edges - Stream reaches from 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

Representation of flow path from point to point.

Description

Stream reaches calculated by STARs resides in lsn.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

htttps://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 edges - Stream reaches from 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 ►
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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:/\\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 Maintenance ►

Resource maintenance
Update frequency not planned

Resource Constraints ►

Constraints
Limitations of use
htttps://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

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 ►

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).

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 withing 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

Lineage ►

Process step ►
When the process occurred 2024-06-06 00:00:00
Description
Ran Polyline to Landscape Network in STARS toolbox with the NHDPLUS HR streamline for the Penobscot River Watershed as the input.

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

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

Source data ►
Relationship to the process step used

Description
USGS NHDPlusHR flowline

Process step ►
When the process occurred 2024-06-06 00:00:00
Description
Eliminated Topological Errors by running the Check network topology and complex confluence tools in STARS toolbox.
Removed any Downstream divergence nodes (these are often braided channels). If one of the streams was named then the unnamed portion was removed.
Checked over the converging streams and shifted streams so no more than 2 were converging.
Fixed any complex confluences.
Reran Polyline to Landscape after the corrections were made

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

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Process step ►
When the process occurred 2024-06-06 00:00:00
Description
Downloaded the 3DEP 1/3 Arc DEM quads from the USGS National Map for the Penobscot watershed. Mosaicked the quads together into a single raster. Clipped the raster to the Penobscot watershed.
Reprojected the raster to Albers.

Process contact - processor

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

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Source data ▶
Relationship to the process step used

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

Process step ▶
When the process occurred 2024-06-06 00:00:00
Description
Reach contributing areas (RCAs) were created following steps in Section 9 of the STARs_tutorial2.0.7

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

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Process step ▶
When the process occurred 2024-06-06 00:00:00
Description
Generate Monthly Discharge:
Downloaded catchments from NHDPlus V2.
Overlaid catchments to edges from above to get a list of COMIDs.
In order to get COMIDs need to extract a list of GRIDCODES and then used the featureidgridcode table that is provided with the catchments to grab the featureids. The featureids are the COMIDS.
In Miller_etal_2018_data_manipulation_protocol.R update Line 31 with the new table of COMIDS. For Penobscot it is called COMIDS_Penobscot.csv and change name of output file. Then run R code.
Discharge data for Penobscot was downloaded from https://www.sciencebase.gov/catalog/item/59cbbd61e4b017cf314244e1
Just the average August discharge was pulled from the output table to be used. This was done using a python script (AverageAugDischargefromMilleroutput.py). A spatial join was performed between the edges and the NHDPlus Catchments to add the GridCode to the edges to create a link between the NHDPLUSHR edges and the NHDPLUS Catchments.
The august monthly data was updated to the edges.

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

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Process step ▶
When the process occurred 2024-06-06 00:00:00
Description
Added annual precipitation and average August air temperature data from NHDPlusFlowlineVAA table provided with NHDPLUSHR using python script (addSSNValuesfromNHDPVAAtables)

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

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Process step ▶
When the process occurred 2024-06-06 00:00:00
Description
Calculate BaseFlow and Elevation edges using Add Surface Information in ArcGIS Pro

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

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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

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Process step ▶
When the process occurred 2024-06-06 00:00:00
Description
The mainstem of the Penobscot as well as some of its headwaters did not have discharge values. The missing data was handled in one of two ways.
Mainstem: Identify reaches immediately upstream of mainstem reaches with associated discharge estimates. Aggregate those values upstream for every mainstem reach of interest). Corrected for areas for each mainstem discharge point multiply by total watershed area upstream/sum of tributary subwatershed areas to account for gaps.
Headwater portions: Calculate average watershed yield at HUC12 scale using existing data and apply to reaches with gaps, multiplying yield by subwatershed areas to get discharge"

Added twocolumns to the edges called AdjCMSQ and MethodCMSQ. If the discharge value is missing adjCMSQ = "yes". The method column indicates if the value was calculated using Average watershed yield at HUC12 scale, aggregated upstream, or NULL (default entry using Miller et al.).

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

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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
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><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>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>rcaAreaSqKm</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 edges ▶
Type ⇔ Feature Class
Row count ⇔ 0

Field OBJECTID ▶
Alias ⇔ OBJECTID
Data type ⇔ Integer

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.

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.

Field LengthKM ▶
Alias ⇔ LengthKM
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Length of edge segment in kilometers

Description source
USGS

Range of values
Minimum value 0.002
Maximum value 16.837
Units of measure Square Kilometer

Field Permanent_ ▶
Alias ⇔ Permanent_
Data type ⇔ String
Width ⇔ 40
Precision ⇔ 0
Scale ⇔ 0

Field description
Unique ID from USGS NHDPLUSHR

Description source
USGS

Description of values
Unique Identifier

Field Shape_Length ▶
Alias ⇔ Shape_Length
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description ⇔
Length of feature in internal units.

Description source ⇔
ESRI

Description of values ⇔
Positive real numbers that are automatically generated.

Field slope ►
Alias ⇔ slope
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Reach Slope from NHDPlus HR VAA table

Description source
USGS, U.S. EPA

Field tempVMM08 ►
Alias ⇔ tempVMM08
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Mean August air temperatures from NHDPlus HR VAA tables ((Degree Celsius)

Description source
USGS, U.S. EPA

Field PrecipAnn ►
Alias ⇔ PrecipAnn
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Annual Precipation (mm) from NHDPlus HR VAA tables

Description source
USGS, U.S. EPA

Field lake_area ►
Alias ⇔ lake_area
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

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

Description source
USGS, U.S. EPA

Field basefl_ave ►
Alias ⇔ basefl_ave
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Average Base Flow Index

Description source
USGS, U.S. EPA

Field elev_ave_m ►
Alias ⇔ elev_ave_m
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

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

Description source
USGS, U.S. EPA

Field cmsq_mean ►
Alias ⇔ cmsq_mean
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Mean raw discharge estimate in cubic meters per second from Miller et al 2018

Description source
Miller 2018, USGS, U.S. EPA

Field missCmsq ►
Alias ⇔ missCmsq
Data type ⇔ String
Width ⇔ 254
Precision ⇔ 0
Scale ⇔ 0

Field description
Discharge is missing in USGS NHDPLUS VAA table

Description source
U.S. EPA

List of values
Value Yes
Description The value is missing
Enumerated domain value definition source U.S. EPA

Field MethodcmsQ ►
Alias ⇔ MethodcmsQ
Data type ⇔ String
Width ⇔ 254
Precision ⇔ 0
Scale ⇔ 0

Field description
Alternate methodology for calculating mean discharge

Description source
U.S. EPA

List of values
Value HUC12 scale
Description Used average discharge for the HUC12
Enumerated domain value definition source U.S. EPA

Value Aggregated upstream
Description sumCMSQ value upstream* (totalAreaUp/tribAreaUp)
Enumerated domain value definition source U.S. EPA

Value NULL
Description No alternate methodology needed
Enumerated domain value definition source U.S. EPA

Field Totdasqkm ►
Alias ⇔ Totdasqkm
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Watershed area from NHDPlus HR VAA

Description source
USGS, U.S. EPA

Field cmsqaveadj ►
Alias ⇔ cmsqaveadj
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Adjusted mean raw discharge in cubic meters per second

Description source
U.S. EPA

Field Latitude ▶
Alias ⇔ Latitude
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Mean latitude of edge segment

Description source
U.S. EPA

Field Bfl_avexrca ▶
Alias Bfl_avexrca
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Average Base Flow weighted by RCA area

Description source
U.S. EPA

Field Precipxrca ▶
Alias ⇔ Precipxrca
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Annual Precipation weighted by RCA area

Description source
U.S. EPA

Field tempMM08xrca ▶
Alias tempMM08xrca
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Mean August air temperatures weighted by rca areas

Description source
U.S. EPA

Field upDist ▶
Alias ⇔ upDist
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description
Total upstream distance generated by STARs

Description source
U.S. EPA, Peterson 2019

Field NHDPlusID ▶
Alias ⇔ NHDPlusID
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field afvArea ►
Alias afvArea
Data type Double
Width 15

Field description
Additive function value for edge

Description source
STARs

Field areaPI ►
Alias areaPI
Data type DOUBLE
Width 15
Precision 8

Field description
Segment proportional influence

Description source
STARS

Field Bfl_avexrcaa ►
Alias Bfl_avexrcaa

Field description
Accumulated Average Base Flow weighted

Description source
U.S. EPA

Field Bfl_avexrcaa_adj ►
Alias Bfl_avexrcaa_adj
Data type Double
Width 15
Precision 8

Field description
Accumulated divided by accumulated rca (h2oAreakm2)

Description source
U.S. EPA

Field FType ►
Alias FType
Data type Long
Width 20

Field description
Ftype for ReachCode

Description source
USGS

Field h2oAreaKm2 ►
Alias h2oAreaKm2
Data type Double
Width 15
Precision 8

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

Description source
STARS, U.S. EPA

Field lake_areaa ►
Alias lake_areaa
Data type Double
Width 15
Precision 8

Field description
Accumulated area (sq km) of NHD lakes

Description source
STARS, U.S. EPA

Field Precipxrcaa ►
Alias Precipxrcaa
Data type Double
Width 15
Precision 8

Field description
Acculumated weighted Annual Precipation

Description source
STARS, U.S. EPA

Field Precipxrcaa_adj ►
Alias Precipxrcaa_adj
Data type Double
Width 15
Precision 8

Field description
Accumulated divided by accumulated rca (h2oAreakm2)

Description source
U.S. EPA

Field reachid ►
Alias reachid
Data type Long
Width 20

Field description
Reach ID for Segment generated by STARS

Description source
STARS

Field rid ►
Alias rid
Data type Long
Width 20

Field description
Id generated by STARs

Description source
STARS

Field tempMM08xrcaa ►
Data type Double
Width 15
Precision 8

Field description
Accumulated August air temperatures

Description source
STARS, U.S. EPA

Field tempMM08xrcaa_adj ►
Alias tempMM08xrcaa_adj
Data type 15
Width 8

Field description
Accumulated divided by accumulated rca (h2oAreakm2)

Description source
Double

Field TravelTime ►
Alias TravelTime

Field description
Field add by Shade Buffer analysis

Description source
U.S. EPA

Field rcaAreakm2 ►
Alias rcaAreakm2
Data type Double
Width 15
Precision 8

Field description
RCA area in square kilometers

Description source
STARS, U.S. EPA

Details for object
NHDFlowlineToMeta
Type ⇔ Relationship
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 16:31:29

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)

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