Cook Inlet Lowland Wetlands

Identification_Information:

Citation:
Citation_Information:
Originator: Mike Gracz, Kenai Watershed Forum
Publication_Date: December 2013
Title: Cook Inlet Wetlands
Geospatial_Data_Presentation_Form: vector digital data (polygons)
Online_Linkage: <http://cookinletwetlands.info/Downloads/CookInletWetlands.zip>
Description:
Abstract:

716,639 acres of wetlands have been mapped over 1,875,151 acres of the Cook Inlet Lowlands, Alaska into 38,691 polygons using a newly developed classification system intended to group wetlands that function similarly. The classification system is largely based on hydrologic and geomorphologic factors.A summary map poster (36"x44") that includes a description of the mapping units and the hydrogeologic setting is available here (3 mb 13 February 2013). The mapping was initially built on data collected during the the Western Kenai Soil Survey (4.5 mb .pdf, Van Patten 2005) then expanded to cover areas expected to receive the greatest wetland permit activity. A summary of the project, which ran from 2002-2013, is provided below. The map is served as a GoogleEarth .KMZ file, or an ESRI ArcGIS 10.0 shape- and layer files. 4617 of the wetland polygons in the file contain hyperlinks to photos taken at the polygon.

Kenai Peninsula:
Begining in 2002 the classification was developed and wetlands were mapped onto clearlay over 1996 black & white stereo-paired aerial photographs printed at a scale of 1:24,000. The linework was transferred with plastic pencil to mylars aligned with a registar bar over orthorectified imagery of the same 1996 photography. The transferred lines were retraced onto clean mylars then scanned and vectorized by Resource Data, Inc (Anchorage, AK) into an ESRI shapefile. A representative sample of wetlands was visited, and data collected, especially plant cover, and later, pH and specific conductance of surface water. In 2002, when the classification was first developed, two small pilot areas were mapped (the polygons in the .dbf of the shapefile with the unique identifier in the field CODE = 1-911) and nearly every polygon was visited. The remaining project area was mapped and field verified in 2003-2004 (CODE 1000-10903 in 2003, and

10905-33612 in 2004). The map is served via the Kenai Peninsula Borough's <http://www.borough.kenai.ak.us/gisdept/> GIS department; so that all that is required to view the map is access to the World Wide Web and a current web browser. The wetland polygons are served along with many layers including high resolution satellite imagery, LiDAR elevation, and parcel lines linked to ownership information. The wetland polygons are linked to a web of descriptive documents incorporating plant, soils, and hydrology data, and photographs of the polygons that were visited. The plolygons are also available in a.KMZ file for viewing in Google Earth and as an ESRI shapefile (http://cookinletwetlands.info/Downloads/Downloads.html).

Homer:

In 2004 the city of Homer and the Bridge Creek Watershed Protection District were mapped at a scale of 1:12,000 using similar methods of stereo interpretation then transfer to corrected imagery and digitization to shapefile followed by field visits of 395 of the 414 polygons (CODE 50001-50741). These polygons were merged with the Kenai Peninsula shapefile.

Seward:

In 2006 the area around Seward, including the Bear Creek Flood Service area were mapped at a scale of 1:24,000 using similar methods (CODE 60001-60600). A total of 210 of the polygons were visited in the field.

Kenai Mountains:

In 2007 the areas around Moose Pass, Hope, Cooper Landing and a few other areas in the Kenai Mountains were mapped at 1:24,000 using similar methods (CODE 61001-61509). Sixty-five of the polygons have been field checked, and much of the editing has been completed, although a final edit was never finished. Data are reasonably accurate, but provisional.

Matanuska-Susitna Borough:

2007

Mapping in the Matanuska-Susitna Borough began in spring 2007. For field use, sheets printed at 1:12,500 were created from Digital Orthorectified Quadrangle imagery (DOQs: USDA 2004) overlain with both National Wetlands Inventory (NWI) and hydric soils polygons (Hall, 2001; USF&WS, Anchorage, AK & Clark and Kautz, 2002; NRCS, Palmer, AK). During the summer of 2007 we visited 132 sites guided by the field sheets. During the autumn of 2007, wetland boundaries were delineated over 1:24,000 stereo-paired imagery using the soil survey, NWI and our field visits as guidance. The stereo pairs were loaned to us by NWI. The boundaries were transferred to mylars registered over corrected imagery and scanned and vectorized into an ESRI shapefile.The shapefile was attributed with map unit names.

2008-2009

In 2008 and 2009 wetlands were first delineated over 1:18,000 stereo-paired aerial photography flown in October 2005 and May 2006. Mapping was guided by experience, NWI, and NRCS soils maps as a guide. The wetland lines were transferred to mylars registered over orthorectified transparencies then scanned and digitized into an ESRI polygon shapefile by Resource Data, Inc. in Anchorage. The polygons were then assigned map units in ArcView. A total of 788 polygons were visited in the field over two seasons, where varying amounts of plant cover, soils and water chemistry data were collected and a photograph taken. The shapefile was edited to reflect field findings. All

polygons were combined with the shapefile from previous years. Adjoining polygon edges were edited and matched, heads-up in ArcView.

2011

In 2011, most wetlands were delineated by Karyn Noyes over 9"x9" stereo-paired aerial photography flown at a nominal scale of 1:18,000 in October of 2005 and September of 2007. Experience, NWI and NRCS soils mapping guided the linework. The lines were transferred onto frosted mylar aligned over orthorectified transparencies using a register bar, then retraced onto clean mylars. The clean mylars were digitized into an ESRI polygon shapefile by Resource Data, Inc. in Anchorage. The polygons were then assigned map units in ArcView. Not all polygons were covered by the stereo-paired photography, however, so the remaining were delineated heads-up in ArcMap (10.0) using DOQs from 2004. Following field visits, additional polygons were delineated by Mike Gracz on 24" x 24" stereo pairs flown 21 September 1985 (flight line 5, photo 3, along the upper portion of the Zero Lake Road) at a nominal scale of 1" = 3000'. These lines were used to guide additional heads-up digitizing in ArcMap 10.0. Sixty-five polygons were visited in the field 1-7 August 2011, and the shapefile was edited based on field findings, then merged with the shapefile covering the entire area mapped to date.

2012

In 2012, wetlands were first delineated by Karyn Noyes on Clearlay(r) over 17" x 17" true-color stereo-paired aerial photographs flown specifically for this project during July 2011. Stereo-pairs were printed at the nominal scale of 1:18,000. The wetland linework was guided by NWI, NRCS soils mapping, and experience. The lines were transferred with plastic pencil from the Clearlay onto frosted mylar aligned using a register bar over orthorectified transparencies of the identical aerial photography. The mylars were re-traced onto clean copies; the clean copies were digitized by Resource Data, Inc. in Anchorage into an ESRI polygon shapefile. A total of 291 polygons were visited in the field where at least map unit was recorded, but also photos were taken (n=260), plant cover data recorded (n=157), pH measured using a YSI 63 meter calibrated nearly every sample (218), and specific conductance (25 degrees C) measured using the same meter (n=227). Soil profiles were often described, and dissolved oxygen (n=144) and alkalinity (n=97) were frequently titrated for in the field using a Hach digital titrator. The polygons were assigned map units in ArcMap 10.0 following field visits. These polygons were merged with the previous mapping, including some heads-up editing along the mapping boundary, where needed .

Kenai Fjords

Exit Glacier Developed Area

Wetlands were first delineated in spring 2012 by Mike Gracz on Clearlay(r) over 9" x 9" true-color stereo-paired aerial photographs flown on 16 August 2007 at a nominal scale of 1:12,000. The polygons were visited in the field where map unit was assigned, photos were taken, plant cover data recorded, pH measured using a YSI 63 meter calibrated before each sample, and specific conductance (25 degrees C) measured using the same meter. Soil profiles were occasionally described. The polygons were re-edited and assigned map units in ArcMap 10.0 following field visits. After final edits, the polygons were merged with the shapefile for described above.

2013
In 2013, wetlands were first delineated by Karyn Noyes on Clearlay(r) over 17" x 17" true-color stereo-paired aerial photographs flown at a nominal scale of 1:18,000 during July 2011 for this project. The linework was guided by NWI, NRCS soils mapping, and experience. The lines were transferred using plastic pencil from the Clearlay onto frosted mylar aligned with a register bar over orthorectified transparencies of the identical aerial photography. The mylars were re-traced onto clean copies; the clean copies were digitized by Resource Data, Inc. in Anchorage into an ESRI polygon shapefile. A total of 378 polygons were visited in the field where at least map unit was recorded, but also photos were taken (n=341), plant cover data recorded (n=207), pH measured using a YSI 63 meter calibrated nearly every sample (n=184), and specific conductance (25 degrees C) measured using the same meter (n=190). Soil profiles were often described, and alkalinity was frequently titrated for in the field using a Hach digital titrator (n=186). The polygons were assigned map units in ArcMap 10.0 following field visits. The polygons were merged along the mapping boundary, and edited heads-up where needed.

Purpose:
A wetland classification and shapefile/Google Earth *.kmz file for management and planning. The mapping classification is based on hydrology and locally relavant landforms in order to best predict wetland function.
Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1996
Ending_Date: 2013
Currentness_Reference: publication date
Status:
Progress: In work
Maintenance_and_Update_Frequency: Intermittently
Spatial_Domain:
Bounding_Coordinates:
West Bounding Coordinate -151.869
East Bounding Coordinate -148.125
North Bounding Coordinate 62.553
South Bounding Coordinate 59.599

Keywords:
Theme:
Theme_Keyword_Thesaurus: USGS NLCD Land Cover classes
Theme_Keyword: Wetlands
Place:
Place_Keyword: Alaska
Place_Keyword: Kenai Peninsula
Place_Keyword: Matanuska-Susitna Borough
Place_Keyword: Seward

Place_Keyword: Cook Inlet
Place_Keyword: Kenai Mountains
Place_Keyword: Homer
Place_Keyword: Kenai Fjords
Place_Keyword: Exit Glacier

Access_Constraints: No access constraints
Use_Constraints: User responsible for interpretation
Point_of_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Mike Gracz
Contact_Organization: Kenai Watershed Forum
Contact_Position: Wetland Program Manager
Contact_Voice_Telephone: 907-235-2218
Contact_Electronic_Mail_Address: mike@kenaiwatershed.org
Hours_of_Service: 9-5 Alaska Time
Contact_Instructions: email preferred
Browse_Graphic:
Browse_Graphic_File_Name:
<http://cookinletwetlands.info/images/cookInletWetlandsLocations.pdf>
Browse_Graphic_File_Description: Map of South-Central Alaska showing areas mapped.
Browse_Graphic_File_Type: JPEG
Data_Set_Credit: Mike Gracz, Kenai Watershed Forum; USEPA, US F&WS.
Native_Data_Set_Environment:
Microsoft Windows 8; ESRI ArcView 10.1/10.0 Beware that the legend of the layer file will display in ArcMap 10.1, but .mxds using this layer file in that version will not save. The current work-around is to Save A copy... (ArcMap 10.0 document [*.mxd]).

Data_Quality_Information:
Logical_Consistency_Report:
Logically consistent: In 2012 topology errors were discovered (especially along the mapping boundary on the Southern Kenai Peninsula) and fixed. The polygon geometry is now believed to be clean. "Area" field indicates no sliver polygons. No formal report generated.
Completeness_Report:
Exact wetland boundaries are perhaps impossible to delineate. The definition of a wetland can change, and is somewhat open to interpretation. This file represents an attempt to map every polygon that could be considered a wetland using the criteria outlined in the 2007 supplement to the 1987 Army Corps Delineation Manual (Environmental Laboratory. (1987). "Corps of Engineers Wetland Delineation Manual", Technical Report Y-87-1, US Army Engineer Waterways Experiment Station. Vicksburg, MS). Before 2008, only the 1987 manual was used. To generate the file, stereo paired

aerial photos and relatively quick field visits, along with National Wetland Inventory maps and soils data were used. Wetlands that may be non-jurisdictional are also included, such as Depressions, inclusions along rivers and in braided river valleys.
Positional_Accuracy:
Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report:
Exact boundaries of wetlands cannot always be delineated, even with extensive fieldwork. The file was generated using stereo-paired photographs flown at a nominal scale of: 1:24,000 (Kenai Lowlands & Seward); 1:12,000 (Homer); 1:24,000 and 1:18,000 (Matanuska-Sustina Borough, 2007 and 2008-2013 respectively); and 1:12,000 (Kenai Fjords- Exit Glacier Developed Area). Linework was transferred, using a plastic pencil, to frosted mylar registered over pre-punched ortho-rectified film positives of aerial imagery.
Vertical_Positional_Accuracy:
Vertical_Positional_Accuracy_Report: Not Applicable
Lineage:
Source_Information:
Source_Citation:
Citation_Information:
Originator: US Department Agriculture (Kenai Lowlands-1996, Mountains-1997, Seward-1997). AeroMetric (Homer-2004, Matanuska-Susitna Borough- 2004-2005; 2011; KEFJ 2007)
Publication_Date: 1996-2011
Title:
Two primary sources: Keani Peninsula (CODE = 1-33612; 60001-61509), USDA 17"x`17" B&W aerial photos (1996-1997). Matanuska-Susitna Borough (CODE = 70001-73500; 74369-97895) and Homer (CODE=50001-50741): AeroMetric (1985, 2004-2005, 2007, 2008-2013), or borrowed from Alaska NWI (CODE = 73501-74368). The 2011 photos were printed at 17" x 17" in true color (for CODE >80000 but < 100 000).
Source_Scale_Denominator:
1:24,000: Kenai Lowlands, Seward, Kenai Mountains (CODE = 1-33612; 60001-61509). Matanuska-Susitna Borough (CODE = 73501-74368), borrowed from US Fish and Wildlife Service National Wetlands Inventory
1:18,000: Matanuska-Susitna Borough (CODE = >70001 & < 100 000, but not 73501-74368- see above).
1:12,000: Kenai Fjords National Park (CODE = 10001-10020). Homer (CODE = 50001-50741)

Type_of_Source_Media: Aerial Photographs

Source_Contribution:
Basis for evaluation of wetland locations on the landscape. Initial line work drawn on plastic overlays on stereo-paired photographs. Approximately 20% of the wetlands with values in the field CODE in the range between 78000-80354, that are located near Willow and along the Willow-Fishook Road and were not covered by stereo-paired aerial

photography, thus were digitized heads-up using lines drawn on 24"x 24" stereo-paired aerial photos flown in 1985 as a guide.
Cloud_Cover: <1%

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: 38691

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: State Plane Coordinate System 1983
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: 1640416.666667
False_Northing: 0.000000
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 0.000000
Ordinate_Resolution: 0.000000
Planar_Distance_Units: survey feet
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Entity_Type_Label: Wetlands13
Entity_Type_Definition: Cook Inlet Lowland Wetlands mapped through 2013
Attribute:
Attribute_Label: FID
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:

Unrepresentable_Domain:
Sequential unique whole numbers that are automatically generated.
Attribute:
Attribute_Label: Shape
Attribute_Definition: Feature geometry.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Coordinates defining the features.
Attribute:
Attribute_Label: ACRES
Attribute_Definition: Area divided by 43,560
Attribute:
Attribute_Label: CODE
Attribute_Definition:
Unique Polygon Identifier. Please use when referencing a wetland polygon(s) in correspondence:
1-33612 = Kenai Lowlands
50001-50741 = Homer
60001-60600 = Seward
61002-61509 = Kenai Mountains
>70001, but <99999 = Matanuska - Susitna Borough
> 100,000 = Kenai Fjords, Exit Glacier Developed Area

Attribute:
Attribute_Label: MapUnit
Attribute_Definition: Name of Wetland Map Unit
Attribute_Definition_Source: This project
Attribute_Domain_Values: Visit: http://cookinletwetlands.info for updated information
See especially the Map Sheet 1: Wetlands and Climate available at:
http://cookinletwetlands.info/Downloads/Downloads.html
Enumerated_Domain: Note: suffix "c" indicates a created wetland; "d" indicates a significantly disturbed wetland.
Enumerated_Domain_Value: AMT
Enumerated_Domain_Value_Definition: Abandoned Meander Terrace, formed when riverbed elevation was much higher than modern
Depression Map Units:
Enumerated_Domain_Value: D1
Enumerated_Domain_Value_Definition: Depression dominated by ponded water
Enumerated _domain_value: D1-3
Enumerated _domain_value_definition: Depression with mixture of: ponded water, sedges, and shrubs
Enumerated _domain_value: D1-3c
Enumerated _domain_value_definition: Created Depression with mixture of: ponded water, sedges, and shrubs
Enumerated _domain_value: D1-4

Enumerated _domain_value_definition: Depression with mixture of: ponded water, sedges, shrubs, and forest
Enumerated _domain_value: D12
Enumerated _domain_value_definition: Depression with mixture of ponded water and sedges
Enumerated _domain_value: D14
Enumerated _domain_value_definition: Depression with mixture of ponded water and forest
Enumerated _domain_value: D1d
Enumerated _domain_value_definition: Significantly disturbed Depression dominated by ponded water
Enumerated _domain_value: D2
Enumerated _domain_value_definition: Sedge-dominated Depression
Enumerated _domain_value: D2-4
Enumerated _domain_value_definition: Depression with mixture of sedges, shrubs, and forest
Enumerated _domain_value: D21
Enumerated _domain_value_definition: Depression with mixture of sedges and ponded water, dominated by sedges
Enumerated _domain_value: D21c
Enumerated _domain_value_definition: Created Depression with mixture of sedges and ponded water, dominated by sedges
Enumerated _domain_value: D23
Enumerated _domain_value_definition: Depression with mixture of sedges and shrubs
Enumerated _domain_value: D23c
Enumerated _domain_value_definition: Created Depression with mixture of sedges and shrubs
Enumerated _domain_value: D23d
Enumerated _domain_value_definition: Significantly disturbed Depression with mixture of sedges and shrubs
Enumerated _domain_value: D24
Enumerated _domain_value_definition: Depression with mixture of sedges and forest
Enumerated _domain_value: D2d
Enumerated _domain_value_definition: Significantly disturbed Sedge-dominated Depression
Enumerated _domain_value: D3
Enumerated _domain_value_definition: Shrubby Depression
Enumerated _domain_value: D31
Enumerated _domain_value_definition: Shrubby Depression with areas of ponded water
Enumerated _domain_value: D32
Enumerated _domain_value_definition: Shrubby Depression with sedge-dominated areas
Enumerated _domain_value: D32c
Enumerated _domain_value_definition: Created Shrubby Depression with sedge-dominated areas
Enumerated _domain_value: D32d

Enumerated _domain_value_definition: Significantly disturbed Shrubby Depression with sedge-dominated areas
Enumerated _domain_value: D34
Enumerated _domain_value_definition: Shrubby Depression with forested areas
Enumerated _domain_value: D34d
Enumerated _domain_value_definition: Significantly disturbed shrubby Depression with forested areas
Enumerated _domain_value: D3d
Enumerated _domain_value_definition: Created Shrubby Depression
Enumerated _domain_value: D4
Enumerated _domain_value_definition: Forested Depression
Enumerated _domain_value: D41
Enumerated _domain_value_definition: Forested Depression with areas of ponded water

Enumerated _domain_value: D42
Enumerated _domain_value_definition: Forested Depression with sedge areas
Enumerated _domain_value: D43
Enumerated _domain_value_definition: Forested Depression with shrubby areas
Enumerated _domain_value: D4d
Enumerated _domain_value_definition: Significantly disturbed forested Depression
Enumerated _domain_value: DISTURB
Enumerated _domain_value_definition: Disturbed wetland such that original map unit is unidentifiable
Relict Glacial Drainageway Map Units:
Enumerated _domain_value: DW1
Enumerated _domain_value_definition: Drainageway dominated by ponded water
Enumerated _domain_value: DW1-3
Enumerated _domain_value_definition: Drainageway with areas of open water, sedges, and shrubs
Enumerated _domain_value: DW1-3d
Enumerated _domain_value_definition: Significantly disturbed Drainageway with areas of open water, sedges, and shrubs
Enumerated _domain_value: DW1-4
Enumerated _domain_value_definition: Drainageway with areas of open water, sedges, shrubs, and bluejoint reedgrass
Enumerated _domain_value: DW1-5
Enumerated _domain_value_definition: Drainageway with areas of open water, sedges, shrubs, bluejoint reedgrass and bog
Enumerated _domain_value: DW1-5A
Enumerated _domain_value_definition: Drainageway with areas of open water, sedges, shrubs, bluejoint reedgrass, bog, and forest
Enumerated _domain_value: DW12
Enumerated _domain_value_definition: Drainageway with open water and sedges
Enumerated _domain_value: DW13
Enumerated _domain_value_definition: Drainageway with areas of open water and shrubs

Enumerated _domain_value: DW12c
Enumerated _domain_value_definition: Created Drainageway with open water and sedges
Enumerated _domain_value: DW1c
Enumerated _domain_value_definition: Created Drainageway with open water
Enumerated _domain_value: DW2
Enumerated _domain_value_definition: Sedge-dominated Drainageway
Enumerated _domain_value: DW2-4
Enumerated _domain_value_definition: Drainageway with sedges, shrubs and bluejoint reedgrass
Enumerated _domain_value: DW2-5A
Enumerated _domain_value_definition: Drainageway with sedges, shrubs, bluejoint reedgrass, and forest
Enumerated _domain_value: DW21
Enumerated _domain_value_definition: Sedge-dominated Drainageway with areas of open water
Enumerated _domain_value: DW23
Enumerated _domain_value_definition: Sedge-dominated Drainageway with shrubby areas
Enumerated _domain_value: DW23d
Enumerated _domain_value_definition: Significantly disturbed Sedge-dominated Drainageway with shrubby areas
Enumerated _domain_value: DW24
Enumerated _domain_value_definition: Sedge-dominated Drainageway with areas of bluejoint reedgrass
Enumerated _domain_value: DW25
Enumerated _domain_value_definition: Sedge-dominated Drainageway with bog areas
Enumerated _domain_value: DW25A
Enumerated _domain_value_definition: Sedge-dominated Drainageway with forested areas
Enumerated _domain_value: DW2d
Enumerated _domain_value_definition: Significantly disturbed Sedge-dominated Drainageway
Enumerated _domain_value: DW3
Enumerated _domain_value_definition: Shrubby Drainageway
Enumerated _domain_value: DW31
Enumerated _domain_value_definition: Shrubby Drainageway with areas of ponded water
Enumerated _domain_value: DW32
Enumerated _domain_value_definition: Shrubby Drainageway with sedge-dominated areas
Enumerated _domain_value: DW3-5
Enumerated _domain_value_definition: Shrubby Drainageway with bluejoint reedgrass and bog areas
Enumerated _domain_value: DW35
Enumerated _domain_value_definition: Shrubby Drainageway with bog areas

Enumerated _domain_value: DW35A
Enumerated _domain_value_definition: Shrubby Drainageway with forested areas
Enumerated _domain_value: DW3-5A
Enumerated _domain_value_definition: Shrubby Drainageway with forested, bluejoint reed grass-dominated, and bog areas
Enumerated _domain_value: DW3T6
Enumerated _domain_value_definition: Shrubby Drainageway and Tidally influenced area dominated by Lyngbyeii sedge.
Enumerated _domain_value: DW3d
Enumerated _domain_value_definition: Created shrubby Drainageway
Enumerated _domain_value: DW4
Enumerated _domain_value_definition: Bluejoint Reedgrass Drainageway

Enumerated _domain_value: DW42
Enumerated _domain_value_definition: Bluejoint Reedgrass-dominated Drainageway with sedge-dominated areas
Enumerated _domain_value: DW43
Enumerated _domain_value_definition: Bluejoint Reedgrass-dominated Drainageway with shrubby areas
Enumerated _domain_value: DW45
Enumerated _domain_value_definition: Bluejoint Reedgrass-dominated Drainageway with areas of bog
Enumerated _domain_value: DW45A
Enumerated _domain_value_definition: Bluejoint Reedgrass-dominated Drainageway with forested areas
Enumerated _domain_value: DW4-5A
Enumerated _domain_value_definition: Bluejoint Reedgrass-dominated Drainageway with areas of bog and forest
Enumerated _domain_value: DW5
Enumerated _domain_value_definition: Bog margin Drainageway
Enumerated _domain_value: DW5d
Enumerated _domain_value_definition: disturbed Bog margin Drainageway
Enumerated _domain_value: DW52
Enumerated _domain_value_definition: Bog margin Drainageway with areas dominated by sedges
Enumerated _domain_value: DW53
Enumerated _domain_value_definition: Bog margin Drainageway with shrubby areas
Enumerated _domain_value: DW54
Enumerated _domain_value_definition: Bog margin Drainageway with areas dominated by forest
Enumerated _domain_value: DW55A
Enumerated _domain_value_definition: Bog margin Drainageway with forested areas
Enumerated _domain_value: DW5A
Enumerated _domain_value_definition: Forested Drainageway
Enumerated _domain_value: DW5A2

Enumerated _domain_value_definition: Forested Drainageway with areas dominated by sedges
Enumerated _domain_value: DW5A3
Enumerated _domain_value_definition: Forested Drainageway with shrubby areas
Enumerated _domain_value: DW5A3d
Enumerated _domain_value_definition: Significantly disturbed Forested Drainageway with shrubby areas
Enumerated _domain_value: DW5A4
Enumerated _domain_value_definition: Forested Drainageway with areas dominated by bluejoint reedgrass
Enumerated _domain_value: DW5A5
Enumerated _domain_value_definition: Forested Drainageway with bog margin
Enumerated _domain_value: DW5Ad
Enumerated _domain_value_definition: Significantly disturbed Forested Drainageway
Enumerated _domain_value: DWR
Enumerated _domain_value_definition: Complex Drainageway
Enumerated _domain_value: DWRd
Enumerated _domain_value_definition: Significantly disturbed complex Drainageway
Tidally-Influenced Drainageway Map Units: (see below for TDW units, where tidal influence dominates freshwater)
Enumerated _domain_value: DWT1
Enumerated _domain_value_definition: Drainageway with tidal influence dominated by ponded water
Enumerated _domain_value: DWT1-3
Enumerated _domain_value_definition: Drainageway with tidal influence with areas of ponded water, sedges, and shrubs
Enumerated _domain_value: DWT12
Enumerated _domain_value_definition: Drainageway with tidal influence dominated by ponded water and sedges
Enumerated _domain_value: DWT2
Enumerated _domain_value_definition: Sedge-dominated Drainageway with tidal influence
Enumerated _domain_value: DWT2-5A
Enumerated _domain_value_definition: Sedge-dominated Drainageway with tidal influence with sedge, shrubby, bluejoint reedgrass and forested areas
Enumerated _domain_value: DWT21
Enumerated _domain_value_definition: Sedge-dominated Drainageway with tidal influence with areas of ponded water
Enumerated _domain_value: DWT23
Enumerated _domain_value_definition: Sedge-dominated Drainageway with tidal influence with shrubby areas
Enumerated _domain_value: DWT23c
Enumerated _domain_value_definition: Created sedge-dominated Drainageway with tidal influence with shrubby areas
Enumerated _domain_value: DWT25A

Enumerated _domain_value_definition: Sedge-dominated Drainageway with tidal influence with forested areas
Enumerated _domain_value: DWT2d
Enumerated _domain_value_definition: Significantly disturbed sedge-dominated Drainageway with tidal influence
Enumerated _domain_value: DWT3
Enumerated _domain_value_definition: Shrubby Drainageway with tidal influence
Enumerated _domain_value: DWT32
Enumerated _domain_value_definition: Shrubby Drainageway with tidal influence with sedge-dominated areas
Enumerated _domain_value: DWT35A
Enumerated _domain_value_definition: Shrubby Drainageway with tidal influence with forested areas
Enumerated _domain_value: DWT45A
Enumerated _domain_value_definition: Forested Drainageway with tidal influence dominated by bluejoint reedgrass and forest
Enumerated _domain_value: DWT5A
Enumerated _domain_value_definition: Forested Drainageway with tidal influence
Enumerated _domain_value: DWT5A3
Enumerated _domain_value_definition: Forested Drainageway with tidal influence with shrubby areas
Enumerated _domain_value: DWT5Ad
Enumerated _domain_value_definition: Significantly disturbed Forested Drainageway with tidal influence
Enumerated _domain_value: DWTR
Enumerated _domain_value_definition: Complex Drainageway with tidal influence
Floating Island Map Unit:
*Enumerated _domain_value:*FI
Enumerated _domain_value_definition: Floating Island
Headwater Fen Map Units:
*Enumerated _domain_value:*H1
Enumerated _domain_value_definition: Headwater fen pond
Enumerated _domain_value: H12
Enumerated _domain_value_definition: Headwater fen with ponded water and sedges
Enumerated _domain_value: H1-3
Enumerated _domain_value_definition: Headwater fen with ponded water, sedges and shrubs
Enumerated _domain_value: H13
Enumerated _domain_value_definition: Headwater fen with ponded water and shrubs
Enumerated _domain_value: H2
Enumerated _domain_value_definition: Headwater fen dominated by sedges
Enumerated _domain_value: H21
Enumerated _domain_value_definition: Headwater fen dominated by sedges with areas of ponded water
Enumerated _domain_value: H23

Enumerated _domain_value_definition: Headwater fen dominated by sedges with shrubby areas
Enumerated _domain_value: H2-4
Enumerated _domain_value_definition: Headwater fen with sedges, shrubs, and forest
Enumerated _domain_value: H3
Enumerated _domain_value_definition: Shrubby Headwater fen
Enumerated _domain_value: H31
Enumerated _domain_value_definition: Shrubby Headwater fen with areas of ponded water
Enumerated _domain_value: H32
Enumerated _domain_value_definition: Shrubby Headwater fen with sedges
Enumerated _domain_value: H34
Enumerated _domain_value_definition: Shrubby Headwater fen with forested areas
Enumerated _domain_value: H4
Enumerated _domain_value_definition: Forested Headwater fen
Enumerated _domain_value: H42
Enumerated _domain_value_definition: Forested Headwater fen with areas dominated by sedges
Enumerated _domain_value: H43
Enumerated _domain_value_definition: Forested Headwater fen with shrubby areas
Kettle Map Units:
Enumerated _domain_value: K1
Enumerated _domain_value_definition: Kettle pond
Enumerated _domain_value: K1-3
Enumerated _domain_value_definition: Kettle with ponded water, sedges and shrubs
Enumerated _domain_value: K1-4
Enumerated _domain_value_definition: Kettle with ponded water, sedges, shrubs and forest
Enumerated _domain_value: K12
Enumerated _domain_value_definition: Kettle pond with sedge-dominated areas
Enumerated _domain_value: K12c
Enumerated _domain_value_definition: Created Kettle pond with sedge-dominated areas
Enumerated _domain_value: K13
Enumerated _domain_value_definition: Kettle pond with shrub-dominated areas
Enumerated _domain_value: K14
Enumerated _domain_value_definition: Kettle pond with forested areas
Enumerated _domain_value: K14d
Enumerated _domain_value_definition: Significantly disturbed Kettle pond with forested areas
Enumerated _domain_value: K1c
Enumerated _domain_value_definition: Created Kettle pond
Enumerated _domain_value: K1d
Enumerated _domain_value_definition: Significantly disturbed Kettle pond
Enumerated _domain_value: K2
Enumerated _domain_value_definition: Sedge-dominated Kettle
Enumerated _domain_value: K2c

Enumerated _domain_value_definition: Created sedge-dominated Kettle
Enumerated _domain_value: K2-4
Enumerated _domain_value_definition: Kettle with sedges, shrubs and forest
Enumerated _domain_value: K2-4c
Enumerated _domain_value_definition: Created Kettle with sedges, shrubs and forest
Enumerated _domain_value: K2-4d
Enumerated _domain_value_definition: Significantly disturbed Kettle with sedges, shrubs and forest
Enumerated _domain_value: K21
Enumerated _domain_value_definition: Sedge-dominated Kettle with areas of ponded water
Enumerated _domain_value: K21c
Enumerated _domain_value_definition: Created sedge-dominated Kettle with areas of ponded water
Enumerated _domain_value: K21d
Enumerated _domain_value_definition: Significantly disturbed sedge-dominated Kettle with areas of ponded water
Enumerated _domain_value: K23
Enumerated _domain_value_definition: Sedge-dominated Kettle with shrubby areas
Enumerated _domain_value: K23c
Enumerated _domain_value_definition: Created sedge-dominated Kettle with shrubby areas
Enumerated _domain_value: K23d
Enumerated _domain_value_definition: Significantly disturbed sedge-dominated Kettle with shrubby areas
Enumerated _domain_value: K24
Enumerated _domain_value_definition: Sedge-dominated Kettle with forested areas
Enumerated _domain_value: K3
Enumerated _domain_value_definition: Shrubby Kettle
Enumerated _domain_value: K31
Enumerated _domain_value_definition: Shrubby Kettle with areas of ponded water
Enumerated _domain_value: K31d
Enumerated _domain_value_definition: Significantly disturbed Shrubby Kettle with areas of ponded water
Enumerated _domain_value: K32
Enumerated _domain_value_definition: Shrubby Kettle with sedge-dominated areas
Enumerated _domain_value: K32d
Enumerated _domain_value_definition: Significantly disturbed Shrubby Kettle with sedge-dominated areas
Enumerated _domain_value: K34
Enumerated _domain_value_definition: Shrubby Kettle with forested areas
Enumerated _domain_value: K34d
Enumerated _domain_value_definition: Significantly disturbed shrubby Kettle with forested areas
Enumerated _domain_value: K3d
Enumerated _domain_value_definition: Significantly disturbed Shrubby Kettle

Enumerated _domain_value: K4
Enumerated _domain_value_definition: Forested Kettle
Enumerated _domain_value: K41
Enumerated _domain_value_definition: Forested Kettle with areas of ponded water
Enumerated _domain_value: K42
Enumerated _domain_value_definition: Forested Kettle with sedge-dominated areas
Enumerated _domain_value: K43
Enumerated _domain_value_definition: Forested Kettle with shrubby areas
Enumerated _domain_value: K43d
Enumerated _domain_value_definition: Significantly disturbed forested Kettle with shrubby areas
Enumerated _domain_value: K4d
Enumerated _domain_value_definition: Significantly disturbed forested Kettle
Enumerated _domain_value: LAKE
Enumerated _domain_value_definition: Open water greater than 20 acres (and deeper than 6 feet)

Relict Glacial Lakebed Map Units:

Enumerated _domain_value: LB1
Enumerated _domain_value_definition: Relict Glacial Lakebed pond
Enumerated _domain_value: LB1-3
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of ponded water, sedges, and sphagnum lawn
Enumerated _domain_value: LB1-4
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of ponded water, sedges, sphagnum lawn, and shrubs
Enumerated _domain_value: LB1-5
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of ponded water, sedges, sphagnum lawn, shrubs, and bluejoint reedgrass
Enumerated _domain_value: LB12
Enumerated _domain_value_definition: Relict Glacial Lakebed pond with areas of sedges
Enumerated _domain_value: LB13
Enumerated _domain_value_definition: Relict Glacial Lakebed pond with sphagnum lawn areas
Enumerated _domain_value: LB14
Enumerated _domain_value_definition: Relict Glacial Lakebed pond with shubby areas
Enumerated _domain_value: LB2
Enumerated _domain_value_definition: Sedge-dominated Relict Glacial Lakebed
Enumerated _domain_value: LB2d
Enumerated _domain_value_definition: Significantly disturbed sedge-dominated Relict Glacial Lakebed
Enumerated _domain_value: LB2-4
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of sedges, sphagnum lawn, and shrubs
Enumerated _domain_value: LB2-4d

Enumerated _domain_value_definition: Significantly disturbed Relict Glacial Lakebed with areas of sedges, sphagnum lawn, and shrubs
Enumerated _domain_value: LB2-5
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of sedges, sphagnum lawn, shrubs, and bluejoint reedgrass
Enumerated _domain_value: LB2-6
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of sedges, sphagnum lawn, shrubs, bluejoint reedgrass, and forest
Enumerated _domain_value: LB21
Enumerated _domain_value_definition: Sedge dominated Relict Glacial Lakebed with areas of ponded water
Enumerated _domain_value: LB23
Enumerated _domain_value_definition: Sedge dominated Relict Glacial Lakebed with areas of sphagnum lawn
Enumerated _domain_value: LB23d
Enumerated _domain_value_definition: Significantly disturbed Sedge dominated Relict Glacial Lakebed with areas of sphagnum lawn
Enumerated _domain_value: LB24
Enumerated _domain_value_definition: Sedge dominated Relict Glacial Lakebed with shrubby areas
Enumerated _domain_value: LB25
Enumerated _domain_value_definition: Sedge dominated Relict Glacial Lakebed with areas dominated by bluejoint reedgrass
Enumerated _domain_value: LB26
Enumerated _domain_value_definition: Sedge dominated Relict Glacial Lakebed with areas of forest
Enumerated _domain_value: LB26d
Enumerated _domain_value_definition: Disturbed Sedge dominated Relict Glacial Lakebed with areas of forest
Enumerated _domain_value: LB3
Enumerated _domain_value_definition: Sphagnum lawn on a Relict Glacial Lakebed
Enumerated _domain_value: LB31
Enumerated _domain_value_definition: Sphagnum lawn on a Relict Glacial Lakebed with areas of ponded water
Enumerated _domain_value: LB32
Enumerated _domain_value_definition: Sphagnum lawn on a Relict Glacial Lakebed with areas of sedges
Enumerated _domain_value: LB34
Enumerated _domain_value_definition: Sphagnum lawn on a Relict Glacial Lakebed with shrubby areas
Enumerated _domain_value: LB34d
Enumerated _domain_value_definition: Significantly disturbed Sphagnum lawn on a Relict Glacial Lakebed with shrubby areas
*Enumerated _domain_value:*LB36
Enumerated _domain_value_definition: Sphagnum lawn on a Relict Glacial Lakebed with forested areas

Enumerated _domain_value: LB3d
Enumerated _domain_value_definition: Significantly disturbed Sphagnum lawn on a Relict Glacial Lakebed
*Enumerated _domain_value:*LB3-6
Enumerated _domain_value_definition: Relict Glacial Lakebed with areas of Sphagnum lawn, shrubs and forest
Enumerated _domain_value: LB4
Enumerated _domain_value_definition: Shrubby Relict Glacial Lakebed
Enumerated _domain_value: LB4d
Enumerated _domain_value_definition: disturbed Shrubby Relict Glacial Lakebed
Enumerated _domain_value: LB41
Enumerated _domain_value_definition: Shrubby Relict Glacial Lakebed with areas o ponded water
Enumerated _domain_value: LB42
Enumerated _domain_value_definition: Shrubby Relict Glacial Lakebed with sedge-dominated areas
Enumerated _domain_value: LB43
Enumerated _domain_value_definition: Shrubby Relict Glacial Lakebed with areas of sphagnum lawn
Enumerated _domain_value: LB45
Enumerated _domain_value_definition: Shrubby Relict Glacial Lakebed with areas dominated by bluejoint reedgrass
Enumerated _domain_value: LB46
Enumerated _domain_value_definition: Shrubby Relict Glacial Lakebed with forested areas
Enumerated _domain_value: LB4-6
Enumerated _domain_value_definition: Relict Glacial Lakebed with shrub-dominated, bluejoint reedgrass-dominated, and forested areas
Enumerated _domain_value: LB5
Enumerated _domain_value_definition: Bluejoint reedgrass-dominated Relict Glacial Lakebed
Enumerated _domain_value: LB54
Enumerated _domain_value_definition: Bluejoint reedgrass-dominated Relict Glacial Lakebed with shrubby areas
Enumerated _domain_value: LB6
Enumerated _domain_value_definition: Forested Relict Glacial Lakebed
Enumerated _domain_value: LB62
Enumerated _domain_value_definition: Forested Relict Glacial Lakebed with areas of sedges
Enumerated _domain_value: LB63
Enumerated _domain_value_definition: Forested Relict Glacial Lakebed with sphagnum lawn areas
Enumerated _domain_value: LB63d
Enumerated _domain_value_definition: disturbed Forested Relict Glacial Lakebed with sphagnum lawn areas
Enumerated _domain_value: LB64

Enumerated _domain_value_definition: Forested Relict Glacial Lakebed with shrubby areas
Enumerated _domain_value: LB64d
Enumerated _domain_value_definition: Significantly disturbed forested Relict Glacial Lakebed with shrubby areas
Enumerated _domain_value: LB6d
Enumerated _domain_value_definition: Significantly disturbed Forested Relict Glacial Lakebed
Enumerated _domain_value: LB65
Enumerated _domain_value_definition: Forested Relict Glacial Lakebed with areas dominated by bluejoint reedgrass
Enumerated _domain_value: LBSF
Enumerated _domain_value_definition: Complex Relict Glacial Lakebed, often with patterned fen features
Late Snow Plateau Map Unit:
Enumerated _domain_value: LSP
Enumerated _domain_value_definition: Late Snow Plateau
Riverine Map Units:
Enumerated _domain_value: RAA
Enumerated _domain_value_definition: AA Stream (waterfall)
Enumerated _domain_value: RA
Enumerated _domain_value_definition: A Stream (cascade)
Enumerated _domain_value: RB
Enumerated _domain_value_definition: B Stream (riffle dominated)
Enumerated _domain_value: RC
Enumerated _domain_value_definition: C Stream (point bars, floodplain development)
Enumerated _domain_value: RD3C
Enumerated _domain_value_definition: D3 Stream channel (braided glacial)
Enumerated _domain_value: RD4C
Enumerated _domain_value_definition: D4 Stream channel (braided glacial)
Enumerated _domain_value: RD4SC
Enumerated _domain_value_definition: D4 Stream side channel (braided glacial)
Enumerated _domain_value: RD4F1
Enumerated _domain_value_definition: D4 Stream open water floodplain wetland (braided glacial)
Enumerated _domain_value: RD4F12
Enumerated _domain_value_definition: D4 Stream open water floodplain wetland with sedge-dominated areas (braided glacial)
Enumerated _domain_value: RD4F1-3
Enumerated _domain_value_definition: D4 Stream floodplain wetland with areas of open water, sedges and shrubs (braided glacial)
Enumerated _domain_value: RD4F1-4
Enumerated _domain_value_definition: D4 Stream floodplain wetland with areas of open water, sedges, shrubs and forest (braided glacial)
Enumerated _domain_value: RD4F1c

Enumerated _domain_value_definition: D4 Stream created open-water floodplain-wetland (braided glacial)
Enumerated _domain_value: RD4F2
Enumerated _domain_value_definition: D4 Stream sedge-dominated floodplain wetland (braided glacial)
Enumerated _domain_value: RD4F21
Enumerated _domain_value_definition: D4 Stream sedge-dominate floodplain wetland with open water areas (braided glacial)
Enumerated _domain_value: RD4F23
Enumerated _domain_value_definition: D4 Stream sedge-dominate floodplain wetland with shrubby areas (braided glacial)
Enumerated _domain_value: RD4F2-4
Enumerated _domain_value_definition: D4 Stream floodplain wetland with sedge, shrub and forested areas(braided glacial)
Enumerated _domain_value: RD4F2c
Enumerated _domain_value_definition: Created D4 Stream sedge-dominated floodplain wetland (braided glacial)
Enumerated _domain_value: RD4F3
Enumerated _domain_value_definition: D4 Stream shrubby floodplain wetland (braided glacial)
Enumerated _domain_value: RD4F32
Enumerated _domain_value_definition: D4 Stream shrubby floodplain wetland with sedge-dominated areas(braided glacial)
Enumerated _domain_value: RD4F34
Enumerated _domain_value_definition: D4 Stream shrubby floodplain wetland with forested areas(braided glacial)
Enumerated _domain_value: RD4F4
Enumerated _domain_value_definition: D4 Stream forested floodplain wetland (braided glacial)
Enumerated _domain_value: RD4F43
Enumerated _domain_value_definition: D4 Stream forested floodplain wetland with shrubby areas(braided glacial)
Enumerated _domain_value: RD4F4d
Enumerated _domain_value_definition: Significantly disturbed D4 Stream forested floodplain wetland (braided glacial)
Enumerated _domain_value: RD4T1
Enumerated _domain_value_definition: D4 Stream lower terrace (braided glacial)
Enumerated _domain_value: RD4T1d
Enumerated _domain_value_definition: Disturbed D4 stream lower terrace (braided glacial)
Enumerated _domain_value: RD4T12
Enumerated _domain_value_definition: D4 Stream lower and upper terraces (braided glacial)
Enumerated _domain_value: RD4T2
Enumerated _domain_value_definition: D4 Stream upper terrace (braided glacial)
Enumerated _domain_value: RD4T21

Enumerated _domain_value_definition: D4 Stream upper and lower terraces (braided glacial)
Enumerated _domain_value: RD4x
Enumerated _domain_value_definition: D4 Stream complex of units (braided glacial)
Enumerated _domain_value: RDA
Enumerated _domain_value_definition: Braided Stream channel on a peatland
Enumerated _domain_value: Rea
Enumerated _domain_value_definition: E Stream not discernable on 1:24,000 aerial photography (pool-dominated)
Enumerated _domain_value: Rea
Enumerated _domain_value_definition: Created E Stream not discernable on 1:24,000 aerial photography (pool-dominated)
Enumerated _domain_value: Reb
Enumerated _domain_value_definition: Bankfull E Stream (pool-dominated)
Enumerated _domain_value: Rel
Enumerated _domain_value_definition: Linear E Stream (pool-dominated)
Enumerated _domain_value: Reld
Enumerated _domain_value_definition: Significantly disturbed Linear E Stream (pool-dominated)
Enumerated _domain_value: Res
Enumerated _domain_value_definition: Sinuous E Stream (pool-dominated)
Enumerated _domain_value: Rib
Enumerated _domain_value_definition: River islands and bars
Enumerated _domain_value: Rt
Enumerated _domain_value_definition: Stream with tidal influence
VLD Trough Map Units:
Enumerated _domain_value: RT1
Enumerated _domain_value_definition: Ripple Trough pond
Enumerated _domain_value: RT1d
Enumerated _domain_value_definition: Significantly disturbed Ripple Trough pond
Enumerated _domain_value: RT1-3
Enumerated _domain_value_definition: Ripple Trough with ponded water, sedges and shrubs
Enumerated _domain_value: RT1-4
Enumerated _domain_value_definition: Ripple Trough with ponded water, sedges, shrubs and forest
Enumerated _domain_value: RT12
Enumerated _domain_value_definition: Ripple Trough with ponded water and sedges

Enumerated _domain_value: RT2
Enumerated _domain_value_definition: Sedge-dominated Ripple Trough
Enumerated _domain_value: RT2d
Enumerated _domain_value_definition: Disturbed sedge-dominated Ripple Trough
Enumerated _domain_value: RT2-4

Enumerated _domain_value_definition: Ripple Trough with sedges, shrubs, and forest

Enumerated _domain_value: RT21
Enumerated _domain_value_definition: Ripple Trough with ponded water and sedges
Enumerated _domain_value: RT23
Enumerated _domain_value_definition: Ripple Trough with sedges and shrubs
Enumerated _domain_value: RT23d
Enumerated _domain_value_definition: Significantly disturbed Ripple Trough with sedges and shrubs
Enumerated _domain_value: RT24
Enumerated _domain_value_definition: Ripple Trough with sedges and forest
Enumerated _domain_value: RT3
Enumerated _domain_value_definition: Shrubby Ripple Trough
Enumerated _domain_value: RT32
Enumerated _domain_value_definition: Shrubby Ripple Trough with sedge-dominated areas
Enumerated _domain_value: RT32d
Enumerated _domain_value_definition: Significantly isturbed Shrubby Ripple Trough with sedges
Enumerated _domain_value: RT34
Enumerated _domain_value_definition: Shrubby Ripple Trough with forested areas
Enumerated _domain_value: RT3d
Enumerated _domain_value_definition: Significantly disturbed Shrubby Ripple Trough
Enumerated _domain_value: RT4
Enumerated _domain_value_definition: Forested Ripple Trough
Enumerated _domain_value: RT42
Enumerated _domain_value_definition: Forested Ripple Trough with sedge-dominated areas
Enumerated _domain_value: RT43
Enumerated _domain_value_definition: Forested Ripple Trough with shrubby areas
Enumerated _domain_value: RT43d
Enumerated _domain_value_definition: Significantly disturbed Forested Ripple Trough with shrubby areas
Enumerated _domain_value: RT4d
Enumerated _domain_value_definition: Significantly disturbed Forested Ripple Trough
Enumerated _domain_value: RTd
Enumerated _domain_value_definition: Significantly disturbed Ripple Trough

Discharge Slope Map Units (in two parts, broken by Spring Fens, to preserve alphabetical order):

Enumerated _domain_value: SA
Enumerated _domain_value_definition: Alder-dominated Discharge Slope
Enumerated _domain_value: SAB
Enumerated _domain_value_definition: Alder and Birch-dominated Discharge Slope
Enumerated _domain_value: SAC
Enumerated _domain_value_definition: Alder and bluejoint-dominated Discharge Slope
Enumerated _domain_value: SAG
Enumerated _domain_value_definition: Alder and white spruce-dominated Discharge Slope

Enumerated _domain_value: SAL
Enumerated _domain_value_definition: Alder and Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SAM
Enumerated _domain_value_definition: Alder and black spruce-dominated Discharge Slope
Enumerated _domain_value: SAS
Enumerated _domain_value_definition: Alder and willow-dominated Discharge Slope
Enumerated _domain_value: SB
Enumerated _domain_value_definition: Birch-dominated Discharge Slope
Enumerated _domain_value: SBA
Enumerated _domain_value_definition: Birch and alder-dominated Discharge Slope
Enumerated _domain_value: SBd
Enumerated _domain_value_definition: Significantly disturbed Birch-dominated Discharge Slope
Enumerated _domain_value: SBG
Enumerated _domain_value_definition: Birch and White spruce-dominated Discharge Slope
Enumerated _domain_value: SBM
Enumerated _domain_value_definition: Birch and black spruce-dominated Discharge Slope
Enumerated _domain_value: SC
Enumerated _domain_value_definition: Bluejoint-dominated Discharge Slope
Enumerated _domain_value: SCA
Enumerated _domain_value_definition: Bluejoint and alder-dominated Discharge Slope
Enumerated _domain_value: SCG
Enumerated _domain_value_definition: Bluejoint and white spruce-dominated Discharge Slope
(more Discharge Slope Units below Spring Fen Units)
Spring Fen Map Units:
Enumerated _domain_value: SF1
Enumerated _domain_value_definition: Spring Fen pond/lake
Enumerated _domain_value: SF1-3
Enumerated _domain_value_definition: Spring Fen with pond, sedges, and shrubs
Enumerated _domain_value: SF1-4
Enumerated _domain_value_definition: Spring Fen with pond, sedges, shrubs, and forest
Enumerated _domain_value: SF12
Enumerated _domain_value_definition: Spring Fen with pond and sedges
Enumerated _domain_value: SF12d
Enumerated _domain_value_definition: Disturbed Spring Fen with pond and sedges
Enumerated _domain_value: SF1c
Enumerated _domain_value_definition: Created Spring Fen pond
Enumerated _domain_value: SF2
Enumerated _domain_value_definition: Sedge-dominated Spring Fen
Enumerated _domain_value: SF2-4
Enumerated _domain_value_definition: Spring Fen with sedges, shrubs, and forest

Enumerated _domain_value: SF2-4d
Enumerated _domain_value_definition: Disturbed Spring Fen with sedges, shrubs, and forest
Enumerated _domain_value: SF21
Enumerated _domain_value_definition: Sedge-dominated Spring Fen with areas of ponded water
Enumerated _domain_value: SF21d
Enumerated _domain_value_definition: Disturbed Sedge-dominated Spring Fen with areas of ponded water
Enumerated _domain_value: SF23
Enumerated _domain_value_definition: Sedge-dominated Spring Fen with shrubby areas
Enumerated _domain_value: SF23d
Enumerated _domain_value_definition: Disturbed Sedge-dominated Spring Fen with shrubby areas
Enumerated _domain_value: SF24d
Enumerated _domain_value_definition: Disturbed Sedge-dominated Spring Fen with forested areas
Enumerated _domain_value: SF2c
Enumerated _domain_value_definition: Created sedge-dominated Spring Fen
Enumerated _domain_value: SF2d
Enumerated _domain_value_definition: Disturbed sedge-dominated Spring Fen
Enumerated _domain_value: SF3
Enumerated _domain_value_definition: Shrubby Spring Fen
Enumerated _domain_value: SF31
Enumerated _domain_value_definition: Shrubby Spring Fen with areas of open water
Enumerated _domain_value: SF32
Enumerated _domain_value_definition: Shrubby Spring Fen with sedge-dominated areas
Enumerated _domain_value: SF34
Enumerated _domain_value_definition: Shrubby Spring Fen with forested areas
Enumerated _domain_value: SF3d
Enumerated _domain_value_definition: Disturbed Shrubby Spring Fen
Enumerated _domain_value: SF4
Enumerated _domain_value_definition: Forested Spring Fen
Enumerated _domain_value: SF42
Enumerated _domain_value_definition: Forested Spring Fen with sedge-dominated areas
Enumerated _domain_value: SF43
Enumerated _domain_value_definition: Forested Spring Fen with shrubby areas
Discharge Slope Map Units (con't):
Enumerated _domain_value: SG
Enumerated _domain_value_definition: White spruce-dominated Discharge Slope
Enumerated _domain_value: SGA
Enumerated _domain_value_definition: White spruce and alder-dominated Discharge Slope
Enumerated _domain_value: SGB
Enumerated _domain_value_definition: White spruce and birch-dominated Discharge Slope

Enumerated _domain_value: SGC
Enumerated _domain_value_definition: White spruce and bluejoint-dominated Discharge Slope
Enumerated _domain_value: SGM
Enumerated _domain_value_definition: White and black spruce-dominated Discharge Slope
Enumerated _domain_value: SGS
Enumerated _domain_value_definition: White spruce and willow-dominated Discharge Slope
Enumerated _domain_value: SL
Enumerated _domain_value_definition: Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SLd
Enumerated _domain_value_definition: Significantly disturbed Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SLA
Enumerated _domain_value_definition: Lutz spruce and alder-dominated Discharge Slope
Enumerated _domain_value: SLC
Enumerated _domain_value_definition: Lutz spruce and bluejoint reedgrass-dominated Discharge Slope
Enumerated _domain_value: SLCd
Enumerated _domain_value_definition: Significantly disturbed Lutz spruce and bluejoint reedgrass-dominated Discharge Slope
Enumerated _domain_value: SLM
Enumerated _domain_value_definition: Lutz and black spruce-dominated Discharge Slope
Enumerated _domain_value: SLMd
Enumerated _domain_value_definition: Significantly disturbed Lutz and black spruce-dominated Discharge Slope
Enumerated _domain_value: SLS
Enumerated _domain_value_definition: Lutz spruce and willow-dominated Discharge Slope
Enumerated _domain_value: SLSd
Enumerated _domain_value_definition: Significantly disturbed Lutz spruce and willow-dominated Discharge Slope
Enumerated _domain_value: SM
Enumerated _domain_value_definition: Black spruce-dominated Discharge Slope
Enumerated _domain_value: SMB
Enumerated _domain_value_definition: Black spruce and birch-dominated Discharge Slope
Enumerated _domain_value: SMBd
Enumerated _domain_value_definition: disturbed Black spruce and birch-dominated Discharge Slope
Enumerated _domain_value: SMC
Enumerated _domain_value_definition: Black spruce and Bluejoint reedgrass-dominated Discharge Slope

Enumerated _domain_value: SMd
Enumerated _domain_value_definition: Disturbed Black spruce-dominated Discharge Slope
Enumerated _domain_value: SMG
Enumerated _domain_value_definition: Black and white spruce-dominated Discharge Slope
Enumerated _domain_value: SML
Enumerated _domain_value_definition: Black and Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SMLd
Enumerated _domain_value_definition: Significantly disturbed Black and Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SMS
Enumerated _domain_value_definition: Black and Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SS
Enumerated _domain_value_definition: Willow-dominated Discharge Slope
Enumerated _domain_value: SSA
Enumerated _domain_value_definition: Willow and alder-dominated Discharge Slope
Enumerated _domain_value: SSG
Enumerated _domain_value_definition: Willow and white spruce-dominated Discharge Slope
Enumerated _domain_value: SSL
Enumerated _domain_value_definition: Willow and Lutz spruce-dominated Discharge Slope
Enumerated _domain_value: SSM
Enumerated _domain_value_definition: Willow and black spruce-dominated Discharge Slope
Enumerated _domain_value: SZ
Enumerated _domain_value_definition: High elevation Discharge Slope
Enumerated _domain_value: Spring
Enumerated _domain_value_definition: Spring
Tidal Map Units:
Enumerated _domain_value: T0
Enumerated _domain_value_definition: Tidal mud
Enumerated _domain_value: T04
Enumerated _domain_value_definition: Tidal mud with areas of alkalaigrass
Enumerated _domain_value: T05
Enumerated _domain_value_definition: Tidal mud with areas of Ramensk sedge
Enumerated _domain_value: T07
Enumerated _domain_value_definition: Tidal mud with areas of beachrye
Enumerated _domain_value: T0-4
Enumerated _domain_value_definition: Tidal mud, salt panne, creeping alkaligrass, arrowgrass-goosetongue, and alkalaigrass
Enumerated _domain_value: T1
Enumerated _domain_value_definition: Salt panne

Enumerated _domain_value: T1c
Enumerated _domain_value_definition: Created Salt panne
Enumerated _domain_value: T13
Enumerated _domain_value_definition: Salt panne, arrowgrass-goosetongue Tidal
Enumerated _domain_value: T14
Enumerated _domain_value_definition: Salt panne, alkalaigrass Tidal
Enumerated _domain_value: T17
Enumerated _domain_value_definition: Salt panne, beachrye Tidal
Enumerated _domain_value: T1-4
Enumerated _domain_value_definition: Salt panne, creeping alkaligrass, arrowgrass-goosetongue, alkalaigrass Tidal
Enumerated _domain_value: T2
Enumerated _domain_value_definition: Creeping alkalaigrass Tidal
Enumerated _domain_value: T23
Enumerated _domain_value_definition: Creeping alkaligrass, arrowgrass-goosetongue Tidal
Enumerated _domain_value: T2-4
Enumerated _domain_value_definition: Creeping alkaligrass, arrowgrass-goosetongue, alkalaigrass Tidal
Enumerated _domain_value: T3
Enumerated _domain_value_definition: Arrowgrass-goosetongue Tidal
Enumerated _domain_value: T32
Enumerated _domain_value_definition: Arrowgrass-goosetongue, creeping alkalaigrass Tidal
Enumerated _domain_value: T34
Enumerated _domain_value_definition: Arrowgrass-goosetongue, alkalaigrass Tidal
Enumerated _domain_value: T35
Enumerated _domain_value_definition: Arrowgrass-goosetongue, Ramensk sedge Tidal
Enumerated _domain_value: T3-5
Enumerated _domain_value_definition: Arrowgrass-goosetongue, alkalaigrass, Ramensk sedge Tidal
Enumerated _domain_value: T36
Enumerated _domain_value_definition: Goosetongue, Lyngbye's sedge Tidal
Enumerated _domain_value: T37
Enumerated _domain_value_definition: Goosetongue, beachrye Tidal
Enumerated _domain_value: T38
Enumerated _domain_value_definition: Arrowgrass-goosetongue, Pacific silverweed-speargrass Tidal
Enumerated _domain_value: T4
Enumerated _domain_value_definition: Alkalaigrass Tidal
Enumerated _domain_value: T4-6
Enumerated _domain_value_definition: Alkaligrass, Ramensk sedge, Lyngbye's sedge Tidal
Enumerated _domain_value: T41
Enumerated _domain_value_definition: Alkalaigrass, salt panne Tidal
Enumerated _domain_value: T42

Enumerated _domain_value_definition: Alkalaigrass, creeping alkalaigrass Tidal
Enumerated _domain_value: T43
Enumerated _domain_value_definition: Alkalaigrass, arrowgrass-goosetongue Tidal
Enumerated _domain_value: T45
Enumerated _domain_value_definition: Alkalaigrass, Ramensk sedge Tidal
Enumerated _domain_value: T46
Enumerated _domain_value_definition: Alkalaigrass, Lyngbye's sedge Tidal
Enumerated _domain_value: T5
Enumerated _domain_value_definition: Ramensk sedge Tidal
Enumerated _domain_value: T51
Enumerated _domain_value_definition: Ramensk sedge, saltpanne Tidal
Enumerated _domain_value: T53
Enumerated _domain_value_definition: Ramensk sedge, arrowgrass-goosetongue Tidal
Enumerated _domain_value: T54
Enumerated _domain_value_definition: Ramensk sedge, alkalaigrass
Enumerated _domain_value: T56
Enumerated _domain_value_definition: Ramensk sedge, Lyngbye's sedge Tidal
Enumerated _domain_value: T5-7
Enumerated _domain_value_definition: Ramensk sedge, Lyngbye's sedge, beachrye Tidal
Enumerated _domain_value: T58
Enumerated _domain_value_definition: Ramensk sedge, Pacific silverweed-speargrass Tidal
Enumerated _domain_value: T6
Enumerated _domain_value_definition: Lyngbye sedge Tidal
Enumerated _domain_value: T6d
Enumerated _domain_value_definition: Significantly disturbed Lyngbye sedge Tidal
Enumerated _domain_value: T6-8
Enumerated _domain_value_definition: Lyngbye sedge, Beachrye, Pacific silverweed Tidal
Enumerated _domain_value: T64
Enumerated _domain_value_definition: Lyngbye sedge, alkalaigrass Tidal
Enumerated _domain_value: T65
Enumerated _domain_value_definition: Lyngbye sedge, Ramensk's sedge Tidal
Enumerated _domain_value: T67
Enumerated _domain_value_definition: Lyngbye sedge, beachrye Tidal
Enumerated _domain_value: T69
Enumerated _domain_value_definition: Lyngbye sedge Tidal with upper Tidal
Enumerated _domain_value: T6A
Enumerated _domain_value_definition: Lyngbye sedge Tidal with alders
Enumerated _domain_value: T6DW3
Enumerated _domain_value_definition: Lyngbye sedge Tidal with Shrubby Relict Glacial Drainageway (precursor to TDW32 in Knik Arm)
Enumerated _domain_value: T7
Enumerated _domain_value_definition: Beachrye Tidal
Enumerated _domain_value: T7c

Enumerated _domain_value_definition: Created beachrye Tidal
Enumerated _domain_value: T73
Enumerated _domain_value_definition: Beachrye, arrowgrass-goosetongue Tidal
Enumerated _domain_value: T74
Enumerated _domain_value_definition: Beachrye, alkalaigrass Tidal
Enumerated _domain_value: T74d
Enumerated _domain_value_definition: Significantly disturbed beachrye, alkalaigrass Tidal
Enumerated _domain_value: T75
Enumerated _domain_value_definition: Beachrye - Ramensk's sedge Tidal
Enumerated _domain_value: T76
Enumerated _domain_value_definition: Beachrye, Lyngbye's sedge Tidal
Enumerated _domain_value: T78
Enumerated _domain_value_definition: Beachrye, Pacific silverweed-speargrass Tidal
Enumerated _domain_value: T78d
Enumerated _domain_value_definition: Significantly disturbed beachrye, Pacific silverweed-speargrass Tidal
Enumerated _domain_value: T8
Enumerated _domain_value_definition: Pacific silverweed-speargrass Tidal
Enumerated _domain_value: T86
Enumerated _domain_value_definition: Pacific silverweed-speargrass, Lyngbye sedge Tidal
Enumerated _domain_value: T8d
Enumerated _domain_value_definition: Significantly disturbed Pacific silverweed Tidal
Enumerated _domain_value: T9
Enumerated _domain_value_definition: Upper Tidal
Enumerated _domain_value: T96
Enumerated _domain_value_definition: Upper Tidal with Lyngbye sedge
Enumerated _domain_value: T98
Enumerated _domain_value_definition: Upper Tidal with Pacific silverweed-speargrass
Enumerated _domain_value: T9K3
Enumerated _domain_value_definition: Upper Tidal with shrubby Kettle
Enumerated _domain_value: T9LB3
Enumerated _domain_value_definition: Upper Tidal with Sphagnum-dominated Relict Glacial Lakebed
Enumerated _domain_value: T9SA
Enumerated _domain_value_definition: Upper Tidal with Alder Discharge Slope
Enumerated _domain_value: T9SC
Enumerated _domain_value_definition: Upper Tidal with bluejoint reedgrass Discharge Slope
Enumerated _domain_value: Tcs
Enumerated _domain_value_definition: Tidal coastal strip: sand/gravel/cobbles
Enumerated _domain_value: Tcsd
Enumerated _domain_value_definition: Significantly disturbed Tidal coastal strip
Enumerated _domain_value: TL
Enumerated _domain_value_definition: Tidal Lagoon

Enumerated _domain_value: TR
Enumerated _domain_value_definition: Tidal Gut
Tidally-Influenced Drainageway Map Units: (see above for DTW units, where freshwater influence dominates tidal)
Enumerated _domain_value: TDW1
Enumerated _domain_value_definition: Tidal Drainageway pond
Enumerated _domain_value: TDW1-3
Enumerated _domain_value_definition: Tidal Drainageway with pond, sedges, and shrubs
Enumerated _domain_value: TDW1-5A
Enumerated _domain_value_definition: Tidal Drainageway with pond, sedges, shrubs, and forest
Enumerated _domain_value: TDW12
Enumerated _domain_value_definition: Tidal Drainageway with pond and sedges
Enumerated _domain_value: TDW2
Enumerated _domain_value_definition: Sedge-dominated Tidal Drainageway
Enumerated _domain_value: TDW2-5A
Enumerated _domain_value_definition: Tidal Drainageway with sedges, shrubs, and forest
Enumerated _domain_value: TDW21
Enumerated _domain_value_definition: Sedge-dominated Tidal Drainageway with areas of ponded water
Enumerated _domain_value: TDW23
Enumerated _domain_value_definition: Sedge-dominated Tidal Drainageway with shrubby areas
Enumerated _domain_value: TDW3
Enumerated _domain_value_definition: Shrubby Tidal Drainageway
Enumerated _domain_value: TDW32
Enumerated _domain_value_definition: Shrubby Tidal Drainageway with sedge-dominated areas
Enumerated _domain_value: TDW35A
Enumerated _domain_value_definition: Shrubby Tidal Drainageway with forested areas
Enumerated _domain_value: TDW3c
Enumerated _domain_value_definition: Created Shrubby Tidal Drainageway
Enumerated _domain_value: TDW5A
Enumerated _domain_value_definition: Forested Tidal Drainageway
Enumerated _domain_value: TDW5A3
Enumerated _domain_value_definition: Forested Tidal Drainageway with shrubby areas
Wetland / Upland complexes:
Enumerated _domain_value: WU
Enumerated _domain_value_definition: Wetland / Upland Complex
Enumerated _domain_value: WU40
Enumerated _domain_value_definition: 40% Wetland / 60% Upland Complex
Enumerated _domain_value: WU50
Enumerated _domain_value_definition: 50% Wetland / 50% Upland Complex
Enumerated _domain_value: WU60

Enumerated _domain_value_definition: 60% Wetland / 40% Upland Complex
Enumerated _domain_value: WU70
Enumerated _domain_value_definition: 70% Wetland / 30% Upland Complex
Attribute_Label: legend
Attribute_Definition: 1 = visited with photograph; 0 = not visited, or no photo. Used for *.kmz legend definition
Attribute:
Attribute_Label: Photo
Attribute_Definition: Hyperlink to photo taken at wetland
Attribute:
Attribute_Label: GeoComp
Attribute_Definition:
Wetland geomorphic category, the highest level of the classification. There are 14 geomorphic categories defined in this classification
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: **Depression**
Enumerated_Domain_Value_Definition: Wetland in an ice-block depression not discernably connected to navigable waterway
Enumerated _domain_value: **Drainageway**
Enumerated _domain_value_definition: Wetland in a relict glacial drainageway feature
Enumerated _domain_value: **Drainageway / Tidal**
Enumerated _domain_value_definition: Wetland along Knik arm at the upper reaches of the extreme high tides of the 18.6 year tidal cycle where freshwater influence appears greater than tidal
Enumerated _Domain_Value: **Floating Island**
Enumerated _Domain_Value_Definition: Floating peat island on a lake
Enumerated _Domain_Value: **Headwater Fen**
Enumerated _Domain_Value_Definition: Peatland at the headwaters of a low-order stream, at or near treeline
Enumerated _domain_value: **Kettle**
Enumerated _domain_value_definition: Wetland in ice-block depression, discernably connected by other wetlands or surface water to a navigable waterbody
Enumerated _domain_value: **Lake**
Enumerated _domain_value_definition: Open waterbody greater than 20 acres (and deeper than six feet)
Enumerated _domain_value: **Lakebed**
Enumerated _domain_value_definition: Large peatland on relict glacial lake deposits
Enumerated _domain_value: **Late Snow Plateau**
Enumerated _domain_value_definition: Higher elevation willow-dominated wetland in the Caribou Hills, underlain by relatively impervious till; wetness maintained by late-season snowpack
Enumerated _domain_value: **Riverine**
Enumerated _domain_value_definition: Valley-bottom wetland adjacent to stream or river reach
Enumerated _domain_value: **VLD Trough**

Enumerated _domain_value_definition: Peatland in the trough of the Very Large Dune features (Weidmer, et al. 2010, Quaternary Research 73:413-424) in the Meadow-Beaver Lakes area near Wasilla, Alaska.
Enumerated _domain_value: **Discharge Slope**
Enumerated _domain_value_definition: Wetland over mineral soil on a slope, usually at a foot- or toeslope break where shallow groundwater discharges to near the surface
Enumerated _domain_value: **Spring Fen**
Enumerated _domain_value_definition: Wetland in an ice-block depression maintained by a steady supply of shallow groundwater. Confined to the area between about Wasilla and Palmer in the Matanuska Valley where potential evapotranspiration exceeds precipitation.
Enumerated _domain_value: **Tidal / Drainageway**
Enumerated _domain_value_definition: Wetland along Knik arm near the upper reaches of the extreme high tides of the 18.6 year tidal cycle where tidal influence appears greater than freshwater.
Enumerated _domain_value: **Wetland / Upland**
Enumerated _domain_value_definition: Wetland area greater than 30% in an area where wetlands mixed with uplands on a scale too small to delineate separately (values in MatSu map unit names indicate percentages of wetland to the nearest 10, estimated from imagery). These map units can be composed of wetlands in any geomorphic category, but Discharge Slope and Depression wetlands are the most common.
Enumerated _domain_value: **Tidal**
Enumerated _domain_value_definition: Wetland influenced by annual tidal cycle
Attribute:
Attribute_Label: DescLink
Attribute_Definition: URL for a description of the wetland type
Attribute:
Attribute_Label: FAQ
Attribute_Definition: Link to project Frequently Asked Questions page
Overview_Description:
Entity_and_Attribute_Overview:
Attributes include basic spatial information, such as area and perimeter, links to more information and photographs, and mapping unit designations.
Entity_and_Attribute_Detail_Citation: see: <http://cookinletwetlands.info/>

Distribution_Information:
Distributor:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Mike Gracz
Contact_Organization: Kenai Watershed Forum
Contact_Position: Wetland Program Manager
Contact_Address:
Address_Type: mailing address
Address: PO Box 15301
City: Fritz Creek

State_or_Province: AK
Postal_Code: 99603
Country: USA
Contact_Voice_Telephone: 907-235-3788
*Contact_Electronic_Mail_Address:*mike@kenaiwatershed.org
Hours_of_Service: 9-5 Alaska Time
Contact_Instructions: email preferred
Resource_Description: Downloadable Data
Distribution_Liability: User assumes responsibility for interpretation
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Format_Name: ARCG
Format_Version_Number: 10,x
Transfer_Size: 26.936
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
*Network_Resource_Name:*http://cookinletwetlands.info/Downloads/Downloads.html
Online_Computer_and_Operating_System: Windows
Ordering_Instructions: download from website: <http://cookinletwetlands.info/>
Custom_Order_Process: Contact: mike@kenaiwatershed.org
Technical_Prerequisites: ArcView 10.x

Metadata_Reference_Information:
Metadata_Date: 20100315
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization:
Keani Watershed Forum
Contact_Person: Mike Gracz
Contact_Address:
Address_Type:
Mailing address: PO Box 15301
City: Fritz Creek
State_or_Province: AK
Postal_Code: 99603
Contact_Voice_Telephone:
907-235-2218
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Time_Convention: local time
Metadata_Access_Constraints: None
Metadata_Use_Constraints: User assumes responsibility for interpretation

Metadata_Extensions:
Online_Linkage: <http://www.esri.com/metadata/esriprof80.html>
Profile_Name: ESRI Metadata Profile

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