

# Wetland Features

## Part 1: Data Summary

### Description

This coverage depicts Municipally-mapped land surfaces having wetland characteristics and includes both freshwater and intertidal features. Data for the MOAWetlnds coverage are stored in a geodatabase format and may be compiled for distribution in ArcInfo and ArcView formats.

#### Corporate Dataset Name:

MOAWetlands

#### Feature Class Name:

e04MWetlnds

#### Polygons:

- Wetlands



### Data Creation Method

MOAWetlnds digital mapping includes 'freshwater' features, specifically delineated and updated through a cooperative mapping effort between the Municipality and the United States Army Corps of Engineers (USACOE), and 'intertidal' features, located by the Municipality in part using map information prepared by others and in part through interpretive mapping of coastal elevation data and manual stereoscopic inspection of aerial photography. Mapping data is transferred to digital format through heads-up screen digitizing using digital ortho-imagery as a background. Linework is imported to a geodatabase where polygon topology is then built in conformance with MOA hydrography mapping logic.

Data Availability	Extent of Data
Available as 'MOAWetlands' in shape file and ArcGIS file format. Features stored in WMS Geodatabase.	Municipality of Anchorage corporate area Suggested viewing scale 1:6,000 or smaller
Publication Information	Contact Information
<p><b>Revision:</b> V4.0</p> <p><b>Published:</b> January 2005</p> <p><b>Produced by:</b> Municipality of Anchorage OPD &amp; PW Watershed Management Services</p>	<p><b>Distribution:</b> Charlie Barnwell (<a href="mailto:BarnwellCE@muni.org">BarnwellCE@muni.org</a>) Mike Kiker (<a href="mailto:KikerMR@muni.org">KikerMR@muni.org</a>) Phil Manke (<a href="mailto:MankePJ@muni.org">MankePJ@muni.org</a>)</p> <p><b>Content:</b> Thede Tobish (<a href="mailto:TobishTG@muni.org">TobishTG@muni.org</a>) Scott Wheaton (<a href="mailto:WheatonSR@muni.org">WheatonSR@muni.org</a>)</p>

# Wetland Features

## Part 2: Definitions and Mapping Method

### Wetland Features

Ultimately identification and development of all wetland features are regulated by the federal government and are only in part administered by the Municipality under a cooperative agreement with the United States Army Corps of Engineers (USACOE). However, to support the Municipality's freshwater wetlands administrative functions and still provide a larger context for the value of all available wetland resources, the MOAWetlnds coverage archives data for a range of wetland features, classified by their regulatory purview. As a guide to the use of Municipal digital data, general definitions of wetland features represented by the data are provided below. Though the Municipality does apply rigorous criteria and standards to its hydrographic mapping and maintains detailed metadata for the geospatial data generated in its mapping programs, the definitions provided in this document are nevertheless synoptic, and the published mapping is inevitably dated, incomplete and locally in error. Users must access source documents and agencies to obtain the precise definitions, criteria and standards and current data that are used by the Municipality and the USCOE in mapping and regulating these features.

### Wetland Feature Definitions

MOA wetlands mapping includes all wetland features as defined by the US Army Corps of Engineers. The MOA wetlands coverage categorizes features in this dataset as 'intertidal', 'freshwater' or 'open water' types. Open water-type features represent any open water body, saline or fresh, and include all features included in the MOALakes coverage. Freshwater-type features represent wetlands having water quality typical of inland locations. Intertidal-type features represent wetlands having saline environments reflective of their coastal locations. Intertidal wetland features are also mapped as 'coastlands' in the MOAMarine map coverage. All 'freshwater' wetland features are mapped and administered under the Anchorage Wetlands Management Plan. Anchorage freshwater wetlands are further categorized by their functional quality that, in part, determines their availability for development. Based on these qualities, Municipal freshwater wetlands are attributed as having an A, B or C 'designation'. These basic definitions are discussed in some detail in the following text but users should refer to the Anchorage Wetlands Management Plan for specific information about freshwater wetlands mapping definitions and methodology.

### Lake Shoreline

A lake shoreline is the boundary between lake water and the land surface. For most lakes the water level is relatively constant and the shoreline can be reasonably represented by a line tracing the elevation of the average lake level. However for ephemeral lakes or reservoirs the lake level can change dramatically either seasonally or from year to year. Therefore for Municipal maps, a lake shoreline is represented by the line tracing the lake border at the mean annual high water level (MHWL) of the lake.

### Wetland Identities

A primary function of the MOAWetlnds data is management of known freshwater wetlands administered by the Municipality under the 1996 Anchorage Wetlands Management Plan. To assist in this, these features have been labeled with the official identity codes assigned under the Plan as proposed by the Municipality and approved by the USACOE as well as a range of other identity codes useful in their management. The attribute AWMPid\_96 records the exact site number used to identify the feature in the 1996 AWMP. The attributes GroupID and PartID pre-parse the AWMP site numbers into their alphabetic and numeric components to help ease selecting and mapping features based on legacy 1996 mapping. The GroupID also provides an important means of tracking the history of a wetland as it becomes further subdivided and for grouping of wetlands to reflect important common geographic and hydrologic connectivity. The attribute SubPartID provides opportunities to map important subdivisions within a single

wetland entity, for example to reflect significant differences in vegetative cover. Finally the WetlandID is a means of providing a unique identifier for each wetland polygon and will allow for establishment of simplified and consistent identity codes in later management plan updates.

## **AWMPid\_96**

This attribute specifies the “Site” identification code officially assigned each wetland considered under the 1996 Anchorage Wetlands Management Plan. This is not a unique feature identifier—under the Plan many individual wetland polygon features were assigned the same “Site” identification code. Intertidal wetlands and any wetlands mapped after implementation of the Plan are assigned a default ‘AWMPid\_96’ code of ‘9999’.

## **GroupID**

The GroupID, or wetland group identification, is equivalent to the first, generally numeric, portion of the 1996 AWMP “Site” identification code, or to new code values assigned to other major groups of associated wetlands. The purpose of the GroupID, then, is to assign one or more wetland polygons to a common group of wetland features that are strongly associated through original contiguity or a common supporting hydrology. GroupID values specifically reflect 1996 Plan-designated grouping IDs, but are also intended to provide for grouping of newly mapped wetlands not characterized under the 1996 plan. GroupID numbers already assigned to 1996 AWMP wetlands (0 through 219, with zero assigned as a default value in the case of 1996 AWMP wetlands with no numeric site code) are not available for assignment to new group associations. However, newly mapped wetlands not originally assigned to a ‘96 AWMP group may be assigned to an existing ‘96 AWMP GroupID based on the newly mapped feature’s physical relationship to the 1996 wetlands. In any event, the GroupID transcends the 1996 mapping in that it provides continuing opportunity for identification and grouping of features that have or had a common geographic contiguity and have a common supporting surface and subsurface hydrology.

## **PartID**

The PartID code, or wetland part identification, identifies sub-groups of wetland features as identified in the 1996 Wetlands Management Plan through assignment of a common second (alphabetic) part of the 1996 AWMP Site number. Part IDs from 1 to 26 are reserved for use in coding (in a one to one correspondence to the ascending order of the alphabet) any wetlands having an A through Z suffix in their AWMPid\_96 code (reflecting their original Site number). The number ‘0’ is assigned as a default value to any 1996 AWMP wetland that did not have an alpha suffix in its Site number.

## **SubPartID**

The SubPartID, or wetland subpart, reflects further subdivision of an individual wetland within wetland ‘groups’ or ‘parts’. Subpart identities may be used, for example, to partition wetlands into land areas having common plant community structure. This is the atomic mapping unit for wetland features.

## **WetlandID**

The WetlandID attribute is a wetland identification code unique to each individual wetland polygon.

## **Wetland Type**

Wetlands can be grouped by similar geomorphologic, hydrologic, chemical, and biological factors. The Municipality’s general permitting authority under the 1996 Plan is in part based on the distinction between ‘intertidal’ and ‘freshwater’ wetlands and is reflected in the “Type” attribute in the MOAWetlnds dataset:

## Wetland Designation

Wetlands designations (referred to as ‘class’ under an earlier wetland management plan) identify the resource functional evaluation ranking of freshwater wetlands and open water features administered by the Municipality. Designation classes were established and assigned under the 1996 Anchorage Wetlands Management Plan based on the observed range of total functional performance of wetlands in Anchorage, assessed according to hydrologic, habitat, species, and socioeconomic performance categories. In order from the highest functional evaluation to the lowest, wetlands are designated as ‘A’, ‘B’, or ‘C’ wetlands. Freshwater wetlands that were not assigned designations under the 1996 Plan, freshwater wetland features mapped since implementation of the Plan, and all intertidal wetlands are given the designation value of ‘D’, or “not designated”.

## Designation

There are four valid values for the designation attribute, ‘A’, ‘B’, ‘C’, and ‘D’. ‘A’ wetlands have been identified as having a high valuation for all functional categories. These wetlands have high priority for protection and preservation due to their ability to provide the highest ecologic, biologic, and hydrologic function. ‘B’ wetlands have been identified as having a moderate overall functional valuation, but still providing significant support to key watershed and drainage area functions. “B” wetlands usually contain a mixture of wetland features reflecting both higher and lower functional performance. ‘C’ wetlands have been identified as having a low overall functional valuation. These features may have moderate values for one or more functions, but generally have reduced or minimal overall functional or ecological value. ‘D’ wetlands have not been designated under the 1996 Anchorage Wetlands Management Plan.

## Wetlands Feature Mapping

Ultimately identification and development of all wetland features are regulated by the federal government. Under a cooperative agreement with the USACOE the Municipality prepares and updates maps of freshwater wetlands within the Municipal corporate boundaries. Under that cooperative agreement the Municipality follows specific USACOE guidelines in delineating freshwater wetland features. Users are referred to those guidelines, and specifically the agreement documented in the 1996 Anchorage Wetlands Management Plan, as the basis for identifying and mapping these wetlands. Users should access these source documents and individual agencies involved to obtain the precise definitions, criteria and standards and current data that are used by the Municipality and the USCOE in mapping and regulating these features.

In creating digital representations of the delineated features, most MOA wetlands mapping, like other Municipal digital mapping of natural water resources features, locates wetlands generally with respect to select base digital imagery. That is, gross wetland features are identified in the field and from other mapping sources, and the map positions of their boundaries are then approximated through visual inspection of the select base digital imagery. MOA wetlands digital mapping is therefore representative and cannot supplant the need to perform delineation of wetlands boundaries on the ground for site-specific applications. The MOAWetlnds dataset depicts and labels wetland features identified in the 1996 Anchorage Wetlands Management Plan using feature identities and designations catalogued in the original Plan documents. Though features are mapped in the dataset generally as located in the 1996 Plan, the digital data does incorporate boundary adjustments and corrections to these wetland features where significant boundary changes have occurred since mapping was completed for the 1996 Plan. Digital data also shows wetland features (particularly intertidal wetlands) that are not administered under the Municipality’s general permitting authority.

Users are advised that MOAWetlnds mapping is not intended to be used or interpreted as a precise or complete representation of wetland conditions as they actually exist on the ground. MOAWetlnds data is locally incomplete, locations and spatial relationships of wetlands and other geographic features are

approximate, and map information reflects only that data available for use in map compilation at the time of publication of the current version. Similarly not all attributes are populated during mapping of individual wetland features. The completeness of feature attribute information reflects the level of mapping effort to date and does not necessarily reflect a management priority for that feature. Though MOAWetlnds data is expected to be useful in preliminary assessment of local wetland characteristics, it is not intended to supplant the need for project managers to confirm and map actual site conditions.

# Wetland Features

## Part 3: Data Dictionary

The following data dictionary contains basic attribute information about the MOA Wetland polygons featureclass. For further information about these attributes, please see Part 2: Definitions and Mapping Methods. Attributes are not listed in the order that they appear in the featureclass attribute tables.

### e04MWetInds Attributes:

**ADJ\_LENGTH**

Total length of all streams marginal to the wetland feature. (Source: Data Dictionary)

**ADJ\_STREAM**

Identity of primary stream transecting or marginal to the wetland feature. (Source: Data Dictionary)

**AWMPID\_96**

"Site" identification code assigned each wetland polygon as published in the 1996 Anchorage Wetlands Management Plan (AWMP). (Source: Data Dictionary)

**DESGNTION**

Identifies the resource evaluation ranking or 'designation' of the wetland feature as established in the 1996 AWMP. (Source: Data Dictionary)

Value	Definition
A	Wetlands having a high valuation for all functional categories
B	Wetlands assigned a moderate valuation but providing significant support to key watershed and drainage area functions
C	Wetlands having a low functional valuation
D	Wetland features that have not been classified under the AWMP
U	'Interior' upland features; uplands entirely enclosed by wetland features

**DRAINAGE**

Code used to identify the predominant hydrographic drainage associated with the wetland. (Source: Data Dictionary)

**GRIDID500**

Identity of 500-scale grid map containing most of a wetland feature or that most closely occupying the wetland centroid. (Source: Data Dictionary)

**GROUPID**

Equivalent of the first numeric portion of the 1996 AWMP "Site" identification code assigned to groups of associated wetlands. (Source: Data Dictionary)

**H2OPCTBYPA**

Index value representing estimated percent reduction in all pre-development sources of surface and ground water to a wetland feature. (Source: Data Dictionary)

**HABITAT**

A numeric valuation given a wetland feature reflecting the wetlands functional performance relative to wildlife habitat. (Source: Data Dictionary)

**HGM\_CLASS**

Predominant hydrogeomorphic character as described by Brinson, 1993, A Hydrogeomorphic Classification of Wetlands. (Source: Data Dictionary )

Value	Definition
1	Riverine (areas where periodic overbank flows from rivers and streams provide the dominant source of wetland water)
2	Depressional (areas where wetland hydrology is supported predominantly as a result for closed elevation contours)
3	Slope (areas where ground water discharge is the predominant source of wetland hydrology)
4	Mineral Soil Flats (areas where wetland hydrology is maintained predominantly as a result of very low slope and reduced vertical ground water movement through underlying low-permeability mineral soils)
5	Organic Soil Flats (areas where wetland hydrology is controlled predominantly by extensive accumulations of organic matter)
6	Estuarine Fringe (areas where wetland hydrology is predominantly supported by tidal waters)
7	Lacustrine Fringe (areas where lake waters maintain the ground water levels of adjacent wetlands)

**HYDRO**

A numeric valuation given a wetland feature reflecting the wetlands functional performance relative to hydrology. (Source: Data Dictionary)

**LAKE\_NAME**

The commonly used or mapped name of a lake. (Source: Data Dictionary)

**MAP\_ACURCY**

Accuracy of location of feature boundaries. (Source: Data Dictionary)

Value	Definition
1	Photo Interpretive Mapping (better than 25m, estimated)
2	Reconnaissance Mapping (better than 15m, estimated)
3	Base Map Survey (better than 11.5m, controlled survey confirmed)
4	Low Resolution GPS Survey (continuous controlled GPS survey)
5	High Resolution Land Survey (continuous controlled land survey)

**MAP\_DATE**

Date of last mapping or survey activity. (Source: Data Dictionary)

**MAP\_EDITOR**

Mapping science professional. (Source: Data Dictionary)

Value	Definition
MOA WMS	Municipality of Anchorage, Watershed Management Service

**MAP\_SOURCE**

Source of feature location information. (Source: Data Dictionary)

Value	Definition
WMS	WMS standardized mapping
NETWORK	Modified WTR_WAY legacy digital mapping
WTR_WAY	MOA area-wide legacy digital mapping
USGS1:25K	Digitized 1:25K USGS DRG
USGS1:63K	1:63K USGS DLG
MAJDRN	MOA 1994 Hillside Drainage Study legacy digital mapping
TURNAGAIN	MOA Turnagain legacy digital mapping

**MAPCOMPILR**

Name of digital map developer. (Source: Data Dictionary)

Value	Definition
GeoNorth	Mapping Professional organization

**OBJECTID**

Internal feature number. (Source: ESRI)

**OBJECTID\_1**

Internal feature number. (Source: ESRI)

**PARTID**

An identity value for individual wetlands or sub-groups of wetland features as identified in the 1996 AWMP. (Source: Data Dictionary)

**PCTPOND**

Percent of the total wetland polygon area in ponded water. A value of 100 % describes a pond-covered wetland feature. (Source: Data Dictionary)

**PUB\_DATE**

Date of map completion/publication. (Source: Data Dictionary)

**REVISIONNO**

Revision. version information for published mapping data. (Source: Data Dictionary)

Value	Definition
1.11	[not provided]
1.12	Prior to Year 2001 Edits
1.13	Year 2001 Edits
2.0	Year 2002 Edits
3.0	Year 2003 Edits
4.0	Year 2004 Edits

**SHAPE**

Feature geometry. (Source: ESRI)

**SHAPE\_Area**

Area of feature in internal units squared. (Source: ESRI)

**SHAPE\_Length**

Length of feature in internal units. (Source: ESRI)

**SECTIONID**

Identity of US Public Land Survey township, section and range containing most of the wetland feature. (Source: Data Dictionary)

**SOCIAL**

A numeric valuation given a wetland feature reflection the wetlands functional performance relative to socioeconomic services. (Source: Data Dictionary)

**SPECIES**

A numeric valuation given a wetland feature reflection the wetlands functional performance relative to support for select species. (Source: Data Dictionary)

**SUBPARTID**

A unique identity value for a wetland feature that reflects further subdivision of an individual wetland within wetland 'groups' or 'parts'. (Source: Data Dictionary)

**SUBSHED**

Name of the associated MOA subwatershed feature. (Source: Data Dictionary)

**SWCONVYNCE**

Type of hydraulic connectivity of storm water runoff to wetland feature. (Source: Data Dictionary)

Value	Definition
1	Overland (storm waters cross wetlands as a non-integrated-overland-flow)
2	Channel (storm waters cross wetlands through an open channel or ditch)
3	Pipe (storm waters cross wetlands through a pipe or other closed conduit)
9	Isolated (no surface storm waters enter the wetland feature)

**SWPCTBYPAS**

Percent of pre-development surface water flows bypassing a wetland feature. (Source: Data Dictionary)

**SWSLOPE**

Reflects an estimated representative ground surface slope measured along the fall line from an upgradient wetland margin to an intersecting stream or lake feature or to a discharge point along a downgradient margin of the wetland. (Source: Data Dictionary)

**TYPE**

Wetland groups sharing similar geomorphologic, hydrologic, chemical, or biological factors. (Source: Data Dictionary)

Value	Definition
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Intertidal	Includes generally coastal saline wetland features (predominantly estuarine in character)
Freshwater	Includes generally inland freshwater wetland features (predominantly palustrine or riverine in character)
Open Water	Standing bodies of water with a permanent minimum surface area at ordinary high water greater than 2,500 square feet or as identified in the 1996 AWMP wetlands dataset. 'Open Water includes all lake (stillwater) features mapped within the Municipality and thus includes as a subset all lake features mapped in 'MLakes'

#### VEGGROUP

Predominant plant community structure as generally based on the first hierarchical level of Viereck et. Al., 1992, Alaska Vegetation Classification. (Source: Data Dictionary)

Value	Definition
1	Forested (10 % or more tree canopy at 10 feet or taller)
2	Scrub (trees less than 10 feet and 25 % or more shrub canopy)
3	Herbaceous (less than 25 % shrub canopy and dominated by grasses; forbs-herbs, ferns, horsetails; bryophytes-mosses, lichens; or aquatic plants-sedges, rushes, and aquatic plants)
4	Wet Herbaceous (less than 25 % shrub canopy and dominated by ponded herbaceous wetlands; standing water is prominent for a significant part of the year)
5	Barren (unvegetated - less than 2 % vegetative cover; may include natural or modified wetland surfaces)
8	Complex (reserved for larger or complex wetland features where size and distribution of local variations in plant communities significantly influence the overall functional character of the wetland)
9	Water (standing open water surface)

#### VEGSNSTVTY

Sensitivity of wetland vegetation to storm water discharge based on qualitative assessment of potential degree of impact to wildlife and environmental functional value. (Source: Data Dictionary)

Value	Definition
1	Sensitive (important wetland plant communities are highly sensitive to changes in hydroperiod and pollutant loading associated with storm water discharges)
2	Marginal (important wetland plant communities require special storm water pre-treatment to tolerate changes in hydroperiod and pollutant loading associated with storm water discharges)
3	Tolerant (wetland plant communities have a low environmental functional value or plant communities require only normal storm water pre-treatment to tolerate changes in hydroperiod and pollutant loading associated with storm water discharges)

**VEGTREND**

Apparent overall response of wetland vegetation as an indicator of the trend in hydrologic regime relative to predevelopment conditions. (Source: Data Dictionary)

<b>Value</b>	<b>Definition</b>
1	Dry Impacted (wetland vegetation reflects a marked longterm response to a lowered ground water elevation or to a reduction in surface water input or both)
2	Drying (cumulative evidence indicates vegetation is responding to a decreasing (lowering) ground water elevation or to a reduction in surface water input)
3	Flood Impacted (wetland vegetation reflects a marked longterm response to rising ground water elevation or to an increase in surface water input or both)
4	Flooding (cumulative evidence indicates vegetation is responding to an increase in (raising of) ground water elevation or to increased surface flooding or both)
9	Predevelopment (the hydrologic regime generally reflects conditions similar to those prior to any development within the contribution watershed)

**WETLNDID**

A unique wetland polygon identification used for feature cataloguing purposes. (Source: Data Dictionary)

**WSHED**

Name of the associated MOA watershed feature. (Source: Data Dictionary)

# Wetland Features

## Part 4: FGDC Metadata

### Identification\_Information:

#### Citation:

##### Citation\_Information:

Originator: MOA Watershed Management Section

Publication\_Date: 01/15/2005

Title: e04MWetlnds

Geospatial\_Data\_Presentation\_Form: vector digital data

Online\_Linkage: \\Zim\Data\wms\031016\_sde\_selected\SDEDevelopment031024updates.mdb

#### Description:

Abstract: MOAWetlands depicts wetland features within the Municipality of Anchorage corporate area. Data are stored in a geodatabase format and are compiled for distribution in ArcInfo and ArcView formats. All features can be derived from single ArcInfo or ArcView Shape files. MOAWetlands digital mapping includes 'freshwater' features specifically delineated and updated through a cooperative mapping effort between the Municipality and the United States Army Corps of Engineers (USACOE), and 'intertidal' features, located by the Municipality in part using map information prepared by others and in part through interpretive mapping of coastal elevation data and manual stereoscopic inspection of aerial photography. Mapping data is transferred to digital format through heads up screen digitizing using digital ortho-imagery as a background. Linework is imported to a geodatabase where polygon topology is then built in conformance with MOA hydrography mapping logic.

#### Time\_Period\_of\_Content:

##### Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 20010905

Currentness\_Reference: ground condition

#### Status:

Progress: REQUIRED: The state of the data set.

Maintenance\_and\_Update\_Frequency: Annually

#### Spatial\_Domain:

##### Bounding\_Coordinates:

West\_Bounding\_Coordinate: -150.286523

East\_Bounding\_Coordinate: -148.465179

North\_Bounding\_Coordinate: 61.482332

South\_Bounding\_Coordinate: 60.748169

#### Keywords:

##### Theme:

Theme\_Keyword\_Thesaurus: hydrology, lakes, wetland, streams

Theme\_Keyword: hydrology, lakes, wetland, streams

##### Place:

Place\_Keyword: Anchorage, Alaska

#### Access\_Constraints:

Refer to Municipality of Anchorage GIS Web page

(<http://www.ci.anchorage.ak.us/gis/gisinternet/htmls/gishome.htm>)

for official policy on use of MOA GIS data.

#### Use\_Constraints:

Refer to Municipality of Anchorage GIS Web page

(<http://www.ci.anchorage.ak.us/gis/gisinternet/htmls/gishome.htm>)

for official policy on use of MOA GIS data. Point\_of\_Contact:

#### Contact\_Information:

##### Contact\_Person\_Primary:

Contact\_Person: Phil Manke

Contact\_Organization: MOA-DPW-Technical Services

Contact\_Position: IT Supervisor

##### Contact\_Address:

Address\_Type: mailing address

Address: Department of Public Works, P.O. Box 196650

City: Anchorage

State\_or\_Province: AK

Postal\_Code: 99519-6650

Country: USA  
 Contact\_Voice\_Telephone: (907) 343-8220  
 Contact\_Electronic\_Mail\_Address: MankePJ@muni.org  
 Hours\_of\_Service: 8-5  
 Contact\_Instructions: Please use phone as primary contact interface  
 Data\_Set\_Credit: MOA WMS  
 Native\_Data\_Set\_Environment: Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 1; ESRI ArcCatalog 8.3.0.800  
 Data\_Quality\_Information:  
   Process\_Step:  
     Process\_Description: Dataset copied.  
     Source\_Used\_Citation\_Abbreviation: \\JUGGERNAUT\Data\WMS\WETLANDS\WETLANDS\_FINAL.mdb  
   Process\_Step:  
     Process\_Description: Dataset copied.  
     Source\_Used\_Citation\_Abbreviation: \\JUGGERNAUT\Data\WMS\WETLANDS\WETLANDS\_FINAL.mdb  
   Process\_Step:  
     Process\_Description: Dataset copied.  
     Source\_Used\_Citation\_Abbreviation:  
   Process\_Step:  
     Process\_Description: Dataset copied.  
     Source\_Used\_Citation\_Abbreviation: \\BOOMHAUER\Data\Projects\WMS\WMS  
 GEODATABASE\WMS\_PILOT\_GDB.mdb  
   Process\_Step:  
     Process\_Description: Metadata imported.  
     Source\_Used\_Citation\_Abbreviation: C:\Documents and Settings\vmartin\Desktop\mlakes\_metadata.xml  
   Process\_Step:  
     Process\_Description: Dataset copied.  
     Source\_Used\_Citation\_Abbreviation:  
 \\ZIM\Data\wms\031016\_sde\_selected\SDEDevelopment031023updates.mdb  
   Process\_Step:  
     Process\_Description: Metadata imported.  
     Source\_Used\_Citation\_Abbreviation: C:\DOCUME~1\vmartin\LOCALS~1\Temp\xml2E.tmp  
 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: 1146  
 Spatial\_Reference\_Information:  
   Horizontal\_Coordinate\_System\_Definition:  
     Planar:  
       Grid\_Coordinate\_System:  
         Grid\_Coordinate\_System\_Name: State Plane Coordinate System 1927  
         State\_Plane\_Coordinate\_System:  
           SPCS\_Zone\_Identifier: 5004  
           Transverse\_Mercator:  
             Scale\_Factor\_at\_Central\_Meridian: 0.999900  
             Longitude\_of\_Central\_Meridian: -150.000000  
             Latitude\_of\_Projection\_Origin: 54.000000  
             False\_Easting: 500000.000000  
             False\_Northing: 0.000000  
         Planar\_Coordinate\_Information:  
           Planar\_Coordinate\_Encoding\_Method: coordinate pair  
           Coordinate\_Representation:  
             Abscissa\_Resolution: 0.000512  
             Ordinate\_Resolution: 0.000512  
           Planar\_Distance\_Units: survey feet  
       Geodetic\_Model:  
         Horizontal\_Datum\_Name: North American Datum of 1927  
         Ellipsoid\_Name: Clarke 1866  
         Semi-major\_Axis: 6378206.400000  
         Denominator\_of\_Flattening\_Ratio: 294.978698

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: b0623MWetlnds  
 Attribute:  
 Attribute\_Label: OBJECTID\_1  
 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: OBJECTID  
 Attribute\_Definition: Feature geometry.  
 Attribute\_Definition\_Source: ESRI  
 Attribute\_Domain\_Values:  
 Unrepresentable\_Domain: Coordinates defining the features.

Attribute:  
 Attribute\_Label: MAP\_ACURCY  
 Attribute\_Definition: Mapping method and associated stream centerline location accuracy.  
 Attribute\_Definition\_Source: Data Dictionary

Attribute:  
 Attribute\_Label: MAP\_SOURCE  
 Attribute\_Definition: Revision.version information for published mapping data.  
 Attribute\_Definition\_Source: Data Dictionary  
 Attribute\_Domain\_Values:  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: WMS  
 Enumerated\_Domain\_Value\_Definition: WMS standardized mapping  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: NETWORK  
 Enumerated\_Domain\_Value\_Definition: Modified WTR\_WAY legacy digital mapping  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: WTR\_WAY  
 Enumerated\_Domain\_Value\_Definition: MOA area-wide legacy digital mapping  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: USGS1:25K  
 Enumerated\_Domain\_Value\_Definition: Digitized 1:25K USGS DRG  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: USGS1:63K  
 Enumerated\_Domain\_Value\_Definition: 1:63K USGS DLG  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: MAJDRN  
 Enumerated\_Domain\_Value\_Definition: MOA 1994 Hillside Drainage Study legacy digital mapping  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: TURNAGAIN  
 Enumerated\_Domain\_Value\_Definition: MOA Turnagain legacy digital mapping  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Attribute\_Definition\_Source: Data Dictionary

Attribute:  
 Attribute\_Label: MAP\_EDITOR  
 Attribute\_Definition: Source of feature location information  
 Attribute\_Definition\_Source: Data Dictionary

Enumerated\_Domain:  
Enumerated\_Domain\_Value: MOA WMS  
Enumerated\_Domain\_Value\_Definition: Municipality of Anchorage, Watershed Management Service

Attribute:  
Attribute\_Label: MAP\_DATE  
Attribute\_Definition: Date of last mapping or survey activity  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: PUB\_DATE  
Attribute\_Definition: Date of map completion/publication  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: AWMPID\_96  
Attribute\_Definition: Unique code assigned to individual wetland features  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: GROUPID  
Attribute\_Definition: Identical to first numeric portion of AWMPID\_96  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: PARTID  
Attribute\_Definition: An identity value for individual wetlands or sub-groups of wetland features as identified in the 1996 AWMP.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: SUBPARTID  
Attribute\_Definition: Name of the associated MOA watershed feature.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: WETLNDID  
Attribute\_Definition: A unique wetland polygon identification used for feature cataloguing purposes.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: WSHED  
Attribute\_Definition: Name of the associated MOA watershed feature.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: SUBSHED  
Attribute\_Definition: Name of the associated MOA watershed feature.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: ADJ\_STREAM  
Attribute\_Definition: Identity of primary stream transecting or marginal to the wetland feature  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: ADJ\_LENGTH  
Attribute\_Definition: Total length of all streams marginal to the wetland feature.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: DRAINAGE  
Attribute\_Definition: Code used to identify the predominant hydrographic drainage associated with the wetland.  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: GRIDID500  
Attribute\_Definition: Identity of 500-scale grid map containing most of a wetland feature or that most closely occupying the wetland centroid  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: SECTIONID  
Attribute\_Definition: Identity of US Public Land Survey township, section and range containing most of the wetland feature  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: TYPE  
Attribute\_Definition: Wetland groups sharing similar geomorphologic, hydrologic, chemical, or biological factors.  
Attribute\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: Open Water  
Enumerated\_Domain\_Value\_Definition: Standing bodies of water with a permanent minimum surface area at ordinary high water greater than 2,500ft<sup>2</sup> or as identified in the 1996 AWMP wetlands dataset.  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: Intertidal  
Enumerated\_Domain\_Value\_Definition: Includes generally coastal saline wetland features (predominantly estuarine in character)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: Freshwater  
Enumerated\_Domain\_Value\_Definition: Includes generally inland freshwater wetland features (predominantly palustrine or riverine in character)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: DESGNTION  
Attribute\_Definition: Identifies the resource evaluation ranking or 'designation' of the wetland feature as established in the 1996 AWMP  
Attribute\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: A  
Enumerated\_Domain\_Value\_Definition: Wetlands having a high valuation for all functional categories  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: B  
Enumerated\_Domain\_Value\_Definition: Wetlands assigned a moderate valuation but providing significant support to key watershed and drainage area functions  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: C  
Enumerated\_Domain\_Value\_Definition: Wetlands having a low functional valuation  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: D  
Enumerated\_Domain\_Value\_Definition: Wetland features that have not been classified under the AWMP  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: U  
Enumerated\_Domain\_Value\_Definition: 'Interior' upland features; uplands entirely enclosed by wetland features  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: HYDRO  
Attribute\_Definition: A numeric valuation given a wetland feature reflecting the wetlands functional performance relative to hydrology  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: HABITAT  
Attribute\_Definition: A numeric valuation given a wetland feature reflecting the wetlands functional performance relative to wildlife habitat  
Attribute\_Definition\_Source: Data Dictionary

Attribute:  
Attribute\_Label: SPECIES  
Attribute\_Definition: A numeric valuation given a wetland feature reflection the wetlands functional performance relative to support for select species  
Attribute\_Definition\_Source: Data Dictionary

Attribute:

Attribute\_Label: SOCIAL  
 Attribute\_Definition: A numeric valuation given a wetland feature reflection the wetlands functional performance relative to socioeconomic services  
 Attribute\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: SWSLOPE  
 Attribute\_Definition: Reflects an estimated representative ground surface slope measured along the fall line from an upgradient wetland margin to an intersecting stream or lake feature or to a discharge point along a downgradient margin of the wetland  
 Attribute\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: PCTPOND  
 Attribute\_Definition: Percent of the total wetland polygon area in ponded water. A value of 100 % describes a pond-covered wetland feature  
 Attribute\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: HGM\_CLASS  
 Attribute\_Definition: Predominant hydrogeomorphic character as described by Brinson, 1993, A Hydrogeomorphic Classification of Wetlands  
 Attribute\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 1  
 Enumerated\_Domain\_Value\_Definition: Riverine (areas where periodic overbank flows from rivers and streams provide the dominant source of wetland water)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 2  
 Enumerated\_Domain\_Value\_Definition: Depressional (areas where wetland hydrology is supported predominantly as a result for closed elevation contours)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 3  
 Enumerated\_Domain\_Value\_Definition: Slope (areas where ground water discharge is the predominant source of wetland hydrology)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 4  
 Enumerated\_Domain\_Value\_Definition: Mineral Soil Flats (areas where wetland hydrology is maintained predominantly as a result of very low slope and reduced vertical ground water movement through underlying low-permeability mineral soils)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 5  
 Enumerated\_Domain\_Value\_Definition: Organic Soil Flats (areas where wetland hydrology is controlled predominantly by extensive accumulations of organic matter)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 6  
 Enumerated\_Domain\_Value\_Definition: Estuarine Fringe (areas where wetland hydrology is predominantly supported by tidal waters)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 7  
 Enumerated\_Domain\_Value\_Definition: Lacustrine Fringe (areas where lake waters maintain the ground water levels of adjacent wetlands)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: VEGGROUP  
 Attribute\_Definition: Predominant plant community structure as generally based on the first hierarchical level of Viereck et. Al., 1992, Alaska Vegetation Classification  
 Attribute\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:

Enumerated\_Domain\_Value: 1  
Enumerated\_Domain\_Value\_Definition: Forested (10 % or more tree canopy at 10 feet or taller)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 2  
Enumerated\_Domain\_Value\_Definition: Scrub (trees less than 10 feet and 25 % or more shrub canopy)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 3  
Enumerated\_Domain\_Value\_Definition: Herbaceous (less than 25 % shrub canopy and dominated by grasses; forbs-herbs, ferns, horsetails; bryophytes-mosses, lichens; or aquatic plants-sedges, rushes, and aquatic plants)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 4  
Enumerated\_Domain\_Value\_Definition: Wet Herbaceous (less than 25 % shrub canopy and dominated by ponded herbaceous wetlands; standing water is prominent for a significant part of the year)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 5  
Enumerated\_Domain\_Value\_Definition: Barren (unvegetated - less than 2 % vegetative cover; may include natural or modified wetland surfaces)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 8  
Enumerated\_Domain\_Value\_Definition: Complex (reserved for larger or complex wetland features where size and distribution of local variations in plant communities significantly influence the overall functional character of the wetland)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 9  
Enumerated\_Domain\_Value\_Definition: Water (standing open water surface)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Attribute:  
Attribute\_Label: VEGSNSTVTY  
Attribute\_Definition: Name of the associated MOA watershed feature.  
Attribute\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 1  
Enumerated\_Domain\_Value\_Definition: Sensitive (important wetland plant communities are highly sensitive to changes in hydroperiod and pollutant loading associated with storm water discharges)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 2  
Enumerated\_Domain\_Value\_Definition: Marginal (important wetland plant communities require special storm water pre-treatment to tolerate changes in hydroperiod and pollutant loading associated with storm water discharges)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 3  
Enumerated\_Domain\_Value\_Definition: Tolerant (wetland plant communities have a low environmental functional value or plant communities require only normal storm water pre-treatment to tolerate changes in hydroperiod and pollutant loading associated with storm water discharges)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Attribute:  
Attribute\_Label: VEGTREND  
Attribute\_Definition: Name of the associated MOA watershed feature.  
Attribute\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:  
Enumerated\_Domain\_Value: 1  
Enumerated\_Domain\_Value\_Definition: Dry Impacted (wetland vegetation reflects a marked longterm response to a lowered ground water elevation or to a reduction in surface water input or both)  
Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
Enumerated\_Domain:

Enumerated\_Domain\_Value: 2  
 Enumerated\_Domain\_Value\_Definition: Drying (cumulative evidence indicates vegetation is responding to a decreasing (lowering) ground water elevation or to a reduction in surface water input)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 3  
 Enumerated\_Domain\_Value\_Definition: Flood Impacted (wetland vegetation reflects a marked longterm response to rising ground water elevation or to an increase in surface water input or both)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 4  
 Enumerated\_Domain\_Value\_Definition: Flooding (cumulative evidence indicates vegetation is responding to an increase in (raising of) ground water elevation or to increased surface flooding or both)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 9  
 Enumerated\_Domain\_Value\_Definition: Predevelopment (the hydrologic regime generally reflects conditions similar to those prior to any development within the contribution watershed)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: SWPCTBYPAS  
 Attribute\_Definition: Percent of pre-development surface water flows bypassing a wetland feature  
 Attribute\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: H2OPCTBYPA  
 Attribute\_Definition: Index value representing estimated percent reduction in all pre-development sources of surface and ground water to a wetland feature  
 Attribute\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: SWCONVYNCE  
 Attribute\_Definition: Type of hydraulic connectivity of storm water runoff to wetland feature  
 Attribute\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 1  
 Enumerated\_Domain\_Value\_Definition: Overland (storm waters cross wetlands as a non-integrated-overland-flow)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 2  
 Enumerated\_Domain\_Value\_Definition: Channel (storm waters cross wetlands through an open channel or ditch)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 3  
 Enumerated\_Domain\_Value\_Definition: Pipe (storm waters cross wetlands through a pipe or other closed conduit)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Enumerated\_Domain:  
 Enumerated\_Domain\_Value: 9  
 Enumerated\_Domain\_Value\_Definition: Isolated (no surface storm waters enter the wetland feature)  
 Enumerated\_Domain\_Value\_Definition\_Source: Data Dictionary  
 Attribute:  
 Attribute\_Label: SHAPE  
 Attribute\_Definition: Feature geometry.  
 Attribute\_Definition\_Source: ESRI  
 Attribute\_Domain\_Values:  
 Unrepresentable\_Domain: Coordinates defining the features.  
 Attribute:  
 Attribute\_Label: MAPCOMPILR  
 Attribute\_Definition: Feature geometry.  
 Attribute\_Definition\_Source: ESRI  
 Attribute\_Domain\_Values:

Unrepresentable\_Domain: Coordinates defining the features.

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.

Attribute:

Attribute\_Label: REVISIONNO

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: LAKE\_NAME

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\_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.

Distribution\_Information:

Distributor:

Contact\_Information:

Contact\_Person\_Primary:

Contact\_Person: Phil Manke

Contact\_Organization: MOA-DPW-Technical Services

Contact\_Position: IT Supervisor

Contact\_Address:

Address\_Type: Dept of Public Works, PO Box 196650

City: Anchorage

State\_or\_Province: AK

Postal\_Code: 99519-6650

Country: USA

Contact\_Voice\_Telephone: (907) 343-8220

Contact\_Electronic\_Mail\_Address: MankePJ@muni.org

Hours\_of\_Service: 8-5

Contact\_Instructions: Please use phone as primary contact interface

Resource\_Description: Downloadable Data

Metadata\_Reference\_Information:

Metadata\_Date: 20031029

Metadata\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: MOA-DPW-WMS

Contact\_Person: Scott Wheaton

Contact\_Position: Watershed Scientist  
Contact\_Address:  
Address\_Type: mailing address  
Address: Department of Public Works, P.O. Box 196650  
City: Anchorage  
State\_or\_Province: AK  
Postal\_Code: 99519-6650  
Country: USA  
Contact\_Voice\_Telephone: (907) 343-8117  
Contact\_Electronic\_Mail\_Address: WheatonSR@muni.org  
Hours\_of\_Service: 8-5  
Contact\_Instructions: Please use telephone as primary contact interface  
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 ProfileAttribute: