the first eight digits of the reach code.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of the Gage\_ID The Gage\_ID is the unique identifier for gages in the 1:1M map layer. The starting number is 100,001.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Reach Code National Atlas Streams 1:1M 2014 has reach codes that were updated to match the reach codes in NHDPlus V2 NHDFlowlines in the 48 conterminous States; High-Resolution NHDFlowlines in Alaska, Puerto Rico, and the U.S. Virgin Islands; and Medium-Resolution NHDFlowlines in Hawaii. All 1:1M gages were checked and, if necessary, their reach codes were updated to match their corresponding stream in National Atlas Streams 1:1M 2014.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Measure Gages were intersected with National Atlas Streams 1:1M 2014 and each gage was assigned a measure that corresponds to its location on a reach. Measures range from 0 to 100 and record the distance, as a percentage, from the downstream end of a reach. If a reach is composed of more than one stream segment, the measure is based on the length of the entire group of segments that comprise the reach. Measures are used in linear referencing.

[Hide Process step ▲](#)

PROCESS STEP ►

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Integration of Gages with Version 2 of the 1:1M Streams National Atlas Streams 1:1M 2014 (version 2 of the streams map layer) contains minor adjustments along the U.S.-Canada border and in other places where the data were improved or corrected. Gages were checked to verify that they were snapped to the correct stream and were moved if necessary.

[Hide Process step ▲](#)

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of NWISWeb The URL for the gage's NWIS web page was calculated by concatenating the gage's site number and a generic NWISWeb URL.

*Hide Process step ▲*

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Lat\_1M and Long\_1M Latitude and longitude coordinates were calculated for the location of the gage using ArcGIS. These coordinates may be different from the coordinates in NWIS because the streams the gages are on have been generalized and moved for cartographic reasons.

*Hide Process step ▲*

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2014-01-01 00:00:00

DESCRIPTION

Calculation of Agency\_CD, Site\_NO, Station\_NM, Site\_TP\_CD, Lat\_NWIS, Long\_NWIS Attributes values for Agency\_CD, Site\_NO, Station\_NM, Site\_TP\_CD, Lat\_NWIS, Long\_NWIS were determined from the agency\_cd, site\_no, station\_nm, site\_tp\_cd, dec\_lat\_va, and dec\_long\_va values in NWIS Web.

*Hide Process step ▲*

PROCESS STEP ▶

WHEN THE PROCESS OCCURRED 2024-03-21 00:00:00

DESCRIPTION

David Blodgett provided the most recent available dataset for Gages, which is still being developed between USGS and EPA. HIFLD generated a Feature Service based on the GeoJSON file provided by USGS.  
[https://github.com/internetofwater/ref\\_gages/releases/tag/v0.8](https://github.com/internetofwater/ref_gages/releases/tag/v0.8). Additional updates are likely to occur over the next year.

PROCESS CONTACT

INDIVIDUAL'S NAME David Blodgett

ORGANIZATION'S NAME U.S. Geological Survey  
CONTACT'S ROLE originator

[Hide Process step ▲](#)

[Hide Lineage ▲](#)

## Geoprocessing history ►

### PROCESS

#### PROCESS NAME

DATE 2024-10-18 07:44:19

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.8\ArcToolbox\Toolboxes\Analysis Tools.tbx\Clip

#### COMMAND ISSUED

Clip

USGS\_Hydro\_Network\_Linked\_Data\_Index\_(NLDI)\_Streamgage\_Monitoring\_Locations  
stbnd\_100\_buff

F:\DATA\00\_HYDROLOGY\USGS\_Hydro\_Streamgage\_2024\MS\_StreamGauges\_2024\_LL.shp  
#

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

## Distribution ►

### DISTRIBUTOR ►

#### CONTACT INFORMATION

INDIVIDUAL'S NAME Lucinda D. McKay

ORGANIZATION'S NAME U.S. Geological Survey

CONTACT'S POSITION distributor

CONTACT'S ROLE distributor

#### CONTACT INFORMATION ►

##### ADDRESS

COUNTRY US

E-MAIL ADDRESS [nhdplus-support@epa.gov](mailto:nhdplus-support@epa.gov)

E-MAIL ADDRESS [nhd@usgs.gov](mailto:nhd@usgs.gov)

[Hide Contact information ▲](#)

### AVAILABLE FORMAT

NAME Vector Digital Data Set (Point)

### ORDERING PROCESS

TERMS AND FEES None. No fees are applicable for obtaining the data set.

[Hide Distributor ▲](#)

### DISTRIBUTION FORMAT

\* NAME Shapefile

VERSION 10.8.2

TRANSFER OPTIONS

\* TRANSFER SIZE 0.089

ONLINE SOURCE

LOCATION <https://www.epa.gov/waterdata/get-nhdplus-national-hydrography-dataset-plus-data>

[Hide Distribution ▲](#)

## Fields ►

DETAILS FOR OBJECT [MS\\_StreamGages\\_2024](#) ►

\* TYPE Feature Class

\* ROW COUNT 3345

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 [id ▶](#)

- \* ALIAS id
- \* DATA TYPE String
- \* WIDTH 15
- \* PRECISION 0
- \* SCALE 0

[Hide Field id ▲](#)

FIELD [uri ▶](#)

- \* ALIAS uri
- \* DATA TYPE String
- \* WIDTH 61
- \* PRECISION 0
- \* SCALE 0

[Hide Field uri ▲](#)

FIELD [name ▶](#)

- \* ALIAS name
- \* DATA TYPE String
- \* WIDTH 50
- \* PRECISION 0
- \* SCALE 0

[Hide Field name ▲](#)

FIELD [descriptio ▶](#)

- \* ALIAS descriptio
- \* DATA TYPE String
- \* WIDTH 100
- \* PRECISION 0
- \* SCALE 0

[Hide Field descriptio ▲](#)

FIELD [subjectOf ▶](#)

- \* ALIAS subjectOf
- \* DATA TYPE String
- \* WIDTH 62
- \* PRECISION 0



\* SCALE 0

*Hide Field subjectOf ▲*

FIELD provider ►

\* ALIAS provider  
\* DATA TYPE String  
\* WIDTH 26  
\* PRECISION 0  
\* SCALE 0

*Hide Field provider ▲*

FIELD provider\_i ►

\* ALIAS provider\_i  
\* DATA TYPE String  
\* WIDTH 20  
\* PRECISION 0  
\* SCALE 0

*Hide Field provider\_i ▲*

FIELD nhdpv2\_REA ►

\* ALIAS nhdpv2\_REA  
\* DATA TYPE String  
\* WIDTH 14  
\* PRECISION 0  
\* SCALE 0

*Hide Field nhdpv2\_REA ▲*

FIELD nhdpv2\_R\_1 ►

\* ALIAS nhdpv2\_R\_1  
\* DATA TYPE Double  
\* WIDTH 19  
\* PRECISION 18  
\* SCALE 15

*Hide Field nhdpv2\_R\_1 ▲*

FIELD nhdpv2\_COM ►

\* ALIAS nhdpv2\_COM  
\* DATA TYPE Integer  
\* WIDTH 9  
\* PRECISION 9

\* SCALE 0

[Hide Field nhdpv2\\_COM ▲](#)

FIELD **ObjectId** ▶

\* ALIAS **ObjectId**  
\* DATA TYPE **Integer**  
\* WIDTH **6**  
\* PRECISION **6**  
\* SCALE **0**

[Hide Field ObjectId ▲](#)

[Hide Details for object MS\\_StreamGages\\_2024 ▲](#)

[Hide Fields ▲](#)

## Metadata Details ▶

METADATA LANGUAGE **English (UNITED STATES)**  
METADATA CHARACTER SET **utf8 - 8 bit UCS Transfer Format**

METADATA IDENTIFIER **1501015718122r4977206723976242**

SCOPE OF THE DATA DESCRIBED BY THE METADATA **dataset**  
SCOPE NAME \* **dataset**

\* LAST UPDATE **2024-10-18**

ARCGIS METADATA PROPERTIES

METADATA FORMAT **ArcGIS 1.0**  
METADATA STYLE **ISO 19139 Metadata Implementation Specification**  
STANDARD OR PROFILE USED TO EDIT METADATA **ISO19139**

CREATED IN ARCGIS FOR THE ITEM **2024-10-18 07:46:12**  
LAST MODIFIED IN ARCGIS FOR THE ITEM **2024-10-18 75:14:60**

AUTOMATIC UPDATES

HAVE BEEN PERFORMED **Yes**  
LAST UPDATE **2024-10-18 07:47:51**

[Hide Metadata Details ▲](#)

## Metadata Contacts ▶

METADATA CONTACT

ORGANIZATION'S NAME **National Atlas of the United States**  
CONTACT'S POSITION **Point of Contact**

CONTACT'S ROLE point of contact

CONTACT INFORMATION ▶

PHONE

VOICE 1-888-ASK-USGS (1-888-275-8747)

ADDRESS

DELIVERY POINT 12201 Sunrise Valley Drive

CITY Reston

ADMINISTRATIVE AREA VA

POSTAL CODE 20192

COUNTRY US

E-MAIL ADDRESS atlasmail@usgs.gov

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

**Metadata Constraints** ▶

SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None.

[Hide Metadata Constraints ▲](#)

**Thumbnail and Enclosures** ▶

THUMBNAIL

THUMBNAIL TYPE JPG

[Hide Thumbnail and Enclosures ▲](#)

**FGDC Metadata (read-only)** ▼

DETAILED DESCRIPTION

ENTITY TYPE

ENTITY TYPE LABEL MS\_StreamGages\_2024

ATTRIBUTE

ATTRIBUTE LABEL FID

ATTRIBUTE DEFINITION

Internal feature number.

ATTRIBUTE DEFINITION SOURCE Esri

ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

Sequential unique whole numbers that are automatically generated.

ATTRIBUTE

ATTRIBUTE LABEL Shape

ATTRIBUTE DEFINITION

Feature geometry.

ATTRIBUTE DEFINITION SOURCE Esri

ATTRIBUTE DOMAIN VALUES  
UNREPRESENTABLE DOMAIN  
Coordinates defining the features.

ATTRIBUTE  
ATTRIBUTE LABEL id

ATTRIBUTE  
ATTRIBUTE LABEL uri

ATTRIBUTE  
ATTRIBUTE LABEL name

ATTRIBUTE  
ATTRIBUTE LABEL descriptio

ATTRIBUTE  
ATTRIBUTE LABEL subjectOf

ATTRIBUTE  
ATTRIBUTE LABEL provider

ATTRIBUTE  
ATTRIBUTE LABEL provider\_i

ATTRIBUTE  
ATTRIBUTE LABEL nhdpv2\_REA

ATTRIBUTE  
ATTRIBUTE LABEL nhdpv2\_R\_1

ATTRIBUTE  
ATTRIBUTE LABEL nhdpv2\_COM

ATTRIBUTE  
ATTRIBUTE LABEL ObjectId

[Hide Entities and Attributes ▲](#)