

Observation Sites for SSN

Type Personal GeoDatabase Feature Class

Tags Elevation, Environment, Geoscientific, Inland Waters, Land cover, streams, discharge, temperature, SSN, NHDPlusHR, Penobscot River Basin, Maine, U.S.A

Summary

Observation sites for use in STARS model

Description

Observation sites importat and updated by STARS resides in Isn.ssn

Credits

U.S. Environmental Protection Agency and U.S. Geological Survey. National Hydrography Dataset Plus High resolution (NHDPlusV2 flowline, waterbody, and area data layer) <https://www.usgs.gov/national-hydrography/nhdplus-high-resolution>; USGS NHDPlus HR VAA; Base-flow index grid for the conterminous United States, USGS <http://water.usgs.gov/lookup/getspatial?bfi48grd>; Miller_etal_2018_data_manipulation_protocol; USGS 3DEP <https://www.usgs.gov/3d-elevation-program>;Peterson 2019 STARS: SPATIAL TOOLS FOR THE ANALYSIS OF RIVER SYSTEMS VERSION 2.0.7

Use limitations

https://edg.epa.gov/EPA_Data_License.html

Extent

West -73.3772849 East -64.6181008

North 47.5165215 South 43.2870834

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

Topics and Keywords ▶

Themes or categories of the resource Elevation, Environment, Geoscientific, Inland Waters

Content type ⇔ Downloadable Data

Export to FGDC CSDGM XML format as Resource Description No

Theme keywords Land cover, streams, discharge, temperature, SSN, NHDPlusHR

Place keywords Penobscot River Basin, Maine, U.S.A

Citation ▶

Title Observation Sites for SSN

Publication date 2024-06-06 00:00:00

Presentation formats ⇔ digital map

Citation Contacts ▶

Responsible party - originator

Individual's name Naomi Detenbeck

Organization's name U.S. EPA Office of Research and Development (ORD), Center for Environmental Measurement & Modeling -(CEMM)

Contact information ▶

Phone

Voice 401-782-3162

Address

Type postal

City Narragansett

Administrative area Rhode Island

Postal code 02882

Delivery point 27 Tarzwell Drive

e-mail address detenbeck.naomi@epa.gov

Resource Details ▶

Dataset languages ⇔ English (UNITED STATES)

Dataset character set utf8 - 8 bit UCS Transfer Format

Status completed

Spatial representation type ⇔ vector

Processing environment ⇔ Version 6.2 (Build 9200) ; Esri ArcGIS 10.6.1.9270

Credits

U.S. Environmental Protection Agency and U.S. Geological Survey. National Hydrography Dataset Plus High resolution (NHDPlusV2 flowline, waterbody, and area data layer) <https://www.usgs.gov/national-hydrography/nhdplus-high-resolution>; USGS NHDPlus HR VAA; Base-flow index grid for the conterminous United States, USGS <http://water.usgs.gov/lookup/getspatial?bfi48grd>; Miller_etal_2018_data_manipulation_protocol; USGS 3DEP <https://www.usgs.gov/3d-elevation-program>;Peterson 2019 STARS: SPATIAL TOOLS FOR THE ANALYSIS OF RIVER SYSTEMS VERSION 2.0.7

ArcGIS item properties

Name ⇔ edges

Location ⇔ file:///D:/D2626UCLANE01/E\$/Ellen/Detenbeck/Penobscot/gdb/Penobscot_SSN_052124.gdb
Access protocol ⇔ Local Area Network

Extents ►

Extent
Description
Temporal existent is coincident with input datasets.

Geographic extent
Bounding rectangle
Extent type
Extent used for searching
West longitude -73.3772849
East longitude -64.6181008
North latitude 47.5165215
South latitude 43.2870834
Extent contains the resource Yes

Resource Points of Contact ►

Point of contact - point of contact
Individual's name Naomi Detenbeck
Organization's name U.S. EPA Office of Research and Development (ORD), Center for Environmental Measurement & Modeling -(CEMM)

Contact information ►
Phone
Voice 401-782-3162
Address
Type postal
City Narragansett
Administrative area Rhode Island
Postal code 02882
Delivery point 27 Tarzwell Drive
e-mail address detenbeck.naomi@epa.gov

Resource Maintenance ►

Resource maintenance
Update frequency not planned

Resource Constraints ►

Constraints
Limitations of use
https://edg.epa.gov/EPA_Data_License.html

Legal constraints
Limitations of use
EPA Public Domain License

Spatial Reference ►

ArcGIS coordinate system
Type ⇔ Projected
Geographic coordinate reference ⇔ GCS_NAD_1983_2011
Projection ⇔ NAD_1983_2011_Contiguous_USA_Albers
Coordinate reference details ⇔
ProjectedCoordinateSystem
WKID 102965
XOrigin -16901100
YOrigin -6972200
XYScale 10000
ZOrigin -100000
ZScale 10000
MOrigin -100000
MScale 10000
XYTolerance 0.001
ZTolerance 0.001
MTolerance 0.001
HighPrecision true
LatestWKID 6350
WKT
PROJCS["NAD_1983_2011_Contiguous_USA_Albers",GEOGCS["GCS_NAD_1983_2011",DATUM["D_NAD_1983_2011",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["G",0],UNIT["Meter",1]]]

Reference system identifier
Value ⇔ 6350
Codespace ⇔ EPSG
Version ⇔ 8.2.2(10.2.1)

Spatial Data Properties ►

Vector ▶

Level of topology for this dataset ⇔ geometry only

Geometric objects

Feature class name edges
Object type ⇔ composite
Object count ⇔ 0

ArcGIS Feature Class Properties ▶

Feature class name edges
Feature type ⇔ Simple
Geometry type ⇔ Polyline
Has topology ⇔ FALSE
Feature count ⇔ 0
Spatial index ⇔ TRUE
Linear referencing ⇔ TRUE

Data Quality ▶

Scope of quality information ▶
Resource level dataset

Data quality report - Conceptual consistency ▶

Data quality measure reference

Measure description
Randomly examined stations across the variables in the intermediate files (prior to accumulation) to ensure that there were data for the same dates as in the original data set and any calculations (e.g., to convert to volume) were accurate
Conceptual Consistency Check (weighted metrics): Randomly examined stations across the variables in the intermediate weighted files (prior to accumulation) to ensure that the weighted calculations were accurate
Range Check: Randomly examined weighted variables accumulations to ensure the weighted accumulation values divided by non-weighted accumulation values fell within the range of the original temperature time series used for weighting
Visual Check for Logical Patterns (accumulated metrics): Visualized accumulated variables to ensure temperatures increase from headwaters to mouth

Data quality report - Completeness omission ▶

Data quality measure reference

Measure description
Checked that deliverable file contained the correct number of rows (number of rows equal to the number of catchments).

Lineage ▶

Process step ▶

When the process occurred 2024-06-06 00:00:00
Description
Using Snap Points to Landscape Network Edges in STARS toolbox, snapped NewBaxterParkCoordinates.shp to edges. Output is observationsites_snapped.
The new sites attribute table will contain some new fields, two of which are the ratio and rid fields. The rid field indicates which edge the site has been snapped to.

Process contact - processor

Individual's name Ellen D'Amico
Organization's name Pegasus Technical Services c/o U.S. EPA

Contact information ▶

Phone
Voice (513) 569-7167
Address
Type postal
Delivery point 26 W. Martin Luther King Dr.
City Cincinnati
Administrative area OH
Postal code 45268
e-mail address damico.ellen@epa.gov

Source data ▶

Relationship to the process step used

Description
NewBaxterParkCoordinates

Process step ▶

When the process occurred 2024-06-06 00:00:00
Description
Calculate watershed attributes using Watershed Attributes tool in the STARS toolbox. This tool is run for rcraArea, Precipitation, Mean August Air Temperature, Discharge, Base Flow, and lake area

Process contact - processor

Individual's name Ellen D'Amico
Organization's name Pegasus Technical Services c/o U.S. EPA

Contact information ▶

Phone

Voice (513) 569-7167

Address

Type postal

Delivery point 26 W. Martin Luther King Dr.

City Cincinnati

Administrative area OH

Postal code 45268

e-mail address damico.ellen@epa.gov

Process step ▶

When the process occurred 2024-06-06 00:00:00

Description

Calculate UpDistance using Updistance- Sites tool in the STARS toolbox

Process contact - processor

Individual's name Ellen D'Amico

Organization's name Pegasus Technical Services c/o U.S. EPA

Contact information ▶

Phone

Voice (513) 569-7167

Address

Type postal

Delivery point 26 W. Martin Luther King Dr.

City Cincinnati

Administrative area OH

Postal code 45268

e-mail address damico.ellen@epa.gov

Process step ▶

When the process occurred 2024-06-06 00:00:00

Description

Calculate Additive Function-Sites in the STARS toolbox

Process contact - processor

Individual's name Ellen D'Amico

Organization's name Pegasus Technical Services c/o U.S. EPA

Contact information ▶

Phone

Voice (513) 569-7167

Address

Type postal

Delivery point 26 W. Martin Luther King Dr.

City Cincinnati

Administrative area OH

Postal code 45268

e-mail address damico.ellen@epa.gov

Source data ▶

Relationship to the process step used

Description

Base-flow index grid for the conterminous United States, USGS <http://water.usgs.gov/lookup/getspatial?bfi48grd>;

USGS 3DEP <https://www.usgs.gov/3d-elevation-program>

Process step ▶

When the process occurred 2024-06-06 00:00:00

Description

Calculate Longitude and Latitude using calculate geometry within ArcGIS Pro for edges

Process contact - processor

Individual's name Ellen D'Amico

Organization's name Pegasus Technical Services c/o U.S. EPA

Contact information ▶

Phone

Voice (513) 569-7167

Address

Type postal

Delivery point 26 W. Martin Luther King Dr.

City Cincinnati

Administrative area OH

Postal code 45268

e-mail address damico.ellen@epa.gov

Process step ▶

When the process occurred 2024-06-06 00:00:00

Description

Add unaccumulated fields to points.

Process contact - processor
Individual's name Ellen D'Amico
Organization's name Pegasus Technical Services c/o U.S. EPA

Contact information ►
Phone
Voice (513) 569-7167
Address
Type postal
Delivery point 26 W. Martin Luther King Dr.
City Cincinnati
Administrative area OH
Postal code 45268
e-mail address damico.ellen@epa.gov

Geoprocessing history ►

Process
Process name
Date 2023-09-28 13:27:22
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CopyFeatures
Command issued
CopyFeatures NHDFlowline E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\nhd\NHDFlowline # # # #
Include in lineage when exporting metadata No

Process
Process name
Date 2023-10-10 12:15:42
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\Toolboxes\Data Management Tools.tbx\UpdateSchema
Command issued
UpdateSchema "CIMDATA=<CIMStandardDataConnection xsi:type='typens:CIMStandardDataConnection' xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema' xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\WorkspaceConnectionString</WorkspaceFactory>Shapefile</WorkspaceFactory><Dataset>edges.shp</Dataset><DatasetType>esriDTFeatureClass</DatasetType></CIMStandardDataConnection>" <operationSequence><workflow><AlterField><field_name>FDate</field_name><field_is_nullable>False</field_is_nullable><clear_field_alias>False</clear_field_alias></AlterField></workflow></operationSequence>
Include in lineage when exporting metadata No

Process
Process name
Date 2024-02-26 10:21:58
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Conversion Tools.tbx\ExportFeatures
Command issued
ExportFeatures edges E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges # NOT_USE_ALIAS "OBJECTID_1 "OBJECTID_1" true true false 10 Long 0 10,First,#,edges,OBJECTID_1,-1,-1;Permanent_ "Permanent_" true true false 40 Text 0 0,First,#,edges,Permanent_,0,40;FDate "FDate" true true false 8 Date 0 0,First,#,edges,FDate,-1,-1;Resolution "Resolution" true true false 10 Long 0 10,First,#,edges,Resolution,-1,-1;GNIS_ID "GNIS_ID" true true false 10 Text 0 0,First,#,edges,GNIS_ID,0,10;GNIS_Name "GNIS_Name" true true false 65 Text 0 0,First,#,edges,GNIS_Name,0,65;LengthKM "LengthKM" true true false 19 Double 0 0,First,#,edges,LengthKM,-1,-1;ReachCode "ReachCode" true true false 14 Text 0 0,First,#,edges,ReachCode,0,14;FlowDir "FlowDir" true true false 10 Long 0 10,First,#,edges,FlowDir,-1,-1;WBArea_Per "WBArea_Per" true true false 40 Text 0 0,First,#,edges,WBArea_Per,0,40;FType "FType" true true false 10 Long 0 10,First,#,edges,FType,-1,-1;FCode "FCode" true true false 10 Long 0 10,First,#,edges,FCode,-1,-1;MainPath "MainPath" true true false 10 Long 0 10,First,#,edges,MainPath,-1,-1;InNetwork "InNetwork" true true false 10 Long 0 10,First,#,edges,InNetwork,-1,-1;Visibility "Visibility" true true false 10 Long 0 10,First,#,edges,Visibility,-1,-1;NHDPlusID "NHDPlusID" true true false 19 Double 0 0,First,#,edges,NHDPlusID,-1,-1;VPUID "VPUID" true true false 8 Text 0 0,First,#,edges,VPUID,0,8;Enabled "Enabled" true true false 10 Long 0 10,First,#,edges,Enabled,-1,-1;Shape_Leng "Shape_Leng" true true false 19 Double 0 0,First,#,edges,Shape_Leng,-1,-1;Shape_Le_1 "Shape_Le_1" true true false 19 Double 0 0,First,#,edges,Shape_Le_1,-1,-1;rid "rid" true true false 10 Long 0 10,First,#,edges,rid,-1,-1;Named "Named" true true false 5 Text 0 0,First,#,edges,Named,0,5;Complex "Complex" true true false 5 Text 0 0,First,#,edges,Complex,0,5;Shape_Le_2 "Shape_Le_2" true true false 19 Double 0 0,First,#,edges,Shape_Le_2,-1,-1;Shape_Le_3 "Shape_Le_3" true true false 19 Double 0 0,First,#,edges,Shape_Le_3,-1,-1" #
Include in lineage when exporting metadata No

Process
Process name
Date 2024-02-26 10:25:27
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField
Command issued
AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges slope "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED #
Include in lineage when exporting metadata No

Process
Process name
Date 2024-02-26 10:25:28
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField
Command issued
AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges AreaSqKm "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED #
Include in lineage when exporting metadata No

Process
Process name
Date 2024-02-26 10:25:29
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField
Command issued
AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges tempVMM08 "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED #
Include in lineage when exporting metadata No

Process
Process name
Date 2024-02-26 10:25:30
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField

7/30/24, 4:33 PM

tmp4FDD.tmp.htm

Command issued

AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges PrecipAnn "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED #

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 11:02:21

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\3D Analyst Tools.tbx\AddZInformation

Command issued

AddZInformation edges Z_MEAN #

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 11:04:23

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\DeleteField

Command issued

DeleteField edges Z_Mean "Delete Fields"

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 11:08:23

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\3D Analyst Tools.tbx\AddSurfaceInformation

Command issued

AddSurfaceInformation edges Penobscot13_Albers Z_MEAN Bilinear # 1 0 #

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 13:18:36

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection' xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema' xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>ssn</FeatureDataset><WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb</WorkspaceConnectionString><WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType></CIMFeatureDatasetDataConnection>"<operationSequence><workflow><AddField><field_name>Elev_m</field_name><field_type>DOUBLE</field_type><field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 13:19:09

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField

Command issued

CalculateField edges Elev_m !Z_Mean! "Python 3" # Text NO_ENFORCE_DOMAINS

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 13:19:20

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\DeleteField

Command issued

DeleteField edges Z_Mean "Delete Fields"

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 13:20:35

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\3D Analyst Tools.tbx\AddSurfaceInformation

Command issued

AddSurfaceInformation edges bfi48grd Z_MEAN Bilinear # 1 0 #

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 13:26:22

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection' xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema' xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>ssn</FeatureDataset><WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb</WorkspaceConnectionString><WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType></CIMFeatureDatasetDataConnection>"<operationSequence><workflow><AddField><field_name>BaselFlow_ave</field_name><field_type>DOUBLE</field_type><field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>

Include in lineage when exporting metadata No

Process

Process name

Date 2024-02-26 13:26:50

Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField

Command issued

CalculateField edges BaselFlow_ave !Z_Mean! "Python 3" # Text NO_ENFORCE_DOMAINS

Include in lineage when exporting metadata No

Process	Process name Date 2024-02-26 13:27:33 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\DeleteField Command issued DeleteField edges Z_Mean "Delete Fields" Include in lineage when exporting metadata No
Process	Process name Date 2024-02-26 13:36:46 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges Length "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-02-26 13:36:54 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges Oneway Text 2 # # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-02-26 13:37:04 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges VEMA_m "Double (64-bit floating point)" 10 8 # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-02-26 13:37:12 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges TravelTime "Double (64-bit floating point)" 15 9 # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-04-22 12:38:04 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CopyMultiple Command issued CopyMultiple "E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot.gdb\ssn\edges FeatureClass" E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb\edges edges "edges FeatureClass edges #" Include in lineage when exporting metadata No
Process	Process name Date 2024-04-22 13:14:32 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\DeleteField Command issued DeleteField edges Shape_Le_1;slope;AreaSqKm;tempVMM08;PrecipAnn "Delete Fields" Include in lineage when exporting metadata No
Process	Process name Date 2024-04-22 16:12:57 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb\edges\edges slope "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-04-22 16:12:58 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb\edges\edges AreaSqKm "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-04-22 16:13:00 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb\edges\edges tempVMM08 "Double (64-bit floating point)" 15 8 # # NULLABLE NON_REQUIRED # Include in lineage when exporting metadata No
Process	Process name Date 2024-04-22 16:13:01 Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\AddField Command issued


```
AddField E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb\edges\edges PrecipAnn "Double (64-bit floating point)" 15 8 # # NULLABLE
NON_REQUIRED #
Include in lineage when exporting metadata No
```

Process

Process name
Date 2024-04-24 10:03:35
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

```
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection'
xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema'
xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset>
<WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString>
<WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType>
</CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AddField><field_name>Latitude</field_name><field_type>DOUBLE</field_type>
<field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow><AddField>
<field_name>Longitude</field_name><field_type>DOUBLE</field_type><field_is_nullable>True</field_is_nullable>
<field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No
```

Process

Process name
Date 2024-04-24 10:05:31
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateGeometryAttributes

Command issued

```
CalculateGeometryAttributes edges "Latitude INSIDE_X;Longitude INSIDE_X" # #
GEOGCS["GCS_NAD_1983_2011",DATUM["D_NAD_1983_2011",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532]
"Same as input"
```

Include in lineage when exporting metadata No

Process

Process name
Date 2024-04-24 10:07:40
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateGeometryAttributes

Command issued

```
CalculateGeometryAttributes edges "Latitude INSIDE_Y" # #
GEOGCS["GCS_NAD_1983_2011",DATUM["D_NAD_1983_2011",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532]
"Same as input"
```

Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-01 10:10:36
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

```
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection'
xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema'
xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset>
<WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString>
<WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType>
</CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AddField><field_name>COMID</field_name><field_type>LONG</field_type>
<field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No
```

Process

Process name
Date 2024-05-01 10:15:01
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

```
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection'
xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema'
xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset>
<WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString>
<WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType>
</CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AlterField><field_name>COMID</field_name>
<new_field_name>COMIDNHDv2</new_field_name><field_is_nullable>True</field_is_nullable><clear_field_alias>False</clear_field_alias></AlterField>
</workflow><workflow><AddField><field_name>GridCodeNHDv2</field_name><field_type>LONG</field_type><field_is_nullable>True</field_is_nullable>
<field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No
```

Process

Process name
Date 2024-05-01 10:33:22
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

```
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection'
xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema'
xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset>
<WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString>
<WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType>
</CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AddField><field_name>cmsQ</field_name><field_type>DOUBLE</field_type>
<field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No
```

Process

Process name
Date 2024-05-07 12:08:31
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\Toolboxes\Data Management Tools.tbx\UpdateSchema

Command issued

```
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection'
xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema'
xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset>
<WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString>
<WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType>
</CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AddField><field_name>cmsQ</field_name><field_type>DOUBLE</field_type>
<field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No
```



```
xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset>
<WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString>
<WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType>
</CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AddField><field_name>AdjcmsQ</field_name><field_type>TEXT</field_type>
<field_length>5</field_length><field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow>
<workflow><AddField><field_name>MethodcmsQ</field_name><field_type>TEXT</field_type><field_length>255</field_length>
<field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No
```

Process
Process name
Date 2024-05-07 12:09:15
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges AdjcmsQ "yes" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 13:29:47
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 13:38:00
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 13:45:44
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:05:10
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:07:00
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:10:53
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:11:55
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:13:08
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:17:30
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:18:53
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:21:15
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:25:25
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:44:54
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:50:30
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:55:18
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:58:07
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ None "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 14:59:42
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 15:11:51
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 15:16:48
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process
Process name
Date 2024-05-07 15:17:58
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS

Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-07 15:19:46
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-07 15:20:45
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-07 15:22:05
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-07 15:23:31
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-07 15:26:29
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges MethodcmsQ "Mean HUC12" "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-08 10:47:22
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema
Command issued
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection' xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema' xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset><WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString><WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType></CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AddField><field_name>rcAreaSqKm</field_name><field_type>DOUBLE</field_type><field_is_nullable>True</field_is_nullable><field_is_required>False</field_is_required></AddField></workflow></operationSequence>
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-08 10:47:44
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\UpdateSchema
Command issued
UpdateSchema "CIMDATA=<CIMFeatureDatasetDataConnection xsi:type='typens:CIMFeatureDatasetDataConnection' xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance' xmlns:xs='http://www.w3.org/2001/XMLSchema' xmlns:typens='http://www.esri.com/schemas/ArcGIS/3.1.0'><FeatureDataset>edges</FeatureDataset><WorkspaceConnectionString>DATABASE=E:\Ellen\Detenbeck\Penobscot\gdb\Penobscot_SSN.gdb</WorkspaceConnectionString><WorkspaceFactory>FileGDB</WorkspaceFactory><Dataset>edges</Dataset><DatasetType>esriDTFeatureClass</DatasetType></CIMFeatureDatasetDataConnection>" <operationSequence><workflow><AlterField><field_name>rcAreaSqKm</field_name><new_field_name>rcAreaSqKm</new_field_name><field_is_nullable>True</field_is_nullable><clear_field_alias>False</clear_field_alias></AlterField></workflow></operationSequence>
Include in lineage when exporting metadata No

Process

Process name
Date 2024-05-08 11:03:45
Tool location c:\users\edamico\appdata\local\programs\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\CalculateField
Command issued
CalculateField edges rcaAreaSqKm None "Python 3" # Text NO_ENFORCE_DOMAINS
Include in lineage when exporting metadata No

Distribution ▶

Distributor ▶

Available format
Name ⇔ Personal GeoDatabase Feature Class

Transfer options
Online source

Online location (URL) ⇔ file:///igskbthisusy01\nhdgeo\oracle_export\GDBExtractServer\Template\NHD_File_Template_High_92v210.gdb

Connection protocol ⇌ Local Area Network
Description ⇌ Downloadable Data

Distribution format
Name ⇌ Personal GeoDatabase Feature Class

Fields ▶

Details for object observationsites_snapped ▶

Definition
Observation poitns for use in SSN

Definition source
U.S. EPA

Field ObjectID ▶

Data type Long
Width 20

Field description
Internal reference number

Description source
ESRI

Description of values
Internal reference number

Field afvArea ▶

Data type Double
Width 15
Precision 8

Field description
Product of the segment PIs found in the path downstream to the stream outlet

Description source
U.S. EPA, STARs

Range of values
Minimum value 0.00000346
Maximum value 0.99890649

Field area_r ▶

Data type Double
Width 15

Field description
Estimate of watershed area at site

Description source
U.S.EPA, STARs

Range of values
Minimum value 0.056253788
Maximum value 21340.70454

Field basefl_ave ▶

Data type Double
Width 15

Field description
Average Base Flow Index

Description source
USGS

Range of values
Minimum value 0
Maximum value 56
Units of measure BaseFlow Index

Field Bfl_avexrca_r ▶

Data type Double
Width 15

Field description
Estimate of area-weighted average baseflow including the entire land area that contributes flow to the site

Description source
U.S. EPA, STARs

Range of values
Minimum value 2.587674234
Maximum value 1071213.135
Units of measure unitless

Field Bfl_avexrca_r_adj ▶

Data type Double
Width 15

Field description
Estimate of area-weighted average baseflow at site divided by estimated watershed area at site

Description source
U.S. EPA

Range of values
Minimum value 43.66078165
Maximum value 56.43305885
Units of measure Base Flow Index

Field cmsq_mean ▶

Data type Double
Width 15

Field description
Mean raw discharge estimate in cubic meters per second

Description source
USGS

Range of values
Minimum value 0.008306525
Maximum value 7386.79795
Units of measure cubic meters per sec

Field cmsqaveadj ▶

Data type Double
Width 15

Field description
Adjusted mean raw discharge in cubic meters per second

Description source
U.S. EPA

Range of values
Minimum value 0.00000126078845464
Maximum value 88603.17329
Units of measure unitless

Field elev_ave_m ▶

Data type Double
Width 15

Field description
Average elevation in meters (at center of edge segment)

Description source
USGS, U.S. EPA

Range of values
Minimum value -1.850000024
Maximum value 482.0508839
Units of measure meters

Field GNIS_Name ▶

Data type Text
Width 20

Field description
NHDPlusIDs GNIS_Name

Description source
USGS

Description of values
GNIS Names related to NHDPlusID segments

Field h2oAreaKm2 ▶
Data type Double
Width 15

Field description
Watershed area in square kilometers (accumulated from rca area)

Description source
U.S. EPA, STARs

Range of values
Minimum value 0.065252985
Maximum value 21341.62186
Units of measure square kilometers

Field HUC8 ▶
Data type Text
Width 20

Field description
HUC8 name the point is within

Description source
USGS

Description of values
HUC 8 name

Field lake_area ▶
Data type Double
Width 15

Field description
Total area (sq km) of NHD lakes in rca

Description source
USGS, U.S. EPA

Range of values
Minimum value 0
Maximum value 92859.91973
Units of measure square kilometer

Field lake_area_r ▶
Data type Double
Width 15

Field description
Estimate of Lake area including the entire land area that contributes flow to the site

Description source
U.S. EPA, STARs

Range of values
Minimum value 0
Maximum value 1077085037.69066

Field Latitude ▶
Data type Double
Width 15

Field description
Mean latitude of edge segment

Description source
U.S.EPA

Range of values
Minimum value 44.47193531
Maximum value 46.32468178
Units of measure Decimal degrees

Field NEAR_DIST ▶
Data type Double
Width 15

Field description
Distance to closest edge

Description source
U.S. EPA, STARS

Range of values
Minimum value 0
Maximum value 144.4033294
Units of measure m

Field NHDPlusID ►
Data type Text
Width 20

Field description
NHDPlusID

Description source
USGS

Description of values
Name provided within NHDPLUSHR

Field PrecipAnn ►
Data type Double
Width 15

Field description
Annual Precipitation (mm) from VAA tables

Description source
USGS, U.S. EPA

Range of values
Minimum value 1003.102041
Maximum value 1304.675234
Units of measure mm

Field Precipxrcar ►
Data type Double
Width 15

Field description
Estimate of area-weighted annual Precipitation including the entire land area that contributes flow the site

Description source
U.S. EPA

Range of values
Minimum value 59.89657483
Maximum value 23418641.75

Field Precipxrcaradj ►
Data type Double
Width 15

Field description
Estimate of area-weighted annual Precipitation at site divided by estimated watershed area at site

Description source
U.S. EPA

Range of values
Minimum value 1026.266957
Maximum value 1316.801648
Units of measure mm

Field ratio ►
Data type Double
Width 15

Field description
distance ratio from the end of an edge to the point location

Description source
STARS

Range of values
Minimum value 0
Maximum value 1

Field rcaAreaKm2 ▶
Data type Double
Width 15

Field description
RCA area in square kilometers

Description source
STARs

Range of values
Minimum value 0
Maximum value 23.6661911
Units of measure square kilometers

Field reachid ▶
Data type Long
Width 20

Field description
Reachid point is on

Description source
STARs

Description of values
Unique ID

Field rid ▶
Data type Long
Width 20

Field description
id generated by STARs links to edges

Description source
STARs

Description of values
Unique identifier

Field SourceID ▶
Data type Long
Width 20

Field description
Unique Site Identifier links to shade buffers

Description source
U.S. EPA

Description of values
Unique site id

Field Shape ▶
Data type Double
Width 15

Field description
Default field

Description source
ESRI

Description of values
Internal area field calculated by ARCGIS software

Field slope ▶
Data type Double
Width 15

Field description
Reach Slope from VAA table

Description source
USGS, U.S. EPA

Range of values
Minimum value -9998
Maximum value 0.84299958

Field tempVMM08 ▶
Data type Double
Width 15

Field description
Mean August air temperatures from VAA tables

Description source
USGS

Range of values
Minimum value 15.36663072
Maximum value 19.56936842
Units of measure Degree Celsius

Field tmpMM08xrca_r ▶
Data type Double
Width 15

Field description
Estimate of area-weighted Mean August air temperatures including the entire land area that contributes flow to the site

Description source
U.S. EPA

Range of values
Minimum value 1.091338785
Maximum value 378752.2042
Units of measure unitless

Field tmpMM08xrca_r_adj ▶
Data type Double
Width 15

Field description
Estimate of area-weighted Mean August air temperatures at site divided by estimated watershed area at site

Description source
U.S. EPA

Range of values
Minimum value 14.0505973
Maximum value 19.50272926
Units of measure Degree Celsius

Field Totdasqkm ▶
Data type Double
Width 15

Field description
Watershed area from NHDPlus HR VAA

Description source
USGS

Range of values
Minimum value 0
Maximum value 21897.6637
Units of measure Square Kilometers

Field upDist ▶
Data type Double
Width 15

Field description
The upstream distance between the stream outlet (i.e., the most downstream location in the stream network) and the site

Description source
STARs

Range of values
Minimum value 0
Maximum value 408633.9226
Units of measure meters

Field AddressDat ▶
Data type Text
Width 40

Field description	Field included in observation site data provided by Naomi
Description source	U.S. EPA
Field Catchment ▶	
Field description	Field included in observation site data provided by Naomi
Description source	U.S. EPA
Field category ▶	
Data type	Text
Width	40
Field description	Field included in observation site data provided by Naomi
Description source	U.S. EPA
Overview Description	Entity and Attribute Overview The National Hydrography Dataset is a comprehensive set of digital spatial data that encodes information about naturally occurring and constructed bodies of water, paths through which water flows, and related entities. The information encoded about features includes a feature date, classification by type, other characteristics, a unique common identifier, the feature length or area, and (rarely) elevation of the surface of water pools and a description of the stage of the elevation. For reaches, encoded information includes a reach code. Names and their identifiers in the Geographic Names Information System, are assigned to most feature types. The direction of flow is encoded for networked features. The data also contains relations that encode metadata, and information that supports the exchange of future updates and improvements to the data. The names and definitions of all feature types, characteristics, and values are in the Standards for National Hydrography Dataset: Reston, Virginia, U.S. Geological Survey, 1999. The document is available online through http://mapping.usgs.gov/standards/. Entity and Attribute Detail Citation The names and definitions of all feature types, characteristics, and values are in U.S. Geological Survey, 1999, Standards for National Hydrography Dataset High Resolution: Reston, Virginia, U.S. Geological Survey. The document is available online through http://mapping.usgs.gov/standards/. Information about tables and fields in the data are available from the user documentation for the National Hydrography Dataset at http://nhd.usgs.gov. The National Map - Hydrography Fact Sheet is also available at: http://erg.usgs.gov/isb/pubs/factsheets/fs06002.html.
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 ↔ 2024-07-30 ArcGIS metadata properties Metadata format ArcGIS 1.0 Metadata style FGDC CSDGM Metadata Standard or profile used to edit metadata FGDC Created in ArcGIS for the item 2024-06-03 11:32:51 Last modified in ArcGIS for the item 2024-07-30 16:31:21 Automatic updates Have been performed Yes Last update 2024-05-21 14:30:45
Metadata Contacts ▶	Metadata contact - owner Individual's name Naomi Detenbeck Organization's name U.S. EPA Office of Research and Development (ORD), Center for Environmental Measurement & Modeling -(CEMM) Contact information ▶ Phone Voice 401-782-3162 Address Type postal City Narragansett Administrative area Rhode Island Postal code 02882 Delivery point 27 Tarzwell Drive e-mail address detenbeck.naomi@epa.gov
Metadata Maintenance ▶	Maintenance

Update frequency not planned