

Shoreline Inventory for the City of Norfolk: Access Structures

Shapefile



Tags

Shoreline access structures, Shoreline structures, Virginia, Little Creek, Willoughby Bay, Mason Creek, Lafayette River, Elizabeth River, Eastern branch of the Elizabeth River, Broad Creek

Summary

To inventory the City of Norfolk tidal shoreline conditions.

Description

Shoreline Situation Reports (SSR) were first generated by VIMS in the 1970's to report the condition and status of the shore lands. The SSR series were published in hardcopy on a county by county basis for each of the Tidewater Virginia localities. The reports were intended to assist planners, managers, and regulators in decisions pertaining to management of coastal areas and natural resources therein. Data collected describes conditions in the immediate riparian zone, the bank, and along the shore. The City of Norfolk was last inventoried in 2002.

Credits

There are no credits for this item.

Use limitations

These data should not be used for jurisdictional permit determinations beyond providing general shoreline condition or status information. These data have not been surveyed to property boundaries.

Extent

West -76.330045 **East** -76.177448

North 36.969418 **South** 36.822308

Scale Range

Maximum (zoomed in) 1:5,000

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

ArcGIS Metadata

Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE boundaries, environment, location, structure

*** CONTENT TYPE** Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS Virginia, Little Creek, Willoughby Bay, Mason Creek, Lafayette River, Elizabeth River, Eastern branch of the Elizabeth River, Broad Creek

THEME KEYWORDS Access structures, Shoreline structures, Shoreline Inventory

Citation

TITLE Shoreline Inventory for the City of Norfolk: Access Structures

PUBLICATION DATE 2014-12-31 00:00:00

PRESENTATION FORMATS * digital map

Resource Details

DATASET LANGUAGES * English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE * vector

SUPPLEMENTAL INFORMATION

There are four shapefiles that are part of the 2014 the City of Norfolk Shoreline Inventory database: Norfolk_lubc_2014, Norfolk_sstru_2014, Norfolk_astru_2014 and Norfolk_tm_2014. Norfolk_lubc_2014 (land use and bank cover for the City of Norfolk) is a linear shapefile containing data about land use, tree fringe, bank height, bank cover, bank stability and beach status along the shoreline. Norfolk_sstru_2014 (the City of Norfolk shoreline structures) is a linear shapefile delineating hard structures in place at the shoreline (bulkhead, dilapidated bulkhead, riprap, wharf, unconventional, debris, marina < 50 slips, marina > 50 slips, jetty, marsh toe revetment, groinfield and breakwaters). Norfolk_astru_2014 (the City of Norfolk access structures) is a point shapefile with locations of docks, dilapidated docks, boathouses, and private and public boat ramps. Norfolk_tm_2014 (the City of Norfolk tidal marshes) shows the location, size, species and type of tidal marshes. The attributes of these four shapefiles are explained in the Entity and Attribute Information section below.

*** PROCESSING ENVIRONMENT** Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.1.0.3035

ARCGIS ITEM PROPERTIES

*** NAME** Norfolk_astru_2014

*** SIZE** 0.040

- * LOCATION <http://ccrm.vims.edu/ccrmp/index.html>
- * ACCESS PROTOCOL Comprehensive Coastal Resource Management Portal

Extents

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

- * WEST LONGITUDE -76.330045
- * EAST LONGITUDE -76.177448
- * NORTH LATITUDE 36.969418
- * SOUTH LATITUDE 36.822308
- * EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- * WEST LONGITUDE 381605.050546
- * EAST LONGITUDE 394992.109726
- * SOUTH LATITUDE 4075982.793500
- * NORTH LATITUDE 4092130.039592
- * EXTENT CONTAINS THE RESOURCE Yes

Resource Constraints

CONSTRAINTS

LIMITATIONS OF USE

These data should not be used for jurisdictional permit determinations beyond providing general shoreline condition or status information. These data have not been surveyed to property boundaries.

Spatial Reference

ARCGIS COORDINATE SYSTEM

- * TYPE Projected
- * GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
- * PROJECTION NAD_1983_UTM_Zone_18N
- * COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 26918

X ORIGIN -5120900

Y ORIGIN -9998100

XY SCALE 450445547.3910538

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.001

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

LATESTWKID 26918

WELL-KNOWN TEXT

PROJCS["NAD_1983_UTM_Zone_18N",GEOGCS["GCS_North_American_1983",DATUM["D_No

rth_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Transverse_Mercator"],PARAMETER["False_Easting",500000.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",-75.0],PARAMETER["Scale_Factor",0.9996],PARAMETER["Latitude_Of_Origin",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",26918]]

REFERENCE SYSTEM IDENTIFIER

* VALUE 26918
* CODESPACE EPSG
* VERSION 7.9.4

Spatial Data Properties

VECTOR

* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME Norfolk_astru_2014

* OBJECT TYPE point
* OBJECT COUNT 1505

ARCGIS FEATURE CLASS PROPERTIES



FEATURE CLASS NAME Norfolk_astru_2014

* FEATURE TYPE Simple
* GEOMETRY TYPE Point
* HAS TOPOLOGY FALSE
* FEATURE COUNT 1505
* SPATIAL INDEX TRUE
* LINEAR REFERENCING FALSE

Data Quality

SCOPE OF QUALITY INFORMATION

RESOURCE LEVEL dataset

Lineage

PROCESS STEP



WHEN THE PROCESS OCCURRED 2014-06-01 00:00:00

DESCRIPTION A small draft boat was used to collect data in the field. Data is logged using a geo-referenced video camera. The Red Hen System provides hardware and software to collect geo-referenced video and photo data in the field. A standard video camera (sony

ACC-HDV7) is interfaced with a GPS antennae via the Red Hen hardware device - VMS 300. VMS 300 converts GPS data into audio signals, which are sent to a video camera through its microphone input connector. As the video is recorded, GPS data are transmitted once per second to the video camera by VMS 300. Each GPS location is linked with a time code on the video. Therefore, the survey is a set of videos containing geographically referenced shoreline data.

PROCESS STEP



WHEN THE PROCESS OCCURRED 2014-09-01 00:00:00

DESCRIPTION All processing steps for the shoreline inventory were done using ArcGis version 10. Using the latest VBMP 2013 imagery as a background, conditions visible on shore were used to code a digital shoreline created using VBMP 2009 imagery. Conditions were also verified using Bing Birds Eye and aerial imagery. For the land use/bank cover shapefile arcs were split and coded for land use, bank height, bank cover, bank stability, tree fringe and presence or absence of beach, for the access structure shapefile arcs were coded for dock, dilapidated dock, boathouse, and public and private ramps, for the shoreline structure shapefile arcs were coded for bulkhead, delapidated bulkhead, riprap, unconventional, debris, wharf, breakwater, groinfield, jetty, marsh toe revetment and marina >50 and <50 slips.

PROCESS STEP



WHEN THE PROCESS OCCURRED 2014-09-01 00:00:00

DESCRIPTION A shoreline for the City of Norfolk was created using 2009 VBMP imagery as a backdrop and using ArcGis version 10.0. Using this as a baseline the shoreline inventory was remotely generated using two sources: 2012 oblique Pictometry imagery available through Bing Maps, and 2013 high resolution imagery available from the Virginia Base Mapping Program (VBMP). The shoreline was coded for land use, bank height, bank condition, bank cover and the presence or absence of beach, access structures and hardened structures.

PROCESS STEP



WHEN THE PROCESS OCCURRED 2014-11-01 00:00:00

DESCRIPTION This Red Hen data was used as part of the QAQC.

Distribution

DISTRIBUTION FORMAT

* NAME Shapefile

VERSION Shapefile

TRANSFER OPTIONS

* TRANSFER SIZE 0.040

Fields

DETAILS FOR OBJECT NORFOLK_ASTRU_2014

* TYPE Feature Class

* ROW COUNT 1505

DEFINITION

A collection of geographical features with the same geometry type (such as point, line or poly), same attributes, and the same spatial reference.

DEFINITION SOURCE

ESRI

FIELD FID



* ALIAS FID

* 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.

FIELD SHAPE



* ALIAS Shape

* DATA TYPE Geometry

* WIDTH 0

* PRECISION 0

* SCALE 0

* FIELD DESCRIPTION

Feature geometry.

* DESCRIPTION SOURCE

Esri

* DESCRIPTION OF VALUES Coordinates defining the features.

FIELD ID



* ALIAS Id

* DATA TYPE Integer

* WIDTH 6

* PRECISION 6

* SCALE 0

FIELD DESCRIPTION

ID #

DESCRIPTION SOURCE
ESRI

DESCRIPTION OF VALUES ID #

FIELD PNTSTRUC



* ALIAS PNTSTRUC
* DATA TYPE String
* WIDTH 50
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

Points coded for access structures: dock, dilapidated dock, boathouse, and public and private boat ramps.

DESCRIPTION SOURCE

Glossary of Shoreline Features Defined, Center for Coastal Resources Management, VIMS

LIST OF VALUES

VALUE Dock

DESCRIPTION Dock/Pier - In this survey, a dock or pier is a structure, generally constructed of wood, which is built perpendicular or parallel to the shore. These are typical on private property, particularly residential areas. They provide access to the water, usually for recreational purposes. Docks and piers are mapped as point features on the shore. Pier length is not surveyed.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE Glossary of Shoreline Features Defined, Center for Coastal Resources Management, VIMS

VALUE Dilapidated Dock

DESCRIPTION Dilapidated Pier - A pier which has failed due to deterioration from age or storm damage is classified as a dilapidated pier. The remnants of this structure may be original pilings only.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE Glossary of Shoreline Features Defined, Center for Coastal Resources Management, VIMS

VALUE Boathouse

DESCRIPTION Boathouse - A boathouse is considered any covered structure alongside a dock or pier built to cover a boat. They include true "houses" for boats with roof and siding, as well as awnings that offer only overhead protection. Since nearly all boathouses have adjoining piers, piers are not surveyed separately, but are assumed. Boathouses may be difficult to see in aerial photography.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE Glossary of Shoreline Features Defined, Center for Coastal Resources Management, VIMS

VALUE Private Ramp

DESCRIPTION Boat Ramp - Boat ramps are used to launch vessels of all types. They are usually constructed of concrete, but wood and gravel ramps are also found. Point

identification of boat ramps does not discriminate based on type, size, material, or quality of the launch. This inventory attempts to distinguish, when possible, private versus public ramps. Ramps located in privately owned, commercial marinas and residential communities are classified as private.

[ENUMERATED DOMAIN VALUE DEFINITION SOURCE](#) Glossary of Shoreline Features Defined, Center for Coastal Resources Management, VIMS

[VALUE](#) Public Ramp

[DESCRIPTION](#) Boat Ramp - Boat ramps are used to launch vessels of all types. They are usually constructed of concrete, but wood and gravel ramps are also found. Point identification of boat ramps does not discriminate based on type, size, material, or quality of the launch. This inventory attempts to distinguish, when possible, private versus public ramps. Ramps located in privately owned, commercial marinas and residential communities are classified as private.

[ENUMERATED DOMAIN VALUE DEFINITION SOURCE](#) Glossary of Shoreline Features Defined, Center for Coastal Resources Management, VIMS

[DESCRIPTION OF VALUES](#) Points coded for access structures: dock, dilapidated dock, boathouse, and public and private boat ramps.

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](#) 2015-01-06

[ARCGIS METADATA PROPERTIES](#)

[METADATA FORMAT](#) ArcGIS 1.0

[STANDARD OR PROFILE USED TO EDIT METADATA](#) ISO19139

[CREATED IN ARCGIS FOR THE ITEM](#) 2014-08-19 09:31:30

[LAST MODIFIED IN ARCGIS FOR THE ITEM](#) 2015-01-06 16:11:29

[AUTOMATIC UPDATES](#)

[HAVE BEEN PERFORMED](#) Yes

[LAST UPDATE](#) 2015-01-06 16:11:29

Metadata Contacts

[METADATA CONTACT](#)

[INDIVIDUAL'S NAME](#) Sharon Killeen

ORGANIZATION'S NAME Comprehensive Coastal Inventory Program, Virginia Institute of Marine Science (VIMS)
CONTACT'S POSITION GIS Programmer/Analyst
CONTACT'S ROLE point of contact

CONTACT INFORMATION

PHONE

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ADDRESS

TYPE postal

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CITY Gloucester Point

ADMINISTRATIVE AREA Virginia

POSTAL CODE 23062

COUNTRY US

E-MAIL ADDRESS sharon@vims.edu

Thumbnail and Enclosures

THUMBNAIL

THUMBNAIL TYPE JPG