



Metadata for Coastal Ecological Unusually Sensitive Area data (Coastal Eco USA, Version 3)

Identification_Information:

Citation:

Citation_Information:

Originator: U.S. Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA)

Originator: Environmental Protection Agency (EPA)

Originator: National Oceanic and Atmospheric Administration (NOAA)

Publication_Date: 20260731

Title: Coastal Eco USA, Version 3

Edition: 3rd

Geospatial_Data_Presentation_Form: vector digital data

Publication_Information:

Publisher: U.S. Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA)

Description:

Abstract:

This dataset includes polygon GIS data currently available from government agencies that depict certain coastal waters and coastal beaches (collectively referred to as Coastal Eco USAs) per the U.S. Congress' PIPES Act of 2020: the PIPES Act of 2020 defines certain coastal waters and coastal beaches to mean:

(A) Certain coastal waters.—The term “certain coastal waters” means—

(i) the territorial sea of the United States;

(ii) the Great Lakes and their connecting waters; and

(iii) the marine and estuarine waters of the United States up to the head of tidal influence.

(B) Coastal beach.—The term “coastal beach” means any land between the high- and low-water marks of certain coastal waters.

PHMSA gathered these data from the National Oceanic and Atmospheric Administration's Office for Coastal Management and The Environmental Protection Agency's Estuary Data Mapper. Specifically, PHMSA gathered subsets of NOAA's Clean Water Act GIS data layer; NOAA's Sea Level Rise GIS data layers; NOAA's US State Submerged Lands Act GIS data layer; and EPA's Estuary Data Map GIS data layer. At the time of data compilation, EPA distributed its Estuary Data Mapper data through its Estuary Data Mapper GUI; NOAA distributed its Sea Level Rise data through its Digital Coast platform and its Clean Water Act and US State Submerged Lands Act data through the Marine Cadastre. The Clean Water Act data was included as part of their Federal Statutes layer. Note that updated versions of the Clean Water Act data do not distinguish a 3 nautical mile line as previous versions did. Since the 3nm line is used by PHMSA to delimit the seaward extent of the territorial sea, PHMSA used a previous version of the Clean Water Act dataset downloaded in 2024.

From the NOAA Clean Water Act data PHMSA removed the features that represent water area beyond the 3nm line and incorporated the remaining data into this dataset. From the NOAA US Submerged Lands Act data PHMSA removed all features not connected to the Great Lakes as defined in US Code and incorporated the data representing the Great Lakes into this dataset. From the NOAA Sea Level Rise data PHMSA used only the layer defined by NOAA to have 0 feet of modeled sea level rise, in other words the current limit of the mean higher high water, based off of digital elevation models. From the EPA Estuary Data Mapper data PHMSA merged regional estuaries layers that were downloaded directly from the application. For more information about these source datasets, please view the corresponding online linkages provided in this metadata. Latest publication dates for the input data sets used in creating the Coastal Eco USA data layer are as follows: NOAA Clean Water Act: November 2016; NOAA Sea Level Rise: April 2026; EPA Estuary Data Mapper: January 2026. PHMSA reviews these datasets every two years and applies any changes they have undergone to the Coastal Eco USA dataset if applicable. The last update was completed July 2026 to reflect updates made to NOAA's Sea Level Rise data since publication of Coastal Eco USA Version 2 data.

PHMSA's dataset includes data only for the Contiguous U.S., Alaska, Hawaii, and Puerto Rico.

Purpose:

Section 19 of the Protecting our Infrastructure of Pipeline and Enhancing Safety Act of 2020 (PIPES Act) designated "Certain Coastal Waters and Coastal Beaches" (see definition in this metadata) as an Unusually Sensitive Area (USA) ecological resource, a subset of high consequence areas (HCA) per 49 CFR § 195.450. PHMSA is distributing this GIS data through the National Pipeline Mapping System website (www.npms.phmsa.dot.gov) for hazardous liquid pipeline operators to use in determining if a pipeline could affect a certain coastal water or coastal beach, as an HCA, for integrity management planning. Guidelines to determine whether a release "could affect" an HCA are included in 49 CFR Part 195, Appendix C. Hazardous liquid pipeline operators should note that this dataset is one resource to aid them in the process of determining which pipelines could affect a certain coastal water or coastal

beach; it is not meant to replace other available resources pertinent to their areas of operation that might also aid in making this determination.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20211210

Ending_Date: 20260615

Currentness_Reference: Data is updated approximately every two years if changes to any of the source datasets have been identified.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: As needed

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -179.229655

East_Bounding_Coordinate: 179.856675

North_Bounding_Coordinate: 71.439573

South_Bounding_Coordinate: 17.830871

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Territorial Sea

Theme_Keyword: Great Lakes

Theme_Keyword: Marine Waters

Theme_Keyword: Estuarine Waters

Theme_Keyword: Coastal Beach

Theme_Keyword: Certain Coastal Waters

Theme_Keyword: PHMSA

Theme_Keyword: Pipeline Safety

Theme_Keyword: High Consequence Area

Theme_Keyword: HCA

Theme_Keyword: Unusually Sensitive Area

Theme_Keyword: USA

Theme_Keyword: Integrity Management Planning

Theme_Keyword: Integrity Management Plan

Theme_Keyword: IMP

Theme_Keyword: Hazardous Liquid Pipeline

Theme_Keyword: Polygon

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Categories

Theme_Keyword: boundaries

Theme_Keyword: environment

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: United States

Place_Keyword: Great Lakes

Place_Keyword: Gulf of America

Place_Keyword: Atlantic Coast

Place_Keyword: Pacific Coast

Place_Keyword: Alaska

Place_Keyword: Hawaii

Place_Keyword: Puerto Rico

Access_Constraints: None

Use_Constraints: These data are intended to help certain pipeline operators identify certain coastal waters and coastal beaches as defined in section 19 of the PIPES Act of 2020 for the purpose of integrity management planning and assisting with the process of determining if a hazardous liquid pipeline could affect a coastal Eco USA resource. Otherwise, use constraints are inherited from the source data providers, for example

NOAA's US State Submerged Lands GIS data:
<https://www.marinecadastre.gov/about/disclaimer.html>

Point_of_Contact: *(National Pipeline Mapping System, Coastal Eco USA)*

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration

Contact_Person: Nathaniel Thompson

Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical

Address: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, East Building, 1200 New Jersey Ave., SE

City: Washington

State_or_Province: DC

Postal_Code: 20590

Country: US

Contact_Voice_Telephone: 202-843-3818

Contact_Electronic_Mail_Address: nathaniel.thompson@dot.gov

Point_of_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration

Contact_Person: Leigha Gooding

Contact_Position: GIS Manager

Contact_Address:

Address_Type: mailing and physical

Address: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, East Building, 1200 New Jersey Ave., SE

City: Washington

State_or_Province: DC

Postal_Code: 20590

Country: US

Contact_Voice_Telephone: 202-441-9086

Point_of_Contact (Source Data):

Contact_Information

Contact_Organization_Primary: NOAA Office for Coastal Management

Contact_Organization: NOAA

Contact_Person: MarineCadastre.gov Data Steward

Contact_Address

Address_Type: mailing and physical address

Address: 2234 South Hobson Avenue

City: Charleston

State_or_Province: SC

Postal_Code: 29405-2413

Country: USA

Contact_Voice_Telephone: 843.740.1202

Contact_Electronic_Mail_Address: coastal.info@noaa.gov

Contact_Organization_Primary: EPA Office of High-End Scientific Computing

Contact_Organization: EPA

Contact_Address

Address_Type: mailing and physical address

Address: 109 TW Alexander Drive, Mail Code: N229-01

City: RTP

State_or_Province: NC

Postal_Code: 27711

Country: USA

Native_Data_Set_Environment: Esri ArcGIS 13.3.2.52636

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: The attributes in this dataset are believed to be accurate. Note that this data does not include attribution that distinguishes the source data layer. The attributes reflect the location of the feature (classified by state or federal waters area). These attributes were applied by adding segmentation to separate state land based on U.S. Census Bureau boundaries and water from federal waters based on NOAA boundaries. Analysts visually validated the attributes as correct.

Quantitative_Attribute_Accuracy_Assessment:

Attribute_Accuracy_Explanation: See processing steps for more information about QC

Logical_Consistency_Report: See processing steps for more information about conceptual consistency

Completeness_Report: See processing steps for more information about QC

Lineage:

Process_Step:

Process_Description:

Where necessary, individual data layers were processed to isolate only the features pertinent to the definition of certain coastal waters and coastal beaches. Each layer was then merged into one singular layer. Due to the complexity of some layers as well as overlap between layers, it was also necessary to perform further processing to remove overlap and, where possible, dissolve coincident features to reduce unnecessary feature segmentation. On the other hand, in a few cases certain polygon features had to be diced into multiple features to address complexities that were preventing smooth integration of the separate datasets. The dataset was also clipped along the U.S.-Canada border to eliminate portions of features located in Canada. PHMSA verified that there was no feature crossing the U.S. – Mexico border.

From the NOAA Clean Water Act data PHMSA removed the features that represent water area beyond the 3nm line and incorporated the remaining data into this dataset. From the NOAA US Submerged Lands Act data PHMSA removed all features not connected to the Great Lakes as defined in US Code and incorporated the data representing the Great Lakes into this dataset. From the NOAA Sea Level Rise data PHMSA used only the layer defined by NOAA to have 0 feet of modeled sea level rise, in other words the current limit of the mean higher high water, based off of digital elevation models. From the EPA Estuary Data Mapper data PHMSA merged regional estuaries layers that were downloaded directly from the application. For more

information about these source datasets, please view the corresponding online linkages provided in this metadata.

Process_Date: 20240607

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 1389975

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: Certain Coastal Waters and Coastal Beaches (Collectively referred to as Coastal Eco USAs)

Entity_Type_Definition: Feature class representing spatial extent of the Certain Coastal Waters and Coastal Beaches as available from government data sources for the intent of the Protecting our Infrastructure of Pipeline and Enhancing Safety Act of 2020 (PIPES Act)

Entity_Type_Definition_Source: PHMSA

Attribute:

Attribute_Label: Shape

Attribute_Definition: Feature geometry.

Attribute_Definition_Source: Esri

Attribute_Domain_Values:

Unrepresentable_Domain: Coordinates defining the features.

Attribute:

Attribute_Label: OBJECTID

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: LOCATION

Attribute_Definition: Location of the feature, classified either by state (including state waters), specific offshore area, or Great Lakes and connecting waters.

Attribute_Definition_Source: PHMSA

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: State abbreviation including state waters (e.g. "TX AND STATE WATERS", "DC"), Outer Continental Shelf area in Atlantic Ocean, Gulf of America, Pacific Ocean, and Alaska (e.g. "OCS ATL"), or Great Lakes (e.g. "GREAT LAKES AND CONNECTING WATERS")

Enumerated_Domain_Value_Definition: State abbreviation including state waters (e.g. "TX AND STATE WATERS", "DC"), Outer Continental Shelf area in Atlantic Ocean, Gulf of America, Pacific Ocean, and Alaska (e.g. "OCS ATL"), or Great Lakes (e.g. "GREAT LAKES AND CONNECTING WATERS")

Enumerated_Domain_Value_Definition_Source: NPMS

Attribute:

Attribute_Label: Shape_Length

Attribute_Definition: Length of feature in internal units.

Attribute_Definition_Source: Esri

Attribute_Domain_Values:

Unrepresentable_Domain: Positive real numbers that are automatically generated.

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.

Metadata_Reference_Information:

Metadata_Date: 20260713

Metadata_Future_Review_Date: 20280731

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration

Contact_Person: Nathaniel Thompson

Contact_Position: GIS Coordinator

Contact_Address:

Address_Type: mailing and physical

Address: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, East Building, 1200 New Jersey Ave. SE

City: Washington

State_or_Province: DC

Postal_Code: 20590

Country: US

Contact_Voice_Telephone: 202-843-3818

Contact_Electronic_Mail_Address: nathaniel.thompson@dot.gov

Metadata_Standard_Name: FGDC Content Standard for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time