

Identification_Information:

Citation:

Citation_Information:

Originator: Delaware Geological Survey, University of Delaware

Publication_Date: May 2007

Title: BayOpenWaterSimplified_level_1

Geospatial_Data_Presentation_Form: vector digital data

Publication_Information:

Publisher: Delaware Geological Survey, University of Delaware

Publication_Place: Newark, Delaware

Online_Linkage: <http://www.dgs.udel.edu/data>

Description:

Abstract:

Digital watershed and bay polygons for use in geographic information systems (GIS) were created for Rehoboth Bay, Indian River, and Indian River Bay in southeastern Delaware. The watersheds cover the entire Inland Bays watershed, are defined based on hydrologic boundary conditions at their downstream ends, incorporate a coastline coincident to coastlines on published topographic maps, and are appropriate for use at map scales as large as 1:24,000. Methodologies used to create the layers are described in McKenna, T.E., A.S. Andres, and K.P. Lepp, 2007, Digital Watershed and Bay Boundaries for Rehoboth Bay, Indian River Bay and Indian River: Delaware Geological Survey Open File Report 47, 8p.

This layer represents the open water of the bays with a simplified coastline.

Purpose: The layers enable unambiguous calculations of watershed and bay surface areas.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1984-1992 (range of dates of topographic base maps)

Currentness_Reference: ground condition

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None planned

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -75.291709

East_Bounding_Coordinate: -75.062454

North_Bounding_Coordinate: 38.715739

South_Bounding_Coordinate: 38.538053

Keywords:

Theme:

Theme_Keyword_Thesaurus: none

Theme_Keyword: inlandWaters

Theme_Keyword: watershed

Theme_Keyword: coastline

Theme_Keyword: shoreline

Theme_Keyword: bay

Theme_Keyword: estuary

Theme_Keyword: coastal

Place:

Place_Keyword: United States
Place_Keyword: mid-Atlantic
Place_Keyword: Delaware
Place_Keyword: Inland Bays
Place_Keyword: Rehoboth Bay
Place_Keyword: Indian River
Place_Keyword: Indian River Bay
Place_Keyword_Thesaurus: USGS GNIS

Access_Constraints: None. Please give proper credit to T. E. McKenna, A.S. Andres, K.P. Lepp, May 2007, BayOpenWaterSimplified_level_1: Delaware Geological Survey.

Use_Constraints: This digital polygon layer depicting watershed and/or bay boundaries in the area of Delaware's Inland Bays was constructed at a scale of 1:24,000. Using these layers at scales greater than 1:24,000 is a misuse of the information. Reasonable efforts have been made by DGS to verify that the layers provided herein accurately interpret the boundaries as determined by methodologies in McKenna, T.E., A.S. Andres, and K.P. Lepp, 2007, Digital Watershed and Bay Boundaries for Rehoboth Bay, Indian River Bay and Indian River: Delaware Geological Survey Open File Report 47, 8p. This digital polygon layer may also contain omissions and errors in scale, resolution, rectification, positional accuracy, development methodology, interpretations of source data, and other circumstances. This digital information is also date specific and as additional data become available and as verification of source data continues, this watershed information contained herein may be reinterpreted and updated by DGS without notification. These data should not be used for navigational, engineering, legal, or any other site-specific use. Nothing contained herein shall be deemed an expressed or implied waiver of the sovereign immunity of the University of Delaware and the State of Delaware or their duly authorized representatives, agents, or employees.

Point_of_Contact:

Contact_Information:

Contact_Address:

Address_Type: mailing and physical address

City: Newark

State_or_Province: Delaware

Postal_Code: 19716-7501

Country: USA

Address: Delaware Geological Survey, University of Delaware

Address: 257 Academy Street

Contact_Voice_Telephone: 302-831-2833

Contact_Organization_Primary:

Contact_Organization: Delaware Geological Survey

Contact_Person: Digital Data Coordinator

Contact_Position: Digital Data Coordinator

Contact_Facsimile_Telephone: 302-831-3579

Contact_Electronic_Mail_Address: DelGeoSurvey@udel.edu

Hours_of_Service: Mon - Fri; 8:00am to 4:30pm EST

Native_Data_Set_Environment: Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.3.1.1850

Data_Quality_Information:

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Quantitative_Horizontal_Positional_Accuracy_Assessment:
Horizontal_Positional_Accuracy_Value: 60 meters
Horizontal_Positional_Accuracy_Explanation: Sixty-meter accuracy reflects the error estimate for the process of digitizing watershed boundaries on 1:24,000 topographic maps published by the United States Geological Survey that meet national map accuracy standards. The delineations are consistent with the topographic contours except where authors had other knowledge of altered drainage patterns (mostly along roadways). Unique watershed delineations are difficult in flat areas such as the Inland Bays watershed and especially in the southern part of the watershed where ditching is ubiquitous. In areas where a clear watershed boundary definition was not possible (mostly ditches and low-lying areas south of Indian River), a generalized boundary was drawn as recommended by the NRCS (1997) guidelines.

Vertical_Positional_Accuracy:
Quantitative_Vertical_Positional_Accuracy_Assessment:
Vertical_Positional_Accuracy_Value: not applicable

Lineage:
Process_Step:
Process_Description: Metadata imported.
Source_Used_Citation_Abbreviation:
C:\DOCUME~1\mckennat\LOCALS~1\Temp\xml9C.tmp
Process_Step:
Process_Description: Metadata imported.
Source_Used_Citation_Abbreviation:
C:\DOCUME~1\mckennat\LOCALS~1\Temp\xml9E.tmp
Time_of_Day: 16082200

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: G-polygon
Point_and_Vector_Object_Count: 0

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 0.000000
Ordinate_Resolution: 0.000000
Planar_Distance_Units: meters
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 18
Transverse_Mercator:
Scale_Factor_at_Central_Meridian: 0.999600
Longitude_of_Central_Meridian: -75.000000
Latitude_of_Projection_Origin: 0.000000
False_Easting: 500000.000000
False_Northing: 0.000000

Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80
 Semi-major_Axis: 6378137.000000
 Denominator_of_Flattening_Ratio: 298.257222
 Vertical_Coordinate_System_Definition:
 Altitude_System_Definition:
 Altitude_Resolution: 0.000010
 Altitude_Encoding_Method: Explicit elevation coordinate included
 with horizontal coordinates
 Entity_and_Attribute_Information:
 Detailed_Description:
 Entity_Type:
 Entity_Type_Label: BayOpenWaterSimplified_level_1
 Attribute:
 Attribute_Label: FID
 Attribute_Definition: Internal feature number.
 Attribute_Definition_Source: ESRI
 Attribute_Domain_Values:
 Unrepresentable_Domain: Sequential unique whole numbers that are
 automatically generated.
 Attribute:
 Attribute_Label: Shape
 Attribute_Definition: Feature geometry.
 Attribute_Definition_Source: ESRI
 Attribute_Domain_Values:
 Unrepresentable_Domain: Coordinates defining the features.
 Attribute:
 Attribute_Label: Shape_Area
 Attribute_Definition: Area of feature in internal units squared.
 Attribute_Definition_Source: ESRI
 Attribute_Domain_Values:
 Unrepresentable_Domain: Positive real numbers that are
 automatically generated.
 Attribute:
 Attribute_Label: Shape_Leng
 Attribute:
 Attribute_Label: LEVEL_1
 Attribute_Definition:
 LEVEL_1 facilitates polygon selection for dissolving of polygon
 boundaries. Dissolving boundaries between polygons with equivalent
 LEVEL_1 values results in one feature with one polygon representing the
 open water of the bays using a simplified coastline definition.

Value	Feature
BAY	bay

Distribution_Information:
 Distributor:
 Contact_Information:
 Contact_Address:
 Address_Type: mailing and physical address
 City: Newark
 State_or_Province: Delaware
 Postal_Code: 19716-7501
 Country: USA
 Address: Delaware Geological Survey, University of Delaware

Address: University of Delaware
Contact_Voice_Telephone: 302-831-2833
Contact_Organization_Primary:
Contact_Organization: Delaware Geological Survey, University of
Delaware
Contact_Person: Digital Data Coordinator
Contact_Position: Digital Data Coordinator
Contact_Facsimile_Telephone: 302-831-3579
Contact_Electronic_Mail_Address: DelGeoSurvey@udel.edu
Hours_of_Service: Mon - Fri; 8:00am to 4:30pm EST
Resource_Description: Downloadable Data
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Transfer_Size: 0.000
Metadata_Reference_Information:
Metadata_Date: 20090731
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: Delaware Geological Survey, University of
Delaware
Contact_Person: Digital Data Coordinator
Contact_Address:
Address_Type: mailing and physical address
City: Newark
State_or_Province: Delaware
Postal_Code: 19716-7501
Country: USA
Address: Delaware Geological Survey, University of Delaware
Address: University of Delaware
Contact_Voice_Telephone: 302-831-2833
Contact_Position: Digital Data Coordinator
Contact_Facsimile_Telephone: 302-831-3579
Contact_Electronic_Mail_Address: DelGeoSurvey@udel.edu
Hours_of_Service: Mon - Fri; 8:00am to 4:30pm EST
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial
Metadata
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Time_Convention: local time
Metadata_Extensions:
Online_Linkage: <http://www.esri.com/metadata/esriprof80.html>
Profile_Name: ESRI Metadata Profile
Metadata_Extensions:
Online_Linkage: <http://www.esri.com/metadata/esriprof80.html>
Profile_Name: ESRI Metadata Profile
Metadata_Extensions:
Online_Linkage: <http://www.esri.com/metadata/esriprof80.html>
Profile_Name: ESRI Metadata Profile