



## Metadata for Ecological Unusually Sensitive Areas (Eco USA)

Identification\_Information:

Citation:

Citation Information:

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

Publication\_Date: 20180101

Title: UNUSUALLY SENSITIVE AREAS FOR ECOLOGICAL RESOURCES (2018 Hybrid)

Geospatial\_Data\_Presentation\_Form: vector digital data

Other Citation Details:

Prepared by NatureServe, Arlington, Virginia for the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA)

Prepared by Research Planning, Inc., Columbia, South Carolina for the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration

Federal Register, Vol. 65, No. 246, Pages 80530-80546, December 21, 2000

## Description:

Abstract: This dataset comprises Unusually Sensitive Areas data for ecological resources (Eco USA) in the United States. Eco USAs are considered High Consequence Areas (HCA) as defined in 49 CFR § 195.450. In accordance with pipeline safety laws (49 U.S.C. Section 60109), except for proprietary or security sensitive data, PHMSA is required to identify areas unusually sensitive to environmental damage in the event of a hazardous liquid pipeline accident. Through interactions with various regulatory agencies, pipeline operators, private contractors, non-profit conservation organizations, and the general public, a process has been developed and adopted by PHMSA to identify USAs for ecological resources. The process consists of identifying a set of candidate ecological resources using approved data sources, and subjecting candidates to a set of filter criteria to determine USAs. The identification of USAs is conducted using standardized data processing steps and an automated GIS model. The resultant USA data are applicable to current and future regulatory requirements as specified by PHMSA, including but not limited to pipeline integrity management. For additional information concerning ecological USAs, please refer to the documents listed in the Cross Reference Section of this report. NatureServe was unable to produce updated Eco USA data for Hawaii, Delaware, Ohio, District of Columbia and Puerto Rico. Where applicable, the Eco USA data PHMSA is distributing for these areas includes updated

Eco USA areas that originate from datasets produced in surrounding states, or Eco USA areas that existed in the previous Eco USA dataset.

HCAs are defined in 49 CFR § 195.450. This dataset is one resource available to assist operators with identifying locations that meet the regulatory definition of an HCA. If a location meets the regulatory definition of an HCA but it is not mapped in the HCA data currently available from PHMSA, that location is still an HCA. Operators must continually assess the locations in which their lines are located, to include reference to NPMS as one avenue to obtain data but not the sole avenue, to determine if they are in or could affect an HCA.

Purpose: Pipeline operators conducting risk assessments can use ecological USAs, in conjunction with their pipeline information and other data, to identify areas that may suffer long-term and permanent environmental/resource damage in the event of a hazardous liquid pipeline accident. Users of these data are encouraged to read carefully the technical reports cited in the Cross Reference section to understand the limitations of the ecological USA data.

```
Time_Period_of_Content:
  Time_Period_Information:
   Range_of_Dates/Times:
    Beginning_Date: 20180101
  Currentness_Reference: Data is current to publication date
 Status:
  Progress: Complete
  Maintenance_and_Update_Frequency: As needed
 Spatial_Domain:
  Bounding_Coordinates:
  West_Bounding_Coordinate: -180.000000
   East_Bounding_Coordinate: 180.000000
   North_Bounding_Coordinate: 88.349102
  South_Bounding_Coordinate: 8.027172
 Keywords:
  Theme:
  Theme_Keyword_Thesaurus: None
   Theme_Keyword: Ecological Unusually Sensitive Areas, Pipeline Safety, Ecological Resources,
Endangered Species, Imperiled Species
  Theme:
```

Theme\_Keyword\_Thesaurus: ISO 19115 Topic Categories

Theme\_Keyword: environment

Place:

Place\_Keyword\_Thesaurus: None

Place\_Keyword: United States

Access\_Constraints: This data is no longer available for distribution in accordance to contracting with the resource gatherer/creator, NaturServe. Previously, a formal request must be made to the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration to obtain access to this data layer. For more information, the National Pipeline Mapping System website can be accessed at <a href="http://www.npms.phmsa.dot.gov">http://www.npms.phmsa.dot.gov</a>.

Use\_Constraints: This data is no longer available for distribution in accordance to contracting with the resource gatherer/creator, NaturServe. Previously, a formal request must be made to the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration to obtain access to this data layer. For more information, the National Pipeline Mapping System website can be accessed at . Use constraints were supplied to data recipients supplied by the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration upon receipt of data requests. PHMSA only distributed ecological USA data to hazardous liquid pipeline operators by request. Operators could share data with their contractor/consultant data Users. All data Users were required to complete NatureServe training and agree to NatureServe terms of use before PHMSA will release ecologial USA data. Hazardous liquid pipeline operators who requested ecological USA data from PHMSA were responsible for ensuring each data User completes the required NatureServe training before he/she used the ecological USA data inside a GIS software program. All other third party requests were be directed to https://www.npms.phmsa.dot.gov/USAEcoData.aspx. Ecological USA data was provided with the understanding that it is not guaranteed to be correct or complete and conclusions drawn from such information are the responsibility of the user.

Note that this dataset is one resource, but not the only resource, that operators should use in determining whether their pipelines could affect a high consequence area (HCA). If the dataset does not show an ecological USA in a certain area, that does not mean it is not an HCA. If an area fits within the regulatory definition of an HCA, even if the data provided by NPMS does not show it as an HCA, it is an HCA. Operators must continually assess the locations in which their lines are located to determine if they are in an HCA/could affect HCA area.

Point\_of\_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
    Address: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety
Administration, East Building, 2nd floor, 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, 2nd floor, 1200 New Jersey Ave., SE
    City: Washington
    State_or_Province: DC
    Postal Code: 20590
    Country: US
   Contact_Voice_Telephone: 202-366-0667
   Contact_Electronic_Mail_Address: leigha.gooding@dot.gov
 Point_of_Contact:
```

Contact\_Information:

Contact\_Organization\_Primary:

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

Contact\_Address:

Address Type: mailing and physical

Address: 1200 New Jersey Ave., S.E.

City: Washington

State\_or\_Province: DC

Postal\_Code: 20590

Contact\_Voice\_Telephone: 202-366-0667

Data\_Set\_Credit: This project was conducted by the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration. Raw data and information contributing to the development of ecological USAs were provided by The NatureServe Network, the National Oceanographic and Atmospheric Administration, the Ramsar Sites Information Service (https://www.ramsar.org/), the Manomet Center for Conservation Sciences, and others (refer to the lineage section for details). Research Planning, Inc. (RPI) provided technical support and was responsible for creating the final technical report. NatureServe was primarily responsible for processing the raw data, conducting and verifying model runs, and preparing the final datasets and metadata for delivery to PHMSA.

Native\_Data\_Set\_Environment: Version 6.2 (Build 9200); Esri ArcGIS 10.5.0.6491

Data Quality Information:

Logical\_Consistency\_Report: Integrity checks were run on all input datasets, using the process detailed in the technical reports. Additional review was conducted by RPI.

Completeness\_Report: These data represent a synthesis of digital data available at the time of compilation from a variety of sources. For additional information refer to the reports listed in the Cross Reference section above.

Positional Accuracy:

Horizontal\_Positional\_Accuracy:

Horizontal\_Positional\_Accuracy\_Report: The ecological USA dataset was developed from pre-existing digital sources and reflects the positional accuracy of these original data. See the Lineage and Process\_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final dataset.

Quantitative\_Horizontal\_Positional\_Accuracy\_Assessment:

Horizontal\_Positional\_Accuracy\_Explanation: See the Lineage and Process\_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final dataset.

Lineage:

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20170101

Title: NatureServe National Species Dataset

Online\_Linkage: http://www.natureserve.org/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: NatureServe National Species Dataset

Source\_Contribution: Element Occurrence (EO) data for species that are imperiled (G1/G2), have federal U.S. Endangered Species Act (USESA) status of Listed Threatened or Listed Endangered, or are Depleted Marine Mammal (DMM) species or population stocks, as defined by the Marine Mammal Protection Act (MMPA).

Source\_Information:

Source Citation:

Citation\_Information:

Publication\_Date: 20120717

Title: Western Hemisphere Shorebird Reserve Network (WHSRN):

Online\_Linkage: https://www.whsrn.org/

Type\_of\_Source\_Media: None

Source Citation Abbreviation: Western Hemisphere Shorebird Reserve Network (WHSRN):

Source\_Contribution: Migratory Waterbird Concentration Areas

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20170501

Title: Wetlands of International Importance (Ramsar)

Online\_Linkage: https://www.ramsar.org/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: Wetlands of International Importance (Ramsar)

Source\_Contribution: Migratory Waterbird Concentration Areas

Source\_Information:

Source\_Citation:

Citation\_Information:

Title: NOAA Environmental Sensitivity Index (ESI) Data

Other\_Citation\_Details: NOAA Office of Response and Restoration

Online\_Linkage: https://response.restoration.noaa.gov/maps-and-spatial-data/download-esimaps-and-gis-data.html

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: NOAA Environmental Sensitivity Index (ESI) Data

Source\_Contribution: Environmental Sensitivity Index (ESI) Species data for species that are imperiled (G1/G2), have federal U.S. Endangered Species Act (USESA) status of Listed Threatened or Listed Endangered, or are Depleted Marine Mammal (DMM) species or population stocks, as defined by the Marine Mammal Protection Act (MMPA).

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20170810

Title: Environmental Sensitivity Index (ESI) Data - Texas Lower Coast

Other\_Citation\_Details: Texas General Land Office

Online\_Linkage: http://www.glo.texas.gov/coast/oil-spill/toolkit/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: Environmental Sensitivity Index (ESI) Data - Texas Lower Coast

Source\_Contribution: Environmental Sensitivity Index (ESI) Species data for species in the Texas Lower Coast that are imperiled (G1/G2), have federal U.S. Endangered Species Act (USESA) status of Listed Threatened or Listed Endangered, or are Depleted Marine Mammal (DMM) species or population stocks, as defined by the Marine Mammal Protection Act (MMPA).

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20160505

Title: Protected Areas Database of the United States (PAD-US), version 1.4

Other\_Citation\_Details: U.S. Geological Survey, Gap Analysis Program (GAP). May 2016. Protected

Areas Database of the United States (PAD-US), version 1.4 Combined Feature Class.

Online\_Linkage: http://gapanalysis.usgs.gov/padus/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: Protected Areas Database of the United States (PAD-US), version 1.4

Source\_Contribution: Site boundaries for RAMSAR sites that are in point format only.

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20170101

Title: Door Peninsula Coastal Wetlands

Other\_Citation\_Details: South Carolina Heritage Trust

Online\_Linkage: http://www.dnr.sc.gov/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: Door Peninsula Coastal Wetlands

Source\_Contribution: Site boundaries for RAMSAR sites that are in point format only.

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20170101

Title: Humbug Marsh

Online Linkage: http://mnfi.anr.msu.edu/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: Humbug Marsh

Source\_Contribution: Site boundaries for RAMSAR sites that are in point format only.

```
Source_Information:
   Source_Citation:
    Citation_Information:
     Publication_Date: 20170101
     Title: Kakagon and Bad River Sloughs
     Other_Citation_Details: Bad River Band of Lake Superior Chippewa Indians, Natural Resources
Department
     Online Linkage: http://www.badriver-nsn.gov/tribal-operations/natural-resources
   Type_of_Source_Media: None
   Source_Citation_Abbreviation: Kakagon and Bad River Sloughs
   Source_Contribution: Site boundaries for RAMSAR sites that are in point format only.
  Source_Information:
   Source_Citation:
    Citation_Information:
     Publication_Date: 20170101
     Title: Missisquoi Delta and Bay Wetlands
     Other_Citation_Details: Vermont Protected Lands Database
     Online_Linkage: http://geodata.vermont.gov/datasets/vt-protected-lands-database
   Type_of_Source_Media: None
   Source_Citation_Abbreviation: Missisquoi Delta and Bay Wetlands
   Source_Contribution: Site boundaries for RAMSAR sites that are in point format only.
  Source_Information:
   Source_Citation:
    Citation_Information:
     Publication_Date: 20120101
     Title: San Francisco Bay Estuary
     Other_Citation_Details: GreenInfo Network
     Online_Linkage: http://www.greeninfo.org/
```

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: San Francisco Bay Estuary

Source\_Contribution: Vermont Protected Lands Database

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20170101

Title: Sue and Wes Dixon Waterfowl Refuge at Hennepin & Hopper Lakes

Other\_Citation\_Details: Illinois Department of Natural Resources Owned, Managed, Leased

Properties dataset

Online\_Linkage: https://www.dnr.illinois.gov/Pages/default.aspx

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: Sue and Wes Dixon Waterfowl Refuge at Hennepin & Hopper Lakes

Source\_Contribution: Site boundaries for RAMSAR sites that are in point format only.

Source\_Information:

Source\_Citation:

Citation\_Information:

Publication\_Date: 20010101

Title: RAMSAR Boundaries from 2001 EcoUSA Analysis

Other\_Citation\_Details: Research Planning, Inc.

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: RAMSAR Boundaries from 2001 EcoUSA Analysis

Source\_Contribution: Site boundaries for RAMSAR sites that are in point format only.

Source\_Information:

Source\_Citation:

Citation\_Information:

Title: NHD High Resolution File GDB 10.1 Model Version 2.2.1

Other\_Citation\_Details: U.S. Geological Survey

Online\_Linkage: http://prd-tnm.s3-website-us-west-

2.amazonaws.com/?prefix=StagedProducts/Hydrography/NHD/State/HighResolution/GDB/

Type\_of\_Source\_Media: None

Source\_Citation\_Abbreviation: NHD High Resolution File GDB 10.1 Model Version 2.2.1

Source\_Contribution: Hydrography data for processing point ESI records that are considered Aquatic Open Water (AOW).

Process Step:

Process\_Description: Pre-processing of WHSRN data for inclusion as potential EcoUSAs. For complete details, please see the technical documentation, which can be requested by emailing the PHMSA GIS Manager at npms@dot.gov.

Process\_Date: 20171101

Process\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: NatureServe

Contact\_Person: Jason McNees

Contact\_Address:

Address\_Type: physical

City: Arlington

State\_or\_Province: VA

Postal\_Code: 22202

Contact\_Voice\_Telephone: 703-908-1849

Process\_Step:

Process\_Description: Pre-processing of NatureServe Element Occurrence (EO) data for inclusion as potential EcoUSAs. For complete details, please see the technical documentation, which can be requested by emailing the PHMSA GIS Manager at npms@dot.gov.

Process Date: 20171101

**Process Contact:** 

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: NatureServe

Contact\_Person: Jason McNees

```
Contact_Address:

Address_Type: physical

City: Arlington

State_or_Province: VA

Postal_Code: 22202

Contact_Voice_Telephone: 703-908-1849
```

Process\_Step:

Process\_Step:

Process\_Description: Pre-processing of ESI species data for inclusion as potential EcoUSAs. For complete details, please see the technical documentation, which can be requested by emailing the PHMSA GIS Manager at npms@dot.gov.

Process\_Date: 20171101

Process\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: NatureServe

Contact\_Person: Lynn Kutner

Contact\_Address:

Address\_Type: physical

City: Arlington

State\_or\_Province: VA

Postal\_Code: 22202

Contact\_Voice\_Telephone: 703-797-4804

Process\_Description: Pre-processing of RAMSAR data for inclusion as potential EcoUSAs. For complete details, please see the technical documentation, which can be requested by emailing the PHMSA GIS Manager at npms@dot.gov.

Process\_Date: 20171101

Process\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: NatureServe

Contact\_Person: Jason McNees

Contact\_Address:

Address\_Type: physical

City: Arlington

State\_or\_Province: VA

Postal\_Code: 22202

Contact\_Voice\_Telephone: 703-908-1849

Process\_Step:

Process\_Description: Creation of EcoUSA - for details of the criteria and process for creating EcoUSA, please see the technical documentation, which can be requested by emailing the PHMSA GIS Manager at npms@dot.gov.

Process\_Date: 20171201

Process\_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, 2nd floor, 1200 New Jersey Ave., SE

City: Washington

State\_or\_Province: DC

Postal\_Code: 20590

Country: US

Contact\_Voice\_Telephone: 202-366-0667

Contact\_Electronic\_Mail\_Address: leigha.gooding@dot.gov

```
Process_Step:
```

Process\_Description: Incorporation of data from bordering states or data from previous USA Ecological dataset for DC, DE, HI, OH, and PR since these areas were not included in the 2018 updated data product. For details on the process of incorporating this data, contact NPMS staff.

```
Process_Date: 20180101
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: 167082
Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
  Planar:
   Map_Projection:
    Map_Projection_Name: North America Albers Equal Area Conic
    Albers_Conical_Equal_Area:
     Standard_Parallel: 20.0
     Standard Parallel: 60.0
     Longitude of Central Meridian: -96.0
     Latitude_of_Projection_Origin: 40.0
     False_Easting: 0.0
     False_Northing: 0.0
   Planar_Coordinate_Information:
    Planar_Coordinate_Encoding_Method: coordinate pair
    Coordinate_Representation:
     Abscissa_Resolution: 0.0001
     Ordinate_Resolution: 0.0001
    Planar_Distance_Units: meter
```

Geodetic\_Model:

Horizontal\_Datum\_Name: D North American 1983

Ellipsoid\_Name: GRS 1980

Semi-major\_Axis: 6378137.0

Denominator\_of\_Flattening\_Ratio: 298.257222101

Entity\_and\_Attribute\_Information:

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: FNL\_Species\_EO\_polygons\_102017

Entity\_Type\_Definition: Polygon

Entity\_Type\_Definition\_Source: Esri

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: Shape

Attribute\_Definition: Feature geometry.

Attribute Definition Source: Esri

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Coordinates defining the features.

Attribute:

Attribute\_Label: OS\_JURIS

Attribute\_Definition: Offshore jurisdiction: Indicates approximated jurisdiction of offshore areas as either STATE, FED or INLAND. If the area is approximated onshore or inland waters, the value is INLAND.

Attribute\_Definition\_Source: US DOT PHMSA

Attribute\_Domain\_Values:

Enumerated\_Domain: Enumerated\_Domain\_Value: FED Enumerated\_Domain\_Value\_Definition: Federal Waters (if offshore) Enumerated\_Domain\_Value\_Definition\_Source: US DOT PHMSA Enumerated\_Domain: Enumerated\_Domain\_Value: INLAND Enumerated\_Domain\_Value\_Definition: Inland waters Enumerated\_Domain\_Value\_Definition\_Source: US DOT PHMSA Enumerated\_Domain: Enumerated\_Domain\_Value: STATE Enumerated\_Domain\_Value\_Definition: State Waters Enumerated\_Domain\_Value\_Definition\_Source: US DOT PHMSA Enumerated\_Domain: Enumerated\_Domain\_Value: OUTSIDE CNTY\_OS Enumerated\_Domain\_Value\_Definition: feature falls outside of PHMSA's counties layer (unable to determine jurisdiction) Enumerated\_Domain\_Value\_Definition\_Source: US DOT PHMSA Attribute\_Domain\_Values: Unrepresentable\_Domain: . Attribute: Attribute\_Label: OS\_DESC

Attribute\_Definition: Offshore description: Describes the approximated type of offshore area. Areas approximated as on shore, in state or inland waters will have a state abbreviation value. For those which are on the Outer Continental Shelf (OCS) the value describes OCS area as Alaska (AK), Atlantic (ATL), Gulf of Mexico (GOM) or Pacific (PAC).

Attribute\_Definition\_Source: US DOT PHMSA

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Inland (belonging to a certain state); state waters (belonging to a certain state), federal waters

Attribute:

Attribute\_Label: OS\_ST\_ABBR

Attribute\_Definition: Offshore or state Abbreviation: Abbreviation of the state when area is not in federal waters. All areas approximated as inland or offshore in state or inland waters have the state abbreviation as a value. All offshore features which are part of an OCS area are identified as "OS".

Attribute\_Definition\_Source: US DOT PHMSA

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Two-letter state abbreviation

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: 20171116

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

Address: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, East Building, 2nd floor, 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