

Shoreline Inventory For Middlesex County 2015: Access structures

Shapefile



Tags

Shoreline structures, Access structures, Land use, Land cover

Summary

To inventory the Middlesex County tidal shoreline conditions.

Description

Shoreline Situation Reports (SSR) were first generated by VIMS in the 1970s 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. This report continues the process which updates and expands earlier reports. Data collected describes conditions in the immediate riparian zone, the bank, and along the shore. Middlesex County was last inventoried in 2000.

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 -76.683412 **East** -76.297326

North 37.773378 **South** 37.510006

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 farming, boundaries, environment, inlandWaters, location, structure

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

PLACE KEYWORDS Virginia, Rappahannock River, Lagrange Creek, Urbana Creek, Piankatank River, Wilton Creek, Fishing Bay, Stingray Point

THEME KEYWORDS Shoreline condition, Shoreline structures, Land use, Shoreline Inventory, Bank cover, Shoreline stability, Bank height, Beach, Access structures

Citation

TITLE Shoreline Inventory For Middlesex County 2015: Access structures
PUBLICATION DATE 2015-12-31 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 2015 Middlesex County Shoreline Inventory database: Middlesex_lubc_2015, Middlesex_sstru_2015, Middlesex_astru_2015 and Middlesex_tm_2015. Middlesex_lubc_2015 (land use and bank cover for Middlesex County) is a linear shapefile containing data about land use, tree fringe, bank height, bank cover, and beach status along the shoreline. Middlesex_sstru_2015 (Middlesex County 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). Middlesex_astru_2015 (Middlesex County access structures) is a point shapefile with locations of docks, dilapidated docks, boathouses, and private and public boat ramps. Middlesex_tm_2015 (Middlesex County 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** Middlesex_astru_2015

* SIZE 0.061
* LOCATION *****
* ACCESS PROTOCOL Local Area Network

Extents

EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -76.683412
* EAST LONGITUDE -76.297326
* NORTH LATITUDE 37.773378
* SOUTH LATITUDE 37.510006
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE 351732.224303
* EAST LONGITUDE 385349.372473
* SOUTH LATITUDE 4152773.328242
* NORTH LATITUDE 4181469.269765
* 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_North_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

DIMENSION horizontal

* 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 Middlesex_astru_2015

* OBJECT TYPE point

* OBJECT COUNT 2283

ARCGIS FEATURE CLASS PROPERTIES

FEATURE CLASS NAME Middlesex_astru_2015

* FEATURE TYPE Simple

* GEOMETRY TYPE Point

* HAS TOPOLOGY FALSE

* FEATURE COUNT 2283

* SPATIAL INDEX TRUE

* LINEAR REFERENCING FALSE

Data Quality

SCOPE OF QUALITY INFORMATION

RESOURCE LEVEL dataset

Lineage

PROCESS STEP

WHEN THE PROCESS OCCURRED 2015-01-15 00:00:00

DESCRIPTION The shoreline produced for the 2000 Middlesex County Shoreline Inventory Report was copied and corrected to the new 2013 VBMP imagery. Other resources, such as Google Earth and Bing Maps, were used when shoreline visibility was obscured.

PROCESS STEP

WHEN THE PROCESS OCCURRED 2015-06-01 00:00:00

DESCRIPTION A small draft boat was used to collect tidal marsh inventory data in the field. A video camera is set up and collects imagery of the coastline as it passes by the camera lens. 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 2015-09-01 00:00:00

DESCRIPTION All processing steps for the shoreline inventory were generated using ArcGIS - ArcMap v10.2.2 while viewing conditions observed in 2015 Bing high resolution oblique imagery and 2013 imagery from the Virginia Base Mapping Program (VBMP). Using the latest VBMP 2013 imagery as a background, conditions visible on shore were used to code a digital shoreline created using VBMP 2013 imagery at a scale of 1:1000. Conditions were also verified using Bing Birds Eye, VBMP 2011, and VBMP 2009 imagery. For the land use/bank cover shapefile arcs were split and coded for land use, bank height, bank cover, 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, dilapidated bulkhead, riprap, unconventional, debris, wharf, breakwater, groinfield, jetty, marsh toe revetment and marina >50 and <50 slips.

SOURCE DATA

DESCRIPTION Provided the latest 2013 imagery used to produce a new digital shoreline coverage that serves as the base shoreline for shoreline conditions. Used to accurately position land use and land cover data.

SOURCE CITATION

TITLE Virginia Base Map Program Imagery and Hydrology

ALTERNATE TITLES VBMP

COLLECTION TITLE Geographic Network Division of its Department of Technology Planning (VGIN)

PROCESS STEP

WHEN THE PROCESS OCCURRED 2015-10-01 00:00:00

DESCRIPTION The first step in the QAQC process involves complete checks of shoreline coding by a GIS Programmer/Analyst and a Marine Scientist

PROCESS STEP

WHEN THE PROCESS OCCURRED 2015-10-29 00:00:00

DESCRIPTION The second and third step in the QAQC process involves complete checks of shoreline coding by a GIS Programmer/Analyst and a Marine Scientist using the Red Hen video.

Distribution

DISTRIBUTION FORMAT

* NAME Shapefile

VERSION Shapefile

TRANSFER OPTIONS

* TRANSFER SIZE 0.061

Fields

DETAILS FOR OBJECT Middlesex_astru_2015

* TYPE Feature Class

* ROW COUNT 2283

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 PNTSTRU

- * **ALIAS** PNTSTRU
- * **DATA TYPE** String
- * **WIDTH** 50
- * **PRECISION** 0
- * **SCALE** 0
- * **FIELD DESCRIPTION**
Access structure type: Dock, Dilapidated Dock, Boathouse, Private Ramp and Public Ramp

DESCRIPTION SOURCE
Processor

LIST OF VALUES

VALUE Dock/Pier

DESCRIPTION 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 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 Private Ramp

DESCRIPTION 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 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 Boathouse

DESCRIPTION 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

BEGINNING DATE OF VALUES 2015-09-01

ENDING DATE OF VALUES 2015-10-30

FIELD Comments

* ALIAS Comments

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD Inv_Update

* ALIAS Inv_Update

* DATA TYPE String

* WIDTH 150

* PRECISION 0

* SCALE 0

Metadata Details

* METADATA LANGUAGE English (UNITED STATES)

* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

METADATA IDENTIFIER C42B8C79-F363-42B6-BED2-E9364EE394EF

SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset
SCOPE NAME * dataset

* LAST UPDATE 2015-12-14

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

STANDARD OR PROFILE USED TO EDIT METADATA NAP

CREATED IN ARCGIS FOR THE ITEM 2015-11-13 15:14:28

LAST MODIFIED IN ARCGIS FOR THE ITEM 2015-12-14 10:46:07

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2015-12-14 10:46:07

Metadata Contacts

METADATA CONTACT

INDIVIDUAL'S NAME Sharon Killeen

ORGANIZATION'S NAME Comprehensive Coastal Inventory, Virginia Institute of Marine Science (VIMS)

CONTACT'S POSITION GIS Programmer/Analyst

CONTACT'S ROLE point of contact

CONTACT INFORMATION

ADDRESS

TYPE

E-MAIL ADDRESS sharon@vims.edu

Metadata Constraints

CONSTRAINTS

LIMITATIONS OF USE

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LIMITATIONS OF USE

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