

NC ATLAS Hydrography Artificial Paths Version 1.4, December 2021 - NC Department of Transportation

File Geodatabase Feature Class



Tags

North Carolina, Hydrography, streams, rivers, waters, shorelines, lakes, ponds, Headwater Streams Spatial Dataset, HSSD, Quality Level 1/2 (QL1/2), Light Distance and Ranging (LiDAR), water quality, water classifications, Coastal Waters, Joint Waters, Inland Waters, Eastern Brook Trout Joint Venture, EBTJV, Hydrologic Units, Biota, Environment, Location, Oceans, Transportation, North Carolina

Summary

This dataset was originally created in July 2019 and updated in December 2021 as part of the Project ATLAS initiative at NCDOT to support the Sweeping Environmental group with project delivery in the development phase. This dataset provides an understanding of the location and various regulatory considerations of water resources which is a critical part of transportation planning, and must be considered for all phases of planning, permitting, and construction activities.

Artificial paths are the centerlines for double line streams and waterbodies. A double-line stream is one that is represented by a line on both banks (resulting in two lines). Double lines are only used on waterbodies greater than 100 feet in width. All smaller streams are represented by a single centerline.

Description

The ATLAS Hydrography Artificial path Version 1.4 dataset is a statewide polyline layer depicting location and various regulatory considerations of water resources with respect to transportation planning. This data was created at the same time and from the same process as the ATLAS Hydrography Version 1.3 dataset. It contains the centerlines for double line streams and waterbodies, to represent network connectivity.

This data is current as of December 2021 and supports the following reports:

- a. General Planning
- b. NRTR generation (location of water resources, name/index numbers of waters, water quality classifications, impaired waters, NCWRC trout waters, USACE stream habitat temperature, bald eagle habitat).
- c. Permitting (Section 10 permitting, Section 404 permitting, Section 401 permitting, Individual permitting, stream location, USACE jurisdiction, NC Division of Coastal Management (NCDCM) jurisdiction, water quality classifications).

Streams data are used in various other reports that the Sweeping Environmental group is not involved with, i.e., Protected Species modeling, NCDOT hydraulics studies.

Datasets developed under Project ATLAS do not replace any Sweeping Environmental group field work for future projects and may not be used as a replacement for site visits / field surveys by licensed professionals and hence should be used only as a supporting platform for decision making. Use of this dataset for project scoping or screening is merely pre-decisional.

Credits

The ATLAS Sweeping Environmental group within NCDOT was tasked to create this dataset. Annual maintenance of this dataset is handled by the Sweeping Environmental group. The dataset supports the production of the following:

- General Planning,
- NRTR generation (location of water resources, name/index numbers of waters, water quality classifications, impaired waters, NCWRC trout waters, USACE stream habitat temperature, bald eagle habitat),
- Permitting (Section 10 permitting, Section 404 permitting, Section 401 permitting, Individual permitting, stream location, USACE jurisdiction, NC Division of Coastal Management (NCDCM) jurisdiction, water quality classifications).

Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

Use limitations

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Extent

West -84.4111076 **East** -75.487609

North 36.601493 **South** 33.738227

Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:625,000

ArcGIS Metadata ►

Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE biota, oceans, environment, transportation, location, inlandWaters

* CONTENT TYPE Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS North Carolina

THESAURUS ►

TITLE User

CREATION DATE 2019-07-22 00:00:00

PUBLICATION DATE 2021-12-01 00:00:00

Hide Thesaurus ▲

THEME KEYWORDS North Carolina, Hydrography, streams, rivers, waters, shorelines, lakes, ponds, Headwater Streams Spatial Dataset, HSSD, Quality Level 1/2 (QL1/2), Light Distance and Ranging (LiDAR), water quality, water classifications, Coastal Waters, Joint Waters, Inland Waters, Eastern Brook Trout Joint Venture, EBTJV, Hydrologic Units, Biota, Environment, Location, Oceans, Transportation

THESAURUS ►

TITLE User

CREATION DATE 2019-07-22 00:00:00
PUBLICATION DATE 2021-12-01 00:00:00

[Hide Thesaurus ▲](#)

[Hide Topics and Keywords ▲](#)

Citation ►

TITLE NC ATLAS Hydrography Artificial Paths Version 1.4, December 2021 - NC Department of Transportation

CREATION DATE 2019-07-22 00:00:00
PUBLICATION DATE 2021-12-01 00:00:00

EDITION Version 1.3
EDITION DATE 2020-04-30

PRESENTATION FORMATS digital map
FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

[Hide Citation ▲](#)

Citation Contacts ►

RESPONSIBLE PARTY

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE resource provider

CONTACT INFORMATION ►

PHONE
VOICE 919-707-6136

ADDRESS

TYPE physical
DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive
CITY Raleigh
ADMINISTRATIVE AREA NC
POSTAL CODE 27610
COUNTRY US
E-MAIL ADDRESS ATLAS@ncdot.gov

HOURS OF SERVICE

9:00am – 5:00pm Monday - Friday

CONTACT INSTRUCTIONS

Please send an email with any issues, questions or comments regarding the ATLAS Data Search Tool, ATLAS Screening Tool or ATLAS Workbench. If it is an immediate need, please call the contact number or indicate as such in the subject line in an email.

[Hide Contact information ▲](#)

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CONTACT'S ROLE point of contact

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CONTACT'S ROLE originator

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[Hide Citation Contacts ▲](#)

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 10.8.1.14362

CREDITS

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- General Planning,
- NRTR generation (location of water resources, name/index numbers of waters, water quality classifications, impaired waters, NCWRC trout waters, USACE stream habitat temperature, bald eagle habitat),
- Permitting (Section 10 permitting, Section 404 permitting, Section 401 permitting, Individual permitting, stream location, USACE jurisdiction, NC Division of Coastal Management (NCDCM) jurisdiction, water quality classifications).

Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

[Hide Resource Details ▲](#)

Extents ►

EXTENT

DESCRIPTION

Data collection is complete.

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

WEST LONGITUDE -84.4216

EAST LONGITUDE -75.416491

SOUTH LATITUDE 33.700957

NORTH LATITUDE 36.620015

EXTENT CONTAINS THE RESOURCE Yes

TEMPORAL EXTENT

BEGINNING DATE 2021-12-01 00:00:00

ENDING DATE 2021-12-01 00:00:00

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -84.411076

* EAST LONGITUDE -75.487609

* NORTH LATITUDE 36.601493

* SOUTH LATITUDE 33.738227

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 409767.560808

* EAST LONGITUDE 3031645.860348

* SOUTH LATITUDE 37630.001706

* NORTH LATITUDE 1037885.463462

* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

Resource Points of Contact ►

POINT OF CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - Sweeping Environmental group
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE originator

CONTACT INFORMATION ►

PHONE

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Hide Contact information ▲

Hide Resource Points of Contact ▲

Resource Maintenance ►

RESOURCE MAINTENANCE

UPDATE FREQUENCY annually

SCOPE OF THE UPDATES dataset

OTHER MAINTENANCE REQUIREMENTS

Annual maintenance of this dataset is handled by the Sweeping Environmental group. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit. Updates to LiDAR-derived waters and shorelines are expected to be captured yearly through the regular 5-phase collection cycle. Improvements to models should be incorporated regularly as they are developed.

MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - Sweeping Environmental group

CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE originator

CONTACT INFORMATION ►

PHONE

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[Hide Contact information ▲](#)

[Hide Resource Maintenance ▲](#)

Resource Constraints ►

LEGAL CONSTRAINTS

LIMITATIONS OF USE

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SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

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CONSTRAINTS

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[Hide Resource Constraints ▲](#)

Spatial Reference ►

ARCGIS COORDINATE SYSTEM

- * TYPE Projected
- * GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
- * PROJECTION NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet
- * COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102719
 X ORIGIN -121841900
 Y ORIGIN -93659000
 XY SCALE 3048.0060960121928
 Z ORIGIN -100000
 Z SCALE 10000
 M ORIGIN -100000
 M SCALE 16384000007.629391
 XY TOLERANCE 0.0032808333333333331
 Z TOLERANCE 0.001
 M TOLERANCE 0.001
 HIGH PRECISION true
 LATEST WELL-KNOWN IDENTIFIER 2264

WELL-KNOWN TEXT

PROJCS["NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet",GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Lambert_Conformal_Conic"],PARAMETER["False_Easting",2000000.002616666],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",-79.0],PARAMETER["Standard_Parallel_1",34.33333333333334],PARAMETER["Standard_Parallel_2",36.16666666666666],PARAMETER["Latitude_Of_Origin",33.75],UNIT["Foot_US",0.3048006096012192],AUTHORITY["EPSG",2264]]

REFERENCE SYSTEM IDENTIFIER

VALUE 2264
 * CODESPACE EPSG
 * VERSION 6.12(9.0.0)

[Hide Spatial Reference ▲](#)

Spatial Data Properties ►

VECTOR ►

* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME NCAtlasArtificialPaths
 * OBJECT TYPE composite
 * OBJECT COUNT 131136

[Hide Vector ▲](#)

ARCgis FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME NCAtlasArtificialPaths
 * FEATURE TYPE Simple
 * GEOMETRY TYPE Polyline
 * HAS TOPOLOGY FALSE
 * FEATURE COUNT 131136
 * SPATIAL INDEX TRUE
 * LINEAR REFERENCING FALSE

[Hide ArcGIS Feature Class Properties ▲](#)

[Hide Spatial Data Properties ▲](#)

Data Quality ►

SCOPE OF QUALITY INFORMATION ►
RESOURCE LEVEL **dataset**

[Hide Scope of quality information ▲](#)

DATA QUALITY REPORT - COMPLETENESS OMISSION ►
MEASURE DESCRIPTION

After processing, the dataset is checked for drawing display and number of records and file sizes compared with source materials.

CONFORMANCE TEST RESULTS
TEST PASSED **Yes**
RESULT EXPLANATION
Pass

PRODUCT SPECIFICATION ►
TITLE **NCDOT Geospatial Data Specifications**
CREATION DATE **2019-07-22 00:00:00**
PUBLICATION DATE **2020-04-30 00:00:00**

[Hide Product specification ▲](#)

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

DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY ►
MEASURE DESCRIPTION

The dataset is converted to file geodatabase (FGDB) format using tools in ArcGIS. The geometry is checked, and if needed repaired.

CONFORMANCE TEST RESULTS
TEST PASSED **Yes**
RESULT EXPLANATION
Pass

PRODUCT SPECIFICATION ►
TITLE **NCDOT Geospatial Data Specifications**
CREATION DATE **2019-07-22 00:00:00**
PUBLICATION DATE **2020-04-30 00:00:00**

[Hide Product specification ▲](#)

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

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ►

MEASURE DESCRIPTION

A visual quality control (QC) check was performed to ensure that no HSSD stream line segments flow in and out of open water areas multiple times. The HU10 data was then combined into HU8 level datasets and checked for connectivity at HU8 boundaries (edge-matching). Topology checks were run to ensure there were no overlaps or discontinuities within the streams dataset or in the separate Artificial Paths dataset. Geometry checks were conducted using ESRI's Data Reviewer tool.

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ►

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2019-07-22 00:00:00

PUBLICATION DATE 2020-04-30 00:00:00

[Hide Product specification ▲](#)

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

[Hide Data Quality ▲](#)

Lineage ►

LINEAGE STATEMENT

ATLAS Hydrography utilizes three sets of source data:

*Hydrographic break lines generated derived from the Quality Level (QL) 1/QL2 Light Distance and Ranging (LiDAR) data collected by the NC Department of Emergency Management (NC EM),

*NC Floodplain Mapping Program (NCFMP) data,

*and Headwater Streams Spatial Dataset (HSSD) linework.

For the purposes of ATLAS, FMP terrain data was incorporated into the HSSD model process to produce a seamless approximation of NCFMP hydrography combined with the HSSD. HSSD/NCFMP-sourced stream reaches were intersected with the hydrographic break lines dataset (double line streams greater than 200 feet in width and waterbodies greater than 2 acres) derived from the QL1/QL2 LiDAR to remove the HSSD stream line segments inside open waters. These HSSD stream segments were clipped and exported to a separate dataset representing artificial paths for future use. The hydrographic break lines were then inserted to create a seamless stream and open water dataset more representative of real-world hydrological features.

Update for April 2020:

-Updated Aliases for all fields

Update for December 2021:

-New polylines were added

PROCESS STEP ►
DESCRIPTION

Geodatabase was forwarded on to the GIS Unit for publishing as part of data for project ATLAS.

PROCESS CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - Sweeping Environmental group
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE originator

CONTACT INFORMATION ►

PHONE

VOICE 919-707-6136

ADDRESS

TYPE

DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27610

COUNTRY US

E-MAIL ADDRESS ATLAS@ncdot.gov

HOURS OF SERVICE

9:00am – 5:00pm Monday - Friday

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[Hide Contact information ▲](#)

[Hide Process step ▲](#)

PROCESS STEP ►
DESCRIPTION

Attributes from several NCDEQ water quality datasets were compiled into a single table using their common and unique attribute, the assessment unit number (AU_Number). The attributes were then transferred to the geometry of the corresponding main stem's stream lines using a spatial join process. This process was again automated using ArcGIS Model Builder. A visual QC followed to check for streams that were: 1) incorrectly attributed, 2) were not attributed but should have been, and 3) streams that were attributed and should not have been. To satisfy the requirement that a tributary carries the attributes of the stream it drains into, a series of processes using buffers and spatial joins were applied to all tributaries flowing into the main stem line segments described above. The remaining tributaries (those flowing outside the state) were attributed with the receiving waterbody name and state abbreviation. Their classification fields AU_Class and BIMS_Class were coded as "C" in accordance with NCDEQ guidelines. Additional attributes not related to NCDEQ AU numbers were joined to the appropriate hydrography lines, including US Army Corps of Engineers Stream Habitat Temperature (cold, cool, and warm), NC Division of Coastal Management (NCDCM) and NC Wildlife Resource Commission (NCWRC) Coastal, Joint, and Inland fishing waters designations, and NCWRC Eastern Brook Trout Joint Venture (EBTJV) data. These data are intended to satisfy the needs of the NCDOT for additional water resource planning, including identification of jurisdiction and moratoria considerations. HSSD attributes were generated within individual USGS HUC10 boundaries and within a small buffer of the approximate bounds of North Carolina; therefore, calculated drainage areas were post-processed to include upstream and out-of-state drainage where necessary. HSSD-generated

attributes were joined directly to the ATLAS Hydrography dataset for all stream centerlines. Shorelines of double-line streams (rivers) were split across from all stream confluences to generate approximately equal shoreline lengths. These shoreline segments were then attributed with the upstream values of the HSSD reach encompassed by the double line stream segment and the downstream values of the HSSD reach encompassed by the double line stream segment. HSSD values of specific stream reach information (Length, Slope, StrmDrop, WSNO, DOUTSTART, DOUTEND) are not included in double-line stream attributes. Shorelines of impoundments (lakes and ponds) were attributed with the upstream and downstream values of the stream reach draining from the waterbody. HSSD attributes that are inappropriate for describing impounded areas were not included (StrmDrop, Slope, StraightL, WSNO- definitions are provided in the attached spreadsheet). Additional site-specific HSSD values within waterbodies may be obtained from the 'Artificial Paths' layer.

PROCESS CONTACT

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[Hide Process step ▲](#)

PROCESS STEP ►

DESCRIPTION

Data was reviewed in ESRI's Data Reviewer tool to verify geometry. No legitimate errors were found.

PROCESS CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - Sweeping Environmental group
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE originator

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[Hide Process step ▲](#)

PROCESS STEP ►

DESCRIPTION

This process was completed at the Hydrologic Unit 10 (HU10) level and was automated using ArcGIS Model Builder. A visual quality control (QC) check was performed to ensure that no HSSD stream line segments flow in and out of open water areas multiple times. The HU10 data was then combined into HU8 level datasets and checked for connectivity at HU8 boundaries (edge-matching). Topology checks were run to ensure there were no overlaps or discontinuities within the streams dataset or in the separate Artificial Paths dataset.

PROCESS CONTACT

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CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE originator

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[Hide Contact information ▲](#)

[Hide Process step ▲](#)

[Hide Lineage ▲](#)

Distribution ►

DISTRIBUTOR ►

CONTACT INFORMATION

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE distributor

CONTACT INFORMATION ►

PHONE

VOICE 919-707-6136

ADDRESS

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[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

DISTRIBUTION FORMAT

* NAME File Geodatabase Feature Class

VERSION 10.5

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT [NCAtlasArtificialPaths](#) ►

* TYPE Feature Class

* ROW COUNT 131136

DEFINITION

Artificial paths are the centerlines for double line streams and waterbodies

DEFINITION SOURCE

NCDOT

FIELD OBJECTID ►

* ALIAS OBJECTID

* DATA TYPE OID

* WIDTH 4

* PRECISION 0

* SCALE 0

* FIELD DESCRIPTION

Internal feature number.

* DESCRIPTION SOURCE

Esri

* DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

Hide Field OBJECTID ▲

FIELD Shape ►

* ALIAS Shape

* DATA TYPE Geometry

* WIDTH 0

* PRECISION 0

* SCALE 0

* FIELD DESCRIPTION

Feature geometry.

* DESCRIPTION SOURCE

Esri

* DESCRIPTION OF VALUES

Coordinates defining the features.

Hide Field Shape ▲

FIELD LinkNo ►

* ALIAS LinkNumber

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

An arbitrary, unique number associated with each link (segment of channel between junctions). This is unique only within each HUC10.

DESCRIPTION SOURCE

HSSD

Hide Field LinkNo ▲

FIELD **DOutEnd** ▶

- * ALIAS DistanceOutEnd
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Distance to the eventual outlet (i.e. the most downstream point in the stream network) from the downstream end of the link in feet. Valid for stream centerlines derived from HSSD data only.

DESCRIPTION SOURCE

HSSD

Hide Field DOutEnd ▲

FIELD **StrmOrder** ▶

- ALIAS StreamOrder
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Strahler Stream Order. This is a numerical value representing stream size and it is standard. Headwater streams are assigned the value '1'. When two '1s' combine, they form a '2.' When a 1-stream flows into a 2-stream, nothing changes, but when two 2-streams flow together, they form a '3.' Only same-order streams flowing together increase the order ($3+1$ or $3+2 =$ no change, but $3+3=4$, $4+4=5$, ad infinitum).

DESCRIPTION SOURCE

HSSD

Hide Field StrmOrder ▲

FIELD **DSContArea** ▶

- ALIAS DownstreamContainmentArea
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Drainage area at the downstream end of the link in sq ft.

DESCRIPTION SOURCE

HSSD

Hide Field DSContArea ▲

FIELD **DSLinkNo** ▶

- * ALIAS DownstreamLinkNumber
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Link Number of the downstream link. -1 indicates that this does not exist. Unique within HUC10 boundaries only.

DESCRIPTION SOURCE

HSSD

Hide Field DLinkNo ▲

FIELD Magnitude ►

* ALIAS Magnitude

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Shreve Magnitude of the link. This is the total number of sources upstream

DESCRIPTION SOURCE

HSSD

Hide Field Magnitude ▲

FIELD USContArea ►

ALIAS UpstreamContainmentArea

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Drainage area at the upstream end of the link in sq ft.

DESCRIPTION SOURCE

HSSD

Hide Field USContArea ▲

FIELD USLinkNo2 ►

* ALIAS UpstreamLinkNumber2

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Link Number of second upstream link. (-1 indicates no second link upstream, i.e. for a source link or an internal monitoring point where the reach is logically split but the network does not bifurcate.)

DESCRIPTION SOURCE

HSSD

Hide Field USLinkNo2 ▲

FIELD MEnd ►

ALIAS MeasureEnd

* DATA TYPE Single

* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

Measured value at end of link (same as Length) in feet.

DESCRIPTION SOURCE

HSSD

[Hide Field MEnd ▲](#)

FIELD MStart ►

ALIAS MeasureStart

* DATA TYPE Single

* WIDTH 4

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Measured value at start of link (same as Length) in feet.

DESCRIPTION SOURCE

HSSD

[Hide Field MStart ▲](#)

FIELD USLinkNo ►

ALIAS UpstreamLinkNumber

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Link Number of first upstream link. (-1 indicates no second link upstream, i.e. for a source link or an internal monitoring point where the reach is logically split but the network does not bifurcate.)

DESCRIPTION SOURCE

HSSD

[Hide Field USLinkNo ▲](#)

FIELD HydroType ►

ALIAS HydroType

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Hydrologic Type of the feature

DESCRIPTION SOURCE

NCDEQ

LIST OF VALUES

VALUE Lake/Pond

DESCRIPTION Lake/Pond

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Stream/River – Double
DESCRIPTION Stream/River – Double
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Stream/River – Single
DESCRIPTION Stream/River – Single
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

[Hide Field HydroType ▲](#)

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.

[Hide Field Shape_Length ▲](#)

[Hide Details for object NCAtlasArtificialPaths ▲](#)

[Hide Fields ▲](#)

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 2024-01-26

ARCGIS METADATA PROPERTIES

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

CREATED IN ARCGIS FOR THE ITEM 2024-02-01 16:06:02
LAST MODIFIED IN ARCGIS FOR THE ITEM 2024-01-26 14:20:47

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2024-01-26 14:20:47

[Hide Metadata Details ▲](#)

Metadata Contacts ►

METADATA CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

PHONE

VOICE 919-707-6136

ADDRESS

TYPE physical

DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27610

COUNTRY US

E-MAIL ADDRESS ATLAS@ncdot.gov

HOURS OF SERVICE

9:00am – 5:00pm Monday - Friday

CONTACT INSTRUCTIONS

Please send an email with any issues, questions or comments regarding the ATLAS Data Search Tool, ATLAS Screening Tool or ATLAS Workbench. If it is an immediate need, please call the contact number or indicate as such in the subject line in an email.

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

Metadata Maintenance ►

MAINTENANCE

UPDATE FREQUENCY as needed

OTHER MAINTENANCE REQUIREMENTS

Annual maintenance of this dataset is handled by the Sweeping Environmental group. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - Sweeping Environmental group
CONTACT'S POSITION Environmental Program Consultant
CONTACT'S ROLE originator

CONTACT INFORMATION ►

PHONE

VOICE 919-707-6136

ADDRESS

TYPE physical

DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA NC

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[Hide Contact information ▲](#)

[Hide Metadata Maintenance ▲](#)

Metadata Constraints ►

SECURITY CONSTRAINTS

CLASSIFICATION unclassified
CLASSIFICATION SYSTEM None

LIMITATIONS OF USE

The North Carolina Department of Transportation shall not be held liable for any errors in this metadata. This includes errors of omission, commission, errors concerning the content of the data, and relative and positional accuracy of the data. This data cannot be construed to be a legal document. Primary sources from which this data was compiled must be consulted for verification of information contained in this data. Datasets developed under Project ATLAS do not replace any Sweeping Environmental group field work for future projects and may not be used as a replacement for site visits / field surveys by licensed professionals and hence should be used only as a supporting platform for decision making. Use of this dataset for project scoping or screening is merely pre-decisional.

CONSTRAINTS

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[Hide Metadata Constraints ▲](#)