

NC ATLAS Hydrography (Abridged) 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

Summary

This dataset was originally created in June 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.

Description

The ATLAS Hydrography Version 1.4 (Abridged) dataset is a statewide polyline layer depicting location and various regulatory considerations of water resources with respect to transportation planning. This is the abridged version of the ATLAS Hydrography layer containing lesser attribute data.

This data is current as of December 2021 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, 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).

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 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

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.

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.

Extent

West -84.421600 **East** -75.416491
North 36.620015 **South** 33.700957

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 (Abridged) 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 ▲](#)

RESPONSIBLE PARTY

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 ▲](#)

RESPONSIBLE PARTY

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
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 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

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 (NCDOT) jurisdiction, water quality classifications).

Support and maintenance of the enterprise spatial database where this data resides is handled by NCDOT'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 -84.421600

* EAST LONGITUDE -75.416491

* NORTH LATITUDE 36.620015

* SOUTH LATITUDE 33.700957

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 407037.415678

* EAST LONGITUDE 3052308.812461

* SOUTH LATITUDE 24189.308443

* NORTH LATITUDE 1044630.001810

* 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

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 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 State Wide Expansive Environmental Program (SWEEP) 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

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 Resource Maintenance ▲](#)

Resource 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

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. 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

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.

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.

[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 10000
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 NCAtlasHydrographyAbridged

* OBJECT TYPE composite

* OBJECT COUNT 1593176

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME NCAtlasHydrographyAbridged

* FEATURE TYPE Simple

* GEOMETRY TYPE Polyline

* HAS TOPOLOGY FALSE

* FEATURE COUNT 1593176

* 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 **2021-12-01 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 **2021-12-01 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 2021-12-01 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 alias fields that provide an understandable description of the fields,

Update for December 2021:

Abridged Hydro field was renamed as per NCDEQ data updates.

-Renamed fields:

IRpt2018Cmt

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 919-707-6136

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 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.

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 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 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 ►

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 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

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

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 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

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 Distributor ▲

DISTRIBUTION FORMAT

* NAME File Geodatabase Feature Class

VERSION 10.5

Hide Distribution ▲

Fields ►

DETAILS FOR OBJECT NCAtlasHydrographyAbridged ►

* TYPE Feature Class

* ROW COUNT 1593176

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 AUNumber ►

ALIAS NCDEQAssessmentUnitNumber

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Unique assessment unit number based on the BIMS Index number. It is a unique identifier of a waterbody in NC. All named and some unnamed streams have an AU Number.

DESCRIPTION SOURCE

NCDEQ

[Hide Field AUNumber ▲](#)

FIELD AUDrainTo ►

ALIAS AUNumberOfReceivingWaters

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

AU number of receiving waters (for all tributaries with no AU designation)

DESCRIPTION SOURCE

NCDOT

[Hide Field AUDrainTo ▲](#)

FIELD AUName ►

ALIAS NCDEQAssessmentUnitName

* DATA TYPE String

* WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

NC name (not always an exact match with GNIS) usually from the US Geological Survey Topo maps.

DESCRIPTION SOURCE

NCDEQ

[Hide Field AUName ▲](#)

FIELD IRC ►

ALIAS IntegratedReportingCategory(IRC)

* DATA TYPE String

* WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Integrated Reporting Category assigned by parameter of interest (see field) and assessment criteria status (see field)
(NRTR required value)

DESCRIPTION SOURCE

NCDEQ

LIST OF VALUES

VALUE 1

DESCRIPTION Meeting Criteria

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 1b

DESCRIPTION Meeting Criteria-a management strategy in place for parameter

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 1f

DESCRIPTION Meeting Criteria-Fish tissue collected in Assessment Unit with no advisories other than statewide Mercury advice

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 1i

DESCRIPTION Meeting Criteria-Parameter assessed is addressed by a TMDL for a different parameter

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 1nc

DESCRIPTION Meeting Criteria-Parameter assessed was exceeding some criteria but it was determined that the exceedances were due to natural conditions (documentation required)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 1r

DESCRIPTION Meeting Criteria-Parameter assessed was meeting criteria and there are ongoing restoration activities

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 1t

DESCRIPTION Meeting Criteria-Parameter assessed was meeting criteria and there is an approved TMDL in place for the parameter

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3a

DESCRIPTION Data Inconclusive

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3b

DESCRIPTION Data Inconclusive- management strategy in place for parameter

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3c

DESCRIPTION Data Inconclusive- non-pollutant

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3i

DESCRIPTION Data Inconclusive-Parameter assessed is addressed by a TMDL for a different parameter

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3r
DESCRIPTION Data Inconclusive- ongoing restoration activities in place to address parameter
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3t
DESCRIPTION Data Inconclusive- approved TMDL in place for parameter
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3v
DESCRIPTION Data Inconclusive- exceedance due to permitted facility with a variance
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3z1
DESCRIPTION Data Inconclusive-Data not assessed against a NC water quality standard
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 3z2
DESCRIPTION Data Inconclusive-No data or information to make assessment
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4b
DESCRIPTION Exceeding Criteria- management strategy in place for parameter
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4c
DESCRIPTION Exceeding Criteria- non-pollutant
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4cs
DESCRIPTION Exceeding Criteria- Shellfish growing area- not approved. Approved fecal coliform bacteria TMDL assessed in category 4t
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4i
DESCRIPTION Exceeding Criteria- Parameter assessed is addressed by a TMDL for a different parameter
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4r
DESCRIPTION Exceeding Criteria- ongoing restoration activities in place to address parameter. Also for restoration parameters without water quality standards
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4s
DESCRIPTION Exceeding Criteria- another aquatic life parameter is assessed in category 4 or 5. For biological assessments only
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4t
DESCRIPTION Exceeding Criteria- approved TMDL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 4v
DESCRIPTION Exceeding Criteria- exceedance due to permitted facility with a variance
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 5
DESCRIPTION Exceeding Criteria- no approved TMDL in place for assessed parameter
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 5e
DESCRIPTION EPA listed the assessment based on EPA guidance not NC methodology

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

VALUE 5r

DESCRIPTION Exceeding Criteria- no approved TMDL restoration plans and activities ongoing

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ - Integrated Report 2018

[Hide Field IRC ▲](#)

FIELD POI ►

ALIAS IRCParameterOfInterest

* DATA TYPE String

* WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Parameter of Interest - Included are: Parameter, Standard for that parameter, Standard type and Area where this standard is applicable (NRTR required value)

DESCRIPTION SOURCE

NCDEQ

[Hide Field POI ▲](#)

FIELD BIMSClass ►

ALIAS BIMSWaterQualityClassification(s)

* DATA TYPE String

* WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Water quality classification(s) Basinwide Information Management System (NRTR required value)

DESCRIPTION SOURCE

NCDEQ

LIST OF VALUES

VALUE B

DESCRIPTION Primary Recreation, Fresh Water

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE C

DESCRIPTION Aquatic Life, Secondary Recreation, Fresh Water

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE CA

DESCRIPTION Critical Area

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE HQW

DESCRIPTION High Quality Waters

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE N/A

DESCRIPTION Not Applicable/Out of State

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE NSW
DESCRIPTION Nutrient Sensitive Waters
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE ORW
DESCRIPTION Outstanding Resource Waters
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE SA
DESCRIPTION Market Shellfishing, Salt Water
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE SB
DESCRIPTION Primary Recreation, Salt Water
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE SC
DESCRIPTION Aquatic Life, Secondary Recreation, Salt Water
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE Sw
DESCRIPTION Swamp Waters
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE Tr
DESCRIPTION Trout Waters
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE UWL
DESCRIPTION Unique Wetland
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE FWS
DESCRIPTION Future Water Supply Waters
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE WS-I
DESCRIPTION Water Supply I - Natural
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE WS-II
DESCRIPTION Water Supply II - Undeveloped
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE WS-III
DESCRIPTION Water Supply III - Moderately Developed
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE WS-IV
DESCRIPTION Water Supply IV- Highly Developed
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE WS-V
DESCRIPTION Water Supply V - Upstream
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

VALUE +, @, #, *
DESCRIPTION Special Designations
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDEQ

FIELD [DSContArea](#) ▶

ALIAS HSSDDrainageAreaAtDownstreamEndOfLink

* 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 [EBTJVTR](#) ▶

ALIAS EasternBrookTroutJointVentureData

* DATA TYPE String

* WIDTH 20

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Eastern Brook Trout Joint Venture (reproducing trout populations and species) Brown, brook, and rainbow trout species.

DESCRIPTION SOURCE

NCDOT

[Hide Field EBTJVTR](#) ▲

FIELD [CCWHab](#) ▶

ALIAS ColdCoolWarmHabitat

* DATA TYPE String

* WIDTH 6

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Designates boundaries for habitat types: Cold, Cool, Warm Habitat

DESCRIPTION SOURCE

NCDOT

[Hide Field CCWHab](#) ▲

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 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 ▲

FIELD Impact ►

* ALIAS Impact

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Designates if the line segment should be used for impact assessments

DESCRIPTION SOURCE
NCDOT

LIST OF VALUES

VALUE Yes

DESCRIPTION Used for impact assessment

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE No

DESCRIPTION Not used for impact assessment

ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

Hide Field Impact ▲

FIELD IRpt2020Cmt ►

* ALIAS IRCMultipleRelationships

* DATA TYPE String

* WIDTH 250

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Comment field advising a user to review the Integrated Report 2020 from DEQ for this AUNumber.

DESCRIPTION SOURCE

NCDEQ

[Hide Field IRpt2020Cmt ▲](#)

[Hide Details for object NCAtlasHydrographyAbridged ▲](#)

[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 2024-01-29

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 16:02:10

LAST MODIFIED IN ARCGIS FOR THE ITEM 2024-01-29 16:17:41

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2024-01-29 16:17:41

[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

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 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

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 report 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.

[Hide Metadata Constraints ▲](#)