

NC ATLAS Hydrography Version 2.1 Intermittent, September 2024 - 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

Summary

This dataset was generated from August 2019 to August 2022 and updated in February 2024 as part of the Project ATLAS initiative at NCDOT to support 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.

Description

The ATLAS Hydrography version 2.1 dataset is a statewide polyline layer depicting location and various regulatory considerations of water resources of intermittent or better flow regimes with respect to transportation planning.

This data is considered current as of February 2024 and is not the officially adopted layer for the state of NC but supports NCDOT in the generation of following reports:

General Planning,

NRTR generation (location of water resources, name/index numbers of waters, water quality classifications, impairedwaters, NCWRCTroutwaters, USACE stream habitat temperature, baldeagle habitat),

Permitting (Section10 permitting, Section404 permitting, Section401 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, etc.

Datasets developed under Project ATLAS do not replace 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 State-Wide Expansive Environmental Programming (SWEEPing) group within NCDOT was tasked to create this dataset and did so in collaboration with the NC Department of Environmental Quality's Headwater

Streams Spatial Dataset (HSSD) program. 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

The North Carolina Department of Transportation shall not be held liable for any errors in this data. 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.

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Extent

West -84.515992 **East** -75.405661
North 36.861351 **South** 33.713597

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, inlandWaters, location, oceans, transportation

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

PLACE KEYWORDS North Carolina

THESAURUS ►

TITLE User
CREATION DATE 2023-01-02 00:00:00
PUBLICATION DATE 2024-09-30 00:00:00

Hide Thesaurus ▲

THEME KEYWORDS streams, rivers, shorelines, lakes, ponds, biota, oceans, environment, transportation, location, inland, coastal, waters, 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 ▶

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[Hide Thesaurus ▲](#)

[Hide Topics and Keywords ▲](#)

Citation ▶

TITLE NC ATLAS Hydrography Version 2.1 Intermittent, September 2024 - NC Department of Transportation

CREATION DATE 2023-01-02 00:00:00

PUBLICATION DATE 2024-09-30 00:00:00

EDITION Version 2.0

EDITION DATE 2022-08-22

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 919-707-6146

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.

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[Hide Citation Contacts ▲](#)

Resource Details ►

DATASET LANGUAGES * English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE * vector

* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.8.1.14362

CREDITS

The ATLAS State-Wide Expansive Environmental Programming (SWEEPing) group within NCDOT was tasked to create this dataset and did so in collaboration with the NC Department of Environmental Quality's Headwater Streams Spatial Dataset (HSSD) program. 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 (NCDQM) 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

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -84.515992

* EAST LONGITUDE -75.405661

* NORTH LATITUDE 36.861351

* SOUTH LATITUDE 33.713597

* EXTENT CONTAINS THE RESOURCE Yes

TEMPORAL EXTENT

BEGINNING DATE 2024-02-01 00:00:00

ENDING DATE 2024-02-01 00:00:00

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 384134.997244

* EAST LONGITUDE 3052308.288840

* SOUTH LATITUDE 30014.999876

* NORTH LATITUDE 1132514.999924

* 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

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Hide Contact information ▲

Hide Resource Points of Contact ▲

Resource Maintenance ►

RESOURCE MAINTENANCE

UPDATE FREQUENCY annually

OTHER MAINTENANCE REQUIREMENTS

Annual maintenance of this dataset is handled by the State-Wide Expansive Environmental Program (SWEEPing) 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 ►

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[Hide Contact information ▲](#)

[Hide Resource Maintenance ▲](#)

Resource Constraints ►

CONSTRAINTS

LIMITATIONS OF USE

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SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

LIMITATIONS OF USE

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LEGAL CONSTRAINTS

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[Hide Resource Constraints ▲](#)

Spatial Reference ►

ARCGIS COORDINATE SYSTEM

* TYPE Projected

* GEOGRAPHIC COORDINATE REFERENCE GCS_NAD_1983_2011

* PROJECTION NAD_1983_2011_StatePlane_North_Carolina_FIPS_3200_Ft_US

* COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 103122

X ORIGIN -121841900

Y ORIGIN -93659000
XY SCALE 3048.0060960121928
Z ORIGIN -100000
Z SCALE 3048.0060960121923
M ORIGIN -100000
M SCALE 10000
XY TOLERANCE 0.0032808333333333331
Z TOLERANCE 0.0032808333333333331
M TOLERANCE 0.001
HIGH PRECISION true
LATEST WELL-KNOWN IDENTIFIER 6543
WELL-KNOWN TEXT
PROJCS["NAD_1983_2011_StatePlane_North_Carolina_FIPS_3200_Ft_US",GEOGCS["GCS_NAD_1983_2011",DATUM["D_NAD_1983_2011",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Lambert_Conformal_Conic"],PARAMETER["False_Easting",2000000.0],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]],VERTCS["NAVD_1988_Foot_US Geoid12b",VDATUM["North_American_Vertical_Datum_1988"],PARAMETER["Vertical_Shift",0.0],PARAMETER["Direction",1.0],UNIT["Foot_US",0.3048006096012192]]

REFERENCE SYSTEM IDENTIFIER

- * VALUE 6543
- * CODESPACE EPSG
- * VERSION 8.2.10(10.3.1)

[Hide Spatial Reference ▲](#)

Spatial Data Properties ►

VECTOR ►

- * LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

- FEATURE CLASS NAME ATLAS_Hydrography_v2
- * OBJECT TYPE composite
- * OBJECT COUNT 26331245

[Hide Vector ▲](#)

ARCgis FEATURE CLASS PROPERTIES ►

- FEATURE CLASS NAME ATLAS_Hydrography_v2
- * FEATURE TYPE Simple
- * GEOMETRY TYPE Polyline
- * HAS TOPOLOGY FALSE
- * FEATURE COUNT 26331245
- * 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 COMMISSION ▶

MEASURE DESCRIPTION

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

EVALUATION TYPE **direct internal**

CONFORMANCE TEST RESULTS

TEST PASSED **Yes**

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ▶

TITLE **NCDOT Geospatial Data Specifications**

CREATION DATE **2023-01-02 00:00:00**

PUBLICATION DATE **2024-09-30 00:00:00**

Hide Product specification ▲

Hide Data quality report - Completeness commission ▲

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.

EVALUATION TYPE **direct internal**

CONFORMANCE TEST RESULTS

TEST PASSED **No**

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ▶

TITLE **NCDOT Geospatial Data Specifications**

CREATION DATE **2023-01-02 00:00:00**

PUBLICATION DATE **2024-09-30 00:00:00**

Hide Product specification ▲

Hide Data quality report - Conceptual consistency ▲

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ►

MEASURE DESCRIPTION

The HUC10 data was combined into HUC8 level datasets and checked for connectivity at HUC8 boundaries (edge-matching). Topology checks were run to ensure there were no overlaps or discontinuities within the streams dataset. Geometry checks were conducted using ESRI's Data Reviewer tool.

EVALUATION TYPE direct internal

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ►

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2023-02-02 00:00:00

PUBLICATION DATE 2024-09-23 00:00:00

[Hide Product specification ▲](#)

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

[Hide Data Quality ▲](#)

Lineage ►

LINEAGE STATEMENT

ATLAS Hydrography utilizes two 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),

*and Headwater Streams Spatial Dataset (HSSD) linework. HSSD-sourced stream reaches were intersected with the hydrographic break lines dataset (double line streams greater than 200 feet in width and waterbodies greater than 2.0 acres) derived from the QL1/QL2 LiDAR to remove the HSSD stream line segments inside open waters. These HSSD stream segments were attributed as Artificial Paths. The hydrographic break lines were then inserted to create a seamless stream and open water dataset more representative of real-world hydrological features when viewed without artificial path features.

UPDATE for April 2020:

-Updated alias fields that provide an understandable description of the fields,

-Individual ID numbers for Unnamed Tributaries.

-Updated names for UTs

For streams that have a single assessment unit, this reads as UT 2 to Eric Creek.

For Streams with multiple assessment units, the AU number is added (e.g. UT 34 to Wilson Creek (27-45-(2))

-Addition of 'NCDEQ Anadromous Fish Spawning Areas' – waters listed in NC Administrative Code as AFSA.

UPDATE for December 2021:
Hydro fields were deleted, added and renamed as per NCDEQ data updates.

-Deleted Fields:

CycleYr: Field retired by DEQ
Collection: Field retired by DEQ
AsmntStat: Field retired by DEQ
USRLong: Field retired by DEQ
USCLongVe: Field retired by DEQ
RFRLong: Field retired by DEQ
POILong: Field retired by DEQ
Dyear: Field retired by DEQ
WQAsmtOneMatch: Field retired by DEQ
WQAsmtCmt: Field retired by DEQ
BIMSName: Duplicate Field, retired by DEQ
BIMSDescr: Duplicate Field, retired by DEQ
BIMSDate: Duplicate Field, retired by DEQ
ShapeSTLe: Duplicate Field, retired by DEQ
OIRCAt: Field retired by DEQ
OUSR: Field retired by DEQ
AULengthA1: Duplicate Field, retired by DEQ
F2018: Replaced with new fields

-New fields:

R2020
A2020
X03RANK20
R2018
A2018
R2016
A2016
R2014
A2014
R2012
A2012
R2010
A2010
R2008
A2008

-Renamed fields:

IRpt2018Mat
IRpt2018Cmt

UPDATE for January 2023:
All attributes have been newly added.
RDBMS Schema

UPDATE for February 2024:
Inclusion of new coded domains for the following related tables:
-CCW_Hab
-FLOWREGIME
-DBCJIW
-EBTJV_TR

Additionally:

- YES/NO domain added to geometry feature class
- 'Atlantic Ocean' was added to and populated for the domain codes used in the HYDROTYPE field.
- Artificial Path features should now have a HYDROTYPE of the feature that they pass through for Lake/Ponds and -
- Double Line Streams.

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

CONTACT INFORMATION ►

PHONE

VOICE 919-707-6146

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DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive

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HOURS OF SERVICE

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PROCESS STEP ►

DESCRIPTION

The ATLAS Hydrography version 2.1 dataset utilizes a Relational Database Schema (RDBMS); thus instead of carrying attributes, features include links to join additional data. These links were generated to maintain NCDEQ data, HSSD, data, and additional ATLAS attributes. Identifiers from HSSD reach points (cellular-level data describing source Digital Elevation Model (DEM) features) and stream origin models were applied to processed linework. HSSD reach point information, unique to each HUC10, was attributed to the corresponding line segment. The HUC10 basin number was then added to this identifier to generate a unique identifier for each line segment in the state. These processes were automated using ArcGIS Model Builder. The results of HSSD stream origin models were applied to linework to identify streams anticipated to exhibit an intermittent or higher flow regime (flowing three months a year or more) using table joins. Linework identified as less than intermittent was attributed with a designation of Drainage Way. Linework identified as intermittent or

better with associated NCDEQ information were designated as Mainstems, while those without associated NCDEQ data were designated as Tributaries. Assessment Unit (AU) numbers from the most recent (August 2022) NCDEQ water data were 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. AU numbers associated with Mainstem features indicate that the feature is a Mainstem with the AU number indicated. AU numbers associated with Tributary features indicate that the feature drains to the Mainstem with the AU number indicated. Streams flowing from outside the state were attributed with the receiving waterbody name. Their classification field (BIMS_Class) were coded as "C" in accordance with NCDEQ guidelines. Links to 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 (NCDQM) 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 are linked 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 attribute links of the reach encompassed by the double line stream segment. Shorelines of impoundments (lakes and ponds) were attributed with the links of the stream reach draining from the waterbody. HSSD stream attributes that are inappropriate for describing impounded areas were not included. Additional site-specific HSSD values within waterbodies may be obtained from links within the 'Artificial Paths' features.

PROCESS CONTACT

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CONTACT'S ROLE originator

CONTACT INFORMATION ►

PHONE

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[Hide Contact information ▲](#)

[Hide Process step ▲](#)

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 ►

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[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 ►

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VOICE 919-707-6146

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[Hide Contact information ▲](#)

[Hide Distributor ▲](#)

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class
VERSION 10.8.1

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT ATLAS_Hydrography_v2 ►

* TYPE Feature Class
* ROW COUNT 26331245

DEFINITION

Water lines depicting location and various regulatory considerations of water resources in the state of NC with respect to transportation planning

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 HYDROID ▶

- * ALIAS NCDOTUniqueFeatureId
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
Unique identifier for each line segment comprised of HU10 code, date of calculation, and ObjectID
Intended as the primary key to link geometry to ATLAS-specific tables.

- DESCRIPTION SOURCE
NCDOT, NCDEQ

Hide Field HYDROID ▲

FIELD AUID ▶

- * ALIAS NCDEQDataLinkMainstem
- * DATA TYPE Integer
- * WIDTH 4
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
Autonumber. Unique assessment unit number for each segment of stream or waterbody tracked by the NDEQ. Primary key to linking NCDEQ data to mainstems only.

- DESCRIPTION SOURCE
NCDEQ

Hide Field AUID ▲

FIELD HUC10AIDX ▶

- * ALIAS HSSDDataLink
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION

Concatenation of the AIDX identifier number (unique to each HU10) and the HU10 code to produce a unique identifier key to HSSD reach point data.

DESCRIPTION SOURCE
NCDOT, NCDEQ

[Hide Field HUC10AIDX ▲](#)

FIELD **HYDROTYPE** ►

- * ALIAS WaterbodyType
- * DATA TYPE String
- * WIDTH 25
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION
Hydrologic Type

DESCRIPTION SOURCE
NCDEQ

LIST OF VALUES

VALUE Lake/Pond
DESCRIPTION Lake/Pond
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

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

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

VALUE Atlantic Ocean
DESCRIPTION Atlantic Ocean
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

[Hide Field HYDROTYPE ▲](#)

FIELD **FEATURETYPE** ►

- * ALIAS WaterbodyFeatureType
- * DATA TYPE String
- * WIDTH 25
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION
Classification of features by flow type as Mainstem, Tributary, Artificial Path, or Drainage Way.

DESCRIPTION SOURCE
NCDOT, NCDEQ

LIST OF VALUES

VALUE Mainstem
DESCRIPTION Mainstem
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE Tributary
DESCRIPTION Tributary
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE Artificial Path
DESCRIPTION Artificial Path
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE Drainage Way
DESCRIPTION Drainage Way
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

Hide Field FEATURETYPE ▲

FIELD IMPACT ►

- * ALIAS ImpactNCDOT
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Yes/No designation if the line segment should be used for NCDOT tool impact assessments.

DESCRIPTION SOURCE
NCDOT

LIST OF VALUES

VALUE YES
DESCRIPTION YES
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE NO
DESCRIPTION NO
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

Hide Field IMPACT ▲

FIELD AUNAME ►

- * ALIAS NCDEQAssessmentUnitName
- * DATA TYPE String
- * WIDTH 250
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Assessment Unit Name from NCDEQ. Mainstem AUName represents the name of the associated feature class, Tributary AUName includes a uniquely-numbered Unnamed Tributary ID to the receiving waters, Drainage Way AUName includes a general "UT" identifier and the receiving water.

DESCRIPTION SOURCE
NCDOT, NCDEQ

Hide Field AUNAME ▲

FIELD INSTATE ►

- * ALIAS InState
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Yes/No identification if segment is located within the state outline.

DESCRIPTION SOURCE

NCDOT, NCDEQ

LIST OF VALUES

VALUE YES

DESCRIPTION YES

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE NO

DESCRIPTION NO

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

Hide Field INSTATE ▲

FIELD AUIDA ►

* ALIAS NCDEQDataLinkAllFeatures

* DATA TYPE Integer

* WIDTH 4

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Autonumber. Unique assessment unit number for each segment of stream or waterbody tracked by the NDEQ. Used as primary key to linking NCDEQ data to mainstems and tributaries.

DESCRIPTION SOURCE

NCDEQ

Hide Field AUIDA ▲

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 ATLAS_Hydrography_v2 ▲

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 2024-07-11

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0
STANDARD OR PROFILE USED TO EDIT METADATA ISO19139
METADATA STYLE ISO 19139 Metadata Implementation Specification GML3.2

CREATED IN ARCGIS FOR THE ITEM 2022-09-19 17:31:04
LAST MODIFIED IN ARCGIS FOR THE ITEM 2024-07-11 00:41:49

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2024-07-11 00:41:49

[Hide Metadata Details ▲](#)

Metadata Contacts ►

METADATA 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 919-707-6146

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 annually

SCOPE OF THE UPDATES dataset

OTHER MAINTENANCE REQUIREMENTS

Annual maintenance of this dataset is handled by the State-Wide Expansive Environmental Program (SWEEPing) 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.

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[Hide Contact information ▲](#)

[Hide Metadata Maintenance ▲](#)

Metadata Constraints ►

LEGAL CONSTRAINTS

LIMITATIONS OF USE

The North Carolina Department of Transportation shall not be held liable for any errors in this data. 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.

SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

LIMITATIONS OF USE

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in this data. Datasets developed under Project ATLAS do not replace any 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 ▲](#)