Wetlands Delineation Report

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# Liberty Development Wetland Delineation Report Foggy Island Bay, Alaska

August 2015

Prepared for

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Prepared by



REGULATORY AND TECHNICAL SERVICES

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# ABBREVIATIONS

AES	ASRC Energy Services Alaska, Inc.
ANSRAM	Arctic North Slope Rapid Assessment Method
ARNI	Aquatic Resource of National Importance
ASA	Aquatic Site Assessment
CWA	Clean Water Act
EIUB	Estuarine Subtidal Unconsolidated Bottom
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
ft	feet
GIS	Geographic Information Services
GPS	Global Positioning System
HGM	Hydrogeomorphic
Hilcorp	Hilcorp Alaska, LLC
LIUBH	Lacustrine Limnetic Unconsolidated Bottom Permanently Flooded
M1UB	Marine Subtidal Unconsolidated Bottom
M2US	Marine Intertidal Unconsolidated Shore
N/A	not applicable
NWI	National Wetland Inventory
OBL	Obligate
OFS	Overall Functional Score
ORM	Operations and Maintenance Business Information Link Regulatory Module
PEM1B/C	Palustrine Emergent Persistent Saturated/ Seasonally Flooded
PEM1C	Palustrine Emergent Persistent Seasonally Flooded
PEM1H	Palustrine Emergent Persistent Permanently Flooded
PUBH	Palustrine Unconsolidated Bottom Permanently Flooded
R2UB	Riverine Lower Perennial Unconsolidated Bottom
TNW	Traditional Navigable Water
UPL	Upland
USACE	United States Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VSM	vertical support members
WOUS	Wetlands and Waters of the United States

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# **1.0 Executive Summary**

The purpose of this Wetlands and Waters of the United States (WOUS) Delineation Report is to support Hilcorp Alaska, LLC's (Hilcorp's) Liberty Development, east of Deadhorse, Alaska. This information was collected to determine the location and extent of wetlands and other WOUS in the project area which are potentially subject to the jurisdiction of the United States Army Corps of Engineers (USACE) under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act (CWA).

Hilcorp proposes to construct a self-contained offshore drilling and production facility located in the Beaufort Sea Outer Continental Shelf. A 12-inch sales oil pipeline inside a 16-inch outer pipe will transport crude oil from the facility to the Badami Sales Oil Pipeline. The offshore portion of the pipeline will be trenched. The overland portion of the pipeline will be trenched for 350 feet (ft) from the shoreline, and then elevated approximately 7 ft high on vertical support members (VSMs) for most of the remaining distance to the Badami tie-in. The onshore pipeline will go underneath a newly constructed gravel pad (approximately 50 ft x 35 ft) where it intersects with the Badami ice road. A second gravel pad (approximately 170 ft x 155 ft) will be constructed at the pipeline tie-in point with the Badami Pipeline. Hilcorp also proposes to mine gravel from a selected nearby site.

ASRC Energy Services Alaska, Inc., (AES) performed this wetlands and other WOUS delineation in accordance with the USACE Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Alaska Region (Version 2.0) (USACE 2007). AES's fieldwork and mapping efforts found the study area consists of wetlands and other WOUS, with no delineated uplands.

AES performed an Aquatic Site Assessment (ASA) based on the wetland functions and values described by the Arctic Slope Regional Corporation's Wetland Mitigation Bank's "Arctic North Slope Rapid Assessment Method" (ANSRAM). This method includes traditional evaluation of functions and values with specific elements of North Slope interest (e.g. subsistence, *Arctophila fulva*, disturbance impacts, and endangered species). The ASA found that there is a mix of Category I and II wetlands and other WOUS. The wetlands are mostly natural with no human disturbance; but are not rare for the region.

AES performed a review of Jurisdictional Determination for the wetlands under the latest regulatory guidance. The entire project area is found to be one large wetland/WOUS complex which is adjacent and neighboring to the Beaufort Sea, a territorial sea considered to be a Traditional Navigable Water (TNW).

# 2.0 Introduction

AES has been retained by Hilcorp to conduct wetlands delineation and ASA studies necessary for the CWA permitting. AES conducted a wetlands field survey and ASA for the onshore portion of the project July 22 - 23 and 29 - 30, 2015. The project area encompasses a larger study area than the proposed footprint to facilitate wetland avoidance and minimization evaluation during permitting.

Initially, potential wetlands were pre-mapped using aerial photography and past field experience. Field data was collected to confirm aerial signatures and alterations to the preliminary classifications were made. The focus of the 2015 effort was to determine potential jurisdictional wetlands and other WOUS within the study area.

Hilcorp proposes to construct a self-contained offshore drilling and production facility located in the Beaufort Sea Outer Continental Shelf. A 12-inch sales oil pipeline inside a 16-inch outer pipe will transport crude oil from the facility to the onshore Badami Sales Oil Pipeline. The offshore portion of the pipeline will be trenched. The overland portion of the pipeline will be trenched for 350 ft from the shoreline, and then elevated approximately 7 ft high on VSMs for most of the remaining distance to the Badami tie-in. The onshore pipeline will go underneath a newly constructed gravel pad (approximately 50 ft x 35 ft) where it intersects with the Badami ice road. A second gravel pad (approximately 170 ft x 155 ft) will be constructed at the pipeline tie-in point with the Badami Pipeline. Hilcorp also proposes to mine gravel from a selected nearby site.

## 3.0 Methods

Wetland field determinations were made using the USACE Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Alaska Region (Version 2.0) (USACE 2007).

### 3.1 Literature Review and Desktop Analysis

Prior to the field investigation, existing public information was reviewed to gain specific background knowledge and to identify the potential for wetlands to occur in the study corridor. Documents evaluated as part of the review include, but were not limited to the following:

- U.S. Fish and Wildlife Service (USFWS) (2015) National Wetland Inventory (NWI) maps, digital datasets, and hardcopy maps
- U.S. Geological Survey (USGS) Digital Raster Graphics (i.e., topographic maps)
- Exploratory Soil Survey of Alaska (Rieger et al. 1979)
- Wetland plant lists, including: National List of Vascular Plant Species that Occur in Wetlands, Region A (Reed 1988), the 1997 USFWS update (Reed 1997), and The National Wetland Plant List (Lichvar 2015)
- Wetland Delineation Protocols, including: USACE Wetlands Delineation Manual, Technical Report Y-87-1 (Environmental Laboratory 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Alaska Region (USACE 2007)
- Existing Geographic Information Services (GIS) layers, including: water bodies, contours, and roads
- Existing Land Status GIS layers, including: State of Alaska, Bureau of Land Management, and Native Allotments.

### 3.2 Pre-mapping

Scientists pre-mapped the study area based on interpretation of aerial photos. This effort was completed by digitizing wetland boundaries in a GIS geodatabase. Wetland types and boundaries were determined based on the following set of parameters:

- Vegetation patterns: Communities of vegetation display habitat breaks; with wetland communities adapted to saturated conditions generally having low plant height.
- Visual evidence of saturated soils: Surface water is identified directly and darkened areas in the photography strongly indicate saturated conditions. The proximity to open water, streams, and marshes was also used as an indicator.
- Topography: Evidence of depressions, toes of slopes, and relatively flat areas indicate areas of potentially poor drainage of soils.

Determinations of upland areas will be made by scientists when the aerial photography lack evidence of soil saturation, or topographic conditions indicate areas of well-drained soils.

Once pre-mapping of the corridor was completed, AES placed wetland determination points in areas to confirm and modify pre-mapping. Wetland determination points were uploaded to a Global Positioning System (GPS) device for field data collection.

## 3.3 Field Confirmation Survey

A field study was conducted to confirm and modify the wetland mapping. At each wetland point a detailed assessment of the wetland parameters was conducted and recorded on USACE Wetland Determination Data Forms specific to the Alaska Region. For wetlands, this includes filling out all relevant entries on the Wetland Determination Data Form and the Wetlands Functional Assessment Data Sheet. Soil pits were dug at each wetland determination data point to facilitate soil data collection. AES also documented other WOUS such as streams and deepwater habitats that do not meet the definition of a wetland. Observation points were completed where vegetation, hydrology, and general site characteristics are similar to places where a full point was completed. In large study areas, observation points allow field personnel to use their best professional judgment to extrapolate data from Full Points into other similar areas.

Field determination of wetlands were based on the three-parameter approach using vegetative, hydric soils, and hydrological characteristics, as described in the USACE Wetlands Delineation Manual (Environmental Laboratory 1987) and Alaska Regional Supplement (USACE 2007). Unless a data point is located in an area considered to be atypical, a problem area, or a deep-water or stream habitat, all three field indicators (hydrophytic vegetation, hydric soils, and wetland hydrology) must be present to be defined as a wetland using current approved methodology.

## 3.3.1 Vegetation

Hydrophytic vegetation includes macrophytic plants adapted to habitats where frequency and duration of inundation or soil saturation exerts strong selective pressures on plant species presence/absence. At each data collection point, plant species were identified using the following reference materials:

- Alaska Trees and Shrubs (Viereck and Little 2007)
- Wetland Sedges of Alaska (Tande and Lipkin 2003)
- Field Guide to Alaskan Wildflowers (Pratt 1989)
- Toolik Field Station Herbarium (Institute of Arctic Biology 2015)

Percent cover of vegetation was estimated within a designated radius of the sample point. A plant indicator status, as designated by the USFWS, was assigned to each plant species from the following categories: Obligate Wetland (OBL), Facultative Wetland (FACW), Facultative (FAC), Facultative Upland (FACU), and Obligate Upland (UPL). The vegetation community was evaluated using the Dominance Test Indicator and the Prevalence Index Indicator method (USACE 2007). The Dominance Test Indicator is more appropriate for plant communities dominated by only a few individuals. The prevalence test is more comprehensive; it accounts for all species present in the plot. Vegetation was considered hydrophytic if either test is satisfied, unless a disturbed or problematic wetland situation exists.

### 3.3.2 Soils

Hydric soils are generally saturated, flooded, or ponded long enough during the growing season to become anaerobic in the upper soil horizon. Soils were sampled and evaluated for hydric soil indicators at all full points. Primary hydric soil indicators in Alaska include histosols, histic epipedons, hydrogen sulfide, thick dark surface, Alaska gleyed, Alaska Redox, and Alaska gleyed pores (USACE 2007). At wetland determination data points soil pits were excavated using a shovel or soil auger to a depth sufficient to document the presence or absence of hydric soil field indicators. Soil matrix color and redoximorphic features were identified according to Munsell Soil Color Charts (2009). Soil pits are

generally excavated to a minimum of 20 inches below ground surface. However, soil pits may be analyzed to a shallower depth if a restrictive or confining layer is encountered, or deeper than 20 inches if it is required to confirm the presence of a field indicator. The soil profile was described on the USACE data sheet.

#### 3.3.3 Hydrology

Wetland hydrology indicators show that water accumulates at or near the surface for extended periods during the growing season. Direct observations of wetland hydrology are often limited during some portions of the growing season, but typical primary indicators include: surface water, high water table or saturation, water marks, sediment deposits, or drift deposits. These are particularly difficult during 2015, which was a low precipitation year for the area. Typical secondary indicators can include: drainage patterns, oxidized or reduced root channels, stunted or stressed plant cover, water-stained leaves or sediment deposits, and presence of reduced iron. Field indicators of hydrology are satisfied if one primary or two secondary field indicators are observed. Certain indicators present throughout the year can be used to confirm the occurrence of saturation or inundation for periods of time, which satisfy USACE wetland delineation criteria (Environmental Laboratory 1987; USACE 2007).

## 3.4 Wetland Aquatic Site Assessment (a.k.a. Functions and Values)

Wetland 'aquatic site assessments' and 'functions and values assessments' are different terms for the same regulatory requirements. Our assessment methodology focuses on providing a rapid Level 1 quantitative assessment over the wetland functions and values described by the ANSRAM method (below). Conceptually the wetland is broken into parts, and evaluated on a series of questions about wetland functions and values. These responses determine the relative value of the wetland. Wetlands determined to be 'exceptional habitat' are automatically rated at the highest value. Finally, if necessary, a disturbance shadow is incorporated (similar to the Anchorage Credit and Debit method) to account for impact zones around non-pristine wetlands.

To use this methodology, each wetland parcel is mapped into general Cowardin units following the NWI system and assigned separate hydrogeomorphic (HGM) classifications (Magee 1998). These HGM classes (Riverine, Depressional, Lacustrine Fringe, Tidal Fringe, Slope, and Flat) break wetlands into their broad functional differences. This component of the assessment is important because not all HGM classes perform a particular function to the same level as another HGM class. Grouping wetlands by HGM allows for a consistent approach. It is important to understand that while each wetland was grouped by HGM, they still maintained their Cowardin class (e.g. Flat PSS1C or Depressional PUBH).

Each wetland provides a combination of the following 10 functions and values depending on its specific role in the ecosystem (as described in the ANSRAM):

- Flood flow alteration
- Sediment removal
- Nutrient and toxicant removal
- Erosion control and shoreline stabilization
- Production of organic matter and its export
- General habitat suitability
- General fish habitat
- Native plant richness

- Educational or scientific value
- Uniqueness and heritage

A rapid qualitative assessment is conducted over the 10 standard wetland functions and values to evaluate the level of service the wetland provides to the ecosystem. These yes/no/not-applicable questions evaluate the wetland on basic observable characteristics which are displayed by typical wetlands with high service levels for the particular function or value.

Depending on the individual wetland and/or the HGM classification, some evaluation questions may be determined to be 'Not Applicable' (on a case by case basis). For example, large rivers rarely have >50 percent aerial cover of herbaceous plant coverage. It is important while evaluating a wetland to remember the difference between a wetland poorly providing a function (rating of 'no') and a wetland not naturally providing a function (rating of 'N/A', not applicable). A 'no' rating is an indication of dysfunction.

Once the rapid qualitative assessment is complete, an individual score is calculated for each of the 10 functions. Each functions' evaluation questions are averaged to generate an individual function or value score (Yes = 1, No = 0, N/A = not included in the average). Then all of the wetland functions and value individual scores are averaged over the individual wetland to generate the preliminary Overall Functional Score (OFS). This preliminary OFS combines the 10 standard wetland functions and values. Again, functions and values evaluated as not applicable are not included in the average.

Exceptionally important habitat (Section 3.4.1) or local disturbance category (Section 3.4.2) is also incorporated into the rapid assessment by adjusting the preliminary OFS to generate a final OFS (Section 3.4.3). This ensures accurate representation for these difficult to quantify wetland impacts.

### 3.4.1 Exceptional Habitat Designation

The analysis can designate wetlands as 'exceptional habitat' (and an automatic full rating) for a variety of reasons. If any agency considers the wetland to be an Aquatic Resource of National Importance (ARNI), the rating is automatically fulfilled. The habitat can also be exceptional if the area is considered irreplaceable or has unique features not found anywhere else on the North Slope. This exceptional designation allows project managers to incorporate these rare habitat designations into the evaluation.

### 3.4.2 Disturbance Category

The evaluation of existing disturbance impacts near a wetland was based off of the methodology of the Anchorage Debit Credit Method (Dean 2011). First, disturbances are mapped on the project. Then disturbance categories are evaluated from Table 3.4-1, and translated into buffers around the disturbance and the Impact Factor (Table 3.4-2). The preliminary OFS is then adjusted for local disturbance/development (preliminary OFS \* Impact Factor = final OFS). These methods incrementally decrease the value of a wetland due to different types of disturbances and their proximity to the wetland.

#### Table 3.4-1 Disturbance Categories

	Type of Activity	Activity Detail	Disturbance Category
None	No activity	N/A	0
Commercial	Motel, office building, restaurant, storage facility, store	N/A	3
Industrial	Heavy equipment parking, repair, storage	N/A	
	Manufacturing	N/A	
	Material extraction, processing, storage, treatment, disposal	N/A	3
	Office building	N/A	
Transportation &	Automobile	Driveway, non-residential	
Shipping		Parking lot	3
		Road, including associated trails	5
	Aviation facility	Airport	
	Culverted crossing	Diameter ≥ bankfull width	2
		Diameter < bankfull width	
	Port facility	Dock	3
	Railroad	Loading/unloading, office, storage	
		Track (away from rail facilities)	2
Utilities	Office building	N/A	3
	Substation	N/A	2
	Utility line	≤ 10 feet wide surface disturbance and winter construction (only if new)	1
		> 10 feet wide surface disturbance or non-winter construction (only if new)	2

#### Notes:

Extend a 300-feet buffer from edge of existing impact zone to see if there is contact with wetland area. Evaluate disturbance impacted polygon separately.

If there is more than one disturbance activity for a polygon (i.e., if there are multiple activities), use the activity with the highest disturbance category score present, the total is not cumulative.

Impact Factor									
Disturbance Cate	Disturbance Category Impact Facto								
0	=	1							
1	=	0.99							
2	=	0.95							
3	=	0.9							

#### Table 3.4-2 Disturbance Category and Impact Factor

#### 3.4.3 Final OFS

The final OFS provides a simple quartile category (I/II/III/IV) with a point estimate ranging from 0 - 1.00 to provide a repeatable quantitative evaluation for all of the functions and values the wetland provides to the ecosystem (Table 3.4-3).

S	cale and Categ	gory
OFS	Category	
0.76 - 1.00		Highest Value
0.51 - 0.75	II	
0.26 - 0.50		
0 - 0.25	IV	Lowest Value

# Table 3.4-3 Final Overall Functional Score (OFS) Scale and Category

### 3.5 Post-Field Mapping

Field data was collected using GPS units and hard copy field maps. These locations and wetland data were electronically transferred to the existing geodatabase. The field data was used to update existing wetland mapping with new information (including functional assessment data). These updated data were incorporated into the geodatabase containing all project wetlands data. The wetlands mapping was then used to calculate approximate acreage of wetlands located in the project area.

#### 3.6 Jurisdictional Determination

The USACE regulates wetlands and other WOUS that are under their jurisdiction. The Environmental Protection Agency (EPA) guidance outlines that the USACE has jurisdiction in eight specific cases (CFR 2015):

"The first three types of jurisdictional waters, traditional navigable waters, interstate waters, and the territorial seas, are jurisdictional by rule in all cases.

The fourth type of water, impoundments of jurisdictional waters, is also jurisdictional by rule in all cases.

The next two types of waters, "tributaries" and "adjacent" waters, are jurisdictional by rule, as defined, because the science confirms that they have a significant nexus to traditional navigable waters, interstate waters, or territorial seas. For waters that are jurisdictional by rule, no additional analysis is required.

The final two types of jurisdictional waters are those waters found after a case-specific analysis to have a significant nexus to traditional navigable waters, interstate waters, or the territorial seas, either alone or in combination with similarly situated waters in the region."

While in the field, wetland scientists observed jurisdictional relationships, and provided jurisdiction opinions (see Section 4) under agency guidance, which defines (CFR 2015):

- "Adjacent" as: bordering, contiguous, or neighboring, including waters separated from other "waters of the United States" by constructed dikes or barriers, natural river berms, beach dunes and the like.
- "Neighboring" as: (1) Waters located in whole or in part within 100 feet of the ordinary high water mark of a traditional navigable water, tributary, etc. (2) Waters located in the 100-year floodplain and that are within 1,500 feet of the ordinary high water mark of a traditional navigable water, tributary, etc. ("floodplain waters"). (3) Waters located within 1,500 feet of the high tide line of a traditional navigable water or the territorial seas

AES created the Operations and Maintenance Business Information Line Regulatory Module (ORM) spreadsheet for the USACE. AES listed a new line for each polygon delineated in the study. The "Waters\_Name" is a concatenation of (Cowardin Code) with (FoggyIslandBay) with (GIS FID Number). If a different ORM input strategy is desired, we can work with the USACE to deliver the needed information.

# 4.0 Results

Field investigations were conducted on July 22 - 23 and 29 - 30, 2015 at multiple field points. Data was only collected on the second field trip, as fog was too dense to fly on the first field trip. These dates align with the recommended field sampling conditions for the area to observe maximum hydrology (USACE 2007). Field conditions were drier than normal, as yearly precipitation was below usual averages (Table 4.0-1). This dry year was an important consideration while observing wetland soil and hydrology indicators.

	January	February	March	April	Мау	June	July
1986-1999	0.2"	0.17"	0.14"	0.08"	0.09"	0.39"	0.68"
2015	0	0	0	0	0.07"	0.27"	0.05"

 Table 4.0-1
 Average Total Precipitation (in) for Deadhorse, Alaska (WRCC 2015)

### 4.1 Wetlands

Foggy weather limited field efforts, but data was collected at 13 sample points. These points were spaced throughout the project area and are documented in Appendix A and field mapping in Appendix B. Table 4.1-1 is a summary of the wetland determinations made at each of these sites and acreages found over the project. Waters of the United States, including streams, lakes, and ponds were mapped using aerial photography and information gathered from the sites.

Table 4.1-1	Wetlands ar	nd Waters of th	he United	States Sam	ple Points

-			Onshore/Nearshore Section 10/404	Offshore Section 10
Туре	Full Points	Observation Points	Acres	Acres
Wetlands				
Emergent:				
PEM1B/C	1, 2, 4, 6, 7, 8, 10	-	1,044.14	
PEM1C	3, 5	-	356.76	
PEM1H	9	-	172.25	
PUBH	Aerial/Satellite observations	-	82.25	
Other Waters of the Uni	ted States	·		
Lower Perennial River:R2UB	-	4B	7.73	
Lake: L1UBH	-	5B	179.93	
Marine: M1UB, M2US	-	3B	1,080.81	225.19
Estuarine: E1UB	Aerial/Satellite observations	-	23.95	

PEM1B/C: Palustrine Emergent Persistent Saturated/Seasonally Flooded

PEM1C: Palustrine Emergent Persistent Seasonally Flooded

PEM1H: Palustrine Emergent Persistent Permanently Flooded

PUBH: Palustrine Unconsolidated Bottom Permanently Flooded

R2UB: Riverine Lower Perennial Unconsolidated Bottom

L1UBH: Lacustrine Limnetic Unconsolidated Bottom Permanently Flooded

M1UB: Marine Subtidal Unconsolidated Bottom

M2US: Marine Intertidal Unconsolidated Shore

E1UB: Estuarine Subtidal Unconsolidated Bottom

#### 4.1.1 Emergent Wetlands (PEM1B/C, PEM1C, PEM1H)

Emergent wetlands are dominated by herbaceous angiosperms, and are the primary vegetated ecosystem in the project area. Different types of emergent wetlands were observed due to the interaction of permafrost and variances in hydrologic regime on the landscape.

Wetlands with saturated hydrological regimes (PEM1B/C) are characterized by having soils periodically saturated with water during the growing season. These had the greatest variety in characteristics over the study area. Almost all of these had patterned ground formed from ice wedges being thrust to the surface, creating small rises and depressions throughout the area. We examined the rises and depressions for the possibility of wetland/upland mosaics, but found that the highest, driest rises still had wetland vegetation and soil characteristics. Saturation and/or high water tables were found in the depressions of the patterned ground. These PEM1B/C areas had a variety of vegetation, including very low shrubs such as *Salix* and *Arctous*, and herbs like *Eriophorum* and *Carex*. Soil profiles tended to have shallow permafrost, with organics observed. Hydrology is expected to perch on top of the shallow permafrost during spring snowmelt, flooding, and/or precipitation events to create anoxic conditions during the growing season.

Wetlands with seasonally flooded hydrological regimes (PEM1C) are characterized by having soils seasonally inundated with water during the growing season. These areas had greater high centered polygon topographic relief. We examined the high parts of these polygons for the possibility of upland/wetland mosaics; but found no evidence to support that type of problematic wetland. The depressions indicated evidence of seasonal flooding. PEM1C wetlands had a large number of very small shrubs present including small *Salix* and *Dryas*, along with large amounts of *Carex*. Soil profiles consisted of histic epipedons, with ~8 inches of saturated fibric organic and deeper layers of darker mineral soils. These are due to the colder arctic temperatures and the anaerobic conditions due to the seasonal flooding.

Wetlands with permanently flooded hydrological regimes (PEM1H) are characterized by having soils frequently inundated with water during the growing season. These were low centered polygonal tundra, with large polygons and shallow water tables. These areas have relatively deep permafrost (15 inches) and thick layers of fibric organic material developed from the longer anaerobic conditions caused by permanent flooding. Few shrubs were present and vegetation consisted of *Carex* and *Eriophorum*.

#### 4.1.2 Ponds (PUBH)

Ponds are a special type of wetlands in depressional areas with unconsolidated bottoms and permanently flooded hydrological regimes. When compared to lakes; ponds are shallower, so that air (rather than water) is the principal medium where plants grow in (Cowardin 1979). On the North Slope, ponds are often less than 20 acres large. There are a great number of ponds in the project area. These have a variety of wetland dependent plants supporting waterfowl and other types of wildlife. Observation of ponds are considered evidence enough of wetland presence, and we do not dig soil pits in them. Typically, in winter free water can be present in ponds on the North Slope deeper than 5 ft.

#### 4.1.3 Rivers (R2UB)

Riverine systems are present in the study area, with bed and bank features and ordinary high water lines. These river systems convey waters through the flat topography to the Beaufort Sea. These are low gradient systems, and water velocity is slow. Water may flow throughout the year; but given the harsh conditions of the Arctic, some flow may be seasonal. The substrate was observed to be sand and mud.

No signs of fish were observed, and the Alaska Department of Fish and Game does not list Anadromous Fish Streams in the study area.

## 4.1.4 Lakes (L1UBH)

Lakes are permanently flooded lands where water (rather than air [in the case of ponds]) is the primary medium plants grow in (Cowardin 1979). Lakes have complicated characteristics on the North Slope, often with very shallow banks, large littoral zones, and polygonal bathymetry due to the underlying permafrost. Some lakes freeze solid during the winter, while others are deep enough to have free water at depths greater than 5 feet. On the North Slope, lakes are often greater than 20 acres. The large littoral zones of lakes were found to often support dense habitats of aquatic vegetation. Aerial observation of lakes was considered evidence to support delineation, and we do not dig soil pits to support their documentation.

#### 4.1.5 Marine (M1UB, M2US)

The northern area of the project is the Beaufort Sea. This saltwater TNW is the dominate habitat for the project. It is fairly shallow, cold, and abuts the shoreline with small (3-5 foot) bluffs where permafrost is eroding into the ocean. Cold arctic winds circulate, keeping vegetation small and stunted, and the majority of the year the ocean is covered in sea ice. The Beaufort Sea was observed to be bordering, contiguous, or neighboring the entire wetland complex that is the project area.

## 4.1.6 Estuary (E1UB)

On the far western edge of the project area is a small estuary system which appears to hold brackish water, and be the floodplain for some riverine systems. These areas are important transition zones between salt and freshwater environments, and provide a location for turbidity to fall out prior to entering the ocean. These locations can also provide some fish species overwintering habitat. As freshwater areas freeze shut, estuaries can be refuges for typically salt water species.

## 4.2 Arctophila fulva

*Arctophila fulva* is an herbaceous plant which is of particular interest to conservation agencies due to its importance to waterfowl habitat. This plant has been identified to be important for many species including Endangered Species Act Steller's eiders; which seasonally inhabit the North Slope. Studies near Barrow have found that most (80 percent) Steller's eider broods are in *Arctophila fulva* habitat (Quakenbush et al. 2004).

While conducting our wetland survey we observed and noted the presence/absence of *Arctophila fulva* in the study area (Appendix B). In the study area *Arctophila fulva* is found at the edges between L1UBH-PEM1B/C and R2UB-PEM1B/C wetland areas. It is also found in the non-polygonal M2US-PEM1B/C wetland areas near the northwest of the project area. These are where wetlands border bodies of water that have seasonal periods of surface water. In these locations, *Arctophila fulva* is dense and ubiquitous where it has not been heavily grazed. Many flocks of waterfowl and geese were observed in the *Arctophila fulva* areas.

*Arctophila fulva* was not found in central region of the study area, where proposed development is planned. These non-*fulva* areas are along the L1UBH-PEM1B/C or L1UBH-PEM1H border areas. These habitats have better banks; without the gently increasing gradient in water depth that *Arctophila fulva* appears to prefer.

The *Arctophila fulva* areas are present on the western half of the study area, with a small presence around the unnamed river on the far eastern edge (Appendix B, Figure 2-23). We hypothesize that this species occupies a specific ecological niche. Areas must not be too dry or too wet for growth. A gradient in water depth appears to be important. Waterfowl and geese were observed only in the *Arctophila fulva* areas, which align with Ducks Unlimited research (Ducks Unlimited Inc 1998).

## 4.3 Aquatic Site Assessment

The ASA (Table 4.3-1, Appendix C) found that most of the wetlands were pristine and high functioning; but not: rare, unique, being used for science, or under threat from upstream sediments or toxins. All other WOUS (marine, estuaries, lakes, and rivers) in Alaska are automatically rated as Category I.

One disturbance was delineated, the Badami Pipeline, which borders the study area on the southern boundary. No disturbance was observed to wetlands in the area. Wetlands were evaluated with the disturbance buffer; but it was found that they rated the same category as without the disturbance buffer. For simplicity, we propose not to include disturbance buffers on this project.

The wetlands rated highly due to erosion control, flood flow alteration, general habitat, and native plants. All of the categories reflect that the habitats had high densities of vegetation, which was well rooted, pristine, and native. These provide great wildlife habitat, especially for waterfowl and caribou.

Some wetlands were not found to have all the characteristics needed for North Slope Category I classifications. Primarily, these wetlands are not rare for the North Slope, and similar habitats are found over millions of acres in the same Alaskan North Slope wetland complex. The wetland functions provided by these wetlands are not unique, and do not comprise a significant portion of the wetland services provided by the entire North Slope. These wetlands also do not have toxin or sediment threats observed; which are key to being high valued for those two functions. Finally, while mostly pristine, these wetlands have little evidence of being used for science or education. Science or education efforts tend to take place closer to logistic centers; as travel to the study area is difficult and expensive.

Wetlands in the project area are evaluated as Category I or II (Table 4.3-1 and Table 4.3-2). We also mapped the areas of Marine Boulder Patches and *Arctophila fulva* as Category I+, to illustrate their location (Appendix B). According to previous USACE guidance, sample ratios for compensatory mitigation may be (USACE 2015):

- Category I or II:
  - o 3:1 for Preservation and
  - 2:1 for Restoration/Enhancement
- Category II or III:
  - 2:1 for Preservation and
  - 1:1 for Restoration/Enhancement

Table	able 4.5-1 Aqualic one Assessment. Sample Fonts													
Sample Point	WЭН	Cowardin	Flood Flow Alteration	Sediment Removal	Nutrient and Toxicant Removal	Erosion Control and Shoreline Stabilization	Production of Organic Matter and its Export	General Habitat Suitability	General Fish Habitat	Native Plant Richness	Educational or Scientific Value	Uniqueness and Heritage	Final Overall Functional Score	Category
1	Flats	PEM1B/C	0.67	0.60	0.67	1.00	0.75	0.60	N/A	1.00	1.00	0.43	0.746	II
2	Flats	PEM1B/C	0.67	0.60	0.67	1.00	0.75	0.80	N/A	1.00	1.00	0.71	0.800	
3	Flats	PEM1C	0.80	0.40	0.67	1.00	0.80	1.00	N/A	1.00	1.00	0.71	0.820	
4	Flats	PEM1B/C	0.43	0.60	0.67	0.33	0.80	0.80	N/A	1.00	1.00	0.71	0.705	II
5	Flats	PEM1C	0.71	0.60	0.67	1.00	0.60	1.00	N/A	1.00	1.00	0.43	0.779	
6	Flats	PEM1B/C	0.80	0.40	0.67	1.00	0.60	1.00	N/A	1.00	1.00	0.57	0.782	
7	Flats	PEM1B/C	0.67	0.40	0.33	1.00	0.60	1.00	N/A	1.00	1.00	0.71	0.746	I
8	Flats	PEM1B/C	0.67	0.40	0.67	1.00	0.80	1.00	N/A	1.00	1.00	0.57	0.789	I
9	Flats	PEM1H	0.71	0.60	0.67	1.00	1.00	1.00	N/A	1.00	1.00	0.57	0.839	I
10	Flats	PEM1B/C	0.50	0.20	0.33	1.00	0.40	1.00	N/A	1.00	1.00	0.29	0.635	II

 Table 4.3-1
 Aquatic Site Assessment: Sample Points

#### Table 4.3-2 Aquatic Site Assessment: Total Study Area

Туре	Acres	Functional Category	Sample Point
Wetlands			
PEM1B/C	619.89	I	2, 6, 8
FEMID/C	424.25	II	1, 4, 7, 10
PEM1C	356.76	I	3, 5
PEM1H	172.25	I	9
PUBH	82.25	I	-
Waters of the United State	S		
Lower Perennial River: R2UB	7.73	I	-
Lake: L1UBH	179.93	I	-
Marine: M1UB, M2US	1,306.00		-
Estuarine: E1UB	23.95	I	-

## 4.4 Jurisdictional Determination

The presence of wetlands and other WOUS were analyzed under the USACE/EPA CWA Guidance described in the methods.

The TNW relevant to this study is the Beaufort Sea, which is the northern border of the study area. All wetlands were observed to be adjacent to the Beaufort Sea. All other WOUS were observed to be tributaries to the Beaufort Sea. All other WOUS had bed and bank features and indicators of ordinary high water marks.

The entire project area is found to be one large wetland/WOUS complex which is adjacent and neighboring to the Beaufort Sea, a territorial sea considered to be a TNW.

Due to these findings, our study finds that all wetlands and other WOUS in the study area are jurisdictional and that the USACE will assert jurisdiction under Section 10 of the Rivers and Harbors Act and Section 404 of the CWA. The ORM input datasheet is included as Appendix D.

# 5.0 Discussion

This report is the result of fieldwork and analysis conducted to support Hilcorp's Liberty Development. The report describes the results of field data collected in the summer of 2015, aerial photography, and many years of experience delineating wetlands and associated habitats on the North Slope. We provide our analysis and results for the wetland delineation, ASA, and jurisdictional status following the latest USACE and EPA guidance. We conducted more detailed analysis for a species of particular conservation concern (*Arctophila fulva*) and describe where the species is located in the project area. At this time proposed development is expected to avoid areas of *Arctophila fulva*. We conclude that there is a mix of Category I and II wetlands and other WOUS in the project area; which are mostly natural with no human disturbance, but are not rare for the region. The USACE appears to have jurisdiction due to all of the wetlands and other WOUS being adjacent and neighboring to the WOUS complex flowing into the Beaufort Sea.

The study area is subject to the jurisdiction of the USACE under Section 10 of the Rivers and Harbors Act and Section 404 of the CWA. The offshore marine waters (>3 nautical miles) are subject to Section 10 of the CWA. The nearshore marine waters (<3 nautical miles) are subject to Section 10 and Section 404 of the CWA. The onshore wetlands and other WOUS are subject to the Section 404 of the CWA.

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Appendix A Data Points This page intentionally left blank

	WETLAND DE	FERMINAT	ION DATA F	ORM – Al	aska Region		
Project/Site:	Hilcorp Liberty	Noi	th Slope Borough	Sampling Date:	7/29/2015		
Applicant/Owner:		Hilcorp		Sampling Point	t:	1	
Investigator(s):	Ryan Cooper, Kiel Kenning	5	Landform (hi	illside, terrace	, hummocks, etc.)	Flat	
Local relief (concave,	convex, none) Beach		Slope (%)	0			
Subregion:	Arctic Coastal Plain	Lat	70.21357	Long	g 147.7293	Datum	N/A
Soil Map Unit Name		N/A			NWI Classifie	cation PE	M1B/C
Are climatic / hydrologic	c conditions on the site typical for this	time of year?	Yes	x No	(If no, explain in ]	Remarks.)	
Are Vegetation	Soil or Hydrology	significantly di	isturbed?	Are '	Normal Circumstances" p	resent? Yes x	No
Are Vegetation	Soil or Hydrology				eded, explain any answers		
SUMMARY OF FI	NDINGS – Attach site map s	howing samp	oling point loc	cations, tra	nsects, important fe	atures, etc.	
Hydrophytic Vegetat	tion Present? Yes x	No		Is the Sar	npled Area		
Hydric Soil Present?	Yes x	No			Wetland? Yes	x No	
Wetland Hydrology	Present? Yes x	No					
Remarks		835-83	38 Near beach with	h primary yeg	etation		
VEGETAT	ION – Use 3/3 abbreviations. L					D Lowest % cov	er.
		Absolute	Dominant	Indicator	Dominance Test wor		
Tree Stratum		% Cover	Species?	Status?	Number of Dominant S		1
1 2					Are OBL, FACW, o	or FAC:	(A)
3					Total Number of Domin		1
4			-	_	Across All Stra	ita:	(B)
4					Percent of Dominant Sp	10	00%
Couling (Church Church	tum 50% of total cover		)/ _f	0	Are OBL, FACW, or		(A/B)
Sapling/Shrub Strat	1011 50% of total cover	0 209	% of total cover	0	Prevalence Index w		- le , he
2					Total % Cover of OBL species 80	,	ply by: 80
3					- ···· ···		
4					FACW species 15 FAC species 0		30 0
5					FAC species0FACU species0		0
6					UPL species 0		0
	Total C	over 0			Column Totals: 95		110 (B)
Herb Stratum	50% of total cover		% of total cover	0	Prevalence Index	· · ·	.16
1 arcful	Arctophila fulva	80	YES	OBL	Hydrophytic Vegetat		
2 erivag	Eriophorum vaginatum	15	NO	FACW	Y Dominance Test is >		
3					Y Prevalence Index is		
4					Morphological Adap	tations <sup>1</sup> (Provide s	supporting
5					data in Remarks or o	· · ·	
6					Problematic Hydroph	nytic Vegetation (E	xplain)
7					<sup>1</sup> Indicators of hydric soi		ology must
8					be present unless disturb	ed or problematic.	
9							
10							
· · · · · · · · · · · · · · · · · · ·	Total C	over 95	-		Hydrophytic		
	50% of total cover	47.5 209	% of total cover	19	Vegetation Present? Y	es x No	
Plot size (radius, or	length x width) 100ft radius	% E	Bare Ground	20	11050111		
% Cover of Wetla	nd Bryophytes 0	Total Cover of	Bryophytes	0			
Remarks		Unker	wn carex with no s	and hands (50	104.)		
		UIKIO	will calex with 110 s	seed neads (30	70)		

#### SOIL

Sampling Point

1

Profile Desc		the depth	needed to document the		confirm the	absence	of indicators.)	
Depth	Matrix			edox Features		2		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-17					_			Fibric Organic
					_			
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS=Co	vered or Coate	d Sand Grain	ns. <sup>2</sup> I	Location: PL=Po	re Lining, M=Matrix.
Hydric Soil	l Indicators:	7	Indicators for Prob	lematic Hydri	ic Soils: <sup>3</sup>			
X Histoso	ol or Histel (A1)			Change (TA4)				Gleyed Without Hue 5Y or Redder
	Epipedon (A2)			Swales (TA5)				ving Layer
	gen Sulfide (A4)			With 2.5Y Hu	e		Other (1	Explain in Remarks)
	Dark Surface (A12)							
	Gleyed (A13)		<sup>3</sup> One indicator of hy					
	Redox (A14)		appropriate landscap	-	-	inless dist	urbed or probler	natic.
	Gleyed Pores (A15)		<sup>4</sup> Give details of colo	or change in Re	marks.			
Restrictive	e Layer (if present):							
Types:			Permafrost				Hydric So	il Present? Yes x No
Depth (in	iches):		17					
Remarks								
		Saturat	ion inferred from the loc	ation, permafro	ost and all the	e hydrolog	gy indicators. The	is is a dry summer.
HYDR	OLOGY							
Wetland Hy	drology Indicators:						Secondary Ind	icators (2 or more required)
Primary Ind	licators (any one ind	icator is su	fficient)				Water-sta	ined Leaves (B9)
x Surface	e Water (A1)		x Inundation Visible	on Aerial Ima	gery (B7)		x Drainage	Patterns (B10)
x High W	Vater Table (A2)		Sparsely Vegetated	d Concave Surf	face (B8)		Oxidized	Rhizospheres along Living Roots (C3)
x Saturat	tion (A3)		Marl Deposits (B1	5)			Presence	of Reduced Iron (C4)
x Water	Marks (B1)		Hydrogen Sulfide	Odor (C1)			Salt Depo	sits (C5)
	ent Deposits (B2)		Dry-Season Water	Table (C2)			Stunted of	r Stressed Plants (D1)
	Deposits (B3)		Other (Explain in 1					nic Position (D2)
	Mat or Crust (B4)	I		,			^	Aquitard (D3)
	eposits (B5)						Mieroton	ographic Relief (D4)
	e Soil Cracks (B6)						EAC New	tral Test (D5)
					-		X FAC-Neu	
	ater Present?	Yes x	No Depth (incl		0	_		
		Yes x	No Depth (incl		0	_		
	Present? (includes ary fringe)	Yes x	No Depth (incl	nes)	0	W	etland Hydrolo	gy Present? Yes x No
		auge, moni	oring well, aerial photos	previous inspe	ections) if a	 /ailable:		
	June (Stream g			, <u>,</u>				
Remarks								
i contar Ko								
	I	Dry year. Sa	turation was not observe	d in the pit; but	surface wat	er was ob	served near the p	bit in the same habitat.

#### WETLAND DETERMINATION PHOTO FORM – Alaska Region

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015					
Applicant/Owner	r: Hilcorp	Sampling Point:	1					
Investigator(s):	Ryan Cooper, Kiel Kenning							
Remarks								
	835-838 Near beach with primary vegetation							





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	WETLAND DETER	MINATI	ON DATA F	ORM – Al	aska Region		
Project/Site:	Hilcorp Liberty		Borough/City:	Nor	th Slope Borough	Sampling Date:	7/29/2015
Applicant/Owner:		Hilcorp			Sampling Point:		2
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hi	illside, terrace,	e, hummocks, etc.) Hummocks		
Local relief (concave	, convex, none) High and low microt	оро	Slope (%)	0			
Subregion:	Arctic Coastal Plain Lat		70.2064	Long	g147.71385	Datum	N/A
Soil Map Unit Name		N/A			NWI Classific	ation Pl	EM1B/C
Are climatic / hydrolog	ic conditions on the site typical for this time	of year?	Yes	x No	(If no, explain in R	emarks.)	_
Are Vegetation	Soil or Hydrology sign	nificantly dis	sturbed?	Are "	Normal Circumstances" pro	esent? Yes x	No
Are Vegetation		nificantly pro			eded, explain any answers	,	
SUMMARY OF FI	INDINGS – Attach site map show	ing samp	ling point loc	cations, tra	nsects, important fea	atures, etc.	
Hydrophytic Veget	ation Present? Yes x No			Is the San	npled Area		
Hydric Soil Present					Wetland? Yes	x No	
Wetland Hydrology	Present? Yes x No						
Remarks	339-842. Hummocks near beach. Not a uplar	d/wetland m	natrix due to wetla	and plants and	soils being everywhere (A	laska Supplemen	t Definition)
VEGETA	TION – Use 3/3 abbreviations. List si	ubregion (a	above) for indi	cator status	List plants Highest to	Lowest % cov	/er.
		Absolute	Dominant	Indicator	Dominance Test work	sheet:	
Tree Stratum		% Cover	Species?	Status?	Number of Dominant Sp		4
2					Are OBL, FACW, or	FAC:	(A)
3	-			_	Total Number of Domina		6
4					Across All Strat	a:	(B)
+	T + 1 C	0			Percent of Dominant Spe		67%
Conline/Chaph Sta	atum 50% of total cover 0	0	of total across	0	Are OBL, FACW, or Prevalence Index wo		(A/B)
Sapling/Shrub Str 1 dryint	Dryas integrifolia	30	o of total cover YES	FACU	Total % Cover of:		inly by
2 arcrub	Arctous ruber	10	YES	FAC	OBL species 0	x 1 =	iply by: 0
3 salova	Salix ovalifolia	10	YES	FAC	FACW species 10	x = x = 2	20
4					FAC w species 10 FAC species 20	x 2 = x 3 =	20 60
5					FACU species 40	x 3 = x 4 =	160
6					UPL species 0	x = x = 5	0
	Total Cover	50			Column Totals: 70	(A)	240 (B)
Herb Stratum	50% of total cover 25		of total cover	10	Prevalence Index =	. ,	3.43
1 equsci	Equisetum scirpoides	10	YES	FACU	Hydrophytic Vegetati		5.15
2 arcarc	Arctanthemum arcticum	5	YES	FACW	Y Dominance Test is >5		
3 erivag	Eriophorum vaginatum	5	YES	FACW	No Prevalence Index is $\leq$		
4					Morphological Adapt	ations <sup>1</sup> (Provide	
5					data in Remarks or or	•	
6					Problematic Hydroph	ytic Vegetation (I	Explain)
7					<sup>1</sup> Indicators of hydric soil		
8					be present unless disturbe	d or problematic	
9							
10							
ų – <b>1</b>	Total Cover	20			Hydrophytic		
	50% of total cover 10	20%	of total cover	4	Vegetation Present? Ye	s x No	
Plot size (radius, c	or length x width) 100ft raadius	% B	are Ground	20	r resent?		
% Cover of Wetl	and Bryophytes 0 Tota	al Cover of I	Bryophytes	0			
Remarks		1		and has 1- (10)	00/ )		
		unknow	n carex with no se	eed neads (100	1%0)		

#### SOIL

Sampling Point

2

Donth	Matrix		R	edox Features				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8				, •	- 71-			Fibric Organic
8-17	10YR3/2							Loamy sand
0-17	1011072							
Type: C=Co	oncentration, D=Deple	tion, RM=	Reduced Matrix, CS=Co	vered or Coated	l Sand Grain	ns. <sup>2</sup> I	location: PL=Po	re Lining, M=Matrix.
lydric Soil	l Indicators:		Indicators for Prob	lematic Hydri	c Soils: <sup>3</sup>			
Histosc	ol or Histel (A1)		Alaska Color C	Change (TA4) <sup>4</sup>				Gleyed Without Hue 5Y or Redder
	Epipedon (A2)		Alaska Alpine	Swales (TA5)			Underly	ying Layer
	gen Sulfide (A4)			With 2.5Y Hue			Other (	Explain in Remarks)
- · ·								
	Dark Surface (A12)							
	Gleyed (A13)		<sup>3</sup> One indicator of hy-					
Alaska	Redox (A14)		appropriate landscap	-	-	unless dist	turbed or problem	matic.
Alaska	Gleyed Pores (A15)		<sup>4</sup> Give details of colo	or change in Re	narks.		-	
Restrictive	e Layer (if present):							
Types:			Permafrost				H-d-t-C	PD Decement 9 March 19 March 1
Depth (in	iches):		17				Hydric So	oil Present? Yes x No
Remarks	Histic epipedon due		l under fibric organic. Sa					
HYDR	COLOGY		l under fibric organic. Sa				s are expected in	n cold climates.
HYDR fetland Hy	COLOGY drology Indicators:	the	l under fibric organic. Sa highest, dryest site that c				s are expected in Secondary Ind	n cold climates. icators (2 or more required)
HYDR fetland Hy imary Ind	COLOGY drology Indicators: licators (any one indi	the	l under fibric organic. Sa highest, dryest site that c ufficient)	could be found i	n the area. 7		s are expected in Secondary Ind Water-sta	n cold climates. icators (2 or more required) ined Leaves (B9)
HYDR etland Hyd imary Ind	COLOGY drology Indicators: licators (any one indi e Water (A1)	the	l under fibric organic. Sa highest, dryest site that c ifficient) x Inundation Visible	on Aerial Imag	n the area. <sup>7</sup> gery (B7)		s are expected in Secondary Ind Water-sta Drainage	n cold climates. icators (2 or more required) ined Leaves (B9) Patterns (B10)
HYDR etland Hy imary Ind Surface	COLOGY drology Indicators: licators (any one indi e Water (A1) Vater Table (A2)	the	l under fibric organic. Sa highest, dryest site that c ifficient) x Sparsely Vegetated	on Aerial Imag	n the area. <sup>7</sup> gery (B7)		s are expected in Secondary Ind Water-sta Drainage Oxidized	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3)
HYDR etland Hyd imary Ind Surface High W	COLOGY drology Indicators: licators (any one indi e Water (A1) Vater Table (A2) ion (A3)	the	l under fibric organic. Sa highest, dryest site that c ifficient) x Inundation Visible Sparsely Vegetatec Marl Deposits (B1	on Aerial Imag Concave Surfa 5)	n the area. <sup>7</sup> gery (B7)		s are expected in Secondary Ind Water-sta Drainage Oxidized Presence	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
HYDR etland Hy imary Ind Surface High W Saturat Water I	COLOGY drology Indicators: licators (any one indi e Water (A1) Water Table (A2) ion (A3) Marks (B1)	the	l under fibric organic. Sa highest, dryest site that c ifficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide	on Aerial Imag l Concave Surf 5) Odor (C1)	n the area. <sup>7</sup> gery (B7)		s are expected in Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo	n cold climates. icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5)
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HYDR Vetland Hy rimary Ind x Surface X High W X Saturat Water I Sedime Drift D Algal M Iron De Surface Surface Wa Water Tab	COLOGY drology Indicators: licators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) Deposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ater Present?	the cator is su Yes x	l under fibric organic. Sa highest, dryest site that c fficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in l No Depth (incl	on Aerial Imag d Concave Surfa 5) Odor (C1) Table (C2) Remarks)	an the area. 7 gery (B7) ace (B8)	Thin layer	s are expected in Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo x Stunted of Geomorp x Shallow 4 x Microtop FAC-Net	n cold climates. icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4)
HYDR Yetland Hy rimary Ind X Surface X High W X Saturat Water I Sedime Drift D Algal M Iron De Surface Surface Wa Water Tab	COLOGY drology Indicators: licators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) peposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ater Present? Present? (includes ary fringe)	Yes x Yes x Yes x	l under fibric organic. Sa highest, dryest site that c ifficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in l No Depth (inch	on Aerial Imag d Concave Surfa 5) Odor (C1) Table (C2) Remarks) nes)	0 0 0	Thin layer	s are expected in Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo x Stunted of Geomorp x Shallow 4 x Microtop FAC-Net	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) ttral Test (D5)
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#### WETLAND DETERMINATION PHOTO FORM – Alaska Region

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015						
Applicant/Own	er: Hilcorp	Sampling Point:	2						
Investigator(s):	Ryan Cooper, Kiel Kenning								
Remarks									
	839-842. Hummocks near beach. Not a upland/wetland matrix due to wetland plants and soils being everywhere (Alaska Supplement Definition)								





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	WETLAND DETEI	RMINAT	ION DATA F	FORM – Al	aska Region		
Project/Site:	Hilcorp Liberty		Borough/City:	Nor	th Slope Borough	Sampling Date:	7/29/2015
Applicant/Owner:		Hilcorp			Sampling Point:		3
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hi	Landform (hillside, terrace, hummocks, etc.)			eaves
Local relief (concave, c	convex, none) Highs and Lows		Slope (%)	0			
Subregion:	Arctic Coastal Plain Lat		70.20286	Long	g 147.69737	Datum	N/A
Soil Map Unit Name		N/A			NWI Classificat	tion 1	PEM1C
Are climatic / hydrologic	conditions on the site typical for this time	of year?	Yes	x No	(If no, explain in Re	marks.)	
Are Vegetation	Soil or Hydrology sig	nificantly di	sturbed?	Are '	Normal Circumstances" pres	sent? Yes x	No
Are Vegetation	Soil or Hydrology sig	nificantly pr	oblematic?	(If ne	eded, explain any answers in	n Remarks.)	
SUMMARY OF FIN	NDINGS – Attach site map show	ving samp	oling point loc	cations, tra	nsects, important feat	tures, etc.	
Hydrophytic Vegetat	ion Present? Yes x No	)		Is the Sar	npled Area		
Hydric Soil Present?	Yes x No	)			Wetland? Yes _	x No	
Wetland Hydrology I	Present? Yes x No	)					
Remarks 8	43-846 Wetland frost heaves with low po	ints between	Both highs and l	lows are wetla	nds Point taken on highest o	drvest point we	could find
	ION – Use 3/3 abbreviations. List s					• •	
		Absolute	Dominant	Indicator	Dominance Test works		
Tree Stratum	I	% Cover	Species?	Status?	Number of Dominant Spe		3
1					Are OBL, FACW, or	FAC:	(A)
2					Total Number of Dominar	nt Species	3
3					Across All Strata	:	(B)
4	<u> </u>				Percent of Dominant Spec	ies That	100%
	Total Cover	0			Are OBL, FACW, or F		(A/B)
Sapling/Shrub Strat			6 of total cover	0	Prevalence Index wor	ksheet	
1 arcrub	Arctous ruber	40	YES	FAC	Total % Cover of:		tiply by:
2 salova	Salix ovalifolia	25	YES	FAC	OBL species 0	x 1 =	0
3 dryint	Dryas integrifolia	10	NO	FACU	FACW species 3	x 2 =	6
4 drydru	Dryas drummondii	2	NO	FACU	FAC species 65	x 3 =	195
5					FACU species 12	x 4 =	48
6	<u> </u>				UPL species 0	x 5 =	0
	Total Cover	· · · ·			Column Totals: 80	(A)	249 (B)
Herb Stratum	50% of total cover 38.5 Eriophorum vaginatum	3	6 of total cover YES	15.4 FACW	Prevalence Index = 1		3.11
1 erivag 2		3	TES	FAC W	Hydrophytic Vegetatio		
3					$\underline{Y}$ Dominance Test is >50		
4				_	No Prevalence Index is ≤3 Morphological Adaptat		supporting
5					data in Remarks or on		
6					Problematic Hydrophy	tic Vegetation (	Explain)
7					<sup>1</sup> Indicators of hydric soil a	nd wetland hvd	rology must
8					be present unless disturbed		
9							
10							
10	Total Comm	3			Hydrophytic		
	Total Cover           50% of total cover         1.5	· _ · ·	6 of total cover	0.6	Vegetation	x No	
Plot size (radius, or			are Ground	10	Present? Yes	X No	
% Cover of Wetlar		tal Cover of l		0			
Remarks		an Cover of		0			
NCHIALKS		Unknow	wn Carex with no	seed head (80	%)		

Sampling Point

	Depth Matrix Redox Features									
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-9								Fibric Organic		
9-15	10YR3/2							Sandy Loam		
Type: C=C	ncentration. D=Deple	tion. RM=	Reduced Matrix, CS=C	overed or Coate	d Sand Grai	ns. <sup>2</sup> I	ocation: PL=Po	re Lining, M=Matrix.		
	Indicators:	]	Indicators for Pro			101 1				
				Change (TA4)			Alaska	Gleyed Without Hue 5Y or Redder		
	bl or Histel (A1)			e Swales (TA5)				ying Layer		
	Epipedon (A2)			with 2.5Y Hu			Other (	Explain in Remarks)		
	gen Sulfide (A4)		Alaska Redox	K with 2.51 Hu	e					
	Dark Surface (A12)									
Alaska	Gleyed (A13)		<sup>3</sup> One indicator of h	ydrophytic vege	tation, one p	rimary ind	licator of wetlan	d hydrology, and an		
Alaska	Redox (A14)		appropriate landsca		-	unless dist	turbed or problem	natic.		
Alaska	Gleyed Pores (A15)		<sup>4</sup> Give details of col	lor change in Re	emarks.		_			
Restrictive	e Layer (if present):									
Types:			Permafrost				Hudwie Se	oil Present? Yes x No		
Depth (in	ches):		15				Hyuric Sc	oil Present? Yes x No		
Remarks										
	the growing season,			afrost would per		t. Point tal		pect to see saturation at some point during int we could find. Thin layers are expected		
HYDR	the growing season,			afrost would per	rch snowmel	t. Point tal	ken at highest po	int we could find. Thin layers are expected		
HYDR Wetland Hy	the growing season, OLOGY drology Indicators:	expecially	during the spring. Perm	afrost would per	rch snowmel	t. Point tal	ken at highest po Secondary Ind	int we could find. Thin layers are expected in the second se		
HYDR Wetland Hy Primary Ind	the growing season, OLOGY drology Indicators: licators (any one indi	expecially	fficient)	afrost would per fron	rch snowmel n cold climat	t. Point tal	Secondary Ind	int we could find. Thin layers are expected licators (2 or more required) lined Leaves (B9)		
HYDR Wetland Hy Primary Ind x Surface	the growing season, OLOGY drology Indicators: licators (any one indice Water (A1)	expecially	fficient)	afrost would per from	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage	int we could find. Thin layers are expected ficators (2 or more required) ined Leaves (B9) Patterns (B10)		
HYDR Wetland Hy Primary Ind x Surface X High W	the growing season, OLOGY drology Indicators: licators (any one indi e Water (A1) Vater Table (A2)	expecially	fficient) x Inundation Visibl	afrost would per from le on Aerial Ima ed Concave Sur	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3)		
HYDR Wetland Hy Primary Ind x Surface x High W x Saturat	the growing season, OLOGY drology Indicators: licators (any one indicators) water (A1) Vater Table (A2) ion (A3)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B	afrost would per from le on Aerial Ima ed Concave Surf 15)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence	int we could find. Thin layers are expected ficators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)		
HYDR Wetland Hy Primary Ind x Surface x High W x Saturat Water	the growing season, OLOGY drology Indicators: licators (any one indi e Water (A1) /ater Table (A2) ion (A3) Marks (B1)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B Hydrogen Sulfide	afrost would per from e on Aerial Ima ed Concave Surf 15) e Odor (C1)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5)		
HYDR Wetland Hy Primary Ind x Surface x High W x Saturat Water Sedime	the growing season, OLOGY drology Indicators: licators (any one indicators) Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B Hydrogen Sulfide Dry-Season Wate	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1)		
HYDR Wetland Hy Primary Ind X Surface X High V X Saturat Water Sedime Drift D	the growing season, OLOGY drology Indicators: dicators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B Hydrogen Sulfide	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted o Geomorp	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2)		
HYDR Wetland Hy Primary Ind x Surface X High W x Saturat Water Sedime Drift D Algal M	the growing season, <b>OLOGY</b> drology Indicators: licators (any one indicators) licators (any one indicators) water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B Hydrogen Sulfide Dry-Season Wate	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted o Geomorp x Shallow A	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3)		
HYDR Wetland Hy Primary Ind X Surface X High W X Saturat Water Sedime Drift D Algal M Iron De	the growing season, OLOGY drology Indicators: licators (any one indi water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B Hydrogen Sulfide Dry-Season Wate	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind       Water-sta       Drainage       Oxidized       Presence       Salt Depc       Stunted o       Geomorp       x       Microtop	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4)		
HYDR Wetland Hy Primary Ind X Surface X High W X Saturat Water Sedime Drift D Algal M Iron De Surface	the growing season, <b>OLOGY</b> drology Indicators: licators (any one indicators) licators (any one indicators) licators (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6)	cator is su	fficient)          x       Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in	afrost would per from e on Aerial Ima ed Concave Surf 15) e Odor (C1) er Table (C2) Remarks)	rch snowmel n cold climat gery (B7) face (B8)	t. Point tal	Secondary Ind       Water-sta       Drainage       Oxidized       Presence       Salt Depc       Stunted o       Geomorp       x       Microtop	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3)		
HYDR Wetland Hy Primary Ind X Surface X High W X Saturat Water Sedime Drift D Algal M Iron De Surface	the growing season, <b>OLOGY</b> drology Indicators: licators (any one indicators) licators (any one indicators) licators (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6)	expecially	fficient) x Inundation Visibl Sparsely Vegetate Marl Deposits (B Hydrogen Sulfide Dry-Season Wate	afrost would per from e on Aerial Ima ed Concave Surf 15) e Odor (C1) er Table (C2) Remarks)	rch snowmel n cold climat gery (B7)	t. Point tal	Secondary Ind       Water-sta       Drainage       Oxidized       Presence       Salt Depc       Stunted o       Geomorp       x       Microtop	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4)		
HYDR Wetland Hy Primary Ind x Surface X High W X Saturat Water 1 Sedime Drift D Algal M Iron De Surface Wa Water Tab	the growing season, <b>OLOGY</b> drology Indicators: licators (any one indicators: Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? ble Present?	expecially of the second secon	fficient)          x       Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in	afrost would per from e on Aerial Ima ed Concave Surf 15) e Odor (C1) er Table (C2) Remarks)	rch snowmel n cold climat gery (B7) face (B8)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow 4 x Microtop x FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) itral Test (D5)		
HYDR Wetland Hy Primary Ind x Surface x High W x Saturat Water I Sedime Drift D Algal M Iron De Surface Wa Water Tat Saturation P	the growing season, <b>OLOGY</b> drology Indicators: licators (any one indicators: licators (any one indicators: licators (any one indicators) vater (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) atter Present? resent? (includes	cator is su	fficient)          x       Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2) . Remarks) 	rch snowmel n cold climat gery (B7) face (B8)	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow 4 x Microtop x FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4)		
HYDR Wetland Hy Primary Ind X Surface X High V X Saturat Vater 1 Sedime Drift D Algal M Iron De Surface Wa Surface Wa Surface Tat Saturation P capill	the growing season, <b>OLOGY</b> <b>drology Indicators:</b> <b>licators (any one indi</b> 2 Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ther Present? resent? (includes ary fringe)	Yes     x       Yes     x       Yes     x       Yes     x	during the spring. Perm.         fficient)         x         Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in         No       Depth (inc         No       Depth (inc         No       Depth (inc	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2) . Remarks) ches) ches) ches)	ch snowmel n cold climat gery (B7) face (B8) 0 0 0	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow 4 x Microtop x FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) itral Test (D5)		
HYDR Wetland Hy Primary Ind X Surface X High V X Saturat Vater 1 Sedime Drift D Algal M Iron De Surface Wa Surface Wa Surface Tat Saturation P capill	the growing season, <b>OLOGY</b> <b>drology Indicators:</b> <b>licators (any one indi</b> 2 Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ther Present? resent? (includes ary fringe)	Yes     x       Yes     x       Yes     x       Yes     x	fficient)          x       Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in         No       Depth (inc         No       Depth (inc	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2) . Remarks) ches) ches) ches)	ch snowmel n cold climat gery (B7) face (B8) 0 0 0	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow 4 x Microtop x FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) itral Test (D5)		
HYDR Wetland Hy Primary Ind X Surface X High V X Saturat Vater 1 Sedime Drift D Algal M Iron De Surface Wa Surface Wa Surface Tat Saturation P capill	the growing season, <b>OLOGY</b> <b>drology Indicators:</b> <b>licators (any one indi</b> 2 Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ther Present? resent? (includes ary fringe)	Yes     x       Yes     x       Yes     x       Yes     x	during the spring. Perm.         fficient)         x         Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in         No       Depth (inc         No       Depth (inc         No       Depth (inc	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2) . Remarks) ches) ches) ches)	ch snowmel n cold climat gery (B7) face (B8) 0 0 0	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow 4 x Microtop x FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) itral Test (D5)		
HYDR Wetland Hy Primary Ind x Surface X High W X Saturat Water I Sedime Drift D Algal M Iron De Surface Wa Water Tat Saturation P capill Describe Rec	the growing season, <b>OLOGY</b> <b>drology Indicators:</b> <b>licators (any one indi</b> 2 Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ther Present? resent? (includes ary fringe)	Yes     x       Yes     x       Yes     x       Yes     x	during the spring. Perm.         fficient)         x         Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in         No       Depth (inc         No       Depth (inc         No       Depth (inc	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2) . Remarks) ches) ches) ches)	ch snowmel n cold climat gery (B7) face (B8) 0 0 0	t. Point tal	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow 4 x Microtop x FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) itral Test (D5)		
HYDR Vetland Hy Primary Ind X Surface X High W X Saturat Water I Sedime Drift D Algal M Iron De Surface Wa Water Tat Saturation P capill Describe Rec	the growing season, <b>OLOGY</b> drology Indicators: licators (any one indi 2 Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? resent? (includes ary fringe) Forded Data (stream ga	expecially of the second secon	fficient)         x         Inundation Visibl         Sparsely Vegetate         Marl Deposits (B         Hydrogen Sulfide         Dry-Season Wate         Other (Explain in         No       Depth (inc         No       Depth (inc         No       Depth (inc         No       Depth (inc         No       Depth (inc	afrost would per from le on Aerial Ima ed Concave Surf 15) e Odor (C1) or Table (C2) . Remarks) 	ch snowmel n cold climat gery (B7) face (B8) 0 0 0 ections), if a	t. Point tal es.	Secondary Ind Water-sta Drainage Oxidized Presence Salt Dept Stunted of Geomorp x Shallow A X FAC-Net	int we could find. Thin layers are expected icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) osits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4) itral Test (D5)		

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015
Applicant/Owner	: Hilcorp	Sampling Point:	3
Investigator(s):	Ryan Cooper, Kiel Kenning		
Remarks			
	843-846 Wetland frost heaves with low points between. Both highs and lows are wetlands. Point t	aken on highest, dry	est point we could find.





Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015
Applicant/Owned	er: Hilcorp	Sampling Point:	3B
Investigator(s):	Ryan Cooper, Kiel Kenning		
Remarks			
	70.20306 147.69678 Eroded Shoreline Photos:847-848 Wet due to permafrost a	nd microtopographic	c relief





	WETLAND DETE	RMINAT	ION DATA F	ORM – A	aska Region		
Project/Site:	Hilcorp Liberty		Borough/City:	No	rth Slope Borough	Sampling Date:	7/29/2015
Applicant/Owner:		Hilcorp			Sampling Point	:	4
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hi	Landform (hillside, terrace, hummocks, etc.) terrace			
Local relief (concave, o	convex, none) Flat area above riv	ver	Slope (%)	0			
Subregion:	Arctic Coastal Plain Lat		70.20931	Lon	g 147.73663	Datum	N/A
Soil Map Unit Name		N/A			NWI Classific	ation PE	EM1B/C
Are climatic / hydrologic	c conditions on the site typical for this time	e of year?	Yes	x No	(If no, explain in F	Remarks.)	
Are Vegetation	Soil or Hydrology sig	gnificantly di	sturbed?	Are	'Normal Circumstances" pr	esent? Yes x	No
Are Vegetation	Soil or Hydrology sig	gnificantly pr	oblematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FI	NDINGS – Attach site map show	ving samp	oling point loc	cations, tra	nsects, important fe	atures, etc.	
Hydrophytic Vegetat	tion Present? Yes x N	0			1 1 4		
Hydric Soil Present?		0			npled Area Wetland? Yes	x No	
Wetland Hydrology				within a	wettanu:		
Remarks							
		-	9-852 River terrac			<b>T</b> . 0/	
VEGETAT	TION – Use 3/3 abbreviations. List s	Absolute	above) for indi	Indicator			er.
Tree Stratum		% Cover	Species?	Status?	Dominance Test wor Number of Dominant Sp		_
1					Are OBL, FACW, o		3(A)
2					Total Number of Domin	ant Spacias	
3					Across All Stra		3 (B)
4					Percent of Dominant Spe	cies That	
	Total Cover	0	-		Are OBL, FACW, or	1	00% (A/B)
Sapling/Shrub Strat	tum 50% of total cover 0	209	% of total cover	0	Prevalence Index wo	orksheet	
1 salova	Salix ovalifolia	5	YES	FAC	Total % Cover of	: Multi	iply by:
2					OBL species 40	x 1 =	40
3					FACW species 10	x 2 =	20
4					FAC species 5	x 3 =	15
5					FACU species 0	x 4 =	0
6					UPL species 0	x 5 =	0
	Total Cover	r 5			Column Totals: 55	(A)	75 (B)
Herb Stratum	50% of total cover 2.5	209	% of total cover	1	Prevalence Index =	= B/A =	1.36
1 arcful	Arctophila fulva	40	YES	OBL	Hydrophytic Vegetat	ion Indicators:	
2 erivag	Eriophorum vaginatum	10	YES	FACW	Y Dominance Test is >:	50%	
3					Y Prevalence Index is ≤	3.0	
4					Morphological Adapt		
5					data in Remarks or o	1	
6					Problematic Hydroph	ytic Vegetation (I	Explain)
7					<sup>1</sup> Indicators of hydric soil	•	
8					be present unless disturbe	ed or problematic.	
9							
10							
	Total Cover	r 50	-	<u> </u>	Hydrophytic		
	50% of total cover 25	· T · ·	% of total cover	10	Vegetation Proceeds	es x No	
Plot size (radius, or			are Ground	80	Present?		
% Cover of Wetla	<b>0</b> ,	tal Cover of	Bryophytes	0			
Remarks							
		Ν	Ainuartia arctica (	60%) is NI			

Sampling Point

Profile Desc		the depth n	eeded to document th		onfirm the	absence	of indicators.)	
Depth	Matrix		-	edox Features	1	2		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8								Fibric Organic
8-20	10YR5/2							Sand
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=R	educed Matrix, CS=Co	overed or Coated	Sand Grain	ns. <sup>2</sup> L	ocation: PL=Po	re Lining, M=Matrix.
Hvdric Soil	Indicators:		Indicators for Prob	olematic Hvdrid	Soils: <sup>3</sup>			
- T	ol or Histel (A1)			Change (TA4) <sup>4</sup>				Gleyed Without Hue 5Y or Redder
	Epipedon (A2)			Swales (TA5)			Underly	ving Layer
	gen Sulfide (A4)			With 2.5Y Hue			Other (1	Explain in Remarks)
	Dark Surface (A12)							
	Gleyed (A13)		<sup>3</sup> One indicator of hy					
	Redox (A14)		appropriate landscap	-	-	inless dist	urbed or probler	natic.
1	Gleyed Pores (A15)		<sup>4</sup> Give details of cold	or change in Ren	narks.		٦	
	e Layer (if present):							
Types:	1 \		none				Hydric So	il Present? Yes x No
Depth (in Remarks	iches):							
		to organics a	nd dark soils under the cracks are also app					flooding and microtopo relief. Surface soil lering.
HYDR	OLOGY					i		
	drology Indicators:							icators (2 or more required)
	licators (any one ind	icator is suff						ined Leaves (B9)
	e Water (A1)	_	Inundation Visible		• • •			Patterns (B10)
x High W	Vater Table (A2)	_	Sparsely Vegetate	d Concave Surfa	ce (B8)		Oxidized	Rhizospheres along Living Roots (C3)
	ion (A3)	_	Marl Deposits (B1					of Reduced Iron (C4)
Water	Marks (B1)	_	Hydrogen Sulfide	Odor (C1)			Salt Depo	osits (C5)
Sedime	ent Deposits (B2)		Dry-Season Water	Table (C2)			Stunted of	r Stressed Plants (D1)
Drift D	eposits (B3)		Other (Explain in	Remarks)			Geomorp	hic Position (D2)
Algal N	Aat or Crust (B4)						Shallow A	Aquitard (D3)
Iron De	eposits (B5)						X Microtope	ographic Relief (D4)
x Surface	e Soil Cracks (B6)						x FAC-Neu	tral Test (D5)
Surface Wa	ater Present?	Yes x 1	No Depth (inc	hes)	0			
Water Tab			No x Depth (incl		0	1		
Saturation P	resent? (includes	Yes x 1	No Depth (incl	hes)	0	w	etland Hydrolo	ogy Present? Yes x No
	ary fringe)						<b>.</b>	
Describe Rec	corded Data (stream g	auge, monito	ring well, aerial photos	, previous inspec	ctions), if av	ailable:		
Remarks								
	Г	)rv vear Satu	ration was not observe	d in the nit: but	surface wat	er was ob	served near the r	nit in the same habitat
	L	i y year. Batu	auton was not observe	a in the pit, but	surface wat	CI Was 008	served near the p	nt in the sume nuorat.

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015
Applicant/Owner	r: Hilcorp	Sampling Point:	4
Investigator(s):	Ryan Cooper, Kiel Kenning		
Remarks			
	849-852 River terrace next to stream		





Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015
Applicant/Own	ner: Hilcorp	Sampling Point:	4B
Investigator(s)	: Ryan Cooper, Kiel Kenning		
Remarks	Lat 70.20919 Long 147.73621 Stream Observation Point, Sand/ Organic bottom, seasonal, 2 feet deep	, 10-30 ft wide. Lots	s of goose sign. Photos 853-
L	854		





	WETLAND DETE	RMINATI	ION DATA F	ORM – Al	aska Region		
Project/Site:	Hilcorp Liberty		Borough/City:	Nor	th Slope Borough	Sampling Date:	7/29/2015
Applicant/Owner:		Hilcorp			Sampling Poir	ıt:	5
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hi	llside, terrace,	hummocks, etc.)	Fla	t
Local relief (concave,	convex, none) Flat leading into po	ond	Slope (%)	0			
Subregion:	Arctic Coastal Plain Lat		70.19759	Long	g 147.74272	Datum	N/A
Soil Map Unit Name		N/A			NWI Classifi	cation	PEM1C
Are climatic / hydrologic	c conditions on the site typical for this time	e of year?	Yes	x No	(If no, explain in	Remarks.)	
Are Vegetation	Soil or Hydrology sig	gnificantly dis	sturbed?	Are "	Normal Circumstances" p	resent? Yes x	No
Are Vegetation		gnificantly pro			eded, explain any answer	,	
SUMMARY OF FI	NDINGS – Attach site map shov	ving samp	ling point loc	ations, tra	nsects, important f	eatures, etc.	
Hydrophytic Vegeta	tion Present? Yes x No	o0		Is the San	npled Area		
Hydric Soil Present?	Yes x No	o0			Wetland? Yes	s <u>x</u> No	
Wetland Hydrology	Present? Yes x No	o0					
Remarks	855-	-858. Point ta	ken next to pond.	Lots of water	fowl in the area.		
VEGETAT	TION – Use 3/3 abbreviations. List s		*			o Lowest % co	ver.
		Absolute	Dominant	Indicator	Dominance Test wo		
Tree Stratum		% Cover	Species?	Status?	Number of Dominant S		2
1					Are OBL, FACW,	or FAC:	(A)
2					Total Number of Domi		3
4					Across All Str	ata:	(B)
4					Percent of Dominant Sp		67%
	Total Cover	0			Are OBL, FACW, o		(A/B)
Sapling/Shrub Stra	tum 50% of total cover 0 Salix ovalifolia	10	of total cover YES	0 FAC	Prevalence Index w		
2 drydru	Dryas drummondii	3	YES	FACU	Total % Cover of		tiply by:
3		5	1125	TACU		) x 1 =	0
4	-				FACW species 2		40
5	-			_	FAC species 11		330
6					FACU species 3		12
0	Total Cover	13			UPL species 0 Column Totals: 13		0 382 (B)
Herb Stratum	50% of total cover 6.5		of total cover	2.6	Prevalence Index	( )	382 (B) 2.87
1 carful	Carex fuliginosa	100	YES	FAC	Hydrophytic Vegeta		2.87
2 erivag	Eriophorum vaginatum	20	NO	FACW	Y Dominance Test is 2		
3	1	-			Y Prevalence Index is		
4					Morphological Adap		supporting
5					data in Remarks or	on a separate sheet	t)
6					Problematic Hydrop	hytic Vegetation (	Explain)
7					<sup>1</sup> Indicators of hydric so	il and wetland hyd	lrology must
8					be present unless disturb		
9							
10							
	Total Cover	120			Hydrophytic		
	50% of total cover 60		of total cover	24	Vegetation	es x No	
Plot size (radius, or			are Ground	0	Present?		
% Cover of Wetla		tal Cover of H		0			
Remarks		20.01011	J-FJ.00	<u> </u>			
	Ca	rex id difficu	lt; so went with m	nost conservati	ve species.		

Sampling Point

Profile Desci	ription: (Describe t	o the depth	needed to	document the	e indicator or c	onfirm the	absence	of indicators.)	
Depth	Matrix			R	edox Features				
(inches)	Color (moist)	%	Color	r (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-7									Fibric Organic
7-20	10YR4/1								Sand
<sup>1</sup> Type: C=Co	ncentration, D=Dep	letion RM=	Reduced N	Matrix CS=Co	vered or Coated	Sand Grain	18 <sup>2</sup> I	ocation: PL=Po	re Lining, M=Matrix.
	Indicators:				lematic Hydric				
					Change (TA4) <sup>4</sup>	. 50115.		Alaska	Gleyed Without Hue 5Y or Redder
	bl or Histel (A1)								ving Layer
	Alaska Alpine Swales (TA5)					Other (	Explain in Remarks)		
· ~	gen Sulfide (A4)			nusku reedok	11 III 2.5 I IIIU				
	Dark Surface (A12)								
	Gleyed (A13)								d hydrology, and an
	Redox (A14)			-	e position must	-	inless dist	urbed or problei	natic.
	Gleyed Pores (A15)		Give	details of cold	or change in Ren	narks.		٦	
	e Layer (if present)	:							
Types: Depth (in	ches).			None				Hydric So	il Present? Yes x No
Remarks	ches).								
Keinarks									
	Histic epipedon	due to satura	ated fibric	organic and da	rk lower soil. Sa	turation wa	s present	even in this dry	year and dry season. Slightly thinner soil
				la	yers are too be e	expected fro	m cold reg	gion.	
HYDR	OLOGY								
Wetland Hy	drology Indicators	:							icators (2 or more required)
`	licators (any one in	dicator is su							ined Leaves (B9)
	e Water (A1)				on Aerial Imag	• • •			Patterns (B10)
	Vater Table (A2)		Spar	rsely Vegetated	d Concave Surfa	ce (B8)		Oxidized	Rhizospheres along Living Roots (C3)
x Saturati	ion (A3)		Mar	l Deposits (B1	5)				of Reduced Iron (C4)
Water M	Marks (B1)		Hyd	rogen Sulfide	Odor (C1)			Salt Depo	sits (C5)
Sedime	ent Deposits (B2)		Dry	-Season Water	Table (C2)			Stunted o	r Stressed Plants (D1)
X Drift D	eposits (B3)		Othe	er (Explain in I	Remarks)			Geomorp	hic Position (D2)
Algal N	fat or Crust (B4)							Shallow A	Aquitard (D3)
Iron De	eposits (B5)							Microtop	ographic Relief (D4)
Surface	e Soil Cracks (B6)							FAC-Neu	tral Test (D5)
Surface Wa	ater Present?	Yes	No x	Depth (incl	nes)				
Water Tab	ble Present?	Yes x	No	Depth (incl	nes)	4			
	resent? (includes	Yes x	No	Depth (incl	nes)	8	w	etland Hydrolo	gy Present? Yes x No
÷.	ary fringe)						]		
Describe Rec	orded Data (stream	gauge, moni	toring well	, aerial photos	, previous inspec	ctions), if a	ailable:		
Remarks									
					D	ry Year			

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015
Applicant/Owner:	Hilcorp	Sampling Point:	5
Investigator(s):	Ryan Cooper, Kiel Kenning		
Remarks			
	855-858. Point taken next to pond. Lots of waterfowl in the	area.	





Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015
Applicant/Owne	r: Hilcorp	Sampling Point:	5B
Investigator(s):	Ryan Cooper, Kiel Kenning		
Remarks			
	Arctophila fulva in lake/pond. Lots of waterfowl. Photos 859	9-861	





	WETLAND DETE	RMINATI	ON DATA F	ORM – Al	aska Region		
Project/Site:	Hilcorp Liberty		Borough/City:	Nor	th Slope Borough S	ampling Date:	7/29/2015
Applicant/Owner:		Hilcorp			Sampling Point:		6
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hil	lside, terrace,	hummocks, etc.)	Humm	nocks
Local relief (concave	e, convex, none) highs and low humm	nocks	Slope (%)	0			
Subregion:	Arctic Coastal Plain Lat		70.194	Long	g 147.711	Datum	N/A
Soil Map Unit Name	,	N/A			NWI Classificati	on F	PEM1B/C
Are climatic / hydrolog	gic conditions on the site typical for this time	e of year?	Yes	x No	(If no, explain in Ren	narks.)	
Are Vegetation	Soil or Hydrology sig	gnificantly dis	turbed?	Are "	Normal Circumstances" pres	ent? Yes	x No
Are Vegetation		gnificantly pro			eded, explain any answers in	,	
SUMMARY OF F	INDINGS – Attach site map show	ving samp	ling point loc	ations, tra	nsects, important feat	ures, etc.	
Hydrophytic Veget	tation Present? Yes x No	o		Is the San	npled Area		
Hydric Soil Presen	t? Yes <u>x</u> No	o			Wetland? Yes	x No	
Wetland Hydrolog	y Present? Yes x No	<u> </u>					
Remarks		No Arcto	ophila fulva. Patte	rned tundra. 8	62-865		
VEGETA	TION – Use 3/3 abbreviations. List s	ubregion (a	above) for indic	cator status.	List plants Highest to L	owest % co	over.
Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status?	Dominance Test works		
		% Cover	Species?	Status?	Number of Dominant Spec		3
2					Are OBL, FACW, or F		(A)
3					Total Number of Dominan Across All Strata:		4 (B)
4							(B)
	Total Cover	0			Percent of Dominant Speci Are OBL, FACW, or FA		75% (A/B)
Sapling/Shrub Str			of total cover	0	Prevalence Index worl		(17D)
1 arcrub	Arctous ruber	40	YES	FAC	Total % Cover of:		ltiply by:
2 vacvit	Vaccinium vitis-idaea	20	YES	FAC	OBL species 0	x 1 =	0
3 dryint	Dryas integrifolia	20	YES	FACU	FACW species 20	x 2 =	40
4 salova	Salix ovalifolia	5	NO	FAC	FAC species 65	x 3 =	195
5 castet	Cassiope tetragona	5	NO	FACU	FACU species 25	x 4 =	100
6					UPL species 0	x 5 =	0
•	Total Cover	90			Column Totals: 110	(A)	335 (B)
Herb Stratum	50% of total cover 45	20%	of total cover	18	Prevalence Index = H	3/A =	3.05
1 erivag	Eriophorum vaginatum	20	YES	FACW	Hydrophytic Vegetation	1 Indicators:	
2					Y Dominance Test is >50	%	
3					No Prevalence Index is $\leq 3$ .	0	
4					Morphological Adaptat		
5					data in Remarks or on a	•	
6					Problematic Hydrophyt	-	-
7					<sup>1</sup> Indicators of hydric soil an		
8					be present unless disturbed	or problematic	U.
9							
10							
	Total Cover	· 20			Hydrophytic Vegetation		
	50% of total cover 10	20%	of total cover	4	Vegetation Present? Yes	x No	0
Plot size (radius, o	or length x width) 100ft radius	% Ba	are Ground	0			
% Cover of Wet	land Bryophytes 0 To	tal Cover of E	Bryophytes	0			
Remarks		Unknow	n Carex with no s	seed head (90	%)		

Sampling Point

	epth Matrix Redox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12								Fibric Organic
vne: C-Co	ncentration D-Deple	tion PM-E	Reduced Matrix, CS=Co	warad or Costa	d Sand Grai	nc <sup>2</sup> I	ocation: DI -Do	re Lining, M=Matrix.
						115. 1		e Lining, M–Maura.
-	Indicators:		Indicators for Prob	-			Alaska	Gleyed Without Hue 5Y or Redder
	l or Histel (A1)			Change (TA4) <sup>4</sup>				ing Layer
Histic E	Epipedon (A2)			Swales (TA5)				Explain in Remarks)
Hydrog	en Sulfide (A4)		Alaska Redox	With 2.5Y Hue	•			. /
Thick D	Dark Surface (A12)							
Alaska	Gleyed (A13)		<sup>3</sup> One indicator of hy	drophytic veget	ation, one p	rimary inc	licator of wetland	d hydrology, and an
Alaska	Redox (A14)		appropriate landscap					
Alaska	Gleyed Pores (A15)		<sup>4</sup> Give details of cold	or change in Re	marks.		_	
Restrictive	Layer (if present):							
Types:			Permafrost					
D 1 (	ahas);		10				Hydric So	il Present? Yes x No
Depth (ind Remarks			12	u. :. d	6	male The	<b>_</b>	
Remarks		med from sh		lly in the spring	from snow	melt. This	s is the dry month	and dry year; so it was not observed.
Remarks HYDR	Saturation assu	med from sh		lly in the spring	from snow	melt. This		a and dry year; so it was not observed.
Remarks HYDR etland Hyd	Saturation assu		allow aquitard; especia	lly in the spring	from snow	melt. This	Secondary Ind	
Remarks HYDR etland Hyo imary Indi	Saturation assu OLOGY drology Indicators:		allow aquitard; especia			melt. This	Secondary Ind Water-sta	icators (2 or more required)
HYDR HYDR etland Hyd imary Ind Surface	Saturation assu OLOGY drology Indicators: icators (any one indi		nallow aquitard; especia	on Aerial Imag	gery (B7)	melt. This	Secondary Ind Water-sta Drainage	icators (2 or more required) ined Leaves (B9)
HYDR etland Hyd imary Ind Surface High W	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1)		hallow aquitard; especia ficient) x Inundation Visible	e on Aerial Imag d Concave Surf	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized	icators (2 or more required) ined Leaves (B9) Patterns (B10)
HYDR etland Hyd imary Ind Surface High W Saturati	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2)		allow aquitard; especia ficient) x Inundation Visible Sparsely Vegetated	e on Aerial Imag d Concave Surf 5)	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
HYDR etland Hyc imary Ind Surface High W Saturati Water M	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3)		ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide	e on Aerial Imag d Concave Surf 5) Odor (C1)	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
Remarks         HYDR         etland Hyd         imary Indi         Surface         High W         Saturati         Water N         Sedime	Saturation assu OLOGY drology Indicators: dicators (any one indi Water (A1) Vater Table (A2) ton (A3) Marks (B1)		ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1	e on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted o	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5)
HYDR etland Hyd imary Ind: Surface High W Saturati Water M Sedime Drift De	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3)		ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted or Geomorpl	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2)
HYDR etland Hyd imary Indi Surface High W Saturati Water M Sedime Drift Do Algal M	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4)		ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted or Geomorpl x Shallow A	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1)
HYDR etland Hyd imary Indi Surface Saturati Water M Sedime Drift Do Algal M Iron De	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5)		ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	gery (B7)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) hic Position (D2) Aquitard (D3) ographic Relief (D4)
HYDR etland Hyd imary Ind Surface High W Saturati Saturati Saturati Drift Da Algal M Iron De Surface	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6)	icator is suf	ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in	e on Aerial Imag d Concave Surf 5) Odor (C1) · Table (C2) Remarks)	gery (B7) ace (B8)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) equitard (D3)
HYDR         etland Hyc         imary Inditional stress of the stress of	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present?	icator is suf	ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in 1 No Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks)	gery (B7) ace (B8)	melt. This	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) Aquitard (D3) ographic Relief (D4)
HYDR         etland Hyd         imary Indi         Surface         High W         Saturati         Vater N         Sedime         Drift Da         Algal N         Iron De         Surface	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) dater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? le Present?	icator is suf Yes x Yes x	nallow aquitard; especia         ficient)         x         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in 1)         No       Depth (incl         No       Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) ace (B8) 0		Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
Remarks         etland Hyp         imary Inditional Surface         High W         Saturati         Water N         Sedime         Drift De         Algal M         Iron De         Surface Wa         Water Tab         Autration Provident Surface	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) dater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? le Present?	icator is suf Yes x Yes x	ficient) x Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in 1 No Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) ace (B8)		Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) Aquitard (D3) ographic Relief (D4)
Remarks HYDR etland Hyd imary Indi Surface Surface Unift De Surface Surface Wa Water Tab aturation Pr capilla	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) dater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? le Present? resent? (includes ary fringe)	icator is suf Yes x Yes x Yes x	nallow aquitard; especia         ficient)         x         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in 1)         No       Depth (incl         No       Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) ace (B8) 0 0	w	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
Remarks HYDR  fetland Hyc  imary Indi x Surface X High W X Saturati Water N Sedime Drift De Algal M Iron De Surface Surface Water Tab aturation Pr capilla escribe Reco	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) dater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? le Present? resent? (includes ary fringe)	icator is suf Yes x Yes x Yes x	nallow aquitard; especia         ficient)         x         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in 1)         No       Depth (incl         No       Depth (incl         No       Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) ace (B8) 0 0	w	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
Remarks HYDR etland Hyd imary Indi Surface Surface Gurface Wa Water Tab aturation Pr capilla	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) dater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? le Present? resent? (includes ary fringe)	icator is suf Yes x Yes x Yes x	nallow aquitard; especia         ficient)         x         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in 1)         No       Depth (incl         No       Depth (incl         No       Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) ace (B8) 0 0	w	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
Remarks HYDR etland Hyo imary Indi Surface High W Saturati Water N Sedime Drift Do Algal M Iron De Surface Gurface Wa Water Tab aturation Pr capilla scribe Reco	Saturation assu OLOGY drology Indicators: icators (any one indi Water (A1) dater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? le Present? resent? (includes ary fringe)	icator is suf Yes x Yes x Yes x	nallow aquitard; especia         ficient)         x         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in 1)         No       Depth (incl         No       Depth (incl         No       Depth (incl	e on Aerial Imag d Concave Surf 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) ace (B8) 0 0	w	Secondary Ind Water-sta Drainage Oxidized Presence Salt Depo Stunted of Geomorpl x Shallow A X Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) Aquitard (D3) ographic Relief (D4) tral Test (D5)

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015					
Applicant/Owne	r: Hilcorp	Sampling Point:	6					
Investigator(s):	Ryan Cooper, Kiel Kenning							
Remarks								
	No Arctophila fulva. Patterned tundra. 862-865							





	WETLAND DETE	RMINATI	ON DATA F	ORM – Al	aska Region		
Project/Site:	Hilcorp Liberty		Borough/City:	gh/City: North Slope Borough Samp			7/29/2015
Applicant/Owner:		Hilcorp			Sampling Poin	nt:	7
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hi	llside, terrace,	hummocks, etc.)	Frost He	eaves
Local relief (concave,	convex, none) None		Slope (%)	0			
Subregion:	Arctic Coastal Plain Lat		70.19154	Long	147.69366	Datum	N/A
Soil Map Unit Name		N/A			NWI Classif	ication P	EM1B/C
Are climatic / hydrologi	c conditions on the site typical for this tim	e of year?	Yes	x No	(If no, explain in	Remarks.)	
Are Vegetation	Soil or Hydrology si	gnificantly dis	sturbed?	Are "	Normal Circumstances"	present? Yes x	No
Are Vegetation	Soil or Hydrology si	gnificantly pro	oblematic?	(If ne	eded, explain any answer	s in Remarks.)	
SUMMARY OF FI	NDINGS – Attach site map sho	wing samp	ling point loc	ations, tra	nsects, important f	eatures, etc.	
Hydrophytic Vegeta	tion Present? Yes x N	o		Is the San	npled Area		
Hydric Soil Present	Yes <u>x</u> N	o			Wetland? Ye	s <u>x</u> No	
Wetland Hydrology	Present? Yes x N	o					
Remarks		866 860 I	Large Frost heaves	e No Areful t	be seen		
VEGETAT	TION – Use 3/3 abbreviations. List					to Lowest % cov	ver.
, EGEIIII		Absolute	Dominant	Indicator	Dominance Test wo		
Tree Stratum		% Cover	Species?	Status?	Number of Dominant		2
1					Are OBL, FACW,	or FAC:	(A)
2					Total Number of Domi	nant Species	3
3					Across All Str	ata:	(B)
4					Percent of Dominant S	pecies That	67%
	Total Cover	0			Are OBL, FACW, o		(A/B)
Sapling/Shrub Stra			of total cover	0	Prevalence Index v	vorksheet	
1 castet	Cassiope tetragona	70	YES	FACU	Total % Cover of	of: Mult	iply by:
2 rubcha	Rubus chamaemorus	60	YES	FACW	OBL species (	) x 1 =	0
3 salova	Salix ovalifolia	10	NO	FAC	FACW species 6	3 x 2 =	126
4 vacvit	Vaccinium vitis-idaea	3	NO	FAC	FAC species 1	3 x 3 =	39
5					FACU species 7	0 x 4 =	280
6					UPL species	) x 5 =	0
	Total Cove	r 143			Column Totals: 14	46 (A)	445 (B)
Herb Stratum	50% of total cover 71.		of total cover	28.6	Prevalence Index	x = B/A =	3.05
1 erivag	Eriophorum vaginatum	3	YES	FACW	Hydrophytic Vegeta	ation Indicators:	
2					Y Dominance Test is		
3					No Prevalence Index is Morphological Ada		
4					data in Remarks or		
5					Problematic Hydrop		·
6							· ·
7					<sup>1</sup> Indicators of hydric so be present unless distur	•	0,
8						F	
9				<u> </u>			
10	l						
	Total Cove	r 3			Hydrophytic Vegetation		
	50% of total cover 1.5	20%	of total cover	0.6	Present?	Yes x No	
Plot size (radius, or	length x width) 100ft radius	% B	are Ground	0			
% Cover of Wetla	nd Bryophytes 0 To	otal Cover of I	Bryophytes	10			
Remarks	Unidentified Carex (no seed he	ads) in low po	oints (80%) shrub	s growing on	nounds. Polygonum bisto	orta (1%) is NI.	

Sampling Point

(inches)	Matrix         Redox Features							
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9								Fibric Organic
Sume: C-Cou	ncentration D-Denl	ation PM-	Reduced Matrix, CS=Co	warad or Coat	d Sand Grai	ns <sup>2</sup> I	ocation: DI Dor	e Lining, M=Matrix.
		etioli, Kwi–				115. 1		e Linnig, M–Maurx.
<u> </u>	Indicators:		Indicators for Prob	-			Alaska (	Gleyed Without Hue 5Y or Redder
	or Histel (A1)			Change (TA4)				ing Layer
Histic E	pipedon (A2)			Swales (TA5)			-	Explain in Remarks)
Hydroge	en Sulfide (A4)		Alaska Redox	With 2.5Y Hu	e			L
Thick D	ark Surface (A12)							
Alaska (	Gleyed (A13)		<sup>3</sup> One indicator of hy	drophytic vege	etation, one p	rimary inc	licator of wetland	hydrology, and an
Alaska H	Redox (A14)		appropriate landscap					
Alaska (	Gleyed Pores (A15)		<sup>4</sup> Give details of colo	or change in Re	emarks.			
Restrictive	Layer (if present):							
Types:			Permafrost					
Depth (inc	ches):		9				Hydric Soi	il Present? Yes x No
	771.							
		iick orgs; w	ith permafrost underlying	g. Assumed sat	uration, espe	cially afte	r snowmelt and w	vith the shallow aquitard.
	OLOGY	iick orgs; w	ith permafrost underlyin;	g. Assumed sat	uration, espe	cially afte	[	•
etland Hyd	OLOGY Irology Indicators:			g. Assumed sat	uration, espe	cially afte	Secondary Indi	cators (2 or more required)
etland Hyd imary Indi	OLOGY Irology Indicators: cators (any one ind		fficient)			cially afte	Secondary Indi Water-stai	cators (2 or more required) ned Leaves (B9)
etland Hyd imary Indi Surface	OLOGY Irology Indicators: cators (any one ind Water (A1)		fficient)	e on Aerial Ima	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I	cators (2 or more required) ned Leaves (B9) Patterns (B10)
etland Hyd imary Indi Surface	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2)		fficient) X Inundation Visible Sparsely Vegetate	e on Aerial Ima d Concave Sur	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3)
etland Hyd imary Indi Surface High Wa Saturatio	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1	e on Aerial Ima d Concave Sur 5)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence c	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
etland Hyd imary Indi Surface High Wa Saturatio Water M	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) farks (B1)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide	e on Aerial Ima d Concave Sur 5) Odor (C1)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5)
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etland Hyd imary Indi Surface High Wa Saturatie Water M Sedimer Drift De	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide	e on Aerial Ima d Concave Sur 5) Odor (C1) Table (C2)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) ic Position (D2)
etland Hyd imary Indi Surface High Wa Saturatio Water M Sedimer Drift De Algal M	DLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Ima d Concave Sur 5) Odor (C1) Table (C2)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) • Stressed Plants (D1) tic Position (D2) .quitard (D3)
etland Hyd imary Indi Surface High Wa Saturatio Water M Sedimer Drift De Algal M	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Ima d Concave Sur 5) Odor (C1) Table (C2)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) ic Position (D2)
etland Hyd imary Indi Surface High Wa Saturatio Water M Sedimer Drift De Algal M	DLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Ima d Concave Sur 5) Odor (C1) Table (C2)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) • Stressed Plants (D1) tic Position (D2) .quitard (D3)
etland Hyd imary Indi Surface High Wa Saturatio Water M Sedimer Drift De Algal M Iron Dep Surface	DLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6)		fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	e on Aerial Ima d Concave Sur 5) Odor (C1) • Table (C2) Remarks)	gery (B7)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) sic Position (D2) quitard (D3) ographic Relief (D4)
etland Hyd imary Indi Surface High Wa Saturatio Water M Sedimer Drift De Algal M Iron Dep Surface	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present?	icator is su	fficient) x Inundation Visible Sparsely Vegetate Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in	e on Aerial Ima d Concave Sur 5) Odor (C1) Table (C2) Remarks)	gery (B7) face (B8)	cially afte	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) sic Position (D2) quitard (D3) ographic Relief (D4)
etland Hyd       imary Indi       x     Surface       x     High Wa       x     Saturation       Water M     Sedimer       Drift De     Algal M       Iron Dep     Surface       Surface     Surface       Surface     Surface	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? he Present?	icator is su Yes x	fficient)          x       Inundation Visible         Sparsely Vegetate         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in	e on Aerial Ima d Concave Sur 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) face (B8)		Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo x FAC-Neut	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) sic Position (D2) quitard (D3) ographic Relief (D4)
vetland Hyd       rimary Indi       x     Surface       x     High Wa       x     Saturation       water M     Sedimer       Drift De     Algal M       Iron Dep     Surface       Surface Water Table     Saturation Pr	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? esent? (includes ry fringe)	icator is su Yes x Yes x Yes x	ficient)         x         Inundation Visible         Sparsely Vegetate         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in         No       Depth (inc.)         No       Depth (inc.)	e on Aerial Ima d Concave Sur 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) face (B8)	w	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo x FAC-Neut	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) tic Position (D2) quitard (D3) ographic Relief (D4) ral Test (D5)
Vetland Hyd rimary Indi x Surface x High Wa X Saturatio Water M Algal M Iron Dep Surface Water Surface Water Tabl Gaturation Pr capilla	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? esent? (includes ry fringe)	icator is su Yes x Yes x Yes x	ficient)         x         Inundation Visible         Sparsely Vegetate         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in         No       Depth (incl         No       Depth (incl         No       Depth (incl	e on Aerial Ima d Concave Sur 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) face (B8)	w	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo x FAC-Neut	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) tic Position (D2) equitard (D3) ographic Relief (D4) ral Test (D5)
etland Hyd imary Indi Surface Saturatio Vater M Sedimer Drift De Algal M Iron Dep Surface Surface Wate Vater Tabl aturation Pr capilla	OLOGY Irology Indicators: cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) Soil Cracks (B6) ter Present? esent? (includes ry fringe)	icator is su Yes x Yes x Yes x	ficient)         x         Inundation Visible         Sparsely Vegetate         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in         No       Depth (incl         No       Depth (incl         No       Depth (incl	e on Aerial Ima d Concave Sur 5) Odor (C1) • Table (C2) Remarks) hes)	gery (B7) face (B8)	w	Secondary Indi Water-stai Drainage I Oxidized I Presence o Salt Depos Stunted or Geomorph x Shallow A x Microtopo x FAC-Neut	cators (2 or more required) ned Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) Stressed Plants (D1) tic Position (D2) quitard (D3) ographic Relief (D4) ral Test (D5)

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015						
Applicant/Owne	er: Hilcorp	Sampling Point:	7						
Investigator(s):	Ryan Cooper, Kiel Kenning								
Remarks									
	866-869 Large Frost heaves. No Arcful to be seen								



Projective         Hikkop Lakery         Borough City:         Noth Slope Borough         Sampling Date:         7.22/2015           Applicant/Overs		WETLAND DETE	RMINATI	ION DATA F	ORM – Al	aska Region			
Investigner(s):       Ran Cooper, Kiel Kenning       Landform (hilbadi, terrace, hummocks, etc.)       Hummocks         Ixed:rolife((concurve, convex, convex, rome)       polygonal       Sine (w)       0       NA       NM       NM       NM         Sine Murphin       Acret Cosmal Phine       NA       NA       NM       NM       Cosmal Science       NA         Are elematic / hydrologic conditions on the site typical for this time of year?       Yes       X       No       (ff no. explain may answers in Remarks.)         StitMAR OF FINDINCS - Attach site map showing sampling point locations. transects, important features, etc.       No	Project/Site:	Hilcorp Liberty		Borough/City:	Nor	th Slope Borough S	ampling Date:	7/29/2015	
Lead relief (concerve, convex, none)       polygonal       Slope (%)       0         Solver polin       Acet (Convex poline)       NA         Solver polin       Nacet (Convex poline)       NA         Solver poline       NA       NA         Solver poline       NA       NA         Are volgenion       Sol       of Hydrologi       significantly otherwheat         Are volgenion       Sol       of Hydrologi       significantly otherwheat       Are "Normal Circumstance" priorit 10 feet wide presentals and an average in Remarks.)         SUMMARY OF FINDINCS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrologi Present?       Yes       No         Wetland Hydrology Present?       Yes       No       Is the Sampled Area within a Wetland?       No       No         Verderion       Solverion       Solverion       Dominance Test worksheet:       No       Areological Movie for indicator status. List plants Highest to Lowest % cover.         Tree Straum       Solverion       Objection?       Solution       Solution       Areological Advances for aversheet         1       Image: Solution Microsconder       Solverion       Solverion       Solverion       Solverion       Areological Advances         2       Vaccich       Vaccinim winimidea       10<	Applicant/Owner:		Hilcorp			Sampling Point:		8	
binegion:         Arctic Coatal Plain         Lat         70.18968         Long         147.65599         Dam         N/A           Soll Mup Curl Name         NA         NA         NA         No         PRAILED           Are Unput: / physiolic conditions on the site typical for this time of year?         Yes         No         Otto explain in Remarks.)           Are Vegatation         Soil or Hydrology         significantly disturbed?         Ane 'Normal Circumstances' present? Yes         No           MAR Vegatation         Soil or Hydrology         significantly disturbed?         Ane 'Normal Circumstances' present? Yes         No           MUMARY OF FINDINCS - Attach site map showing sampling point locations. transects. Important features, etc.         Hydrology Present?         Yes         No           Wathat Hydrology Present?         Yes         No         Is the Sampled Area within a Wetland?         Yes         No           Remarks         Acctophile fulva in stream next to point (10 feet wide present)         Yes         No         (A)           Tece Stratum         Absolut Present?         Yes         A         No         (A)           Statistic Middle Monitonin Stream next to point (10 feet wide present)         No         Present Med Worksheet         (A)           Tece Stratum         Absolut Present?         No	Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (hi	illside, terrace,	hummocks, etc.)	Hummocks		
Seli Map Unit Name     NA     NWI Classification     PEMIBC       Are clamatic / hydrologic conditions on the site typical for this time dy out?     Yes     x     No     (If no cellad) Circumstances' present?     No       Are Vegatation     Soil     or Hydrologic     ignificantly moblematic?     (If no cellad) Circumstances' present?     No     No       Hydrologic Person     Yes     X     No     Is the Sampled Area within any answers in Remarks.)       Hydrologic Person     Yes     X     No     Is the Sampled Area within a Wetland?     Yes     No       Hydrologic Person     Yes     X     No     Is the Sampled Area within a Wetland?     Yes     No       Wetland Hydrologic Person     Yes     X     No     Is the Sampled Area within a Wetland?     Yes     No       Wetland Hydrologic Person     Yes     X     No     Is the Sampled Area within a Wetland?     Yes     No       Wetland Hydrologic Person     Yes     X     No     Indicator     State or All Strate     No       Tees Stratum     Absolute     Solute     Dominant Secies That Area OBL, FACW, or FAC     Arcobal, FACW, or FAC     (A)       A during Strate Actions inform     100     YES     FAC     Total Number of Dominant Species That Area OBL, FACW, or FAC     (B)       A during Strate Actoons inf	Local relief (concave,	convex, none) polygonal		Slope (%)	0				
Are climite / hydrologic conditions on the site typical for this time of year? Yes x No (It no, explain in Remarks.) Are Vegatation Soil or Hydrology equificantly disturbed? Are "Normal Circumsaces" present? Yes x No (Pertoneous) Soil Or Hydrologic quantificantly disturbed? If needed, explain any avery explain any explain any avery explained avery explai	Subregion:	Arctic Coastal Plain Lat		70.18968	Long	g <u>147.68599</u>	Datum	N/A	
Ave Vegetation       Soil       or Hydrology       significantly problematic?       Are "Normal Circumsances" present? Yes       No         Status       me Hydrology       significantly problematic?       (If needed, ceptian any answers in Remarks.)       No         Status       Yes       No       Status       No       Status       No         Hydrology Present?       Yes       No       Status       No       Status       No         Wethand Hydrology Present?       Yes       No       Status       Is the Sampled Area within a Wethand?       Yes       No         Wethand Hydrology Present?       Yes       No       Status       Is the Sampled Area within a Wethand?       Yes       No         Tree Stratam       Accophila fidwa in stream next to point (10 feet wide premial) \$70.573       Dominance Textors       Accophila fidwa in stream next to point (10 feet wide premial) \$70.573         VECETATION - Use 33 abhreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.       Dominance Textors       4       Accophila fidwa in stream next to point (10 feet wide premial) \$70.573         VECETATION - Use 33 abhreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.       Dominance Textors worksheet       Toma Cover       Dominance Textor Norman Species That Accophila fidwa in stream next to point (10 feet wide premial) \$70.573	Soil Map Unit Name		N/A			NWI Classificat	ion P	EM1B/C	
Ave Vegenation       Sol       or Hydrology       significantly problemate?       (ff needed, explain any answers in Remarks.)         Hydrophylic Vegetation Present?       Yes       No	Are climatic / hydrologie	c conditions on the site typical for this time	e of year?	Yes	x No	(If no, explain in Re	marks.)		
SUMARY OF FINDINGS – Attach site imp showing sampling point locations, transects, important features, etc.         Hydric Soil Present?       Yes       x       No         Yes       x       No         Wethant Hydralogy Present?       Yes       x       No         Wethant Hydralogy Present?       Yes       x       No         Wethant Hydralogy Present?       Yes       x       No         Tree Stratum       Accoptilat fulva in stream next to point (10 feet wide permial) 870-873         VEGETATION - Use 3/3 abbreviations. List subregion (above) for indicator status. List plantat Bjecies That       Colspan="2">Colspan="2">Colspan="2">Colspan="2">Dominance Test worksheet         Tree Stratum       No       Total Cover       O         Stratum       Solve of total cover       O         Stratum       Solve of total cover       O         Stratum       Solve of total cover       O         Colspan="2">Colspan="2">Colspan="2"       No <th colspan<="" td=""><td>Are Vegetation</td><td>Soil or Hydrology si</td><td>gnificantly dis</td><td>sturbed?</td><td>Are "</td><td>Normal Circumstances" pres</td><td>ent? Yes x</td><td>No</td></th>	<td>Are Vegetation</td> <td>Soil or Hydrology si</td> <td>gnificantly dis</td> <td>sturbed?</td> <td>Are "</td> <td>Normal Circumstances" pres</td> <td>ent? Yes x</td> <td>No</td>	Are Vegetation	Soil or Hydrology si	gnificantly dis	sturbed?	Are "	Normal Circumstances" pres	ent? Yes x	No
Hydrophytic Vegetation Present?       Yes       x       No       Is the Sampled Area within a Wetland?       Yes       x       No         Remarks       Acetophila Idva in stream next to point (10 feet wide premial) 870-873         VEGETATION – Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.         Image: stream       Acetophila Idva in stream next to point (10 feet wide premial) 870-873         VEGETATION – Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.         Image: stream       Acetophila Idva in stream next to point (10 feet wide premial) 870-873         VEGETATION – Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.         Image: stream       Accophila Idva in stream next to point (10 feet wide premial) 870-873         Vegetaria       Status?         Image: stream       Montheor of Dominant Species That Account the cover         Image: stream       Status?         Status?       Total Cover         Image: stream       Status?         Image: stream       Status?<	6						,		
Hydric Soil Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       Metophila fubva in steam next to point (10 feet wide pereinal 820-873         VEGETATION – Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.         Tore Stratum       % Cover       Species?       Status?         1	SUMMARY OF FI	NDINGS – Attach site map show	wing samp	ling point loc	cations, tra	nsects, important feat	ures, etc.		
Hydric Soil Present?       Yes       No       within a Wetland?       Yes       No         Remarks       Accophila fulva in stream next to point (10 feet wide perenial) 870-873         VEGE TATION - Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.         Tree Stratum       Absolute       Dominant       Indicator       Dominance Test worksheet:         1	Hydrophytic Vegeta	tion Present? Yes x N	0		Is the San	npled Area			
Remarks       Accophila fulva in stream next to point (10 feet wide perenial) \$70-873         VEGETATION – Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Lowest % cover.         Tree Stratum       Absolute       Dominant       Indicator         1       -       -       -       -         2       -       -       -       -       -         3       -       -       -       -       -       -         4       -       -       -       -       -       -       -         5       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	-		0			- Vec	x No		
Arctophila fulva in stream next to point (10 feet wide percental) 870-873         VEGETATION - Use 3/3 abbreviations. List subregion (above) for indicator status. List plants Highest to Newst % cover.         Tree Stratum       Absolute       Dominant       Indicator         1	Wetland Hydrology	Present? Yes x N	o						
Absolute       Dominant       Indicator         1	Remarks	Arctopl	hila fulva in st	tream next to poir	nt (10 feet wid	e perenial) 870-873			
Tree Stratum% CoverSpecies?Status?Joininant Species That Are OBL FACW, or FAC:411111211113111141111411114111100%4111100%3111100%1salovaSalit coviliolia30YESFAC2vacvitVaccinium vitis-idaea10YESFAC3arcrubArctous ruber5NOFAC4dryintDryas integrifolia5NOFAC511100%of total cover101erivagEriophorum vaginatum3YESFACW1erivagEriophorum vaginatum3YESFACW2arceareArctanthemum arcticum3YESFACW41111141111511116111711181119111911110111101111011110111101	VEGETAT	FION – Use 3/3 abbreviations. List s	subregion (a	above) for indi	cator status	. List plants Highest to I	Lowest % cov	ver.	
1						Dominance Test works	heet:		
2			% Cover	Species?	Status?	1			
3						Are OBL, FACW, or I	AC:	(A)	
4									
Image: Shrub Stratum       Total Cover       0         1       salova       Salix ovalifolia       30       YES       FAC         2       vacvit       Vaccinium vitis-idaea       10       YES       FAC         3       arcrub       Arctous ruber       5       NO       FAC         4       dryint       Dryas integrifolia       5       NO       FAC         5					_	Across All Strata:		(B)	
Sapling/Shrub Stratum       50% of total cover       0       20% of total cover       0         1       salova       Salix ovalifolia       30       YES       FAC         2       vacvit       Vaccinium vitis-idaea       10       YES       FAC         3       arcrub       Arctous ruber       5       NO       FAC         4       dryint       Dryas integrifolia       5       NO       FAC         5	+		0						
1       Salix ovalifolia       30       YES       FAC         2       vacvit       Vaccinium vitis-idaea       10       YES       FAC         3       arcrub       Arctous ruber       5       NO       FAC         4       dryint       Dryas integrifolia       5       NO       FAC         5	Couline (Church Churc		4 <u> </u>	-f	0			(A/B)	
2vacvitVaccinium vitis-idaea10YESFAC3arcrubArctous ruber5NOFAC4dryintDryas integrifolia5NOFACU5	- Î				-			·	
3       arcrub       Arctous ruber       5       NO       FAC         4       dryint       Dryas integrifolia       5       NO       FAC         5									
4dryintDryas integrifolia5NOFACU5 </td <td></td> <td></td> <td>-</td> <td></td> <td>_</td> <td></td> <td></td> <td></td>			-		_				
5						-			
6       Image: constraint of the species	5					-			
Total Cover       50         Herb Stratum       50% of total cover       25       20% of total cover       10         1       erivag       Eriophorum vaginatum       3       YES       FACW         2       arcarc       Arctanthemum arcticum       3       YES       FACW         3       2       arctanthemum arcticum       3       YES       FACW         4       arctanthemum arcticum       3       YES       FACW         5       arcarc       Arctanthemum arcticum       3       YES       FACW         6       arcarc       Arctanthemum arcticum       3       YES       FACW         7       arcarc       Arctanthemum arcticum       3       YES       FACW         8       arcarc       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum         9       arcarc       Arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum         8       arcarc       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum       arctanthemum arcticum         9       arctan       arctanthemum arctanthemum arctanthemuma									
Herb Stratum       50% of total cover       25       20% of total cover       10         1       erivag       Eriophorum vaginatum       3       YES       FACW         2       arcarc       Arctanthemum arcticum       3       YES       FACW         3		Total Cove	r 50						
1       erivag       Eriophorum vaginatum       3       YES       FACW         2       arcarc       Arctanthemum arcticum       3       YES       FACW         3	Herb Stratum			of total cover	10		. ,		
2       arcarc       Arctanthemum arcticum       3       YES       FACW         3								2.90	
3	2 arcarc	Arctanthemum arcticum	3	YES	FACW				
4	3								
3 -   6 -   7 -   7 -   8 -   9 -   10 -   Total Cover 6   50% of total cover 1.2   50% of total cover 3   20% of total cover 1.2   Plot size (radius, or length x width) 100ft radius   % Cover of Wetland Bryophytes 0   Total Cover of Bryophytes 0	4							supporting	
6     1       7     1       8     1       9     1       10     1       Total Cover     6       50% of total cover     3       20% of total cover     1.2       Plot size (radius, or length x width)     100ft radius     % Bare Ground       0     Total Cover of Bryophytes     0	5					data in Remarks or on a	a separate sheet	t)	
8     Image: Second condition     Image: Second co					+	Problematic Hydrophyt	ic Vegetation (	Explain)	
8     9     10       10     Total Cover     6       Total Cover     6       50% of total cover     3       20% of total cover     1.2       Plot size (radius, or length x width)     100ft radius     % Bare Ground       % Cover of Wetland Bryophytes     0       Total Cover of Bryophytes     0	7				+				
Interview       Total Cover     6       Total Cover     Hydrophytic       Solve of total cover     3     20% of total cover     1.2       Plot size (radius, or length x width)     100ft radius     % Bare Ground     0       % Cover of Wetland Bryophytes     0     Total Cover of Bryophytes     0	8				+	be present unless disturbed	or problematic	•	
Total Cover     6       50% of total cover     3     20% of total cover     1.2       Plot size (radius, or length x width)     100ft radius     % Bare Ground     0       % Cover of Wetland Bryophytes     0     Total Cover of Bryophytes     0	9				+				
Solution     Solution     Solution       50% of total cover     3     20% of total cover     1.2       Plot size (radius, or length x width)     100ft radius     % Bare Ground     0       % Cover of Wetland Bryophytes     0     Total Cover of Bryophytes     0	10								
50% of total cover     3     20% of total cover     1.2       Plot size (radius, or length x width)     100ft radius     % Bare Ground     0       % Cover of Wetland Bryophytes     0     Total Cover of Bryophytes     0		Total Cover	r 6			Hydrophytic			
Plot size (radius, or length x width)       100ft radius       % Bare Ground       0         % Cover of Wetland Bryophytes       0       Total Cover of Bryophytes       0         Remarks       0       0       0				of total cover	1.2	- Ves	x No		
% Cover of Wetland Bryophytes 0 Total Cover of Bryophytes 0	Plot size (radius, or					Present?			
Remarks		<b>U</b>	_						

Sampling Point

Prome Desci	ription: (Describe to	the depth	needed to document the	e indicator or	confirm the	absence	of indicators.)	
Depth	Matrix		R	edox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10								Fibric Organic
<sup>1</sup> Type: C=Co	ncentration. D=Depl	etion, RM=	Reduced Matrix, CS=Co	vered or Coate	d Sand Grain	18. <sup>2</sup> I	ocation: PL=Po	re Lining, M=Matrix.
	Indicators:	7	Indicators for Prob					
				Change (TA4) <sup>4</sup>			Alaska	Gleyed Without Hue 5Y or Redder
	ol or Histel (A1)		Alaska Color C					ring Layer
	Epipedon (A2)			With 2.5Y Hue			Other (I	Explain in Remarks)
• •	en Sulfide (A4)		Alaska Reuox	with 2.31 Hut	3			
	Dark Surface (A12)							
	Gleyed (A13)		<sup>3</sup> One indicator of hy					
Alaska	Redox (A14)		appropriate landscap	-	-	unless dist	urbed or probler	natic.
Alaska	Gleyed Pores (A15)		<sup>4</sup> Give details of colo	r change in Re	marks.		-	
Restrictive	Layer (if present):							
Types:			Permafrost				Hudwie Co	il Present? Yes x No
Depth (in	ches):		10				Hyune So	
HYDR	Thick organic	cs with pern	nafrost. Assume saturatio	n, especially af	ter snowmel	t with the	permafrost. This	s has been a dry year and dry season.
Wetland Hyd	drology Indicators:						Secondary Ind	icators (2 or more required)
Primary Ind	icators (any one ind	licator is su	fficient)				Water-sta	ined Leaves (B9)
x Surface	Water (A1)		x Inundation Visible	on Aerial Imag	gery (B7)		Drainage	Patterns (B10)
x High W	ater Table (A2)		Sparsely Vegetated	l Concave Surf	ace (B8)		Oxidized	Rhizospheres along Living Roots (C3)
x Saturati	ion (A3)		Marl Deposits (B1	5)			Presence	of Reduced Iron (C4)
Water M	Marks (B1)		Hydrogen Sulfide	Odor (C1)			Salt Depo	sits (C5)
Sedime	nt Deposits (B2)		Dry-Season Water	Table (C2)			Stunted or	r Stressed Plants (D1)
	eposits (B3)		Other (Explain in l				Geomorpl	nic Position (D2)
	fat or Crust (B4)			,				Aquitard (D3)
÷	eposits (B5)						Miaraton	ographic Relief (D4)
	Soil Cracks (B6)						EAC New	tral Test (D5)
		37		<u>\</u>	0		X FAC-Neu	
	ter Present?	Yes x	No Depth (inch		0	-		
	le Present? resent? (includes	Yes x	No Depth (inch		0	_		
	ary fringe)	Yes x	No Depth (inch	nes)	0	W	etland Hydrolo	gy Present? Yes x No
	· · ·	auge, moni	oring well, aerial photos,	previous inspe	ections), if av	ailable:		
	() · · · · · · · · · · · · · · · · · · ·			. r	,,			
Remarks								
	Ι	Dry Year. Sa	turation was not observe	d in the pit; but	t surface wat	er was ob	served near the J	pit in the same habitat.

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015					
Applicant/Owner	:: Hilcorp	Sampling Point:	8					
Investigator(s):	Ryan Cooper, Kiel Kenning							
Remarks								
	Arctophila fulva in stream next to point (10 feet wide perenial) 870-873							





WETLAND DETERMINATION DATA FORM – Alaska Region									
Project/Site:	Hilcorp Liberty		Borough/City:	Nor	Sampling Date:	7/29/2015			
Applicant/Owner:		Hilcorp			Sampling Point:		9		
Investigator(s):	Ryan Cooper, Kiel Kenning		Landform (h	illside, terrace,	hummocks, etc.)	Low center	ed tundra		
Local relief (concave, o	convex, none) low centered tune	dra	Slope (%)	0					
Subregion:	Arctic Coastal Plain Lat		70.18924	Long	g 147.71594	Datum	N/A		
Soil Map Unit Name		N/A			NWI Classifica	ation	PEM1H		
Are climatic / hydrologic	c conditions on the site typical for this tim	e of year?	Yes	x No	(If no, explain in R	emarks.)			
Are Vegetation	Soil or Hydrology si	gnificantly di	sturbed?	Are "	Normal Circumstances" pre	esent? Yes	No		
Are Vegetation		gnificantly pr			eded, explain any answers i				
SUMMARY OF FI	NDINGS – Attach site map show	wing samp	oling point loc	cations, tra	nsects, important fea	tures, etc.			
Hydrophytic Vegetat	tion Present? Yes <u>x</u> N	o		Is the Sar	npled Area				
Hydric Soil Present?	Yes <u>x</u> N	o			Wetland? Yes	x No			
Wetland Hydrology	Present? Yes x N	o							
Remarks			Low centered tun	dra, Very wet					
VEGETAT	TION – Use 3/3 abbreviations. List			•	. List plants Highest to	Lowest % co	ver.		
		Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum	r	% Cover	Species?	Status?	Number of Dominant Sp		2		
2					Are OBL, FACW, or	FAC:	(A)		
3	ł				Total Number of Domina		2		
4	<u>+</u>				Across All Strata	a:	(B)		
7		0			Percent of Dominant Spec		100%		
Conline/Chapter Street	tum 50% of total cover 0	0	V of total agree	0	Are OBL, FACW, or I		(A/B)		
Sapling/Shrub Strat	Salix ovalifolia	3	% of total cover YES	FAC	Prevalence Index wo		(		
2	Sunk övünföld	5	125	inte	Total % Cover of:		tiply by: 0		
3	+				OBL species 0	x 1 =			
4					FACW species 5 FAC species 103	x 2 =	10 309		
5			-		FAC species 103 FACU species 0	x 3 =	0		
6					UPL species 0	x 4 = x 5 =	0		
	Total Cove	r 3			Column Totals: 108	(A)	319 (B)		
Herb Stratum	50% of total cover 1.5		% of total cover	0.6	Prevalence Index =	. ,	2.95		
1 carful	Carex fuliginosa	100	YES	FAC	Hydrophytic Vegetatio		2.75		
2 erivag	Eriophorum vaginatum	5	NO	FACW	Y Dominance Test is >5				
3					Y Prevalence Index is $\leq$				
4					Morphological Adapta		supporting		
5	1				data in Remarks or on	-			
6					Problematic Hydrophy	tic Vegetation (	Explain)		
7					<sup>1</sup> Indicators of hydric soil	and wetland hyd	lrology must		
8					be present unless disturbed	d or problematic			
9									
10									
ų	Total Cove	r 105			Hydrophytic				
	50% of total cover 52.5		% of total cover	21	Vegetation Present? Yes	s x No			
Plot size (radius, or	length x width) 100ft radius	% B	are Ground	0	Present?				
% Cover of Wetla	nd Bryophytes 0 To	otal Cover of	Bryophytes	0					
Remarks		1 1 20							
	Ca	arex 10 difficu	ilt; so went with n	nost conservat	ve species.				

Sampling Point

Profile D	escription: (Describe t	o the depth	needed to document th	e indicator or c	onfirm the	absence	of indicators.)	
Depth	Matrix		Redox Features					
(inches		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-15								Fibric Organic
						2 -		
Type: C	=Concentration, D=Dep	letion, RM=	Reduced Matrix, CS=Co			1s. <sup>–</sup> I	location: PL=Po	re Lining, M=Matrix.
Hydric	Soil Indicators:		Indicators for Prot		Soils: <sup>3</sup>		<b>—</b>	
x His	tosol or Histel (A1)			Change (TA4) <sup>4</sup>				Gleyed Without Hue 5Y or Redder ving Layer
His	tic Epipedon (A2)		Alaska Alpine	Swales (TA5)				Explain in Remarks)
Нус	lrogen Sulfide (A4)		Alaska Redox	With 2.5Y Hue			Other (	Explain in Kemarks)
Thi	ck Dark Surface (A12)							
Ala	ska Gleyed (A13)		<sup>3</sup> One indicator of hy	drophytic vocate	tion on an	imory ind	lighter of watlen	d hydrology and an
	ska Redox (A14)		appropriate landscar					
	ska Gleyed Pores (A15)		<sup>4</sup> Give details of colo	-	-		I	
	tive Layer (if present):						7	
Types			permafrost					
• •	(inches):		*				Hydric So	il Present? Yes x No
Remark			15				_	
			Thick organics, with pe	rmafrost. Satura	tion comes	up high, e	even during this	dry month.
HY	DROLOGY					1		
Wetland	Hydrology Indicators:							icators (2 or more required)
·	Indicators (any one inc	licator is su	fficient)				Water-sta	ined Leaves (B9)
Sur	face Water (A1)		Inundation Visible	on Aerial Imag	ery (B7)		Drainage	Patterns (B10)
x Hig	h Water Table (A2)		Sparsely Vegetate	d Concave Surfa	ice (B8)		Oxidized	Rhizospheres along Living Roots (C3)
x Sat	uration (A3)		Marl Deposits (B1	5)			Presence	of Reduced Iron (C4)
Wa	ter Marks (B1)		Hydrogen Sulfide	Odor (C1)			Salt Depo	osits (C5)
Sed	iment Deposits (B2)	1	Dry-Season Water	Table (C2)			Stunted o	r Stressed Plants (D1)
Dri	ft Deposits (B3)		Other (Explain in	Remarks)			Geomorp	hic Position (D2)
Alg	al Mat or Crust (B4)	L					x Shallow	Aquitard (D3)
Iror	Deposits (B5)							ographic Relief (D4)
	face Soil Cracks (B6)							tral Test (D5)
	Water Present?	Vac	No y Douth Gard					
		Yes	No x Depth (incl		0			
	Table Present? on Present? (includes	Yes x	No Depth (incl		9	_		
	pillary fringe)	Yes x	No Depth (incl	nes)	3	W	etland Hydrolo	ogy Present? Yes x No
		gauge, monit	oring well, aerial photos	, previous inspec	ctions), if av	ailable:		
			C / Files		,, -			
Remarks	3							
				Ε	Dry year			

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015					
Applicant/Owne	er: Hilcorp	Sampling Point:	9					
Investigator(s):	Ryan Cooper, Kiel Kenning							
Remarks								
	Low centered tundra, Very wet							





Project/Site:	Hilcorp Liberty		Borough/City:	No	rth Slope Borough Sampling Date: 7/29/2015
Applicant/Owner:	* *	Hilcorp	"""		Sampling Point: 10
Investigator(s):		F	Landform (hill	side, terrace	, hummocks, etc.) Terrace
Local relief (concave,			Slope (%)	0	
Subregion:	Arctic Coastal Plain Lat		70.18433		g 147.72433 Datum N/A
Soil Map Unit Name		N/A			NWI Classification PEM1B/C
*	conditions on the site typical for this time		Yes	x No	(If no, explain in Remarks.)
Are Vegetation		nificantly dis	_		"Normal Circumstances" present? Yes x No
Are Vegetation		nificantly pro			eeded, explain any answers in Remarks.)
· · · ·	NDINGS – Attach site map show	ving samp	ling point loca	tions, tra	nsects, important features, etc.
Hydrophytic Vegetat	tion Present? Yes x No	)			
Hydric Soil Present?		)			npled Area Wetland? <sup>Yes</sup> <u>x</u> <sup>No</sup>
Wetland Hydrology		)		within a	wettand:
Remarks	874-8	77 Terrace. Fi	rost heaves runnin	g NE/SE nea	ar Badami pipeline
VEGETAT				-	. List plants Highest to Lowest % cover.
		Absolute	Dominant	Indicator	
Tree Stratum		% Cover	Species?	Status?	Number of Dominant Species That 3
2					Are OBL, FACW, or FAC: (A)
3					Total Number of Dominant Species 4
4					Across All Strata: (B)
	Total Cover	0			Percent of Dominant Species That 75% Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Strat		+ <u></u>	of total cover	0	Prevalence Index worksheet
1 arcrub	Arctous ruber	30	YES	FAC	Total % Cover of: Multiply by:
2 dryint	Dryas integrifolia	20	YES	FACU	OBL species $0   x   1 = 0$
3 vacvit	Vaccinium vitis-idaea	15	YES	FAC	FACW species $5 \times 2 = 10$
4 salova	Salix ovalifolia	10	NO	FAC	FAC species $55 \times 3 = 165$
5					FACU species $20 \times 4 = 80$
6					UPL species $0 \times 5 = 0$
	Total Cover	75			Column Totals: 80 (A) 255 (B)
Herb Stratum	50% of total cover 37.5	20%	of total cover	15	Prevalence Index = $B/A = 3.19$
1 erivag	Eriophorum vaginatum	5	YES	FACW	Hydrophytic Vegetation Indicators:
2					Y Dominance Test is >50%
3					No Prevalence Index is $\leq 3.0$
4					Morphological Adaptations <sup>1</sup> (Provide supporting
5					data in Remarks or on a separate sheet)
6					Problematic Hydrophytic Vegetation (Explain)
7					<sup>1</sup> Indicators of hydric soil and wetland hydrology must
8					be present unless disturbed or problematic.
9					
10					
	Total Cover	5			Hydrophytic
	50% of total cover 2.5	20%	of total cover	1	Vegetation Present? Yes x No
Plot size (radius, or	length x width) 100ft radius	% Ba	re Ground	0	
% Cover of Wetla	nd Bryophytes 0 Tot	tal Cover of B	ryophytes	0	
Remarks	Unknown	grass with no	seed heads (80%	) erivag on	tops of hummocks

Sampling Point

Depth	Matrix		R	edox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12								Fibric Organic
ype: C=Cc	ncentration, D=Deple	tion, RM=	Reduced Matrix, CS=Co	vered or Coate	d Sand Grai	ns. <sup>2</sup> I	Location: PL=Por	re Lining, M=Matrix.
-	Indicators:	]	Indicators for Prob					
	ol or Histel (A1)			Change (TA4)			Alaska	Gleyed Without Hue 5Y or Redder
	Epipedon (A2)		Alaska Alpine				Underly	ing Layer
			Alaska Redox		<b>_</b>		Other (H	Explain in Remarks)
	en Sulfide (A4)		r hushu reedox		-			
_	Dark Surface (A12)							
	Gleyed (A13)		<sup>3</sup> One indicator of hy					
	Redox (A14)		appropriate landscap	-	-	unless dist	turbed or problem	natic.
	Gleyed Pores (A15)		<sup>4</sup> Give details of colo	or change in Re	marks.			
estrictive	Layer (if present):							
Types:			Permafrost				Hydric So	il Present? Yes x No
Depth (in	ches):		12				ilyune so	
Remarks	Thick layer of organ	ics with pe	rmafrost. Expect to have	saturation, esp	ecially durir	ig snowme	elt with the perm	afrost. Point taken in a dry month durin
		ics with pe	rmafrost. Expect to have	saturation, esp	ecially durir dry year.	ig snowme	elt with the perm	afrost. Point taken in a dry month durin
HYDR	OLOGY	ics with pe	rmafrost. Expect to have	saturation, esp		ıg snowme	_	
HYDR etland Hyd	OLOGY drology Indicators:			saturation, esp		ng snowme	Secondary Ind	icators (2 or more required)
HYDR etland Hyd mary Ind	OLOGY drology Indicators: icators (any one indi		fficient)		dry year.	ig snowme	Secondary Ind	icators (2 or more required) ined Leaves (B9)
HYDR etland Hyd mary Ind Surface	OLOGY drology Indicators: icators (any one indi Water (A1)		fficient)	on Aerial Ima	dry year. gery (B7)	ig snowme	Secondary Ind Water-sta Drainage	icators (2 or more required) ined Leaves (B9) Patterns (B10)
HYDR tland Hyd mary Ind Surface High W	OLOGY drology Indicators: icators (any one indi water (A1) Jater Table (A2)		fficient) Inundation Visible Sparsely Vegetated	on Aerial Imag	dry year. gery (B7)	ig snowme	Secondary Ind Water-sta Drainage Oxidized	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3)
HYDR atland Hyd mary Ind Surface High W Saturat	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1	on Aerial Ima; d Concave Surf 5)	dry year. gery (B7)	ig snowme	Secondary Indi Water-sta Drainage Oxidized Presence o	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4)
HYDR etland Hyd mary Ind Surface High W Saturat Water I	OLOGY drology Indicators: icators (any one indi e Water (A1) /ater Table (A2) ion (A3) Marks (B1)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide	on Aerial Ima d Concave Surf 5) Odor (C1)	dry year. gery (B7)	ig snowma	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5)
HYDR etland Hyd mary Ind Surface High W Saturat Water I	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1	on Aerial Ima d Concave Surf 5) Odor (C1)	dry year. gery (B7)	ig snowme	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1)
HYDR etland Hyd mary Ind Surface High W Saturati Water I Sedime Drift D	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	dry year. gery (B7)	ig snowme	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5)
HYDR etland Hyd imary Ind Surface High W Saturati Water I Sedime Drift D	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) mt Deposits (B2)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	dry year. gery (B7)	ig snowme	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted or Geomorph	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1)
HYDR etland Hyd imary Ind Surface High W Saturati Vater I Sedime Drift D Algal M	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	dry year. gery (B7)	ig snowma	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted on Geomorpl x Shallow A	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) hic Position (D2)
HYDR etland Hyd imary Ind Surface High W Saturati Water I Sedime Drift D Algal M Iron De	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2)	dry year. gery (B7)	ig snowme	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A X Microtopo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) Aquitard (D3)
HYDR etland Hyd imary Ind Surface High W Saturati Saturati Sedime Drift D Algal M Iron De Surface	OLOGY drology Indicators: icators (any one indi e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) e Soil Cracks (B6)		fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water	on Aerial Imag l Concave Surf 5) Odor (C1) Table (C2) Remarks)	dry year. gery (B7)	ig snowme	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A X Microtopo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) equitard (D3) ographic Relief (D4)
HYDR etland Hyd Surface High W Saturati Sedime Drift D Algal M Iron De Surface	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) atter Present?	icator is su	fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide Dry-Season Water Other (Explain in I	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks)	dry year. gery (B7) ace (B8)	ig snowma	Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A X Microtopo	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) equitard (D3) ographic Relief (D4)
HYDR etland Hyd imary Ind Surface High W Saturati Vater I Sedime Drift D Algal M Iron De Surface Water Tab aturation P	OLOGY drology Indicators: icators (any one indi e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) uter Present? resent? (includes	icator is su	fficient) Inundation Visible Sparsely Vegetated Marl Deposits (B1 Hydrogen Sulfide ( Dry-Season Water Other (Explain in I No Depth (inch	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks) nes)	dry year. gery (B7) ace (B8)		Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A x Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) equitard (D3) ographic Relief (D4)
HYDR etland Hyd surface High W Saturati Water I Sedime Drift D Algal M Iron De Surface Water Tab aturation P capilla	OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? resent? (includes ary fringe)	Yes x Yes x Yes x	fficient)         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in I         No       Depth (inch         No       Depth (inch	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks) nes)	dry year. gery (B7) ace (B8) 0 0 0		Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A x Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
HYDR etland Hyd surface High W Saturati Water I Sedime Drift D Algal M Iron De Surface Wa Water Tab aturation P capilla	OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? resent? (includes ary fringe)	Yes x Yes x Yes x	fficient)         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in I         No       Depth (inch         No       Depth (inch	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks) nes)	dry year. gery (B7) ace (B8) 0 0 0		Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A x Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
etland Hyd imary Ind Surface High W Saturati Water N Sedime Drift D Algal M Iron De Surface Surface Wa aturation P capilla	OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? resent? (includes ary fringe)	Yes x Yes x Yes x	fficient)         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in I         No       Depth (inch         No       Depth (inch	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks) nes)	dry year. gery (B7) ace (B8) 0 0 0		Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A x Microtope FAC-Neu	ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
HYDR etland Hyd surface High W Saturati Water I Sedime Drift D Algal M Iron De Surface Water Tab turation P capilla	OLOGY drology Indicators: icators (any one indi Water (A1) Vater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? resent? (includes ary fringe)	Yes x Yes x Yes x	fficient)         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in I         No       Depth (inch         No       Depth (inch	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks) nes)	dry year. gery (B7) ace (B8) 0 0 0		Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A x Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
HYDR etland Hyd mary Ind Surface High W Saturat Sedime Drift D Algal M Iron De Surface urface Wa Water Tab turation P capilla	OLOGY drology Indicators: icators (any one indi e Water (A1) 7 ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) e Soil Cracks (B6) tter Present? resent? (includes ary fringe)	Yes x Yes x Yes x	fficient)         Inundation Visible         Sparsely Vegetated         Marl Deposits (B1         Hydrogen Sulfide         Dry-Season Water         Other (Explain in I         No       Depth (inch         No       Depth (inch	on Aerial Imag d Concave Surf 5) Odor (C1) Table (C2) Remarks) nes)	dry year. gery (B7) ace (B8) 0 0 0		Secondary Indi Water-sta Drainage Oxidized Presence of Salt Depo Stunted of Geomorpl x Shallow A x Microtope FAC-Neu	icators (2 or more required) ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C3) of Reduced Iron (C4) sits (C5) r Stressed Plants (D1) nic Position (D2) aquitard (D3) ographic Relief (D4) tral Test (D5)
## WETLAND DETERMINATION PHOTO FORM – Alaska Region

Project/Site:	Hilcorp Liberty	Sampling Date:	7/29/2015					
Applicant/Owner:	Hilcorp	Sampling Point:	10					
Investigator(s):	- Ryan Cooper, Kiel Kenning							
Remarks								
	874-877 Terrace, Frost heaves running NE/SE near Badami pipeline							



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Appendix B Maps This page intentionally left blank



NAD 1983 StatePlane Alaska 3 FIPS 5003 Feet







				SCALE: 0 10	0 200 300 400 Feet	
<ul> <li>2015 Wetland Photo Point</li> <li>2015 Wetland Sample Point</li> <li>2015 Wetland Sample Point</li> <li>Badami Pipeline</li> <li>Badami Seasonal Ice Road</li> <li>Outer Continental Shelf Buffer</li> </ul>	Study Area Boulder Patch Disturbed Shadow Effect 300 ft Buffer Private Land (Native Allotment)	Cowardin E1UB L1UBH M1UB M2US	PEM1B/C PEM1C PEM1H PUBH R2UB	2015 HILC Hilcorp Liber W	ORP WETLANDS RE ty Development POA- etlands Delineation	



				SCALE: 0 10	0 200 300 400 Feet	
<ul> <li>2015 Wetland Photo Point</li> <li>2015 Wetland Sample Point</li> <li>2015 Wetland Sample Point</li> <li>Badami Pipeline</li> <li>Badami Seasonal Ice Road</li> <li>Outer Continental Shelf Buffer</li> </ul>	Study Area Boulder Patch Disturbed Shadow Effect 300 ft Buffer Private Land (Native Allotment)	Cowardin E1UB L1UBH M1UB	PEM1B/C PEM1C PEM1H PUBH R2UB	2015 HILC Hilcorp Libert W	DRP WETLANDS RE by Development POA- etlands Delineation	









































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Appendix C Aquatic Site Assessment This page intentionally left blank

	Aquatic Site Assessment Summary													
Unique ID	HGM	Cowardin	Flood Flow Alteration	Sediment Removal	Nutrient and Toxicant Removal	Erosion Control and Shoreline Stabilization	Production of Organic Matter and its Export	General Habitat Suitability	General Fish Habitat	Native Plant Richness	Educational or Scientific Value	Uniqueness and Heritage	Final Overall Functional Score	Category
1	Flats	PEM1B/C	0.67	0.60	0.67	1.00	0.75	0.60	N/A	1.00	1.00	0.43	0.746	Ш
2	Flats	PEM1B/C	0.67	0.60	0.67	1.00	0.75	0.80	N/A	1.00	1.00	0.71	0.800	I
3	Flats	PEM1C	0.80	0.40	0.67	1.00	0.80	1.00	N/A	1.00	1.00	0.71	0.820	1
4	Flats	PEM1B/C	0.43	0.60	0.67	0.33	0.80	0.80	N/A	1.00	1.00	0.71	0.705	11
5	Flats	PEM1C	0.71	0.60	0.67	1.00	0.60	1.00	N/A	1.00	1.00	0.43	0.779	I
6	Flats	PEM1B/C	0.80	0.40	0.67	1.00	0.60	1.00	N/A	1.00	1.00	0.57	0.782	I
7	Flats	PEM1B/C	0.67	0.40	0.33	1.00	0.60	1.00	N/A	1.00	1.00	0.71	0.746	
8	Flats	PEM1B/C	0.67	0.40	0.67	1.00	0.80	1.00	N/A	1.00	1.00	0.57	0.789	1
9	Flats	PEM1H	0.71	0.60	0.67	1.00	1.00	1.00	N/A	1.00	1.00	0.57	0.839	1
10	Flats	PEM1B/C	0.50	0.20	0.33	1.00	0.40	1.00	N/A	1.00	1.00	0.29	0.635	

Wetland Functions and Values Fredericks Oversiters		
Wetland Functions and Values Evaluation Questions Unique HGM C		
HGM C Cowardin Cl		
Size (aci		
Disturbance Categ		
A. Exceptional Habitat Designation	Y or N	
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North		
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N	
<ol> <li>Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)</li> <li>Flood Flow Alteration</li> </ol>	N	
1. Wetland occurs in the upper portion of its watershed	Y or N or N/A N	
<ol> <li>Wetland occurs in the upper portion of its watershed</li> <li>Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall condit</li> </ol>		
3. Wetland is a closed system	N	
4. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris	N/A	
5. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation	Y	
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y	
7. Floodwaters come as sheet flow rather than channel flow	Y	
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A N	
<ol> <li>Sources of excess sediment are present up gradient of the wetland</li> <li>Is wetland influenced by slow-moving water and/or a deepwater habitat</li> </ol>	N	
3. Is herbaceous vegetation present (>50% cover)	Y	
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	Ŷ	
5. Sediment deposits are present in wetland (observation or noted in application materials)	Y	
D. Nutrient and Toxicant Removal	Y or N or N/A	
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the		
wetland	N	
<ol><li>Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by other hydrological data source</li></ol>		
, 5	Y	
3. Wetland has at least 30% aerial cover of live vegetation E. Erosion Control and Shoreline Stabilization	Y or N or N/A	
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y	
2. An herbaceous layer is part of this dense vegetation	Y	
3. Shrubs able to withstand erosive flood events	N/A	
F. Production of Organic Matter and its Export	Y or N or N/A	
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y	
2. Woody plants in wetland are mostly deciduous	N/A	
3. Interspersion of vegetation and surface water is high in wetland	N Y	
<ol> <li>Wetland is inundated or has indicators that flooding is a seasonal event during the growing season</li> <li>Wetland has outlet from which organic matter is flushed</li> </ol>	Y	
G. General Habitat Suitability	Y or N or N/A	
1. Is wetland located greater than 300-feet from existing development	Y	
2. Undeveloped upland buffers abutting wetland	N/A	
3. Wetland part of a larger wetland complex, not fragmented	Y	
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	N	
5. Evidence of wildlife use	Y	
6. Wetland has a moderate degree of cowardin class interspersion	N	
H. General Fish Habitat 1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	Y or N or N/A N/A	
2. Does wetland provide overwintering habitat for fish	N/A	
3. Documented presence of fish	N/A	
4. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A	
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A	
6. Juvenile rest areas	N/A	
I. Native Plant Richness	Y or N or N/A	
1. Dominant and codominant plants are native 2. Watland contains two or more Cowardin Classes	Y N/A	
<ol> <li>Wetland contains two or more Cowardin Classes</li> <li>Wetland has two or more strata of vegetation</li> </ol>	N/A N/A	
J. Educational or Scientific Value	Y or N or N/A	
1. Site has scientific or educational use	N/A	
2. Wetland is in public ownership	Y	
3. Accessible trails available	N/A	
4. Is the area a known recreation area	N/A	
5. Subsistence (berry picking, fishing, hunting) K. Uniqueness and Heritage	N/A Y or N or N/A	
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y	
<ol> <li>Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and</li> </ol>		
Wildlife Service	Y	
3. Wetland has biological, geological, or other features that are determined rare	N	
4. Wetland has been determined significant because it provides functions scarce for the area	N	
5. Are there known or reported cultural resources in the area	N	
6. Is the area a known subsistence/recreation/living area	N	
7. Wetland complex contains one or more of the following habitats:		
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp. b) Aquatic berk babitat dominated, by Arctophila fulva		
<ul> <li>b) Aquatic herb habitat dominated by Arctophila fulva.</li> <li>c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins</li> </ul>		
d) Anadromous fish overwintering habitat		
e) Patterned wet sedge meadow and low center polygons		
e) Patterned wet sedge meadow and low center polygons		
Wotland Funct	ons and Values	Poculto
------------------------------	------------------------	----------------------------------------------
Wetland Functi Unique ID:	ons and values	1 1
HGM Class:		Flats
Cowardin Class	:	PEM1B/C
Size (acres):		-
Flood Flow Alte	Raw Score	Weighted Score
FIOOD FIOW AIte	o 0	
2	1	t.
3	0	Į
4	N/A	
5	1	
6	1	
7	Total	0.667
Sediment Remo		
1	0	
2	0	-
3	1	
4	1	-
5	Total	0.600
Nutrient and To	oxicant Removal	
1	0	
2	1	-
3	1	0.00-
Erocion Control	Total and Shoreline	0.667
Erosion Control	and shoreline :	Stabilization
2	1	ł
3	N/A	
	Total	1.000
	organic Matter a	ind its Export
1	1 N/A	l T
3	N/A 0	-
3	1	ł
5	1	t
	Total	0.750
General Habita		
1	1 N/A	l T
3	N/A 1	1
4	0	ł
5	1	Į
6	0	
	Total	0.600
General Fish Ha		
1	N/A N/A	l I
3	N/A N/A	ł
4	N/A	t
5	N/A	Į
6	N/A	
Native Plant Rid	Total	N/A
Native Plant Rid	nness 1	
2	N/A	ł
3	N/A	<u>†                                    </u>
	Total	1.000
Educational or :		
1	N/A	-
2	1 N/A	ļ
4	N/A N/A	ł
5	N/A	ł
	Total	1.000
Uniqueness and		
1	1	
2	1	ļ
3	0	l.
5	0	ł
6	0	t
7	1	
	Total	0.429

Disturbance Activities			
Disturbance Category		0	
Disturbance Cat	egory	Impact Factor	
0	=	1	
1	=	0.99	
2	=	0.95	
3	=	0.9	
Disturbance Imp	oact Factor	1	

Wetland Functions and Values Results (cont.)			
Unique ID 1			
Exceptional Habitat Designation			0
			·
	Weighted Score		
Flood Flow Alteration	0.667		
Sediment Removal	0.600		
Nutrient and Toxicant Removal	0.667		
Erosion Control and Shoreline Stabilization	1.000		
Production of Organic Matter and its Export	0.750		
General Habitat Suitability	0.600		
General Fish Habitat	N/A		
Native Plant Richness	1.000		
Educational or Scientific Value	1.000		
Uniqueness and Heritage	0.429		_
	Total	6.712	
Standardization			
Total # of functions assessed		9	
Standardized Total		0.746	
Total (Including Disturbance and Exceptional Habitat)			0.746
		-	
Overall Functional Score (Category)	0.76 - 1.00	1	Highest II
	0.51 - 0.75	<u> </u>	-
	0.26 - 0.50		-
	0 - 0.25	IV	Lowest
Notes:			
1) Scores for each category component, 0 = no and 1 = yes.			
2) Not all functional categories will be applicable to each wetland			-
For example, General Fish Habitat is only applicable to wet Functional categories that are not applicable will be treated			
that component. No score is not the same as 0, which wou			
Accordingly, the maximum total score will be reduced by 1			
For example, if General Fish Habitat does not apply, then the	•	0	,
3) NA = an item that is currently not applicable, but could be app			
<ol> <li>Si NA – an territiat is currently not applicable, but could be app 4) See impacted area assessment worksheet for determination o</li> </ol>			ממנם מוכ מעמוומטול.
Apply the correct impact factor to the disturbance category			
Apply the correct impact factor to the distdfballce category	-		

Mada a Providence and Malance Production Constitution	2
Wetland Functions and Values Evaluation Questions Unique ID: HGM Class:	
HGM Class: Cowardin Class:	
Size (acres):	
Disturbance Category:	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)	N
B. Flood Flow Alteration	Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
2. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions	Y
3. Wetland is a closed system	N
4. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris	N/A
5. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation	Y
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y
7. Floodwaters come as sheet flow rather than channel flow	Y
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
1. Sources of excess sediment are present up gradient of the wetland	N
2. Is wetland influenced by slow-moving water and/or a deepwater habitat	N
3. Is herbaceous vegetation present (>50% cover)	Y
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	Y
5. Sediment deposits are present in wetland (observation or noted in application materials)	Y Vor Nor N/A
D. Nutrient and Toxicant Removal 1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	Y or N or N/A
a sources of excess numerics (refaincers) and toxicants (pesitives and newy inclus) are present up gradient and able to innucled the wetland	N
2. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by	
<ul> <li>A retain a management of the management of the second event during the proving second by violal observation, of management of the second event during the proving second by violal observation, of management of the second event during the proving second by violal observation, of management of the second event of t</li></ul>	Y
3. Wetland has at least 30% aerial cover of live vegetation	Y
E. Frosion Control and Shoreline Stabilization	Y or N or N/A
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y
2. An herbaceous layer is part of this dense vegetation	Y
3. Shrubs able to withstand erosive flood events	N/A
F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
3. Interspersion of vegetation and surface water is high in wetland	N
4. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season	Y
5. Wetland has outlet from which organic matter is flushed	N/A
G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Y
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion	N
H. General Fish Habitat	Y or N or N/A
Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish	N/A
3. Documented presence of fish	N/A
<ol> <li>Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter</li> <li>Generative remote the second data and/or buffer to provide cover, shade, and/or detrital matter</li> </ol>	N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A N/A
6. Juvenile rest areas I. Native Plant Richness	N/A Y or N or N/A
1. Dominant and codominant plants are native	Y OF N OF N/A
2. Wetland contains two or more Cowardin Classes	Y
2. Wetland has two or more strata of vegetation	Y
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use	N/A
2. Wetland is in public ownership	Y
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting)	N/A
K. Uniqueness and Heritage	Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
2. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	
Wildlife Service	Y
3. Wetland has biological, geological, or other features that are determined rare	N
4. Wetland has been determined significant because it provides functions scarce for the area	N
5. Are there known or reported cultural resources in the area	Y
6. Is the area a known subsistence/recreation/living area	Y
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
d) Anadromous fish overwintering habitat	
e) Patterned wet sedge meadow and low center polygons	
f) High center polygon complex	
g) Riverine coastal mudflats	
h) Non-patterned wet meadow adjacent to streams and river bluffs.	Y

Weighted Functions and Values Results           Unique ID:         2           HGM Class:         Flats           Cowardin Class:         PEM1B/C           Size (acres):         -           1         0           2         1           1         0           2         1           1         0           2         1           3         0           4         N/A           5         1           0         0.667           Sediment Removal         0.667           Sediment Removal         0.667           Sediment Removal         0.667           Sediment Station         0.667           Sediment Station         0.667           Sediment Station         0.667           Erosion Control Shorelines Statilization         0.667           Erosion Control Shorelines Statilization         1           1         1         0           2         1         1.000           Production of Organic Matter and its Export         1           1         1         1           2         N/A         1           3         1	Wotland Eurot	ons and Values	Rocults
HGM Class:Flats PEM1B/CSize (acres):Raw ScoreWeighted ScoreFlood Flow Alteration-1021304N/A51617100.667Sediment Removal0.667Sediment Removal0.667Sediment Removal0.667Sediment Removal0.60010203100.667Sediment Removal0.600Nutrient and Toxicant Removal10213100.667Erosion Contro and Shorelines trabilization11213011.000Production of Organic Matter and its Export112130412N/A3031412N/A31112N/A3131415151606N/A112131415N/A5160617111<		ons and values	
PEM1B/CSize (acres):PEM1B/CRaw ScoreWeighted ScoreFlood Flow Alteration1021304N/A5161711031415170.667Sediment Removal1031415170.600Nutrient and Toxicant Removal102131112131.000Production of Organic Matter and its Export111121.001Production of Cranic Matter and its Export1130415N/A60112N/A31112N/A3111213111213111311131111111111121 <th></th> <th></th> <th></th>			
1021304N/A51617180.667Sediment Removal0.60031403140.100Nutrient and Toxicant Removal10213140.667Erosion Control and Shoreline Stabilization11213N/A1111.000Production of Organic Mattern112130415N/A11112N/A3130415N/A112N/A313141511N/A3131415N/A5N/A6N/A71112131415N/A5N/A6N/A71111111<		:	
O1021304N/A516171102031415170.667Sediment Removal102031415100.600Nutrient and Toxicant Removal10213110213111213041213041213041213041213041213131314151606N/A313141513131112131313141515161711 <td< th=""><th>Size (acres):</th><th></th><th>-</th></td<>	Size (acres):		-
O1021304N/A516171102031415170.667Sediment Removal102031415100.600Nutrient and Toxicant Removal10213110213111213041213041213041213041213041213131314151606N/A313141513131112131313141515161711 <td< th=""><th></th><th></th><th></th></td<>			
1021304N/A51617100.667Sediment Removal0.600314151711031411517110213110213111111111213N/A1111213011112130112131112131112131112N/A3131111111111131313131313131311111111131 <td< th=""><th></th><th></th><th>Weighted Score</th></td<>			Weighted Score
21304N/A51617110.667Sediment Removal0.6671031415100.600Nutrient and Toxial0.600Nutrient and Toxial0.60710213110213111213N/A112130112130112130112130304151112N/A313131415131415151112N/A3N/A4N/A513141515160711131111111111 <th></th> <th></th> <th></th>			
4N/A516171Total0.667Sediment Removal1020314151102131102130.667Sediment Removal1010213111213N/A11213N/A1121304111213041112N/A31314151112N/A3141511N/A314N/A5N/A6N/A6N/A7111213131415N/A5N/A6N/A6N/A7111213111 </th <th></th> <th></th> <th></th>			
516171Total0.667Sediment Removal0.66720314151771021102130.667Erosion Control and Shoreline Stabilization11213N/A11213N/A11112130412130415N/A111130415N/A1131314151113141511N/A5111213N/A4N/A5N/A6N/A6N/A7111112131415N/A6N/A6N/A71111121 <t< th=""><th></th><th></th><th></th></t<>			
6171Sediment Removal1020314151Total0.600Nutrient and Toxicant Removal10213110213111213N/ATotal1.000Production of Creanic Matter and its Export112130412130412N/A30412N/A306eneral Habitat Suitability112N/A313141511N/A3141511N/A3N/A4N/A5N/A6N/A11213111213131415N/A5N/A6N/A6N/A7111213111 </th <th>4</th> <th>N/A</th> <th></th>	4	N/A	
71Total0.667Sediment Removal10203141151Total0.600Nutrient and Toxicant Removal1021311011213N/A11213N/A112130112130415N/A112N/A306060112N/A31314151606N/A113N/A3N/A4N/A5N/A1121311121311121313111213111311111213111 <td< th=""><th>5</th><th></th><th>-</th></td<>	5		-
Total0.667Sediment Removal1020314151Total0.600Nutrient and Toxicant Removal10213110213111213N/A11213N/A11213N/A1121301121304121304151112N/A3131314151606N/A112N/A3N/A4N/A5131112131112131314N/A5111.000Educational or Scientific Value113N/A4N/A5N/A6N/A6N/A			
1         0           1         0           2         0           3         1           4         1           5         1           Total 0.600           Nutrient and Toxicant Removal           1         0           2         1           3         1           Total 0.667           Erosion Control and Shoreline Stabilization           1         1           2         1           3         N/A           Total 0.667           Erosion Control and Shoreline Stabilization           1         1           2         1           3         N/A           1         1           2         1           3         0           4         1           2         N/A           3         1           1         1           2         N/A           3         1           3         1           4         1           5         1           6         N/A </th <th>7</th> <th></th> <th>0.667</th>	7		0.667
1         0           2         0           3         1           4         1           5         1           1         0           2         1           3         1           1         0           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         N/A           1         1           2         1           3         N/A           1         1           2         1           3         0           4         1           3         0           4         1           2         N/A           3         1           4         1           3         1           4         1           5         1           1         N/A           3         N/A           4         N/A           5         <	Sediment Remo		0.007
3         1           4         1           5         1           Total         0.600           Nutrient and Toxicant Removal         1           2         1           3         1           Control         and Shoreline Stabilization           1         1           2         1           3         N/A           Total         1.000           Production of Organic Matter and its Export           1         1           2         1           3         0           4         1           5         N/A           Total         0.750           General Habitat Suitability         0.750           General Habitat Suitability         0.800           General Fish Habitat         1.000           Mative Plant Richness         1.000           1         1           2         1           3         1.000 <td< th=""><th></th><th></th><th></th></td<>			
4         1           5         1           Total         0.600           Nutrient and Toxicant Removal         1           1         0           2         1           3         1           Cosion Control and Shoreline Stabilization           1         1           2         1           3         N/A           Total         1.000           Production of Organic Matter and its Export           1         1           2         1           3         0           4         1           2         1           3         0           4         1           2         N/A           3         0           4         1           2         N/A           3         1           4         1           5         1           6         0           0         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           3         N/A           1         1	2	0	
51Total0.600Nutrient and Toxicant Removal102131Total0.667Erosion Contro and Shoreline Stabilization11213N/ATotal1.000Production of Organic Matter and its Export112130415N/A6N/A112N/A314151606N/A1N/A3N/A411N/A311N/A311N/A516N/A6N/A71112131112131112131112131112131111121311111111111 </th <th>-</th> <th></th> <th></th>	-		
Total0.600Nutrient and Toxicant Removal102131Total11213N/ATotal11213N/ATotal112130415N/A6eneral Habita0.750General Habita0.750General Habita0.80060112N/A314151600.8000.800General Habitat1N/A314151600.8000.800General Fish Habitat1N/A3N/A4N/A5N/A6N/A11112131112131112131111111111111213N/A4N/A5N/A6N/A11.000 </th <th></th> <th></th> <th>-</th>			-
Nutrient and Toxicant Removal           1         0           2         1           3         1           Total         0.667           Erosion Control and Shoreline Stabilization         1           1         1           2         1           3         N/A           Total         1.000           Production of Organic Matter and its Export         1           1         1           2         1           3         0           4         1           5         N/A           6         0.750           General Habitt Suitability         0.750           General Habitt Suitability         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Mabitat         0.800           General Fish Mabitat         0.800           General Fish Mabitat         0.800           General Fish Mabitat         0.800           Ganda         N/A           1         1.000           1	5		0.600
1         0           2         1           3         1           Total         0.667           Erosion Contro         and Shoreline Stabilization           1         1           2         1           3         N/A           Total         1.000           Production of Organic Matter and its Export           1         1           2         1           3         0           4         1           5         N/A           6         0/A           704         0.750           General Habitat Suitability         0.750           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         1           1         N/A           3         N/A           4         N/A           5         N/A           6         N/A           1         1           2         1           3         N/A           4	Nutrient and To		
3         1           Total         0.667           Erosion Control and Shoreline Stabilization         1           1         1           2         1           3         N/A           Production of Organic Matter and its Export           1         1           2         1           3         0           Yotal         1.000           Production of Organic Matter and its Export           1         1           2         1           3         0           4         1           5         N/A           6         0.750           General Habitat Suitability         0.750           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           General Fish Habitat         0.800           Galation N/A         N/A           1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           1         1.000			
I         0.667           Erosion Control and Shoreline Stabilization         1           1         1           2         1           3         N/A           Total         1.000           Production of Organic Matter and its Export         1           1         1           2         1           3         0           4         1           5         N/A           0         0.750           General Habitat Suitability         0.750           General Habitat Suitability         0.750           General Habitat Suitability         0.750           General Fish Habitat         0.800           General Fish Habitat         1.000           I         N/A           3         N/A           4         N/A           5         N/A           1         1.000	2	1	
Erosion Control         and Shoreline Stabilization           1         1           2         1           3         N/A           Total           1         1           2         1           3         N/A           Total           1         1           2         1           3         0           4         1           5         N/A           General Habitt Suitability           1         1           2         N/A           3         1           4         1           5         1           1         1           2         N/A           3         1           6         0           General Fish Habitat           1         N/A           2         N/A           4         N/A           5         N/A           6         N/A           1         1           2         1           3         1           1         1.000           <	3		
1     1       2     1       3     N/A       Total       1     1       2     1       3     0       4     1       5     N/A       Total       Total       0     0.750       General Habita: Suitability       1     1       2     N/A       3     1       4     1       5     1       6     0       Total       O.800       General Fish Habitat       Total       0     N/A       1     N/A       2     N/A       3     N/A       4     N/A       5     N/A       6     N/A       1     1       1     1       2     N/A       3     N/A       4     N/A       5     N/A       1     1       1     1       2     1       3     N/A       4     N/A       5     N/A       6     N/A       1	Funding Court		
2         1           3         N/A           Total         1.000           Production of Organic Matter and its Export         1           1         1           2         1           3         0           4         1           5         N/A           Total           0.750           General Habitat Suitability           1         1           2         N/A           3         1           4         1           5         1           6         0           6         0           6         0           6         0           6         0           6         N/A           1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           7         1           1         1           2         1           3         1           1         1           2         1			stabilization
3         N/A           Total         1.000           Production of Organic Matter and its Export         1           1         1           2         1           3         0           4         1           5         N/A           0.750         0.750           General Habitat Suitability         0.750           1         1           2         N/A           3         1           4         1           5         1           6         0           Total         0.800           General Fish Habitat         1           1         N/A           3         N/A           4         N/A           5         N/A           6         N/A           1         1           2         1           3         1           1			ł
Production of Organic Matter and its Export           1         1           2         1           3         0           4         1           5         N/A           Total 0.750           General Habitat Suitability           1         1           2         N/A           3         1           4         1           5         1           6         0           Total 0.800           General Fish Habitat           1         N/A           2         N/A           3         N/A           4         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           1         1           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         N/A           4			
1       1         2       1         3       0         4       1         5       N/A         Total 0.750         General Habitat Suitability         1       1         2       N/A         3       1         2       N/A         3       1         4       1         5       1         6       0         Total 0.800         General Fish Habitat         1       N/A         2       N/A         3       N/A         4       N/A         5       N/A         6       N/A         7       Total       N/A         1       1       1         2       1       1         3       1       1         2       1       1         3       1       1         1       1       1         2       1       1         3       N/A       1         4       N/A       1         5       N/A <th></th> <th>Total</th> <th>1.000</th>		Total	1.000
2         1           3         0           4         1           5         N/A           Total 0.750           General Habitat Suitability           1         1           2         N/A           3         1           4         1           5         1           6         0           General Habitat 10.800           General Fish Habitat         0.800           Ging Colspan= Colsp			nd its Export
3         0           4         1           5         N/A           Total         0.750           General Habitat Suitability           1         1           2         N/A           3         1           4         1           5         1           6         0           Total           0.800           General Fish Habitat           1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           7         Total           1         N/A           5         N/A           6         N/A           7         Total           1         1           2         1           3         1           1         1.000           Educational or Scientific Value           1         N/A           3         N/A           4         N/A           5         N/A           1			
4         1           5         N/A           General Habitat Suitability         0.750           1         1           2         N/A           3         1           4         1           5         1           6         0           Total         0.800           General Fish Habitat         0.800           Mathematical Solution         0.800           Mathematical Solution         N/A           1         1           2         1           3         N/A           4         N/A           5         N/A			-
5         N/A           Total 0.750           General Habitat Suitability           1         1           2         N/A           3         1           4         1           5         1           6         0           Total 0.800           General Fish Habitat           1         N/A           2         N/A           3         N/A           4         N/A           3         N/A           4         N/A           5         N/A           6         N/A           Total 0.800           General Fish Habitat           1         N/A           4         N/A           5         N/A           6         N/A           1         1           2         1           3         1           Total 1.000           Educational or Scientific Value           1         N/A           4         N/A           5         N/A           Total 1.000			
Total         0.750           General Habitat Suitability         1           1         1           2         N/A           3         1           4         1           5         1           6         0           Total         0.800           General Fish Habitat         0.800           Mative Plant Citchat         N/A           A         N/A           1         1           2         1           3         1           Educational or Scientific Value         1.000           Educational N/A         N/A           4         N/A           5         N/A           General Fish Habitat         1.000			
1       1         2       N/A         3       1         4       1         5       1         6       0         Total 0.800         General Fish Habitat         1       N/A         2       N/A         3       N/A         4       N/A         5       N/A         6       N/A         5       N/A         6       N/A         7       Total         1       1         2       1         3       1         1       1         2       1         3       1         1       1         2       1         3       1         1       N/A         2       1         3       N/A         4       N/A         5       N/A         0       1.000         Uniqueness and Heritage         1       1         2       1         3       0         4       0		-	0.750
2         N/A           3         1           4         1           5         1           6         0           Total 0.800           General Fish Habitat           1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           5         N/A           6         N/A           N/A           6         N/A           Total N/A           1         1           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         1           1         N/A           2         1           3         N/A           4         N/A           5         N/A           1         1.000           Uniqueness and Heritage         1           1         1			
3     1       4     1       5     1       6     0       Total 0.800       General Fish Habitat       1     N/A       2     N/A       3     N/A       4     N/A       5     N/A       6     N/A       5     N/A       6     N/A       7     Total       1     1       2     1       3     1       1     1       2     1       3     1       Total       1     1       2     1       3     1       1     1       2     1       3     1       Total       1     N/A       2     1       3     N/A       4     N/A       5     N/A       Total       1     N/A       5     N/A       1     1.000       Uniqueness and Heritage       1     1       3     0       4     0       5     1			
4         1           5         1           6         0           Total         0.800           General Fish Habitat         0.800           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           6         N/A           6         N/A           7         Total           8         N/A           4         N/A           5         N/A           1         1           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         N/A           4         N/A           5         N/A           4         N/A           5         N/A           1         1.000           Uniqueness and Heritage           1         1           3         0           3         0           3			
5         1           6         0           Total 0.800           General Fish Habitat           1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           7         Total           1         1           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         N/A           4         N/A           5         N/A           4         N/A           5         N/A           1         1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           3         0           4         0			
Total         0.800           General Fish Habitat			
General Fish Habitat           1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           7         Total           1         1           2         1           3         1           1         1           2         1           3         1           1         1           2         1           3         1           1         1.000           Educational or Scientific Value         1.000           Educational or Scientific Value         1.000           1         N/A           3         N/A           4         N/A           5         N/A           Uniqueness and Heritage         1.000           1         1           2         1           3         0           4         0           5         1	6	0	
1         N/A           2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           6         N/A           1         1           2         1           3         1           1         1           2         1           3         1           Educational or Scientific Value           1         N/A           4         N/A           5         N/A           1         1.000           Uniqueness and Heritage         1.000           1         1           2         1           3         0           4         0           5         1			0.800
2         N/A           3         N/A           4         N/A           5         N/A           6         N/A           Total N/A           Total N/A           1         1           2         1           3         1           Total 1.000           Educational or Scientific Value           1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           3         0           4         0           5         1			
3         N/A           4         N/A           5         N/A           6         N/A           Total N/A           Nitive Plant Richness           1         1           2         1           3         1           Total 1.000           Educational or Scientific Value           1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			-
4         N/A           5         N/A           6         N/A           Total         N/A           Native Plant Richness         N/A           1         1           2         1           3         1           Total           1         N/A           5         N/A           6         N/A           1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total           1         1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			ł
Image: first orgen and series of the series of th			t
Total         N/A           Native Plant Richness         1           1         1           2         1           3         1           Total           3         1           Total           1         N/A           2         1           3         N/A           2         1           3         N/A           4         N/A           5         N/A           Total           1         1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			-
Native Plant Richness           1         1           2         1           3         1           Total 1.000           Educational or Scientific Value           1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1	6		
1         1           2         1           3         1           Total           1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total           1         1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1	Native Plant Bi		N/A
2     1       3     1       Total       1     N/A       2     1       3     N/A       4     N/A       5     N/A       Total       Joint 1.000       Uniqueness and Heritage       1     1       2     1       3     0       4     0       5     1			
3         1           Total           1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total           1         N/A           1         N/A           1         N/A           1         N/A           1         1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			t.
I         N/A           2         1           3         N/A           4         N/A           5         N/A           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1	3	1	
1         N/A           2         1           3         N/A           4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			1.000
2         1           3         N/A           4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			
3         N/A           4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			ł
4         N/A           5         N/A           Total 1.000           Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1			ł
5         N/A           Total           1           1         1           2         1           3         0           4         0           5         1			t
Uniqueness and Heritage           1         1           2         1           3         0           4         0           5         1	5	N/A	
1     1       2     1       3     0       4     0       5     1			1.000
2 1 3 0 4 0 5 1			
3 0 4 0 5 1			1
4 0 5 1			ł
			Į
6 1			
	6	1	
7 1 <b>Total</b> 0.714	7		0.714
10tdi 0.714	ι	rotal	0.714

Disturbance Activities			
Disturbance Category		0	
Disturbance Cat	egory	Impact Factor	
0	=	1	
1	=	0.99	
2	=	0.95	
3	=	0.9	
Disturbance Imp	oact Factor	1	

Wetland Functions and Values Results (cont.)			
Unique ID 2	4		
Exceptional Habitat Designation			0
	Weighted Score	2	
Flood Flow Alteration	0.667		
Sediment Removal	0.600		
Nutrient and Toxicant Removal	0.667		
Erosion Control and Shoreline Stabilization	1.000		
Production of Organic Matter and its Export	0.750		
General Habitat Suitability	0.800		
General Fish Habitat	N/A		
Native Plant Richness	1.000		
Educational or Scientific Value	1.000		
Uniqueness and Heritage	0.714		-
	Total	7.198	
Standardization	1		1
Total # of functions assessed		9	-
Standardized Total	_	0.800	
	1		
Total (Including Disturbance and Exceptional Habitat)			0.800
Querell Functional Secure (Cotogomu)	0.76 - 1.00		
Overall Functional Score (Category)		I 	Highest
	0.51 - 0.75		-
	0.26 - 0.50		
	0 - 0.25	IV	Lowest
Notes:			
1) Scores for each category component, 0 = no and 1 = yes.			
<ol> <li>Not all functional categories will be applicable to each wetland</li> </ol>	d functional acco	comont	
For example, General Fish Habitat is only applicable to wet			rc
Functional categories that are not applicable will be treated			
that component. No score is not the same as 0, which wou			
Accordingly, the maximum total score will be reduced by 1			
For example, if General Fish Habitat does not apply, then the	•	0	,
3) NA = an item that is currently not applicable, but could be app			
<ol> <li>A) See impacted area assessment worksheet for determination on Apply the correct impact factor to the disturbance category</li> </ol>	f disturbance ac		
Apply the correct impact factor to the disturbance category			

Wetland Functions and Values Exclusion Overtiens	
Wetland Functions and Values Evaluation Questions Unique IE HGM Clas	
Cowardin Clas	
Size (acres	
Disturbance Categori	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
<ol> <li>Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)</li> <li>Flood Flow Alteration</li> </ol>	N Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
2. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall condition	
3. Wetland is a closed system	N/A
4. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris	N/A
5. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation	Y
<ol><li>Wetland receives floodwater from an adjacent water course at least once every 10 years</li></ol>	Y
7. Floodwaters come as sheet flow rather than channel flow	Y
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
<ol> <li>Sources of excess sediment are present up gradient of the wetland</li> <li>Is wetland influenced by slow-moving water and/or a deepwater habitat</li> </ol>	N
3. Is herbaceous vegetation present (>50% cover)	Y
<ol> <li>Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years</li> </ol>	Y
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
wetland 2. Wetland is injundated as has indicators that floading is a seasonal quant during the growing season by visual observation, or indicated by	N
2. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by	v
other hydrological data source 3. Wetland has at least 30% aerial cover of live vegetation	Y
E. Erosion Control and Shoreline Stabilization	Y or N or N/A
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y
2. An herbaceous layer is part of this dense vegetation	Y
3. Shrubs able to withstand erosive flood events	Y
F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
3. Interspersion of vegetation and surface water is high in wetland	N Y
<ol> <li>Wetland is inundated or has indicators that flooding is a seasonal event during the growing season</li> <li>Wetland has outlet from which organic matter is flushed</li> </ol>	Y
G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Y
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion H. General Fish Habitat	Y Y or N or N/A
1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish	N/A
3. Documented presence of fish	N/A
4. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A
6. Juvenile rest areas	N/A
I. Native Plant Richness	Y or N or N/A
<ol> <li>Dominant and codominant plants are native</li> <li>Wetland contains two or more Cowardin Classes</li> </ol>	Y Y
3. Wetland contains two or more strata of vegetation	Y
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use	N/A
2. Wetland is in public ownership	Y
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting) K. Uniqueness and Heritage	N/A Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
2. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	
Wildlife Service	Y
3. Wetland has biological, geological, or other features that are determined rare	N
<ol> <li>Wetland has been determined significant because it provides functions scarce for the area</li> </ol>	N
5. Are there known or reported cultural resources in the area	Y
6. Is the area a known subsistence/recreation/living area	Y
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic berb babitat dominated, by Arctophila fulva	
<ul> <li>b) Aquatic herb habitat dominated by Arctophila fulva.</li> <li>c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins</li> </ul>	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins d) Anadromous fish overwintering habitat	
<ul> <li>c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins</li> <li>d) Anadromous fish overwintering habitat</li> <li>e) Patterned wet sedge meadow and low center polygons</li> </ul>	Y

Wetland Functions and Values Results			
Wetland Functi Unique ID:	ons and values		
HGM Class:		3 Flats	
Cowardin Class		PEM1C	
Size (acres):	•	-	
5120 (00103).			
	Raw Score	Weighted Score	
Flood Flow Alte		Ŭ	
1	0		
2	1		
3	N/A		
4	N/A		
5	1		
6	1		
7	1	0.000	
Sediment Remo	Total	0.800	
Sediment Kemo	0		
2	0		
3	1		
4	1		
5	0		
	Total	0.400	
Nutrient and To	oxicant Removal		
1	0		
2	1		
3	1		
	Total	0.667	
Erosion Control	and Shoreline	Stabilization	
1	1		
2	1		
3	1		
	Total	1.000	
	organic Matter a	nd its Export	
1	1		
3	0		
4	1		
5	1		
5	Total	0.800	
General Habita			
1	1		
2	N/A		
3	1		
	=		
4	1		
5	1		
	1 1 1	· · ·	
5	1 1 1 Total	1.000	
5 6 General Fish Ha	1 1 1 Total bitat	1.000	
5 6 General Fish Ha 1	1 1 Total bitat N/A	1.000	
5 6 General Fish Ha 1 2	1 1 Total bitat N/A N/A	1.000	
5 6 General Fish Ha 1	1 1 Total bitat N/A N/A N/A	1.000	
5 6 General Fish Ha 1 2 3	1 1 Total bitat N/A N/A N/A N/A	1.000	
5 6 General Fish Ha 1 2 3 4	1 1 Total bitat N/A N/A N/A	1.000	
5 6 General Fish Ha 2 3 3 4 5	1 1 Total bitat N/A N/A N/A N/A N/A	1.000	
5 6 General Fish Ha 2 3 3 4 5	1 1 1 bitat N/A N/A N/A N/A N/A N/A Total		
5 General Fish Ha 2 3 4 5 6 Native Plant Ric 1	1 1 Total bitat N/A N/A N/A N/A N/A N/A Total chness 1		
5 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Constant Total chness 1 1		
5 General Fish Ha 2 3 4 5 6 Native Plant Ric 1	1 1 Total bitat N/A N/A N/A N/A N/A N/A Chness 1 1 1	N/A	
5 6 General Fish Ha 2 3 4 5 6 Native Plant Ric 1 2 3 3	1 1 Total bitat N/A N/A N/A N/A N/A Total chness 1 1 1 Total		
5 General Fish Ha 1 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or	1 1 Total bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value	N/A	
5 General Fish Ha 1 2 3 4 4 5 6 Native Plant Ric 1 2 3 8 Educational or 1	1 1 Total bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A	N/A	
5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Chness 1 1 Cotal Scientific Value N/A N/A	N/A	
5 6 6 6 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 1 Total bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A 1 N/A	N/A	
5 General Fish Ha 1 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or 1 2 3 4 4 3 4 4 5 6 8 8 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9	1 1 Total bitat N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A 1 N/A N/A	N/A	
5 6 6 6 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 1 Total bitat N/A N/A N/A N/A N/A Total thness 1 1 1 Scientific Value N/A N/A N/A N/A	N/A 1.000	
5 6 6 6 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1 1 1 I V/A N/A N/A N/A N/A N/A N/A N/A N/A Total Chness 1 1 1 Scientific Value N/A N/A N/A N/A N/A Total Scientific Value N/A 1 N/A	N/A	
5 General Fish Ha 1 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or 1 2 3 4 4 3 4 4 5 6 8 8 8 8 9 1 1 2 3 8 8 8 8 8 8 8 8 8 8 8 8 8	1 1 1 I V/A N/A N/A N/A N/A N/A N/A N/A N/A Total Chness 1 1 1 Scientific Value N/A N/A N/A N/A N/A Total Scientific Value N/A 1 N/A	N/A 1.000	
5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 1 1 1 N/A N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 1 1 Scientific Value N/A N/A N/A N/A Total d Heritage	N/A 1.000	
5 General Fish Ha 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or 1 2 3 Educational or 1 2 3 Uniqueness and 1	1 1 Total bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 Total Scientific Value N/A 1 N/A N/A 1 Total d Heritage 1	N/A 1.000	
5 General Fish Ha 1 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or 1 2 3 Educational or 2 1 2 3 4 5 Uniqueness and 1 2	1 1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Scientific Value N/A 1 N/A 1 N/A N/A 1 Heritage 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A 1.000	
5 General Fish Ha 1 2 3 4 5 6 Native Plant Rice 1 2 3 Educational or 1 2 3 Educational or 1 1 2 3 4 5 Uniqueness and 1 2 3 3 4 5 5 1 1 2 3 5 5 1 1 2 3 1 1 2 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 1 2 3 3 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5	1 1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Scientific Value N/A 1 N/A N/A N/A N/A 1 N/A N/A N/A 1 N/A N/A 1 N/A N/A 0 Total d Heritage 1 1 0 0 0 1	N/A 1.000	
5 General Fish Ha 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or 1 2 3 Educational or 1 2 3 Uniqueness and 1 2 3 4 5 5 6	1 1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Control N/A	N/A 1.000	
5 6 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1 1 1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 1 1 Scientific Value N/A 1 N/A N/A 1 I total d Heritage 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A 1.000	
5 General Fish Ha 2 3 4 5 6 Native Plant Ric 1 2 3 Educational or 1 2 3 Educational or 1 2 3 Uniqueness and 1 2 3 4 5 5 6	1 1 1 Total bitat N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Control N/A	N/A 1.000	

Disturbance Activities			
Disturbance Category		0	
Disturbance Cat	egory	Impact Factor	
0	=	1	
1	=	0.99	
2	=	0.95	
3	=	0.9	
Disturbance Imp	oact Factor	1	

Wetland Functions and Values Results (cont.)			
Unique ID 3	4		
Exceptional Habitat Designation			0
			·
	Weighted Score		
Flood Flow Alteration	0.800		
Sediment Removal	0.400		
Nutrient and Toxicant Removal	0.667		
Erosion Control and Shoreline Stabilization	1.000		
Production of Organic Matter and its Export	0.800		
General Habitat Suitability	1.000		
General Fish Habitat	N/A	ļ	
Native Plant Richness	1.000	ļ	
Educational or Scientific Value	1.000		
Uniqueness and Heritage	0.714		7
	Total	7.381	
Standardization Total # of functions assessed	1	0	7
		9	-
Standardized Total	_	0.820	
Total (Including Disturbance and Exceptional Habitat)	]		0.820
Overall Functional Score (Category)	0.76 - 1.00	I	Highest
	0.51 - 0.75	11	
	0.26 - 0.50	III	
	0 - 0.25	IV	Lowest
Notes:			
1) Scores for each category component, 0 = no and 1 = yes.			
<ol> <li>Not all functional categories will be applicable to each wetland</li> </ol>	functional asse	ssment	
For example, General Fish Habitat is only applicable to wet			rs
Functional categories that are not applicable will be treated			
that component. No score is not the same as 0, which wou			
Accordingly, the maximum total score will be reduced by 1			
For example, if General Fish Habitat does not apply, then the	•	0	,
<ol> <li>NA = an item that is currently not applicable, but could be app</li> </ol>			
<ol> <li>See impacted area assessment worksheet for determination o Apply the correct impact factor to the disturbance category</li> </ol>	f disturbance ac		

Matternal Franchises and Values Frankrishes Organizations	
·	que ID: 4 I Class: Flats
Cowardin	
	acres):
Disturbance Cat	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)	N
B. Flood Flow Alteration 1. Wetland occurs in the upper portion of its watershed	Y or N or N/A
<ol> <li>Wetland occurs in the upper portion of its watershed</li> <li>Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall con-</li> </ol>	
3. Wetland is a closed system	N
4. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris	N
5. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation	N
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y
7. Floodwaters come as sheet flow rather than channel flow	Y
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
1. Sources of excess sediment are present up gradient of the wetland	N Y
<ol> <li>Is wetland influenced by slow-moving water and/or a deepwater habitat</li> <li>Is herbaceous vegetation present (&gt;50% cover)</li> </ol>	Y
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	Y
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
wetland	N
2. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated	
other hydrological data source 3. Wetland has at least 30% aerial cover of live vegetation	Y
E. Erosion Control and Shoreline Stabilization	Y or N or N/A
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	N
2. An herbaceous layer is part of this dense vegetation	N
3. Shrubs able to withstand erosive flood events	Y
F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
3. Interspersion of vegetation and surface water is high in wetland	N
4. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season	Y
5. Wetland has outlet from which organic matter is flushed G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	N
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion	Y
H. General Fish Habitat	Y or N or N/A
1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish 3. Documented presence of fish	N/A N/A
4. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A N/A
6. Juvenile rest areas	N/A
I. Native Plant Richness	Y or N or N/A
1. Dominant and codominant plants are native	Y
2. Wetland contains two or more Cowardin Classes	Y
3. Wetland has two or more strata of vegetation J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific value	N/A
2. Wetland is in public ownership	Y
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting)	N/A
K. Uniqueness and Heritage	Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Υ
<ol> <li>Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish an Wildlife Society</li> </ol>	
Wildlife Service 3. Wetland has biological, geological, or other features that are determined rare	Y
<ol> <li>Wetland has been determined significant because it provides functions scarce for the area</li> </ol>	N
5. Are there known or reported cultural resources in the area	Y
6. Is the area a known subsistence/recreation/living area	Ŷ
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
d) Anadromous fish overwintering habitat	
e) Patterned wet sedge meadow and low center polygons	
	1
f) High center polygon complex	
	Y

Wotland Eurot	ons and Values	Results
Unique ID:	ons and values	4
HGM Class:		Flats
<b>Cowardin Class</b>	:	PEM1B/C
Size (acres):		-
	Raw Score	Weighted Score
Flood Flow Alte		
2	0	
3	0	
4	0	
5	0	
6	1	
7	1	
Collins of Doma	Total	0.429
Sediment Remo	ovai 0	
2	1	
3	1	
4	1	
5	0	
	Total	0.600
	oxicant Remova	
1	0	
2	1	
5	Total	0.667
<b>Erosion Control</b>	and Shoreline	
1	0	
2	0	
3	1	
Due duetien of C	Total	0.333
1	organic Matter a 1	na its export
2	1	
3	0	
4	1	
5	1	
	Total	0.800
General Habita 1	1	
2	N/A	
3	1	
4	0	
5	1	
6	1	
Company Fish Ha	Total	0.800
General Fish Ha	N/A	
2	N/A N/A	
3	N/A	
4	N/A	
5	N/A	
6	N/A	
Native Plant Rid	Total	N/A
Native Plant Rid	nness 1	
2	1	
3	1	
	Total	1.000
Educational or		
1	N/A	
2	1 N/A	
3	N/A N/A	
5	N/A	
	Total	1.000
Uniqueness and	d Heritage	
1	1	
2	1	
-	0	
3	Ω	
4	0	
	0 1 1	
4	1	
4 5 6	1	0.714

Disturbance Cat	0	
Disturbance Cat	egory	Impact Factor
0	=	1
1	=	0.99
2	=	0.95
3	=	0.9
Disturbance Imp	1	

Wetland Functions and Values Results (cont.)				
Unique ID 4	1			
Exceptional Habitat Designation			0	
· · ·			1	1
	Weighted Score	2		
Flood Flow Alteration	0.429	I		
Sediment Removal	0.600	Ī		
Nutrient and Toxicant Removal	0.667			
Erosion Control and Shoreline Stabilization	0.333			
Production of Organic Matter and its Export	0.800			
General Habitat Suitability	0.800			
General Fish Habitat	N/A			
Native Plant Richness	1.000	l		
Educational or Scientific Value	1.000	ļ		
Uniqueness and Heritage	0.714		_	
	Total	6.343		
Standardization			_	
Total # of functions assessed		9		
Standardized Total		0.705		
	1			_
Total (Including Disturbance and Exceptional Habitat)			0.705	
			7	
Overall Functional Score (Category)	0.76 - 1.00	1	Highest	ll ll
	0.51 - 0.75	II		
	0.26 - 0.50	III	_	
	0 - 0.25	IV	Lowest	
Notes:				
1) Scores for each category component, 0 = no and 1 = yes.				
2) Not all functional categories will be applicable to each wetlan				
For example, General Fish Habitat is only applicable to wet		-		
Functional categories that are not applicable will be treated				no score for
that component. No score is not the same as 0, which wou				
Accordingly, the maximum total score will be reduced by 1	•	0	,	pplicable.
For example, if General Fish Habitat does not apply, then t				1.
3) NA = an item that is currently not applicable, but could be app			data are availab	le.
<ol> <li>See impacted area assessment worksheet for determination of Apple the assessment for the distribution of the dist</li></ol>		tivities.		
Apply the correct impact factor to the disturbance category	<i>y</i> .			

Wetland Europhians and Values Europhic time Overstand	<b>D</b> . <b>F</b>
Wetland Functions and Values Evaluation Questions Unique HGM Cla	
Cowardin Cla	
Size (acre	
Disturbance Catego	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
<ol> <li>Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)</li> <li>Flood Flow Alteration</li> </ol>	N Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
2. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall condition	
3. Wetland is a closed system	N
4. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris	Y
5. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation	Y
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y
7. Floodwaters come as sheet flow rather than channel flow	Y
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A N
<ol> <li>Sources of excess sediment are present up gradient of the wetland</li> <li>Is wetland influenced by slow-moving water and/or a deepwater habitat</li> </ol>	Y
3. Is herbaceous vegetation present (>50% cover)	Y
<ol> <li>Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years</li> </ol>	Ŷ
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
wetland	N
<ol> <li>Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by other hydrological data source</li> </ol>	Y
other hydrological data source 3. Wetland has at least 30% aerial cover of live vegetation	Y
E. Erosion Control and Shoreline Stabilization	Y or N or N/A
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y
2. An herbaceous layer is part of this dense vegetation	Y
3. Shrubs able to withstand erosive flood events	Y
F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
3. Interspersion of vegetation and surface water is high in wetland	N Y
<ol> <li>Wetland is inundated or has indicators that flooding is a seasonal event during the growing season</li> <li>Wetland has outlet from which organic matter is flushed</li> </ol>	N
General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Y
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion H. General Fish Habitat	Y or N or N/A
1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish	N/A
3. Documented presence of fish	N/A
4. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A
6. Juvenile rest areas	N/A
I. Native Plant Richness	Y or N or N/A
<ol> <li>Dominant and codominant plants are native</li> <li>Wetland contains two or more Cowardin Classes</li> </ol>	Y Y
3. Wetland tontains two or more strata of vegetation	Y
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use	N/A
2. Wetland is in public ownership	Y
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting) K. Uniqueness and Heritage	N/A Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
2. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	-
Wildlife Service	Y
3. Wetland has biological, geological, or other features that are determined rare	Ν
4. Wetland has been determined significant because it provides functions scarce for the area	N
5. Are there known or reported cultural resources in the area	N
6. Is the area a known subsistence/recreation/living area	N
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva. c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins d) Anadromous fish overwintering habitat	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins d) Anadromous fish overwintering habitat e) Patterned wet sedge meadow and low center polygons	Y

Wotland Frank	one and Values	Populto
Wetland Functi Unique ID:	ons and Values	Results 5
HGM Class:		Flats
Cowardin Class	:	PEM1C
Size (acres):		-
	Raw Score	Weighted Score
Flood Flow Alte		
2	0	
3	0	
4	1	
5	1	
6	1	
7	1	
Sediment Remo	Total	0.714
1	0	
2	1	
3	1	
4	1	ļ
5	0 Total	0.600
Nutrient and To	Total oxicant Removal	0.600
Nutrient and TC		
2	1	[
3	1	
	Total	0.667
	and Shoreline	stabilization
1	1	
3	1	
	Total	1.000
Production of C	rganic Matter a	nd its Export
1	1	
2	1	
3	0	ļ
4	1	
5	Total	0.600
General Habita		
1	1	
2	N/A	ŀ
3	1	1
5	1	
6	1	
	Total	1.000
General Fish Ha		
1	N/A	
2	N/A N/A	
4	N/A N/A	L.
5	N/A	
6	N/A	
	Total	N/A
Native Plant Rid		
1	1	
3	1	
	Total	1.000
Educational or		
1	N/A	-
2	1 N/A	1
3	N/A N/A	
5	N/A N/A	
	Total	1.000
Uniqueness and		
1	1	
2	1 0	1
3	0	
5	0	
6	0	1
-	1	[
7	1	
/	Total	0.429

Disturbance Activities				
Disturbance Cat	0			
Disturbance Cat	egory	Impact Factor		
0	=	1		
1	=	0.99		
2	=	0.95		
3	=	0.9		
Disturbance Imp	1			

Unique ID       5         Exceptional Habitat Designation       0         Weighted Score       0         Flood Flow Alteration       0.714         Sediment Removal       0.600         Nutrient and Toxicant Removal       0.667         Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Habitat Suitability       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       0.779         Total of functions assessed       9         Standardized Total       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         Unique of functional Score (Category)       0.76 - 1.00       1         0.25 or 0.75       III       0.26 - 0.50       III         0.26 - 0.50       III       0.26 - 0.50       III         1       Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.	land Functions and Values Results (cont.)					
Exceptional Habitat Designation       0         Weighted Score         Flood Flow Alteration       0.714         Sediment Removal       0.660         Nutrient and Toxicant Removal       0.667         Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       0.779         Total /f of functions assessed       9         Standardized Total       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.26 - 0.50       III       0.00         Jost of or each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no scot that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
Flood Flow Alteration       0.714         Sediment Removal       0.600         Nutrient and Toxicant Removal       0.607         Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       0.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Standardized Total       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III       0.429         I) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitati is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable				0		
Flood Flow Alteration       0.714         Sediment Removal       0.600         Nutrient and Toxicant Removal       0.607         Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       0.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Standardized Total       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III       0.429         I) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitati is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable	· · · ·					
Sediment Removal       0.600         Nutrient and Toxicant Removal       0.667         Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Total # of functions assessed       9         Standardized Total       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III       0.26 - 0.50         1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitati sonly applicable to wetlands that are fish-bearing waters.       Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.		Weighted Score				
Nutrient and Toxicant Removal       0.667         Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       7.010         Total # of functions assessed       9         Standardized Total       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III       0.409         Lowest       Lowest         Notes:       1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitati s only applicable to wetland st hat are fish-bearing waters.       Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 po	d Flow Alteration	0.714				
Erosion Control and Shoreline Stabilization       1.000         Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       7010         Total # of functions assessed       9         Standardized Total       0.779         Overall Functional Score (Category)         0.76 - 1.00       1         0.26 - 0.50       III         0.275       IV         Lowest       Lowest         Notes:       1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitati is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable to wetland sthat are fish-bearing waters.         Functional categories is not the same as 0, whic		0.600				
Production of Organic Matter and its Export       0.600         General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Total # of functions assessed       9         Standardized Total       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       III       0.26 - 0.50       III         0.52       IV       Lowest         Notes:       1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.       Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable <th></th> <th>0.667</th> <th></th> <th></th> <th></th> <th></th>		0.667				
General Habitat Suitability       1.000         General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Total # of functions assessed       9         Standardized Total       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       III       0.00       Lowest         Notes:       1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
General Fish Habitat       N/A         Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Total # of functions assessed       9         Standardized Total       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III       0.400         Votes:       1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.       Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable		0.600				
Native Plant Richness       1.000         Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       7.010         Total # of functions assessed       9         Standardized Total       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III         0.26 - 0.50       III         0.25       IV         Lowest         Notes:       1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitati sonly applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
Educational or Scientific Value       1.000         Uniqueness and Heritage       0.429         Total       7.010         Standardization       9         Total # of functions assessed       9         Standardized Total       0.779         Overall Functional Score (Category)         0.76 - 1.00       1         0.25       IV         0.025       IV         Lowest       Lowest         Notes:         1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
Uniqueness and Heritage       0.429         Total       Total         Total # of functions assessed       9         Standardized Total       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.226 - 0.50       III         0.26 - 0.50       III       0.25       IV         Notes:       1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
Total       Total       7.010         Standardization       9       9         Total # of functions assessed       9       0.779         Standardized Total       0.779       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III         0 - 0.25       IV         Lowest       Lowest         Notes:       1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
Standardization         Total # of functions assessed         9         Standardized Total         0.779         Total (Including Disturbance and Exceptional Habitat)         0verall Functional Score (Category)         0.76 - 1.00         0.779         Overall Functional Score (Category)         0.76 - 0.50         0.75         0.26 - 0.50         0.702         Notes:         1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable	queness and Heritage					
Total # of functions assessed       9         Standardized Total       0.779         Total (including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest         Notes:         1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable		Total	7.010			
Standardized Total       0.779         Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest         Notes:         1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable		r				
Total (Including Disturbance and Exceptional Habitat)       0.779         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50         0.26 - 0.50       III       0.70 - 0.25         1) Scores for each category component, 0 = no and 1 = yes.       2) Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable to the eated as NA (not applicable), which means there is no scot that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.			÷			
Overall Functional Score (Category)       0.76 - 1.00       I         0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest    Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.	idardized lotal		0.779			
Overall Functional Score (Category)       0.76 - 1.00       I         0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest    Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable				0.770		
0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest    Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.	ii (Including Disturbance and Exceptional Habitat)			0.779		
0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest    Notes:          1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.     Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.	Overall Functional Score (Category)	0.76 - 1.00	I	Highest		
0.26 - 0.50         III           0 - 0.25         IV         Lowest           Notes:         1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.           Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable	overall runctional score (category)			ingliest		
Image: Notes:         Image: Notes:           1) Scores for each category component, 0 = no and 1 = yes.         2) Not all functional categories will be applicable to each wetland functional assessment.           For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no sco that component. No score is not the same as 0, which would erroneously reduce the total score.           Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable						
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	that component. No score is not the same as 0, wh	nich would erroneously re	educe the tota	al score.		
	Accordingly, the maximum total score will be reduce	ced by 1 point for each fu	nctional cate	gory that is not a	pplicable.	
For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9.	For example, if General Fish Habitat does not apply	, then the Total # of func	tions assesse	d is 9.		
3) NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.	A = an item that is currently not applicable, but could	d be applicable at a future	e time if more	e data are availat	ole.	
<ol> <li>See impacted area assessment worksheet for determination of disturbance activities. Apply the correct impact factor to the disturbance category.</li> </ol>	ee impacted area assessment worksheet for determi	nation of disturbance act				

Wotland Exactions and Values Evaluation Quantizer	c
Wetland Functions and Values Evaluation Questions Unique ID: HGM Class:	6 Flats
Cowardin Class:	PEM1B/C
Size (acres):	-
Disturbance Category:	0
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	Ν
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)	N
B. Flood Flow Alteration	Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
2. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions	Y
3. Wetland is a closed system	N/A
<ol> <li>If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris</li> <li>Wetland contains a dense herbaceous layer (&gt;70% cover) or woody vegetation</li> </ol>	N/A
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y Y
7. Floodwaters come as sheet flow rather than channel flow	Y
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
1. Sources of excess sediment are present up gradient of the wetland	N
2. Is wetland influenced by slow-moving water and/or a deepwater habitat	Y
3. Is herbaceous vegetation present (>50% cover)	Y
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	Ν
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
wetland	N
<ol><li>Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by other here be a bar of the search of t</li></ol>	
other hydrological data source	Y
3. Wetland has at least 30% aerial cover of live vegetation	Y Vor Nor N/A
E. Erosion Control and Shoreline Stabilization	Y or N or N/A Y
<ol> <li>Wetland has dense, energy absorbing vegetation (&gt;70%) bordering the water course and no evidence of erosion</li> <li>An herbaceous layer is part of this dense vegetation</li> </ol>	Y
2. An increase of the second sec	Y
5. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Ŷ
3. Interspersion of vegetation and surface water is high in wetland	Ν
4. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season	Y
5. Wetland has outlet from which organic matter is flushed	N
G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Y
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion	Y
H. General Fish Habitat	Y or N or N/A
Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish 3. Documented presence of fish	N/A
	N/A
4. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A N/A
<ol> <li>5. Spawning areas are present (aquatic vegetation and/or gravel beds)</li> <li>6. Juvenile rest areas</li> </ol>	N/A N/A
I. Native Plant Richness	Y or N or N/A
1. Dominant and codominant plants are native	Y
2. Wetland contains two or more Cowardin Classes	Y
3. Wetland has two or more strata of vegetation	Ŷ
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use	N/A
2. Wetland is in public ownership	Y
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting)	N/A
K. Uniqueness and Heritage	Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
<ol> <li>Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and Wildlife Service</li> </ol>	Y
3. Wetland has biological, geological, or other features that are determined rare	N N
4. Wetland has been determined significant because it provides functions scarce for the area	N
5. Are there known or reported cultural resources in the area	N
6. Is the area a known subsistence/recreation/living area	Y
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
d) Anadromous fish overwintering habitat	
e) Patterned wet sedge meadow and low center polygons	
f) High center polygon complex	
g) Riverine coastal mudflats	
h) Non-patterned wet meadow adjacent to streams and river bluffs.	Y

wetland Functi	ana and Valuas	Desults
Unique ID:	ons and Values	-
HGM Class:		6 Flats
Cowardin Class		PEM1B/C
Size (acres):	•	-
5120 (00105).		
	Raw Score	Weighted Score
Flood Flow Alte		
1	0	
2	1	
3	N/A	
4	N/A	
5	1	
6	1	
7	1	
	Total	0.800
Sediment Remo		
1	0	
2	1	
3	1	
4	0	
5	Total	0.400
Nutrient and To	oxicant Removal	
Nutrient and TC		
2	1	
3	1	
3	Total	0.667
<b>Erosion Control</b>	and Shoreline	
1	1	
2	1	
3	1	
	Total	1.000
Production of C	rganic Matter a	nd its Export
1	1	
2	1	
3	0	
4	1	
5	0	
	Total	0.600
General Habita		
1	1	
2	N/A	
3	1	
5	1	
6	1	
0	Total	1.000
		1.000
General Fish Ha		
General Fish Ha		
	bitat	
1	bitat N/A	
1	bitat N/A N/A	
1 2 3	bitat N/A N/A N/A	
1 2 3 4	bitat N/A N/A N/A N/A N/A N/A	
1 2 3 4 5 6	bitat N/A N/A N/A N/A N/A N/A Total	N/A
1 2 3 4 5 6 Native Plant Rio	bitat N/A N/A N/A N/A N/A N/A N/A Total chness	N/A
1 2 3 4 5 6 <b>Native Plant Ric</b> 1	bitat N/A N/A N/A N/A N/A Total chness	N/A
1 2 3 4 5 6 Native Plant Ric 1 2	bitat N/A N/A N/A N/A N/A Total thness 1 1	N/A
1 2 3 4 5 6 <b>Native Plant Ric</b> 1	bitat N/A N/A N/A N/A N/A Total chness 1 1 1	
1 2 3 4 5 6 <b>Native Plant Rie</b> 1 2 3	bitat N/A N/A N/A N/A N/A Total chness 1 1 1 1 1	N/A
1 2 3 4 5 6 Native Plant Rid 1 2 3 Educational or 1	bitat N/A N/A N/A N/A N/A Total chness 1 1 1 1 Scientific Value	
1 2 3 4 5 6 6 Native Plant Ric 1 2 3 3 Educational or 1 1	bitat N/A N/A N/A N/A N/A Total thness 1 1 1 1 Scientific Value N/A	
1 2 3 4 5 6 Native Plant Rice 1 2 3 Educational or 1 2 2	bitat N/A N/A N/A N/A N/A N/A Total thness 1 1 1 Scientific Value N/A 1	
1 2 3 4 5 6 Native Plant Ric 2 3 Educational or 1 2 3 3	bitat N/A N/A N/A N/A N/A Total chness 1 1 1 Scientific Value N/A 1 N/A	
1 2 3 4 5 6 Native Plant Ric 1 2 2 3 3 Educational or 1 2 2 3 3 4	bitat N/A N/A N/A N/A N/A Total chness 1 1 1 1 Scientific Value N/A 1 N/A N/A	
1 2 3 4 5 6 Native Plant Ric 2 3 Educational or 1 2 3 3	bitat N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A 1 N/A N/A N/A	1.000
1 2 3 4 5 6 <b>Native Plant Rid</b> 1 2 3 <b>Educational or</b> 1 2 3 4 5	bitat N/A N/A N/A N/A N/A Total thness 1 1 1 Total Scientific Value N/A 1 N/A N/A N/A N/A Total	
1 2 3 4 5 6 Native Plant Ric 1 2 2 3 3 Educational or 1 2 2 3 3 4	bitat N/A N/A N/A N/A N/A Total thness 1 1 1 Total Scientific Value N/A 1 N/A N/A N/A N/A Total	1.000
1 2 3 4 5 6 Native Plant Rice 1 2 3 <b>Educational or</b> 1 2 3 4 5 <b>Uniqueness and</b>	bitat N/A N/A N/A N/A N/A N/A Total thness 1 1 Scientific Value N/A 1 N/A N/A N/A N/A N/A N/A Total	1.000
1 2 3 4 4 5 6 <b>Native Plant Ric</b> 1 2 3 <b>Educational or</b> 1 2 3 4 4 5 <b>Uniqueness and</b> 1	bitat N/A N/A N/A N/A N/A N/A N/A Total chness 1 1 Scientific Value N/A 1 N/A N/A N/A N/A N/A N/A Total d Heritage 1	1.000
1 2 3 4 5 6 Native Plant Rid 1 2 2 3 3 Educational or 1 2 2 3 4 5 Uniqueness and 1 2	bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Scientific Value N/A 1 N/A 1 N/A N/A N/A N/A N/A N/A N/A 1 theritage 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.000
1 2 3 4 5 6 Native Plant Ric 1 2 3 <b>Educational or</b> 1 2 3 4 5 <b>Uniqueness and</b> 1 2 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 5 5 5 6 6 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A 1 N/A N/A Total d Heritage 1 1 0	1.000
1 2 3 4 5 6 Native Plant Ric 1 2 3 3 Educational or 1 1 2 3 3 4 5 Uniqueness and 1 2 3 4 4 5 5	bitat N/A N/A N/A N/A N/A Total thness 1 1 1 Total Scientific Value N/A 1 N/A N/A 1 N/A 1 Total 1 1 1 1 1 1 1 1 1 1 1 1 1	1.000
1 2 3 4 5 6 Native Plant Rice 1 2 3 3 Educational or 1 2 3 4 4 5 Uniqueness and 1 2 3 4 4 5 5	bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A 1 N/A N/A N/A 1 Total 4 Heritage 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	1.000
1 2 3 4 4 5 6 <b>Native Plant Ric</b> 2 3 <b>Educational or</b> 1 2 3 <b>Educational or</b> 1 2 3 <b>Uniqueness and</b> 1 2 3 3 4 4 5 5 6 6	bitat N/A N/A N/A N/A N/A N/A Total chness 1 1 1 Total Scientific Value N/A N/A N/A N/A N/A N/A D/A 1 1 1 1 1 1 1 1 1 1 1 1 1	1.000

Disturbance Activities					
Disturbance Cat	0				
Disturbance Cat	egory	Impact Factor			
0	=	1			
1	=	0.99			
2	=	0.95			
3	=	0.9			
Disturbance Imp	1				

Wetland Functions and Values Results (cont.)				
Unique ID 6	4			
Exceptional Habitat Designation			0	
	Weighted Score			
Flood Flow Alteration	0.800			
Sediment Removal	0.400	-		
Nutrient and Toxicant Removal	0.667	-		
Erosion Control and Shoreline Stabilization	1.000	-		
Production of Organic Matter and its Export	0.600			
General Habitat Suitability	1.000	ļ		
General Fish Habitat	N/A	ļ		
Native Plant Richness	1.000	ļ		
Educational or Scientific Value	1.000	ļ		
Uniqueness and Heritage	0.571		-	
	Total	7.038		
Standardization	-	1	-	
Total # of functions assessed	1	9	4	
Standardized Total	]	0.782		
	7			_
Total (Including Disturbance and Exceptional Habitat)	]		0.782	
			<b>.</b>	
Overall Functional Score (Category)	0.76 - 1.00	1	Highest	
	0.51 - 0.75		4	
	0.26 - 0.50	111	4	
	0 - 0.25	IV	Lowest	
Neters				
Notes:				
1) Scores for each category component, 0 = no and 1 = yes.	d functional			
2) Not all functional categories will be applicable to each wetlan				
For example, General Fish Habitat is only applicable to wet		-		na ccara fa-
Functional categories that are not applicable will be treate	· · ·			no score ior
that component. No score is not the same as 0, which wo Accordingly, the maximum total score will be reduced by 1				nnlicable
	•	0		phucapie.
For example, if General Fish Habitat does not apply, then t 3) NA = an item that is currently not applicable, but could be app				
<ol> <li>A = an item that is currently not applicable, but could be app 4) See impacted area assessment worksheet for determination of</li> </ol>			iala ale avallat	ne.
4) See impacted area assessment worksneet for determination of Apply the correct impact factor to the disturbance categor		uvides.		
Apply the correct impact factor to the disturbance categor	у.			

Cowardin Class:       PE         Size (acres):       Size (acres):         Disturbance Category:       Disturbance Category:         is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North       N         is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North       N         is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       N         L is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       N         L wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       N         L wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       N         L wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       N         L wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions       N         L wetland is a closed system       N       N         L if flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris       N         Wetland contains a dense herbaceous layer (>70% cover) or	7 Flats PEM1B/C - 0 Y or N N N N N N N N
Cowardin Class:       PE         Size (acres):       Size (acres):         Disturbance Category:       Disturbance Category:         Xeceptional Habitat Designation       N         I. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)       N         I. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       V or         I. Is wetland located within an area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions       N         Wetland is a closed system       S.       S.         Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation       S.       S.         Wetland receives floodwater from an adjacent water course at least once every 10 years       F.       F.         F. Floodwaters come as sheet flow rather than channel flow       S.       S.       S.	PEM1B/C - 0 Y or N N N or N or N/A
Size (acres):       Size (acres):         Disturbance Category:       Disturbance Category:         xceptional Habitat Designation       N         I. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)       N         Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Vor         Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Vor         Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Vor         Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Vor         Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Vor         Is wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions       S         Wetland is a closed system       Vor       Vor         Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation       S         Wetland receives floodwater from an adjacent water course at least once every 10 years       Vor         Y. Floodwaters c	0 Y or N N or N or N/A
Disturbance Category:         xxceptional Habitat Designation       N         Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the Northilope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)       N         . Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Importance Category:         . Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Importance Category:         . Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Importance Category:         . Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Importance Category:         . Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Importance Category:         . Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Importance Category:         . Wetland scates is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions       Importance Category:         . Wetland is a closed system       Importance Category:       Importance Category:         . If flow through, wetland has constricted	Y or N N or N or N/A
Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)     Vor Wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)     Vor Wetland occurs in the upper portion of its watershed Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions Wetland is a closed system If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris Wetland receives floodwater from an adjacent water course at least once every 10 years Floodwaters come as sheet flow rather than channel flow	N N or N or N/A
Biope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)       Image: Construction of the second s	N or N or N/A
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)       Y or <b>lood Flow Alteration</b> Y or         Wetland occurs in the upper portion of its watershed          B. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions          B. Wetland is a closed system          B. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris          B. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation           B. Wetland receives floodwater from an adjacent water course at least once every 10 years           P. Floodwaters come as sheet flow rather than channel flow	N or N or N/A
Isode Flow Alteration       Y or         Wetland occurs in the upper portion of its watershed	or N or N/A
Wetland occurs in the upper portion of its watershed     Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions     Wetland is a closed system     If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris     Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation     Wetland receives floodwater from an adjacent water course at least once every 10 years     Floodwaters come as sheet flow rather than channel flow	
Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions     Wetland is a closed system     If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris     Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation     Wetland receives floodwater from an adjacent water course at least once every 10 years     Floodwaters come as sheet flow rather than channel flow	
Wetland is a closed system     If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris     Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation     Wetland receives floodwater from an adjacent water course at least once every 10 years     Floodwaters come as sheet flow rather than channel flow	N Y
If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris     Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation     Wetland receives floodwater from an adjacent water course at least once every 10 years     Floodwaters come as sheet flow rather than channel flow	N
5. Wetland receives floodwater from an adjacent water course at least once every 10 years 7. Floodwaters come as sheet flow rather than channel flow	N/A
7. Floodwaters come as sheet flow rather than channel flow	Y
	Y
ediment Removal: If moving waters consider only statements 1 and 2	Y
	or N or N/A
. Sources of excess sediment are present up gradient of the wetland	N
2. Is wetland influenced by slow-moving water and/or a deepwater habitat	Y Y
B. Is herbaceous vegetation present (>50% cover) I. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	N N
Sediment deposits are present in wetland (observation or noted in application materials)	N
	or N or N/A
Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
vetland	Ν
. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by	
ther hydrological data source	N
B. Wetland has at least 30% aerial cover of live vegetation rosion Control and Shoreline Stabilization Y or	Y or N or N/A
. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y
. we change has dense, energy assuming vegetation (2009) bordering the water course and no evidence of erosion	Y
Annessee by a sparse spectral spec	Y
roduction of Organic Matter and its Export Y or	or N or N/A
. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
B. Interspersion of vegetation and surface water is high in wetland	Ν
. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season	Y
. Wetland has outlet from which organic matter is flushed	N
	or N or N/A
. Is wetland located greater than 300-feet from existing development 2. Undeveloped upland buffers abutting wetland	N/A
B. Wetland part of a larger wetland complex, not fragmented	Y
biversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Ŷ
5. Evidence of wildlife use	Y
5. Wetland has a moderate degree of cowardin class interspersion	Y
	or N or N/A
	N/A
. Does wetland provide overwintering habitat for fish	N/A
	N/A
I. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds) 5. Juvenile rest areas	N/A N/A
	or N or N/A
. Dominant and codominant plants are native	Y
2. Wetland contains two or more Cowardin Classes	Y
Wetland has two or more strata of vegetation	Y
	or N or N/A
Site has scientific or educational use 2. Wetland is in public ownership	N/A Y
3. Accessible trails available	N/A
Accessible clais available     Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting)	N/A
	or N or N/A
Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	
Vildlife Service	Y
B. Wetland has biological, geological, or other features that are determined rare	N
I. Wetland has been determined significant because it provides functions scarce for the area i. Are there known or reported cultural resources in the area	N Y
5. Is the area a known subsistence/recreation/living area	Y
V. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
d) Anadromous fish overwintering habitat	
e) Patterned wet sedge meadow and low center polygons	
f) High center polygon complex	
g) Riverine coastal mudflats	
h) Non-patterned wet meadow adjacent to streams and river bluffs.	Y

Wetland Funct	ons and Values	Results
Unique ID:	ons and values	7
HGM Class:		Flats
<b>Cowardin Class</b>	:	PEM1B/C
Size (acres):		-
Flood Flow Alte	Raw Score	Weighted Score
FIOOD FIOW AIte	o 0	
2	1	
3	0	
4	N/A	
5	1	
6	1	
7	1 Total	0.667
Sediment Remo		0.007
1	0	
2	1	
3	1	
4	0	
5	0 Total	0.400
Nutrient and To	oxicant Removal	
1	0	
2	0	
3	1	
Freedom Country	Total	0.333
Erosion Control	and Shoreline	stabilization
2	1	ł
3	1	
	Total	
	organic Matter a	ind its Export
1	1	
3	0	
4	1	
5	0	
	Total	0.600
General Habita		
1	1	
3	N/A 1	
4	1	
5	1	-
6	1	
	Total	1.000
General Fish Ha		
2	N/A N/A	ł
3	N/A	t
4	N/A	Į
5	N/A	-
6	N/A Total	N/A
Native Plant Rid	Total hness	N/A
1	1	
2	1	Į
3	1	 
	Total	1.000
Educational or	Scientific Value N/A	
2	1 N/A	ł
3	N/A	t
4	N/A	Į
5	N/A	4.055
Uniqueness and	Total	1.000
Uniqueness and	1 Heritage	
2	1	ł
3	0	İ
4	0	-
5	1	ļ
6	1	1
/	1 Total	0.714
		0.7 17

Disturbance Cat	ogony	0			
Distui bance cat	egory	0			
Disturbance Cat	egory	Impact Factor			
0	0 = 1				
1	0.99				
2	0.95				
3	=	0.9			
Disturbance Imp	oact Factor	1			

Wetland Functions and Values Results (cont.)					
Unique ID 7	1				
Exceptional Habitat Designation			0	Ī	
· · ·				-	
	Weighted Score	•			
Flood Flow Alteration	0.667	I			
Sediment Removal	0.400				
Nutrient and Toxicant Removal	0.333				
Erosion Control and Shoreline Stabilization	1.000				
Production of Organic Matter and its Export	0.600				
General Habitat Suitability	1.000				
General Fish Habitat	N/A	ļ			
Native Plant Richness	1.000	ļ			
Educational or Scientific Value	1.000				
Uniqueness and Heritage	0.714	-	7		
	Total	6.714			
Standardization	1	0	7		
Total # of functions assessed Standardized Total	-	9	-		
Standardized Total		0.746			
Total (Including Disturbance and Exceptional Habitat)	1		0.746		
Total (including Distarbance and Exceptional Habitat)			0.740	1	
Overall Functional Score (Category)	0.76 - 1.00	I	Highest	1	
	0.51 - 0.75	Ш	0		
	0.26 - 0.50				
	0 - 0.25	IV	Lowest		
			_		
Notes:					
<ol> <li>Scores for each category component, 0 = no and 1 = yes.</li> </ol>					
2) Not all functional categories will be applicable to each wetland	d functional asse	ssment.			
For example, General Fish Habitat is only applicable to wet	lands that are fis	h-bearing wate	rs.		
Functional categories that are not applicable will be treated	d as NA (not app	licable), which r	means there is no	score for	
that component. No score is not the same as 0, which wou					
Accordingly, the maximum total score will be reduced by 1	•	0		plicable.	
For example, if General Fish Habitat does not apply, then the					
<ol><li>NA = an item that is currently not applicable, but could be app</li></ol>			data are available	2.	
<ol> <li>See impacted area assessment worksheet for determination of</li> </ol>		tivities.			
Apply the correct impact factor to the disturbance category	y.				

Motional Europeines and Values Functions Occupitions	
Wetland Functions and Values Evaluation Questions Unique ID HGM Class	
Cowardin Class	
Size (acres)	
Disturbance Category	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)	N
B. Flood Flow Alteration	Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
2. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions	
3. Wetland is a closed system	N
<ol> <li>If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris</li> <li>Wetland contains a dense herbaceous layer (&gt;70% cover) or woody vegetation</li> </ol>	N/A
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y Y
7. Floodwaters come as sheet flow rather than channel flow	Y
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
1. Sources of excess sediment are present up gradient of the wetland	N
2. Is wetland influenced by slow-moving water and/or a deepwater habitat	Y
3. Is herbaceous vegetation present (>50% cover)	Y
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	N
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
wetland	N
2. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by	
other hydrological data source	Y
3. Wetland has at least 30% aerial cover of live vegetation	Y
E. Erosion Control and Shoreline Stabilization	Y or N or N/A
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y Y
<ol> <li>An herbaceous layer is part of this dense vegetation</li> <li>Shrubs able to withstand erosive flood events</li> </ol>	Y Y
F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
3. Interspersion of vegetation and surface water is high in wetland	N
4. Wetland is inundated or has indicators that floading is a seasonal event during the growing season	Y
5. Wetland has outlet from which organic matter is flushed	Ŷ
G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Y
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion	Y
H. General Fish Habitat	Y or N or N/A
1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish	N/A
3. Documented presence of fish	N/A
<ol> <li>Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter</li> </ol>	N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A
6. Juvenile rest areas	N/A
I. Native Plant Richness	Y or N or N/A
1. Dominant and codominant plants are native	Y Y
<ol> <li>Wetland contains two or more Cowardin Classes</li> <li>Wetland has two or more strata of vegetation</li> </ol>	Y
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use	N/A
2. Wetland is in public ownership	Ý
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting)	N/A
K. Uniqueness and Heritage	Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
2. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	
Wildlife Service	Y
3. Wetland has biological, geological, or other features that are determined rare	N
4. Wetland has been determined significant because it provides functions scarce for the area	N
5. Are there known or reported cultural resources in the area	N Y
6. Is the area a known subsistence/recreation/living area	T
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
<ul> <li>c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins</li> <li>d) Anadromous fish overwintering habitat</li> </ul>	
e) Patterned wet sedge meadow and low center polygons	
f) High center polygon complex	
g) Riverine coastal mudflats	
h) Non-patterned wet meadow adjacent to streams and river bluffs.	Y
	1

Wotland Funct	ons and Values	Posulte		
Unique ID:	ons and values	8		
HGM Class:		Flats		
Cowardin Class		PEM1B/C		
Size (acres):	•	-		
. ,				
	Raw Score	Weighted Score		
Flood Flow Alte	ration			
1	0			
2	1			
3	0 N/A			
5	1			
6	1			
7	1			
	Total	0.667		
Sediment Remo	oval			
1	0			
2	1			
3	1			
5	0			
5	Total	0.400		
Nutrient and To	oxicant Removal			
1	0			
2	1			
3	1			
	Total	0.667		
	and Shoreline	Stabilization		
1	1			
3	1			
5	Total	1.000		
Production of C	rganic Matter a			
1	1	•		
2	1			
3	0			
4	1			
5	1	0.000		
General Habita	Total t Suitability	0.800		
1	1			
2	N/A			
3	1			
4	1			
5	1			
6	1			
Comment Fight 11	Total	1.000		
General Fish Ha	N/A			
2	N/A N/A			
3	N/A			
4	N/A			
5	N/A			
6	N/A			
Mating Direct Di	Total	N/A		
Native Plant Rig	nness 1			
2	1			
2	-	l l		
3	1			
3	1 Total	1.000		
3 Educational or :	Total Scientific Value	1.000		
Educational or :	Total Scientific Value N/A	1.000		
Educational or 1	Total Scientific Value N/A 1	1.000		
Educational or 1 2 3	Total Scientific Value N/A 1 N/A	1.000		
Educational or 1 1 2 3 4	Total Scientific Value N/A 1 N/A N/A	1.000		
Educational or 1 2 3	Total Scientific Value N/A 1 N/A N/A N/A			
Educational or 1 1 2 3 4 5	Total Scientific Value N/A 1 N/A N/A N/A Total	1.000		
Educational or 1 1 2 3 4	Total Scientific Value N/A 1 N/A N/A N/A Total			
Educational or 1 1 2 3 4 5 Uniqueness and	Total Scientific Value N/A 1 N/A N/A N/A Total d Heritage 1 1			
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Educational or 1 1 2 3 3 4 4 5 Uniqueness and 1 2 2 3 4	Total Scientific Value N/A N/A N/A N/A Total d Heritage 1 1 0 0			
Educational or 1 1 2 3 4 4 5 Uniqueness and 1 2 3 3 4 5	Total Scientific Value N/A N/A N/A Total d Heritage 1 1 0 0 0			
Educational or 1 1 2 3 4 5 Uniqueness and 1 2 3 4 4 5 6	Total Scientific Value N/A 1 N/A N/A Total d Heritage 1 1 0 0 0 0 0			
Educational or 1 1 2 3 4 4 5 Uniqueness and 1 2 3 3 4 5	Total Scientific Value N/A N/A N/A Total d Heritage 1 1 0 0 0			

Disturbance Category 0				
Disturbance Cat	egory	Impact Factor		
0	= 1			
1	=	0.99		
2	=	0.95		
3	=	0.9		
Disturbance Imp	oact Factor	1		

inique ID       8         xceptional Habitat Designation       0         Weighted Score       0         lood Flow Alteration       0.667         ediment Removal       0.400         lutrient and Toxicant Removal       0.667         rosion Control and Shoreline Stabilization       1.000         roduction of Organic Matter and its Export       0.800         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         iniqueness and Heritage       0.571         otal # of functions assessed       9         tandardization       9         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal (Including Component, 0 = no and 1 = yes.       )         ) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetland sht at are fish-bearing waters.         Functional categories that are not applicable to wetland functional assessment.       For example, General Fish Habitat is only applicable to wetland functional asplicable), which means there is no score that	Wetland Functions and Values Results (cont.)				
Weighted Score         lood Flow Alteration       0.667         ediment Removal       0.400         lutrient and Toxicant Removal       0.667         rosion Control and Shoreline Stabilization       1.000         ieneral Habitat Suitability       1.000         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         iniqueness and Heritage       0.571         trandardization       0.789         otal # of functions assessed       9         tandardized Total       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         Overall Functional Score (Category)       0.76 - 1.00       1 <th></th> <th></th> <th></th> <th></th> <th></th>					
lood Flow Alteration       0.667         ediment Removal       0.400         lutrient and Toxicant Removal       0.667         rosion Control and Shoreline Stabilization       1.000         roduction of Organic Matter and its Export       0.800         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         iniqueness and Heritage       0.571         tandardization       0.769         otal # of functions assessed       9         tandardized Total       0.789         Overall Functional Score (Category)         0.76 - 1.00       I         0.25 - 0.50       III         0.26 - 0.50       III         0.26 - 0.50       IV         Lowest       Lowest          Identicial functional assessment.          For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories will be applicable to wetlands that are fish-bearing waters.         Functional categories is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional assessed is 9.         NAt a an item that is curr	Exceptional Habitat Designation			0	
lood Flow Alteration       0.667         ediment Removal       0.400         lutrient and Toxicant Removal       0.667         rosion Control and Shoreline Stabilization       1.000         roduction of Organic Matter and its Export       0.800         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         iniqueness and Heritage       0.571         tandardization       0.769         otal # of functions assessed       9         tandardized Total       7.105         Overall Functional Score (Category)         0.76 - 1.00       I         0.25 - 0.50       III         0.26 - 0.50       III         0.25 - IV       Lowest          Identicities only applicable to each wetland functional assessment.          For example, General Fish Habitati sonly applicable to wetlands that are fish-bearing waters.       Functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitati sonly applicable to wet					
ediment Removal       0.400         lutrient and Toxicant Removal       0.667         rosion Control and Shoreline Stabilization       1.000         roduction of Organic Matter and its Export       0.800         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         iniqueness and Heritage       0.789         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       III       0.26 - 0.50       III         0.70 - 0.25       IV       Lowest       Lowest         lotes:       )       Scores for each category component, 0 = no and 1 = yes.       Not all functional categories that are not applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional Categories that are not applicable will be treated as NA (not applicable), which means there is no scor that component. No		Weighted Score			
utrient and Toxicant Removal       0.667         rosion Control and Shoreline Stabilization       1.000         roduction of Organic Matter and its Export       0.800         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         tandardization       0.789         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.76 - 1.00         Overall Functional Score (Category)       0.76 - 1.00         0.0.25       IV       Lowest         lotes:       )       Scores for each category component, 0 = no and 1 = yes.         ) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories is not the same as 0, which would erroneously reduce the total score.       Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable will be treated as NA (not applicable), which means there is no score that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score	Flood Flow Alteration	0.667			
Torsion Control and Shoreline Stabilization       1.000         roduction of Organic Matter and its Export       0.800         reneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         tandardization       0.769         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.76 - 1.00         Overall Functional Score (Category)       0.76 - 1.00       1         0.25 - 0.50       III       0.26 - 0.50       III         0.26 - 0.50       III       0.00est       Independent         otal       Inctional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable or eapplicable at a future time if more data are available.         NA = an item that is currently not applicabl	Sediment Removal				
roduction of Organic Matter and its Export       0.800         ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         iniqueness and Heritage       0.571         tandardization       7.105         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal I unctional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       IV       Lowest       Lowest         lotes:       )       Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional assessed is 9.       NA = an item that is currently not appli					
ieneral Habitat Suitability       1.000         ieneral Fish Habitat       N/A         lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         iniqueness and Heritage       0.571         tandardization       0.789         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         otal Including Disturbance and Exceptional Habitat)       0.76 - 1.00       1         otal Science Sc					
intereral Fish Habitat       N/A         lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         tandardization       Total       7.105         tandardized Total       0.789         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.76 - 1.00         Overall Functional Score (Category)       0.76 - 1.00       I         0.26 - 0.50       III       0.0west         lotes:       )       Scores for each category component, 0 = no and 1 = yes.       )         Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score is that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable for example, if General Fish Habitat does not apply, then the Total # of functional assessed is 9.         N A = an item that is currently not applicable, but could be applicable at a future time if more data are available.         NA = an item that is currently not app					
lative Plant Richness       1.000         ducational or Scientific Value       1.000         iniqueness and Heritage       0.571         Total       7.105         tandardization       0.789         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         0.26 - 0.50       III       0.26 - 0.50       III         0.26 - 0.50       IV       Lowest       Lowest         lotes:       )       Scores for each category component, 0 = no and 1 = yes.       )       Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score f that component. No score is not the same as 0, which would erroneously reduce the total score.       Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable for example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9.         ) NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.         ) See impacted area assessment worksheet for determination of					
ducational or Scientific Value       1.000         Iniqueness and Heritage       0.571         tandardization       Total       7.105         tandardized Total       9         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.76 - 1.00       I         Overall Functional Score (Category)       0.76 - 1.00       I         0.26 - 0.50       III       0.26 - 0.50       IU         0.525       IV       Lowest       IV         Scores for each category component, 0 = no and 1 = yes.       Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score f that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable for example, if General Fish Habitat does not apply, then the Total # of functional assessed is 9.         NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.         See impacted area assessment worksheet for determination of disturbance activities.					
Iniqueness and Heritage       0.571         Total       7.105         tandardization       9         otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.76 - 1.00       1         Overall Functional Score (Category)       0.76 - 1.00       1       Highest         0.25 0.05       111       0.25 0.05       111         0.26 - 0.50       111       0.25 0.00       Lowest         lotes:       )       Scores for each category component, 0 = no and 1 = yes.       )       Lowest         Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.       Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score is that component. No score is not the same as 0, which would erroneously reduce the total score.       Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable for example, if General Fish Habitat does not apply, then the Total # of functional assessed is 9.         N Na = an item that is currently not applicable, but could be applicable at a future time if more data are available.       See impacted area assessment worksheet for determination of disturbance activities.					
Total       7.105         tandardization       9         tandardized Total       9         otal (Including Disturbance and Exceptional Habitat)       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       III       0.00000000000000000000000000000000000					
tandardization       9         tandardized Total       9         otal (Including Disturbance and Exceptional Habitat)       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       III       0.00000000000000000000000000000000000	Uniqueness and Heritage				
otal # of functions assessed       9         tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50       III         0.26 - 0.50       III       0.025       IV       Lowest         Iotes:       ) Scores for each category component, 0 = no and 1 = yes.       ) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score for that component. No score is not the same as 0, which would erroneously reduce the total score.       Accordingly, the maximum total score will be reduced by 1 point for eader functional category that is not applicable.         Yot an item that is currently not applicable, but could be applicable at a future time if more data are available.       9.         Yot a an item that is currently not applicable, but could be applicable at a future time if more data are available.       9.		Total	7.105		
tandardized Total       0.789         otal (Including Disturbance and Exceptional Habitat)       0.789         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II         0.26 - 0.50       III         0.225       IV         IV       Lowest         Interse       0.789         Interse       0.51 - 0.75         IV       Lowest         Interse       0.725         IV       Lowest         Interse       Lowest         Interse </td <th></th> <td></td> <td>-</td> <td>_</td> <td></td>			-	_	
otal (Including Disturbance and Exceptional Habitat)       0.76 - 1.00       1         Overall Functional Score (Category)       0.76 - 1.00       1         0.51 - 0.75       II       0.26 - 0.50         0.26 - 0.50       III       0.26 - 0.50         0.76 - 1.00       1       Highest         0.51 - 0.75       II       0.26 - 0.50         0.26 - 0.50       III       Lowest         lotes:       )       Scores for each category component, 0 = no and 1 = yes.         ) Not all functional categories will be applicable to each wetland functional assessment.       For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score f that component. No score is not the same as 0, which would erroneously reduce the total score.         Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.         For example, if General Fish Habitat does not apply, then the Total # of functional sasessed is 9.         NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.         See impacted area assessment worksheet for determination of disturbance activities.		_		_	
Overall Functional Score (Category)	Standardized Total		0.789		
Overall Functional Score (Category)	Tatal (Including Disturbance and Eventional Unkited)	_		0.700	
0.51 - 0.75       II         0.26 - 0.50       III         0.25       IV         Lowest    Iotes:          ) Scores for each category component, 0 = no and 1 = yes.         ) Not all functional categories will be applicable to each wetland functional assessment.         For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.         Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score f that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable. For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9. () NA = an item that is currently not applicable, but could be applicable at a future time if more data are available. See impacted area assessment worksheet for determination of disturbance activities.	Total (including Disturbance and Exceptional Habitat)			0.789	
0.51 - 0.75       II         0.26 - 0.50       III         0.26 - 0.50       III         0.25       IV         Lowest    Iotes: Scores for each category component, 0 = no and 1 = yes. Not all functional categories will be applicable to each wetland functional assessment. For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters. Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score for that component. No score is not the same as 0, which would erroneously reduce the total score. Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable. For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9. NA = an item that is currently not applicable, but could be applicable at a future time if more data are available. See impacted area assessment worksheet for determination of disturbance activities.	Overall Functional Score (Category)	0.76 - 1.00	Ι	Highest	
Interview         IV         Lowest           Interview         0 - 0.25         IV         Lowest           Interview         Interview         Interview         Interview           Interview </td <th></th> <td>0.51 - 0.75</td> <td>11</td> <td>- ŭ</td> <td></td>		0.51 - 0.75	11	- ŭ	
<ul> <li>Iotes:</li> <li>Scores for each category component, 0 = no and 1 = yes.</li> <li>Not all functional categories will be applicable to each wetland functional assessment.</li> <li>For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.</li> <li>Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score for that component. No score is not the same as 0, which would erroneously reduce the total score.</li> <li>Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.</li> <li>For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9.</li> <li>NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.</li> <li>See impacted area assessment worksheet for determination of disturbance activities.</li> </ul>		0.26 - 0.50		1	
<ul> <li>Scores for each category component, 0 = no and 1 = yes.</li> <li>Not all functional categories will be applicable to each wetland functional assessment.</li> <li>For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.</li> <li>Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score for that component. No score is not the same as 0, which would erroneously reduce the total score.</li> <li>Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable.</li> <li>For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9.</li> <li>NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.</li> <li>See impacted area assessment worksheet for determination of disturbance activities.</li> </ul>		0 - 0.25	IV	Lowest	
<ul> <li>Scores for each category component, 0 = no and 1 = yes.</li> <li>Not all functional categories will be applicable to each wetland functional assessment.</li> <li>For example, General Fish Habitat is only applicable to wetlands that are fish-bearing waters.</li> <li>Functional categories that are not applicable will be treated as NA (not applicable), which means there is no score fo that component. No score is not the same as 0, which would erroneously reduce the total score.</li> <li>Accordingly, the maximum total score will be reduced by 1 point for each functional category that is not applicable. For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9.</li> <li>NA = an item that is currently not applicable, but could be applicable at a future time if more data are available.</li> <li>See impacted area assessment worksheet for determination of disturbance activities.</li> </ul>					
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For example, if General Fish Habitat does not apply, then the Total # of functions assessed is 9. ) NA = an item that is currently not applicable, but could be applicable at a future time if more data are available. ) See impacted area assessment worksheet for determination of disturbance activities.					
) NA = an item that is currently not applicable, but could be applicable at a future time if more data are available. ) See impacted area assessment worksheet for determination of disturbance activities.	Accordingly, the maximum total score will be reduced by	1 point for each fu	unctional categ	gory that is not a	applicable
) See impacted area assessment worksheet for determination of disturbance activities.					
				data are availal	ole.
Apply the correct impact factor to the disturbance category.			tivities.		
	Apply the correct impact factor to the disturbance categories	ory.			

Walland Fundition and Victor Fundition Accession	0
Wetland Functions and Values Evaluation Questions Unique ID: HGM Class:	
HGM Class: Cowardin Class:	
Size (acres):	
Disturbance Category:	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)	N
B. Flood Flow Alteration	Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
2. Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall conditions	
3. Wetland is a closed system	N
4. If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris	Y
5. Wetland contains a dense herbaceous layer (>70% cover) or woody vegetation	Y
6. Wetland receives floodwater from an adjacent water course at least once every 10 years	Y Y
7. Floodwaters come as sheet flow rather than channel flow C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
1. Sources of excess sediment are present up gradient of the wetland	N
2. Is wetland influenced by slow-moving water and/or a deepwater habitat	Y
3. Is herbaceous vegetation present (>50% cover)	Y
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	Ŷ
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
1. Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the	
wetland	N
2. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by	
other hydrological data source	Y
3. Wetland has at least 30% aerial cover of live vegetation	Y Y an N an N/A
E. Erosion Control and Shoreline Stabilization	Y or N or N/A
<ol> <li>Wetland has dense, energy absorbing vegetation (&gt;70%) bordering the water course and no evidence of erosion</li> <li>An herbaceous layer is part of this dense vegetation</li> </ol>	Y Y
3. Shrubs able to withstand erosive flood events	Y
5. Sin us able to writing and ensite inducevents F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Ŷ
3. Interspersion of vegetation and surface water is high in wetland	Y
4. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season	Y
5. Wetland has outlet from which organic matter is flushed	Y
G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	N/A
5. Evidence of wildlife use	Y
6. Wetland has a moderate degree of cowardin class interspersion	N/A
H. General Fish Habitat	Y or N or N/A
1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland provide overwintering habitat for fish	N/A N/A
<ol> <li>Documented presence of fish</li> <li>Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter</li> </ol>	
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A N/A
6. Juvenile rest areas	N/A
I. Native Plant Richness	Y or N or N/A
1. Dominant and codominant plants are native	Y
2. Wetland contains two or more Cowardin Classes	N/A
3. Wetland has two or more strata of vegetation	N/A
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use	N/A
2. Wetland is in public ownership	Y
3. Accessible trails available	N/A
4. Is the area a known recreation area	N/A
5. Subsistence (berry picking, fishing, hunting) K Uniqueness and Heritage	N/A Y or N or N/A
K. Uniqueness and Heritage 1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y OF N OF N/A
2. Wetland contains documented occurrence of a state of rederally listed threatened of endangered species 2. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	
2. We take domains documented childran habitat, ingri quarty ecosystems, or priority species respectively designated by the 0.3. Fish and Wildlife Service	Y
3. We than a biological, geological, or other features that are determined rare	N
4. Wetland has been determined significant because it provides functions scarce for the area	N
5. Are there known or reported cultural resources in the area	N
6. Is the area a known subsistence/recreation/living area	Y
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
d) Anadromous fish overwintering habitat	
e) Patterned wet sedge meadow and low center polygons	
	ĺ.
f) High center polygon complex	
<ul> <li>f) High center polygon complex</li> <li>g) Riverine coastal mudflats</li> <li>h) Non-patterned wet meadow adjacent to streams and river bluffs.</li> </ul>	Y

Motor d Fund	one or - 1/	Populto		
	ons and Values			
Unique ID: HGM Class:		9 Flats		
Cowardin Class:		PEM1H		
Size (acres):	•	PEIVITH		
Size (acres):		-		
	Raw Score	Weighted Score		
Flood Flow Alte		weighted Score		
1 1	0			
2	1	-		
3	0			
4	1	-		
5	1			
6	1			
7	1			
	Total	0.714		
Sediment Remo	oval			
1	0			
2	1			
3	1			
4	1			
5	0			
	Total	0.600		
	oxicant Remova			
1	0	<u> </u>		
2	1	ļ		
3	1			
	Total	0.667		
	and Shoreline	Stabilization		
1	1			
2	1			
3	1	4 000		
Due du stiene effe	Total	1.000		
	organic Matter a	ind its Export		
1	1			
2	1			
3	1			
5	1			
5	Total	1.000		
General Habita		1.000		
1	1			
2	N/A			
3	1			
4	N/A			
5	1			
6	N/A			
	Total	1.000		
General Fish Ha	bitat			
1	N/A			
2	N/A			
3	N/A	ļ		
4	N/A	ļ		
5	N/A	ļ		
6	N/A			
Mating Plant 2	Total	N/A		
Native Plant Rid				
1	1 N/A	ł		
3	N/A N/A	ł		
5	Total	1.000		
Educational or		1.000		
1	N/A			
2	1	ł		
3	N/A	ł		
4	N/A	t		
5	N/A	t		
	, Total	1.000		
Uniqueness and				
. 1	1			
2	1	<u>l</u>		
3	0	ļ		
	0			
4	U	+		
4	0			
5	0 1	* - -		
5	0 1 1	* * *		
5	0 1	0.571		

Disturbance Cat	ogony	0			
Distui bance cat	egory	0			
Disturbance Cat	egory	Impact Factor			
0	0 = 1				
1	0.99				
2	0.95				
3	=	0.9			
Disturbance Imp	oact Factor	1			

Wetland Functions and Values Results (cont.)				
Unique ID 9				
Exceptional Habitat Designation			0	
	Weighted Score			
Flood Flow Alteration	0.714			
Sediment Removal	0.600			
Nutrient and Toxicant Removal	0.667			
Erosion Control and Shoreline Stabilization	1.000			
Production of Organic Matter and its Export	1.000			
General Habitat Suitability	1.000			
General Fish Habitat	N/A			
Native Plant Richness	1.000			
Educational or Scientific Value	1.000			
Uniqueness and Heritage	0.571			
	Total	7.552		
Standardization			_	
Total # of functions assessed	_	9	_	
Standardized Total		0.839		
Fotal (Including Disturbance and Exceptional Habitat)	_		0.839	
			0.859	
Overall Functional Score (Category)	0.76 - 1.00	1	Highest	
overall Functional Score (Category)	0.51 - 0.75	 		
	0.26 - 0.50		-	
	0-0.25	IV	Lowest	
	0-0.25	IV	Lowest	
Notes:				
1) Scores for each category component, 0 = no and 1 = yes.				
<ol> <li>Not all functional categories will be applicable to each wetla</li> </ol>	and functional asse	ssment		
For example, General Fish Habitat is only applicable to w			ers.	
Functional categories that are not applicable will be treat		-		
that component. No score is not the same as 0, which w				
Accordingly, the maximum total score will be reduced by				
For example, if General Fish Habitat does not apply, then		0		
3) NA = an item that is currently not applicable, but could be a				
4) See impacted area assessment worksheet for determination	• •			
Apply the correct impact factor to the disturbance catego	ory.			
	•			

Wetland Functions and Values Evaluation Questions Unique ID	. 10
Wetland Functions and Values Evaluation Questions Unique IE HGM Class	
Cowardin Class	
Size (acres	
Disturbance Category	
A. Exceptional Habitat Designation	Y or N
1. Is wetland located within an area considered to be irreplaceable, or does it have unique habitat not found anywhere else on the North	
Slope (i.e., Teshukpuk Lake Surface Protection Area, Colville River Delta, Beaufort Sea Coastal Marsh)	N
2. Is wetland located within an area considered by any regulatory agency to be an Aquatic Resource of National Importance (ARNI)	N
B. Flood Flow Alteration	Y or N or N/A
1. Wetland occurs in the upper portion of its watershed	N
<ol> <li>Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall condition</li> <li>Wetland is relatively flat area and is capable of retaining higher volumes of water during storm events than under normal rainfall condition</li> </ol>	
3. Wetland is a closed system	Y N
<ol> <li>If flow through, wetland has constricted outlet with signs of fluctuating water levels, algal mats, and/or lodged debris</li> <li>Wetland contains a dense herbaceous layer (&gt;70% cover) or woody vegetation</li> </ol>	Y
5. We take Contains a close reliable to back out and the second of the second s	N
7. Floodwaters come as sheet flow rather than channel flow	N/A
C. Sediment Removal: If moving waters consider only statements 1 and 2	Y or N or N/A
1. Sources of excess sediment are present up gradient of the wetland	N
2. Is wetland influenced by slow-moving water and/or a deepwater habitat	N
3. Is herbaceous vegetation present (>50% cover)	Y
4. Interspersion of vegetation and surface water is moderate in wetland presently or during flooding at least once ever 10 years	N
5. Sediment deposits are present in wetland (observation or noted in application materials)	N
D. Nutrient and Toxicant Removal	Y or N or N/A
<ol> <li>Sources of excess nutrients (fertilizers) and toxicants (pesticides and heavy metals) are present up gradient and able to influence the unstand</li> </ol>	
wetland	N
2. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season by visual observation, or indicated by	NI
other hydrological data source 3. Wetland has at least 30% aerial cover of live vegetation	N Y
E. Erosion Control and Shoreline Stabilization	Y or N or N/A
1. Wetland has dense, energy absorbing vegetation (>70%) bordering the water course and no evidence of erosion	Y OF IN OF IN/A
2. An herbaceous layer is part of this dense vegetation	Y
3. Shrubs able to withstand erosive flood events	Ŷ
F. Production of Organic Matter and its Export	Y or N or N/A
1. Wetland has at least 30% aerial cover of herbaceous vegetation	Y
2. Woody plants in wetland are mostly deciduous	Y
3. Interspersion of vegetation and surface water is high in wetland	N
4. Wetland is inundated or has indicators that flooding is a seasonal event during the growing season	N
5. Wetland has outlet from which organic matter is flushed	N
G. General Habitat Suitability	Y or N or N/A
1. Is wetland located greater than 300-feet from existing development	Y
2. Undeveloped upland buffers abutting wetland	N/A
3. Wetland part of a larger wetland complex, not fragmented	Y
4. Diversity of plant species is apparent (> or = 5 species with at least 10% cover each)	Y
5. Evidence of wildlife use	Y Y
6. Wetland has a moderate degree of cowardin class interspersion H. General Fish Habitat	Y or N or N/A
1. Wetland has perennial or intermittent surface-water connection to a fish-bearing water body	N/A
2. Does wetland not performed on meeting and action water control of instruction to a nan-occuring water body.	N/A
3. Documented presence of fish	N/A
4. Herbaceous and/or woody vegetation is present in wetland and/or buffer to provide cover, shade, and/or detrital matter	N/A
5. Spawning areas are present (aquatic vegetation and/or gravel beds)	N/A
6. Juvenile rest areas	N/A
I. Native Plant Richness	Y or N or N/A
1. Dominant and codominant plants are native	Y
2. Wetland contains two or more Cowardin Classes	Y
3. Wetland has two or more strata of vegetation	Y
J. Educational or Scientific Value	Y or N or N/A
1. Site has scientific or educational use 2. Wetland is in public ownership	N/A Y
2. Wetland is in public ownership 3. Accessible trails available	Y N/A
4. Is the area a known recreation area	N/A N/A
5. Subsistence (berry picking, fishing, hunting)	N/A N/A
S. Subjaceness and Heritage	Y or N or N/A
1. Wetland contains documented occurrence of a state or federally listed threatened or endangered species	Y
2. Wetland contains documented critical habitat, high quality ecosystems, or priority species respectively designated by the U.S. Fish and	
Wildlife Service	Y
3. Wetland has biological, geological, or other features that are determined rare	Ν
4. Wetland has been determined significant because it provides functions scarce for the area	N
5. Are there known or reported cultural resources in the area	N
6. Is the area a known subsistence/recreation/living area	N
7. Wetland complex contains one or more of the following habitats:	
a) Tall shrub habitat (>.5ft in height) dominated by Salix spp.	
b) Aquatic herb habitat dominated by Arctophila fulva.	
c) Semi-permanently flooded to permanently flooded vegetated portions of drained lake basins	
d) Anadromous fish overwintering habitat	
e) Patterned wet sedge meadow and low center polygons	
f) High center polygon complex	
g) Riverine coastal mudflats	1
h) Non-patterned wet meadow adjacent to streams and river bluffs.	N

Motor d Fund	ons and Values	Populto
	ons and values	
Unique ID: HGM Class:		10 Flats
Cowardin Class Size (acres):	•	PEM1B/C
Size (acres):		-
	Raw Score	Weighted Score
Flood Flow Alte		Weighted Score
1	0	
2	1	
3	1	
4	0	
5	1	
6	0	
7	N/A	
	Total	0.500
Sediment Remo		
1	0	
2	0	
3	1	
4	0	
5	Total	0.200
Nutrient and To	oxicant Removal	
1		
2	0	
3	1	
	Total	0.333
<b>Erosion Control</b>	and Shoreline	Stabilization
1	1	
2	1	
3	1	
	Total	1.000
	rganic Matter a	nd its Export
1	1	
2	1	
3	0	
4	0	
5	Total	0.400
General Habita		0.400
1	1	
2	N/A	
3	1	
4	1	
5	1	
6	1	
	Total	1.000
General Fish Ha		
1	N/A	
2	N/A	
3	N/A	
4	N/A	
6	N/A N/A	
0	Total	N/A
Native Plant Rid		-7
1	1	
2	1	
3	1	
	Total	1.000
Educational or		
1	N/A	
2	1	
3	N/A	
4	N/A	
5	N/A Total	1.000
Uniqueness and		1.000
1	1	
2	1	
3	0	
4	0	
	0	
5	0	
6	0	
	0 0	
6	0	0.286

Disturbance Category 0							
Disturbance Cat	egory	Impact Factor					
0	=	1					
1	=	0.99					
2	=	0.95					
3	=	0.9					
Disturbance Imp	1						

/etland Functions and Values Results (cont.) nique ID 10 kceptional Habitat Designation				
cceptional Habitat Designation				
			0	
	Weighted Score			
ood Flow Alteration	0.500			
ediment Removal	0.200			
utrient and Toxicant Removal	0.333			
rosion Control and Shoreline Stabilization	1.000			
roduction of Organic Matter and its Export	0.400			
eneral Habitat Suitability	1.000			
eneral Fish Habitat	N/A			
ative Plant Richness	1.000			
ducational or Scientific Value	1.000			
niqueness and Heritage	0.286		7	
	Total	5.719		
tandardization	_		7	
otal # of functions assessed		9	_	
tandardized Total		0.635		
otal (Including Disturbance and Exceptional Habitat)	_		0.635	
tal (including Disturbance and Exceptional Habitat)			0.055	
Overall Functional Score (Category)	0.76 - 1.00	1	Highest	
overall runctional score (category)	0.51 - 0.75		Ingliest II	
	0.26 - 0.50		-	
	0-0.25	IV	Lowest	
	0 - 0.25	ĨV	Lowest	
otes:				
Scores for each category component, 0 = no and 1 = yes.				
) Not all functional categories will be applicable to each wetla	and functional asse	ssment.		
For example, General Fish Habitat is only applicable to w			rs.	
Functional categories that are not applicable will be treat		-		
that component. No score is not the same as 0, which w	ould erroneously r	educe the tota	score.	
Accordingly, the maximum total score will be reduced by				
For example, if General Fish Habitat does not apply, then		0	,	
NA = an item that is currently not applicable, but could be a				
See impacted area assessment worksheet for determination	••			
Apply the correct impact factor to the disturbance category	ory.			
	•			

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## Appendix D ORM Spreadsheet

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Waters Name	Cowadin	HGM Code	Measur	Amount Unite	Waters Types	Latitude	Longitude Local_Waterway	NIF Justification	Route to Section 10 Navigable Water or to TNW
E1UBFoggyIslandBay79	E1UB	ESTUARINEF	Area	23.955468 Acre	TNW	70.216044	-147.741138 FoggyIslandBay	Subsistance use area for motored boats	Flows into the Arctic Ocean
L1UBHFoggyIslandBay1	L1UBH	DEPRESS	Area	43.778496 Acre	RPW	70.18517	-147.715024 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay26	L1UBH	DEPRESS	Area	31.862461 Acre	RPW	70.191907	-147.720023 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay27	L1UBH	DEPRESS	Area	17.672715 Acre	RPW	70.196863	-147.717888 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay28	L1UBH	DEPRESS	Area	52.560254 Acre	RPW	70.197336	-147.736193 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay29	L1UBH	DEPRESS	Area	7.031947 Acre	RPW	70.197139	-147.730328 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay60	L1UBH	DEPRESS	Area	3.802657 Acre	RPW	70.202592	-147.743853 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay66	L1UBH	DEPRESS	Area	6.185933 Acre	RPW	70.20295	-147.727692 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay73	L1UBH	DEPRESS	Area	5.655029 Acre	RPW	70.207759	-147.72155 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay74	L1UBH	DEPRESS	Area	4.039176 Acre	RPW	70.208244	-147.727531 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay95	L1UBH	DEPRESS	Area	0.654375 Acre	RPW	70.183114	-147.717271 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
L1UBHFoggyIslandBay225	L1UBH	DEPRESS	Area	6.687412 Acre	RPW	70.193103	-147.691672 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	M1UB	DEPRESS	Area	197.215405 Acre	TNW	70.269069	-147.594238 FoggyIslandBay	Subsistance use area for motored boats	N/A
	M1UB	DEPRESS	Area	27.97707 Acre	TNW	70.270502	-147.595075 FoggyIslandBay		N/A
	M1UB	DEPRESS	Area	2.111235 Acre	TNW	70.25423	-147.620314 FoggyIslandBay		N/A
M1UBFoggyIslandBay174	M1UB	DEPRESS	Area	1066.03868 Acre	TNW	70.22777	-147.663798 FoggyIslandBay	Subsistance use area for motored boats	N/A
	M2US	DEPRESS	Area	1.288656 Acre	TNW	70.218804	-147.741788 FoggyIslandBay	Subsistance use area for motored boats	N/A
	M2US M2US	DEPRESS DEPRESS	Area Area	9.611465 Acre 1.759145 Acre	TNW	70.210876 70.204531	-147.722625 FoggyIslandBay -147.702326 FoggyIslandBay	Subsistance use area for motored boats Subsistance use area for motored boats	N/A N/A
		ORGSOILFLT	Area	36.629929 Acre	TNWW	70.204531 70.211513	-147.702326 FoggylslandBay -147.741986 FoggylslandBay	N/A	
	PEM1B/0	ORGSOILFLT	Area	0.780595 Acre	TNWW	70.211513		N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay96 PEM1B/CFoggyIslandBay100	PEM1B/0	ORGSOILFLT	Area	8.921422 Acre	TNWW	70.185356	-147.728247 FoggylslandBay -147.702786 FoggylslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay100 PEM1B/CFoggyIslandBay102		ORGSOILFLT	Area	0.138414 Acre	TNWW	70.180198	-147.739948 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay102 PEM1B/CFoggyIslandBay103		ORGSOILFLT	Area	0.032569 Acre	TNWW	70.187494	-147.696105 FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay103		ORGSOILFLT	Area	15.185062 Acre	TNWW	70.180787	-147.690347 FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay108		ORGSOILFLT	Area	10.210037 Acre	TNWW	70.187919	-147.685821 FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay114		ORGSOILFLT	Area	24.130613 Acre	TNWW	70.183132	-147.720838 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay124		ORGSOILFLT	Area	6.811746 Acre	TNWW	70.205129	-147.741311 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
			Area	5.183197 Acre	TNWW	70.203216	-147.735861 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
		ORGSOILFLT	Area	6.415071 Acre	TNWW	70.204747	-147.735036 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay160	PEM1B/0	ORGSOILFLT	Area	14.42963 Acre	TNWW	70.20898	-147.734514 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay162			Area	20.296625 Acre	TNWW	70.192955	-147.747831 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay165		ORGSOILFLT	Area	14.958727 Acre	TNWW	70.185141	-147.71018 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay166	PEM1B/0	ORGSOILFLT	Area	147.709233 Acre	TNWW	70.189537	-147.730798 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay168		ORGSOILFLT	Area	610.25867 Acre	TNWW	70.194213	-147.695584 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay171		ORGSOILFLT	Area	0.551272 Acre	TNWW	70.179195	-147.703834 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
		ORGSOILFLT	Area	7.454627 Acre	TNWW	70.217214	-147.742739 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay226		ORGSOILFLT	Area	0.159099 Acre	TNWW	70.193158	-147.69123 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1B/CFoggyIslandBay228	PEM1B/0	ORGSOILFLT	Area	113.887905 Acre	TNWW	70.20963	-147.728097 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1CFoggyIslandBay52	PEM1C PEM1C	ORGSOILFLT	Area	25.543421 Acre	TNWW	70.186505	-147.68708 FoggyIslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1C PEM1C		Area	27.060657 Acre	TNWW		-147.707683 FoggyIslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
		ORGSOILFLT	Area	9.697482 Acre	TNWW	70.186537	-147.689379 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1C PEM1C	ORGSOILFLT ORGSOILFLT	Area Area	0.153766 Acre 0.409467 Acre	TNWW	70.190508	-147.67416 FoggylslandBay -147.674473 FoggylslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1CFoggylslandBay83 PEM1CFoggylslandBay97	PEM1C PEM1C	ORGSOILFLT	Area	2.410952 Acre	TNWW	70.190598	-147.674473 FoggylslandBay -147.69895 FoggylslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1C PEM1C	ORGSOILFLT	Area	1.43035 Acre	TNWW	70.179891	-147.69895 FoggylslandBay -147.699517 FoggylslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEMIC PEMIC	ORGSOILFLT	Area	0.03076 Acre	TNWW	70.180144	-147.099317 Foggylslandbay -147.736165 Foggylslandbay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1CFoggyIslandBay164	PEMIC PEMIC	ORGSOILFLT	Area	12.631205 Acre	TNWW	70.203774	-147.70143 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1CFoggyIslandBay167	PEM1C	ORGSOILFLT	Area	264.650817 Acre	TNWW	70.198325	-147.731677 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1CFoggyIslandBay170	PEM1C	ORGSOILFLT	Area	1.407881 Acre	TNWW	70.17893	-147.70109 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1CFoggyIslandBay172	PEM1C	ORGSOILFLT	Area	0.344166 Acre	TNWW	70.179083	-147.702693 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1C	ORGSOILFLT	Area	10.990258 Acre	TNWW	70.180791	-147.70949 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay40	PEM1H	ORGSOILFLT	Area	17.344912 Acre	TNWW	70.188381	-147.714652 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1H	ORGSOILFLT	Area	0.34714 Acre	TNWW	70.203108	-147.726799 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay65	PEM1H	ORGSOILFLT	Area	0.155264 Acre	TNWW	70.202539	-147.728152 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay91	PEM1H	ORGSOILFLT	Area	5.075193 Acre	TNWW	70.186713	-147.732627 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1H	ORGSOILFLT	Area	14.763388 Acre	TNWW	70.189816	-147.74775 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1H	ORGSOILFLT	Area	0.016626 Acre	TNWW	70.186339	-147.731675 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay99	PEM1H	ORGSOILFLT	Area	30.812866 Acre	TNWW	70.186664	-147.738577 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay109	PEM1H	ORGSOILFLT	Area	2.102199 Acre	TNWW	70.185746	-147.726102 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay110	PEM1H	ORGSOILFLT	Area	14.048162 Acre	TNWW	70.188507	-147.724239 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay115	PEM1H	ORGSOILFLT	Area	6.428164 Acre	TNWW	70.201621	-147.740117 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PEM1HFoggyIslandBay152	PEM1H	ORGSOILFLT	Area	0.367619 Acre	TNWW	70.208831	-147.727128 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1H	ORGSOILFLT	Area	0.195977 Acre	TNWW	70.215075	-147.741514 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
33)	PEM1H	ORGSOILFLT	Area	19.946857 Acre	TNWW	70.207705	-147.744292 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PEM1H PUBH	ORGSOILFLT	Area	60.642878 Acre	TNWW	70.205627 70.18979	-147.732754 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggyIslandBay2	PUBH	DEPRESS	Area	3.416352 Acre	TNWW		-147.709781 FoggyIslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PUBH PUBH	DEPRESS DEPRESS	Area	0.234738 Acre		70.190668 70.192407	-147.712302 FoggyIslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PUBH	DEPRESS	Area Area	0.332242 Acre 1.072029 Acre	TNWW	70.192407	-147.712269 FoggyIslandBay -147.708313 FoggyIslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggyIslandBay5	PUBH	DEPRESS	Area Area	0.844686 Acre	TNWW	70.194845	-147.708313 FoggylslandBay -147.706702 FoggylslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PUBH	DEPRESS DEPRESS	Area	0.316255 Acre	TNWW	70.194742		N/A N/A	
PUBHFoggyIslandBay7 PUBHFoggyIslandBay8	PUBH	DEPRESS	Area	0.09234 Acre	TNWW	70.188775		N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggyIslandBay8 PUBHFoggyIslandBay9	PUBH	DEPRESS	Area	1.079845 Acre	TNWW	70.189262	-147.71265 FoggyIslandBay -147.706431 FoggyIslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PUBH	DEPRESS	Area	0.380767 Acre	TNWW	70.186194	-147.705431 FoggyIslandBay -147.705939 FoggyIslandBay	N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggyIslandBay10	PUBH	DEPRESS	Area	0.617417 Acre	TNWW	70.183008	-147.707569 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
	PUBH	DEPRESS	Area	0.254265 Acre	TNWW	70.184552	-147.706062 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggyIslandBay12	PUBH	DEPRESS	Area	0.383009 Acre	TNWW	70.188867	-147.713761 FoggyIslandBay	NA	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggyIslandBay14	PUBH	DEPRESS	Area	0.508551 Acre	TNWW	70.189275	-147.711099 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
				2.00000101010		10.100210	i rooo i oggitolandbay	1	in a second second to the metal a complex norming into the Arbite Ocean

Cold Strate March         No.h         Package of Strategy and Strat	DLIDHEeggudelendDeudE	PUBH	DEPRESS	Area	0.242348 Acre	TNWW	70.188313	147 700214	1 Fear-JalandBay	N/A	Adjacent and Neighbering to the watland complex flexing into the Aratic Ocean
Here         Here <th< td=""><td>PUBHFoggyIslandBay15 PUBHFoggyIslandBay16</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean</td></th<>	PUBHFoggyIslandBay15 PUBHFoggyIslandBay16										Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
OME         OME <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-147.702210</td> <td>FoggyIslandBay</td> <td></td> <td></td>								-147.702210	FoggyIslandBay		
Lis Signa (height)         Dist         Protoc         <								-147.699777	7 FoggylslandBay		
Order Specification         Design of the Physics         Part of Design of the Physics of the Physi								-147.732198	3 FoggyIslandBay		
		PUBH				TNWW		-147.746634	4 FoggyIslandBay	N/A	
All Displandari         Data         Desc         Desc <thdesc< th="">         Desc         Desc</thdesc<>								-147.719241	1 FoggyIslandBay	N/A	
Construction         Number         Construction         Number         Applied on Standard		PUBH	DEPRESS	Area	0.142177 Acre	TNWW	70.187256	-147.744856	6 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Dist         Dist <thdist< th="">         Dist         Dist         <thd< td=""><td>PUBHFoggyIslandBay23</td><td>PUBH</td><td>DEPRESS</td><td></td><td></td><td>TNWW</td><td>70.191263</td><td>-147.744897</td><td>7 FoggylslandBay</td><td>N/A</td><td></td></thd<></thdist<>	PUBHFoggyIslandBay23	PUBH	DEPRESS			TNWW	70.191263	-147.744897	7 FoggylslandBay	N/A	
Alth         Alth         Add of an Anticing in the action of the hand in the Add Osen           Alth         Alth         Alth         Alth Sector of a the action of the hand in the Add Osen           Alth         Alth         Alth         Alth Sector of a the action of the hand in the Add Osen           Alth         Alth         Alth         Alth         Alth Sector of a the action of the hand Osen           Alth         Alth         Alth         Alth         Alth Sector of a the action of the hand Osen           Alth         Alth         Alth         Alth Sector of the action of the hand Osen         Alth Alth Alth Alth Alth Alth Alth Alth	PUBHFoggyIslandBay24							-147.720526	6 FoggyIslandBay		
Column Schuld         Num         Column Schule         Num         Column Schule         Num         Schule	PUBHFoggyIslandBay25										
BHF System         No.         Res         Also ent options in a construction of a set o											Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Disk         Disk <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-147.712172</td><td>2 FoggyIslandBay</td><td></td><td></td></th<>								-147.712172	2 FoggyIslandBay		
Dist         Dist         Dist         Dist         Dist         Address of adjustments in a solid back in the factor data in the facto								-147.708119	9 FoggyIslandBay		
Hard regions         Hors											
Outrog         Dist         Dist <thdist< th="">         Dist         Dist         <t< td=""><td>PUBHFoggyIslandBay34</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-147.722093</td><td>3 FoggyIslandBay</td><td></td><td></td></t<></thdist<>	PUBHFoggyIslandBay34							-147.722093	3 FoggyIslandBay		
Bits Display         Display         Display         Prob         Prob<         Prob	PUBHFoggyIslandBay35							-147.719995	FoggyisiandBay		
Dist 0         Dist 0         LTTP 0         PMV         P1120         P117 Transform         PVV         P117 Transform         P117 Transform<											
Dief         Dies         Profess         Prof								-147.722100	1 EcocylelandBay		
Parts         Parts <th< td=""><td>PLIBHEoggyIslandBay39</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-147 708424</td><td>1 FoggylslandBay</td><td></td><td></td></th<>	PLIBHEoggyIslandBay39							-147 708424	1 FoggylslandBay		
Bit Bit Speending         Data         Bit Speending         Data         Applies of Bit Speeding Dist         Dist         Applies Dist         Dist         Applies Dist         ist											
PUB 5 grant								-147.699691	1 FoggyIslandBay		
Piller Syndholdsvarkur         Piller Prefers         Am         Obstacl         Piller Prefers         Am         Obstacl         Piller Prefers         Am         Obstacl         Piller Prefers         Am         Obstacl         Piller Prefers         Am         Piller Prefers         Pil								-147.701568	B FoggyIslandBay		
URF         URF <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-147.697672</td> <td>2 FoggyIslandBay</td> <td></td> <td></td>								-147.697672	2 FoggyIslandBay		
Diels Southers         Phys.         Num.         Addext af System is nur descent south a bering south	PUBHFoggyIslandBay45	PUBH	DEPRESS	Area				-147.729975	5 FoggyIslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Public System         Public S	PUBHFoggyIslandBay46			Area	0.333304 Acre		70.184636	-147.725455	5 FoggyIslandBay		
Pieles         Pieles<	PUBHFoggyIslandBay47			Area				-147.707301	1 FoggyIslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Dubl Specification         UNID         DSTRESS         PARE         1.03114 (Arr.         PMVW         TV 10164         -1.178 (Sec.)         Specification         Additional interploting in the Adid Communication           PAREFSSORE         PARE         0.8074 (Arr.         PMW         TV 10164         -1.178 (Sec.)         PAREFSSORE         Additional interploting in the Adid Communication         Additional interploting in the	PUBHFoggyIslandBay48							-147.686938	B FoggyIslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Ref-source         Part Part Signal         Num         Descent         Num         Total Signal         Part Signal         Num         Descent         Signal         ignal        Signal	PUBHFoggyIslandBay49				1.383144 Acre			-147.690862	2 FoggyIslandBay		
Number         Prob         DEPRESS         Ave         0.4666624         Provide         Prov	PUBHFoggyIslandBay50							-147.695888	3 FoggyIslandBay		
Det Programmenta         Process         Name         Operation         Name         Adjacent and Programments (not be affect Count)           Name of supported in the state of the sta								-147.697328	3 FoggyIslandBay		
Dieff-Signalundigen         ILBN         DEPENSA         Amage         0.05552         Area         Adaption to be written complex forwary into the Arcit: Communication of the A								-147.680502	2 FoggyIslandBay		
PURPE         DePENSE         Ave.         0.87888         /km         0.87288         /km         0.727285         regulationships/         NA         Applicationships/	PUBHFoggyIslandBay55										
PURP SQL UPTESS         PMB         CPTRSS         PMS         TMVM         TO 20113         -1772085         PGR SQL											
Public Support         Public					0.637389 Acre			-147.707548	B FoggyIslandBay		
PUBPE operational system         PUBPE System         Avea         First Provide system         Pro	PUBHFoggyIslandBay58							-147.722855	FoggyIslandBay		
PuBH-Signification         NA         Addact and Heighborgs in the water comes more and the Additic comes           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes         NA           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes         NA           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes         NA           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes         NA           PuBH-Signification         NA         Advacet and Heighborgs in the water comes         NA         Advacet and Heighborgs in the water comes         NA           PuBH-Signification         NA         Adv											
PLBH*GgerickenBude         FUBL         OPPERSS         Ava         3.47021         Ava         The second of the second origination or the second originatin the second origin								-147.720014			
PUBH         OPINE         PUBH         OPINES         Ava         1.82273         Ava         TVM         VM        TVM <th< td=""><td>PUBHFoggylslandBay69</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-147.723912</td><td>Z FoggylslandBay</td><td></td><td></td></th<>	PUBHFoggylslandBay69							-147.723912	Z FoggylslandBay		
PUBH* Operfload         PUBH*         DetPress         Are         1.1225 / Are         TWW         70.1988/2         Output         NA         Adapcet and Neighboring to be wintait compact floar into the Arctic Ocean           PUBH* operfload         DEPTRESS         Are         0.5884 / Arc         TWW         70.21128         14773821         Togget/andByn         NA         Adapcet and Neighboring to be wintait compact floar into the Arctic Ocean           PUBH* operfload         DEPTRESS         Are         1.5978 / Arc         TWW         70.21128         14773821         Togget/andByn         NA         Adapcet and Neighboring to be wintait compact floar into the Arctic Ocean           PUBH* operfload         PUBH         DEPTRESS         Are         1.5978 / Arc         TWW         70.21149         14774425         Togget/andByn         NA         Adapcet and Neighboring to be wintait compact floar into the Arctic Ocean           PUBH* operfload         DEPTRESS         Are         1.5978 / Arc         TWW         70.20175         14774425         Togget/andByn         NA         Adapcet and Neighboring to be wintait compact floar into the Arctic Ocean           PUBH* operfload         DEPTRESS         Are         1.5927 / Arc         TWW         70.20265         14777427         Togget/andByn         NA         Adapcet and Neighboring to be Arctic Ocean <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-147 680688</td> <td>B EnggyIslandBay</td> <td></td> <td></td>								-147 680688	B EnggyIslandBay		
PLBH* Op/ENESS         Area         0.68864. Area         NNW         70.20556	PUBHFoggyIslandBay70							-147.673875	5 FoggyIslandBay	N/A	
PLBH         DEPRESS         Area         0.30021         Area         NNW         TV21180         TV278486         CognylandBay         NA         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLBHF200gylabandBay77         PLBH         DEPRESS         Area         1.51562         Area         NA         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLBH 200gylabandBay7         PLBH         DEPRESS         Area         1.81562         Area         NA         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLBH 200gylabandBay7         PLBH         DEPRESS         Area         1.81562         Area         NA         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLBH 200gylabandBay6         PLBH         DEPRESS         Area         1.84270         Area         NA         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLBH 200gylabandBay6         PLBH         DEPRESS         Area         1.84270         Area         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLBH 200gylabandBay6         PLBH         DEPRESS         Area         1.84270         Area         Adaptert an Neghtomig to the wetterd comples flowing into the Arctic Ocean           PLB								-147.738217	7 FoggylslandBay		
PUBH DEPRESS         Ava         1.5197.8 Ava         TVNW         T0.211709         Int 77.2388         FoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH SoggyliandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arda Coeaen           PUBH SoggyliandBay         PUBH Soggyliand											
PUBH GPRESS         Ava         1.43/52         Ava	PUBHFoggyIslandBay76	PUBH	DEPRESS	Area		TNWW	70.211769	-147.728888	B FoggyIslandBay	N/A	
PUBH PUBH SegNetandBay?         PUBH PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH SegNetandBay?         PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH SegNetandBay?         PUBH SegNetandBay?         NA         Adjacent and NegNoting to the wetland complex flowing in the Arclic Ocean           PUBH SegNetandBay?         PUBH SegNetandBay?		PUBH	DEPRESS	Area	1.431562 Acre	TNWW	70.212108			N/A	
PUBH DEPRESS         Area         0.168956         Area         0.168956         Area         0.169956         Area         0.169956         Area         0.169956         Area         0.169956         Area         0.47736176         Area         0.4673617         Area         0.46736176         Area         0.46736176         Area         0.4673617         Area         0.466667         Area         0.46736176         Area         0.466667         Area         0.46736176         Area         0.4666776         Area         0.46736176         Area         0.4666776         Area         0.4666776         Area         0.4666776         Area         0.4666776         Area         0.4666776         Area         0.4666777         Area         0.46677777777777777777777777777777777777	PUBHFoggyIslandBay78	PUBH	DEPRESS	Area		TNWW	70.214412	-147.734375	5 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH DEPRESS         Area         0.168956         Area         0.168956         Area         0.169956         Area         0.169956         Area         0.169956         Area         0.169956         Area         0.47736176         Area         0.4673617         Area         0.46736176         Area         0.46736176         Area         0.4673617         Area         0.466667         Area         0.46736176         Area         0.466667         Area         0.46736176         Area         0.4666776         Area         0.46736176         Area         0.4666776         Area         0.4666776         Area         0.4666776         Area         0.4666776         Area         0.4666776         Area         0.4666777         Area         0.46677777777777777777777777777777777777	PUBHFoggyIslandBay80	PUBH	DEPRESS	Area	0.591765 Acre	TNWW	70.209138	-147.746253	3 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH <sup>®</sup> oppylandBay         PUBH         DEPRESS         Aras         0.478766 Aras         NNW         70.127458         1-147.7386 (2) compylandBay         NA         Adapcent and Neighboring to the welland compiles (lowing into the Arctic Ocean           PUBH <sup>®</sup> oppylandBay         PUBH         DEPRESS         Aras         0.007281 Aras         NNW         70.187458         1-147.7386 (2) compylandBay         NA         Adapcent and Neighboring to the welland compiles (lowing into the Arctic Ocean           PUBH <sup>®</sup> oppylandBay         PUBH         DEPRESS         Aras         0.007281 Aras         NNW         70.185672         1-147.73287 (2) compylandBay         NA         Adapcent and Neighboring to the welland compiles (lowing into the Arctic Ocean           PUBH <sup>®</sup> oppylandBay         PUBH         DEPRESS         Aras         0.14803 Aras         NNW         70.135361         1-47.72067 (2) compylandBay         NA         Adapcent and Neighboring to the welland compiles (lowing into the Arctic Ocean           PUBH <sup>®</sup> oppylandBay         PUBH         DEPRESS         Aras         0.14803 Aras         NNW         70.137262         1-47.72067 (2) compylandBay         NA         Adapcent and Neighboring to the welland compiles (lowing into the Arctic Ocean           PUBH <sup>®</sup> oppylandBay         NA         Adapcent and Neighboring to the welland compiles (lowing into the Arctic Ocean         PUBH <sup>®</sup> oppylandBay         NA	PUBHFoggyIslandBay87	PUBH	DEPRESS	Area		TNWW	70.209773	-147.739194	4 FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH Exp(standBay6)         PUBH         DEPRESS         Area         1.55207         TNW         77.1286         PoggylaindBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Exp(sylaindBay64         PUBH         DEPRESS         Area         0.100721         Area         TNW         70.18256         -147.71344         FoggylaindBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Exp(sylaindBay112         PUBH         DEPRESS         Area         0.13027         Arctic Ocean           PUBH Exp(sylaindBay112         PUBH         DEPRESS         Area         0.1412331         Arctic Ocean           PUBH Exp(sylaindBay113         PUBH         DEPRESS         Area         0.143231         Arctic Ocean           PUBH Exp(sylaindBay114         PUBH         DEPRESS         Area         0.143216         Arctic Ocean           PUBH Exp(sylaindBay115         PUBH         DEPRESS         Area         0.31423 Arctic Ocean         PUBH Exp(sylaindBay114         PUBH         DEPRESS         Area         0.31423 Arctic Ocean           PUBH Exp(sylaindBay115         PUBH         DEPRESS         Area         0.31423 Arctic Ocean         PUBH Exp(sylaindBay114         PUBH         DEPRESS         Ar	PUBHFoggyIslandBay88							-147.741622	2 FoggyIslandBay		
PUBH E-gogylsiandBay34         PUBH         DEPRESS         Area         0.00721         Area         TWW         70.88226         -1477.3144         FoggylsiandBay1         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylsiandBay112         PUBH         DEPRESS         Area         0.30974         Area         0.20954         Area         TWW         70.88627         FoggylsiandBay13         PUBH         DEPRESS         Area         0.141733         Area         0.141733         Area         0.14183         Area         0.14173         Area	PUBHFoggyIslandBay89										
PUBH GaystandBay4         PUBH         DEPRESS         Area         0.130747         Area         TWW         70.88672         -1.47.72372         FoggytslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH GaystlandBay112         PUBH         DEPRESS         Area         0.13402 Arc         TWW         70.83281         -147.72076 / FoggytslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH GaystlandBay113         PUBH         DEPRESS         Area         0.13402 Arc         TWW         70.83281         -147.72076 / FoggytslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH GaystlandBay114         PUBH         DEPRESS         Area         0.231402 Arc         TWW         70.197382         -147.72067 FoggytslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH GaystlandBay112         PUBH         DEPRESS         Area         0.331402 Arc         TWW         70.20265         -147.712407 FoggytslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH GaystlandBay120         PUBH         DEPRESS         Area         0.331423 Arc         TWW         70.202275	PUBHFoggyIslandBay90				1.524207 Acre						
PUBH EquipyliandBay111         PUBH         DEPRESS         Area         0.2954/2 Area         TNWW         70.153066         -147.722916 [PoggyliandBay13         PUBH         Depression         Area         0.14133         Area         0.131402         Area         0.13130         Area         0.13130         Area         0.13130         Area         0.13130         Area         0.13130         Area         0.23141         Area         0.13102         -147.719586         FoggyliandBay13         PUBH         DEPRESS         Area         0.314013         Area         0.31413         Area	PUBHFoggyIslandBay93							-147.731144	4 FoggyIslandBay		
PUBH Expersion         Area         0.141839 Acre         TNWW         70.183291         -147.72077 [FoggylslandBay)         NA         Adjacent and Neighboring to the wettal complex flowing into the Arctic Ocean           PUBH Expersion         PUBH         DEPRESS         Area         0.141020 Acre         TNWW         70.183201         -147.72007 [FoggylslandBay)         NA         Adjacent and Neighboring to the wettal complex flowing into the Arctic Ocean           PUBH Expersion         PUBH         DEPRESS         Area         0.340075 Acre         TNWW         70.19326         -147.72008 [FoggylslandBay)         NA         Adjacent and Neighboring to the wettal complex flowing into the Arctic Ocean           PUBH Expersion         DEPRESS         Area         0.334075 Acre         TNWW         70.19502         -147.72008 [FoggylslandBay)         NA         Adjacent and Neighboring to the wettal complex flowing into the Arctic Ocean           PUBH Expersion         Area         0.334075 Acre         TNWW         70.20227         -147.71947 [FoggylslandBay)         NA         Adjacent and Neighboring to the wettal complex flowing into the Arctic Ocean           PUBH Expersion         Area         0.339978 Acre         TNWW         70.20227         -147.71948 [FoggylslandBay)         NA         Adjacent and Neighboring to the wettal complex flowing into the Arctic Ocean           PUBH Expersistrandia <t< td=""><td>PUBHFoggyIslandBay94</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-147.732972</td><td>2 FoggyIslandBay</td><td></td><td></td></t<>	PUBHFoggyIslandBay94							-147.732972	2 FoggyIslandBay		
PUBH-GogylsiandBay113         PUBH         DEPRESS         Area         0.13402         Acre         TWW         70.183205         -147.719884         FoggylsiandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GogylsiandBay116         PUBH         DEPRESS         Area         0.314075         Acre         TWW         70.197382         -147.719058         FoggylsiandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GogylsiandBay118         PUBH         DEPRESS         Area         0.314075         Acre         TWW         70.19508         FoggylsiandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GogylsiandBay120         PUBH         DEPRESS         Area         0.32266         Acre         TWW         70.202275         -147.71943         FoggylsiandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GogylsiandBay121         PUBH         DEPRESS         Area         0.32058         Acre         TWW         70.20245         -147.71945         FoggylsiandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GogylsiandBay122         PUBH         DEP	PUBHFoggyIslandBay111							-147.722918	FoggyIslandBay		
PUBH SogyslandBay116         PUB DEPRESS         Area         0.219856 Acre         TNWW         70.197282         -1.47.20076         FoggyslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyslandBay118         PUBH         DEPRESS         Area         0.314075         Acre         TWWW         70.197262         -1.47.20045         FoggyslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyslandBay118         PUBH         DEPRESS         Area         0.331423         Acre         TWWW         70.200266         -1.47.714947         FoggyslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyslandBay121         PUBH         DEPRESS         Area         0.33787         Acre         70.20226         -147.714847         FoggyslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyslandBay123         PUBH         DEPRESS         Area         0.33808         Area         10.17211         Area         70.20266         -147.718047         FoggyslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyslandBay129         PUBH         DE	PUBHFoggyIslandBay112										
PUBH SogylslandBay117         PUBH         DEPRESS         Area         0.433141         Area         TNWW         70.19752b         -147.72068         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-FoggylslandBay118         PUBH         DEPRESS         Area         0.31423         Area         TNWW         70.20563         -147.714937         FoggylslandBay2         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-FoggylslandBay120         PUBH         DEPRESS         Area         0.23266         Area         TNWW         70.202653         -147.714937         FoggylslandBay2         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-foggylslandBay122         PUBH         DEPRESS         Area         0.306978         Area         TNWW         70.202664         -147.716427         FoggylslandBay123         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-foggylslandBay123         PUBH         DEPRESS         Area         0.15367         Area         TNWW         70.20860         -147.72807         FoggylslandBay2         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean         PUBH-foggylslandBay132 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
PUBH CoggylslandBay113         PUBH         DEPRESS         Area         0.314075         Acres         TNWW         70.99902         -147.722405         FoggylslandBay119         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay120         PUBH         DEPRESS         Area         0.314075         Acres         TNWW         70.20265         -147.71847         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay121         PUBH         DEPRESS         Area         0.172325         Acres         147.71849         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay123         PUBH         DEPRESS         Area         0.05878         Acre         TNWW         70.20427         -147.71827         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay123         PUBH         DEPRESS         Area         0.15877         Acres         147.71827         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay123         PUBH         DEPRESS         Area         0.15877<					0.210900 ACTE			-147.720076			
PUBH ToggyIslandBay119PUBHDEPRESSArea0.331423ArrowTO 200663-147.719437FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH ToggyIslandBay121PUBHDEPRESSArea0.12266ArrowTNWW70.20267-147.719682FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggyIslandBay122PUBHDEPRESSArea0.306978ArrowTNWW70.20284-147.719622FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggyIslandBay122PUBHDEPRESSArea0.306978Arrow70.203248-147.719622FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggyIslandBay123PUBHDEPRESSArea0.536963ArrowTNWW70.20869-147.72807FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggyIslandBay130PUBHDEPRESSArea0.53697Arrow70.208617-147.728067FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggyIslandBay131PUBHDEPRESSArea0.149046Arrow70.20867-147.728067FoggyIslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggyIslandBay133PUBHDEPRESSArea0.149066Aree <t< td=""><td>PLIBHEongy/sidHubdy117</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-147.719058</td><td>5 FoggylslandBay</td><td></td><td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean</td></t<>	PLIBHEongy/sidHubdy117							-147.719058	5 FoggylslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggylslandBay120         PUBH         DEPRESS         Area         0.22566         Acre         TNWW         70.202275         -147.71843         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay121         PUBH         DEPRESS         Area         0.172225         Acre         TNWW         70.202275         -147.71962         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay123         PUBH         DEPRESS         Area         1.030978         Acre         TNWW         70.20437         -147.71982         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay123         PUBH         DEPRESS         Area         0.53678         Acre         TNWW         70.20437         -147.71982         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay123         PUBH         DEPRESS         Area         0.15877         Acre         TNWW         70.20437         -147.728077         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay130											
PUBH FoggylslandBay121PUBHDEPRESSArea0.172252AcceTNWT0.202864-147.71982FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay123PUBHDEPRESSArea0.309578AcreTNWWT0.20346-147.71982FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay123PUBHDEPRESSArea0.309578AcreTNWWT0.20437-147.71982FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay123PUBHDEPRESSArea0.15877AcreTNWWT0.20437-147.728977FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay130PUBHDEPRESSArea0.163974AcreTNWWT0.208367-147.728977FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay131PUBHDEPRESSArea0.149766AcreTNWWT0.209732-147.728977FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay133PUBHDEPRESSArea0.149766AcreTNWWT0.209732-147.728977FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBH FoggylslandBay133PUBHDEPRESS<	PUBHEoggyIslandBay120							-147.719437	FoggylslandBay		
PUBH FoggylslandBay122         PUBH         DEPRESS         Area         0.30578         Are-         TNW         70.203248         -147.721618         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay123         PUBH         DEPRESS         Area         0.107211         Area         TNWW         70.20630         -147.72887         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay128         PUBH         DEPRESS         Area         0.13520         Area         TNWW         70.206803         -147.728877         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay130         PUBH         DEPRESS         Area         0.13946         Arec         TNWW         70.206123         -147.72897         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay131         PUBH         DEPRESS         Area         0.1497.65         Area         TNWW         70.20672         -147.72819         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay133 <td>PUBHFoggyIslandBav121</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-147 719682</td> <td>2 FoggylslandBay</td> <td></td> <td></td>	PUBHFoggyIslandBav121							-147 719682	2 FoggylslandBay		
PUBHF oggylslandBay123         PUBH         DEPRESS         Area         1.017211         Aree         TNW         70.20437         -147.719822         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay128         PUBH         DEPRESS         Area         0.53808         Aree         TNWW         70.206309         -147.728977         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay130         PUBH         DEPRESS         Area         0.13877         Aree         TNWW         70.208367         -147.728967         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay131         PUBH         DEPRESS         Area         0.14916         Aree         TNWW         70.20972         -147.728967         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay132         PUBH         DEPRESS         Area         0.14976         Aree         TNWW         70.20728         -147.724986         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay133 <td></td>											
PUBH pogylsandBay128         PUBH         DEPRESS         Area         0.53508 Arce         TNW         T0206609         1-47.728977         FogylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay130         PUBH         DEPRESS         Area         0.15367         Arce         TNWW         T0208367         -147.728977         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay131         PUBH         DEPRESS         Area         0.14976 Å cre         TNWW         T0209732         -147.728977         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay131         PUBH         DEPRESS         Area         0.149766         Arer         TNWW         T020972         -147.721967         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay133         PUBH         DEPRESS         Area         0.44266         Arer         TNWW         T020661         -147.722987         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylslandBay133         PUBH         DEPR								-147.719822	2 FoggyIslandBay		
PUBHFoggylslandBay129         PUBH         DEPRESS         Area         0.15367         Area         TNWW         70.208123         -147.728867         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay130         PUBH         DEPRESS         Area         0.15367         Area         TNWW         70.208123         -147.728867         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay132         PUBH         DEPRESS         Area         0.149168         Arca         TNWW         70.20872         -147.72848         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay132         PUBH         DEPRESS         Area         0.442565         Arce         TNWW         70.20728         -147.72849         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay133         PUBH         DEPRESS         Area         0.219478         Arce         TNWW         70.20669         -147.723291         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean         PUBHFoggylslandBay135         PUBH<	PUBHFoggyIslandBav128							-147.728977	7 FoggyIslandBay		
PUBHFoggylslandBay130         PUBH         DEPRESS         Area         0.09344         Aree         TMW         70.208367         -147.729087         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylslandBay131         PUBH         DEPRESS         Area         0.149166         Aree         TNW         70.209732         -147.732198         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylslandBay132         PUBH         DEPRESS         Area         0.442566         Aree         TNWW         70.209732         -147.732198         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylslandBay133         PUBH         DEPRESS         Area         0.219478         Aree         TNWW         70.20669         -147.723498         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylslandBay133         PUBH         DEPRESS         Area         0.219478         Aree         TNWW         70.20669         -147.723498         FoggylslandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylslandBay136								-147.728867	7 FoggylslandBay		
PUBH FoggyIslandBay131         PUBH         DEPRESS         Area         0.149166         Acre         TWW         70.209732         -147.731541         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggyIslandBay133         PUBH         DEPRESS         Area         0.442665         Area         TNWW         70.206792         -147.72198         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggyIslandBay133         PUBH         DEPRESS         Area         0.214976         Acre         TNWW         70.206519         -147.72249         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggyIslandBay133         PUBH         DEPRESS         Area         0.214976         Acre         TNWW         70.20666         -147.72349         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggyIslandBay136         PUBH         DEPRESS         Area         0.214976         Acre         TNWW         70.20666         -147.72349         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggyIslandBay138		PUBH	DEPRESS			TNWW		-147.729087	7 FoggylslandBay	N/A	
PUBH FoggylstandBay132         PUBH         DEPRESS         Area         0.44265         Arer         TMW         70.210728         1-147.732199         FoggylstandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay133         PUBH         DEPRESS         Area         0.04102         Arec         TNWW         70.206519         -147.723295         FoggylstandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay134         PUBH         DEPRESS         Area         0.219478         Arer         TNWW         70.20666         -147.723891         FoggylstandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay135         PUBH         DEPRESS         Area         0.219478         Arer         TNWW         70.20669         -147.723691         FoggylstandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay135         PUBH         DEPRESS         Area         0.328983         Aree         TNWW         70.208219         -147.732891         FoggylstandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean         PUBH FoggylstandBay137         P	PUBHFoggyIslandBay131			Area				-147.731541	1 FoggylslandBay		
PUBH FoggylslandBay133         PUBH         DEPRESS         Area         0.084102         Aree         TMWW         70.206519         -147.724986         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggylslandBay133         PUBH         DEPRESS         Area         0.219478         Aree         TNWW         70.20666         -147.723496         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggylslandBay135         PUBH         DEPRESS         Area         0.21196         Aree         TNWW         70.20666         -147.723691         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggylslandBay136         PUBH         DEPRESS         Area         0.228913         Arce         TNWW         70.20669         -147.73931         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggylslandBay137         PUBH         DEPRESS         Area         0.289191         Arce         TNWW         70.21280         -147.732491         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean         PUBH-foggylslandBay138         PUB	PUBHFoggyIslandBay132			Area				-147.732199	9 FoggyIslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH FoggyIslandBay134         PUBH         DEPRESS         Area         0.214978         Acre         TNWW         70.20666         1-47.723829         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyIslandBay135         PUBH         DEPRESS         Area         0.211926         Acre         TNWW         70.206697         -147.723829         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyIslandBay136         PUBH         DEPRESS         Area         0.218961         Acre         TNWW         70.209219         -147.719913         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyIslandBay137         PUBH         DEPRESS         Area         0.238919         Acre         TNWW         70.21281         -147.739413         FoggyIslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggyIslandBay138         PUBH         DEPRESS         Area         0.133295         Area         0.133295         Area         0.133295         Area         0.133295         Area         0.133295         Area         0.116038         Acre         TNWW         70	PUBHFoggyIslandBay133			Area				-147.724986	6 FoggyIslandBay		Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH FoggylstandBay135         PUBH         DEPRESS         Area         0.211298         Arec         TMWW         70.208697         -147.723691         FoggylstandBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay137         PUBH         DEPRESS         Area         0.328983         Arec         TNWW         70.208219         -147.732911         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay137         PUBH         DEPRESS         Area         0.258191         Arec         TNWW         70.2118         -147.733231         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay138         PUBH         DEPRESS         Area         0.138395         Arec         TNWW         70.21201         -147.733231         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH FoggylstandBay139         PUBH         DEPRESS         Area         0.116038         Arec         TNWW         70.212301         -147.730431         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFOggylstandBa	PUBHFoggyIslandBay134			Area				-147.723829	9 FoggyIslandBay		
PUBH FoggylslandBay138         PUBH         DEPRESS         Area         0.32893         Aree         TWW         70.209219         -147.719913         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay137         PUBH         DEPRESS         Area         0.32893         Aree         TNWW         70.218         -147.73913         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay138         PUBH         DEPRESS         Area         0.133295         Aree         TNWW         70.212301         -147.73341         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay138         PUBH         DEPRESS         Area         0.133295         Aree         TNWW         70.212301         -147.734033         FoggylslandBay1         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay139         PUBH         DEPRESS         Area         0.116038         Aree         TNWW         70.212911         -147.730438         FoggylslandBay1         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay140 <td>PUBHFoggyIslandBay135</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-147.723691</td> <td>1 FoggyIslandBay</td> <td></td> <td></td>	PUBHFoggyIslandBay135							-147.723691	1 FoggyIslandBay		
PUBH FoggylslandBay137         PUBH         DEPRESS         Area         0.258191         Arer         TMWW         70.2118         -147.733271         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggylslandBay138         PUBH         DEPRESS         Area         0.133295         Arer         TNWW         70.21201         -147.734033         FoggylslandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH FoggylslandBay139         PUBH         DEPRESS         Area         0.116038         Arer         TNWW         70.212911         -147.734033         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay140         PUBH         DEPRESS         Area         0.116038         Arer         TNWW         70.212911         -147.731593         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay140         PUBH         DEPRESS         Area         0.253443         Arer         TMWW         70.21291         -147.731593         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean	PUBHFoggyIslandBay136							-147.719913	3 FoggyIslandBay		
PUBHFoggylslandBay139 PUBH DEPRESS Area 0.116038 Are TNWW 70.212911 -147.730434 FoggylslandBay N/A Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean PUBHFoggylslandBay140 PUBH DEPRESS Area 0.263443 Are TNWW 70.212918 -147.731593 FoggylslandBay N/A Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean								-147.733271	1 FoggylslandBay		
PUBHFoggylslandBay140 PUBH DEPRESS Area 0.263443 Acre TNWW 70.212918 -147.731593 FoggylslandBay N/A Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean	PUBHFoggyIslandBay138							-147.734033	3 FoggyIslandBay		
PUBH DEPRESS       Area       0.259443   Aree       INWW       // U.212318       -14/./31933   roggy/siandBay       INA       Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean         PUBH Forgy/siandBay141       PUBH       DEPRESS       Area       0.248052   Aree       TNWW       70.212803       -147.732954   Forgy/siandBay       N/A       Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean								-147.730434	FoggyIslandBay		
rubriogqvisiandBay 141 jrubri jubricsS jArea u.248052 jArea 10.248052 jArea 10								-147.731593	FoggyIslandBay		
	PUBHFoggyIslandBay141	IPUBH	DEPRESS	Area	0.248052 Acre	LINVVVV	70.212803	-147.732954	+ I Foggy Island Bay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean

Bale         Description         Data         Description         Data         Mean or in frequency in the originant in the o	PUBHFoggyIslandBay142	PUBH	DEPRESS	Area	0.724207 Acre TNWW	70.213189	147 726672	FoggylslandPay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Def Seguridading         UPU         Description         Description <thdescription< th="">         Description         &lt;</thdescription<>										
Description         The Part of the Appendix State Appendix A							-147.737059			
Out         Annu         Description         Descripion         Descripti										
Distriguisher         The Distriguisher         Distriguisher <thdistriguisher< th="">         Distriguisher         Distr</thdistriguisher<>		PUBH								
Def Segues         No.         Segues         No.         Additional of the second segues close in a low close segues close clos	PUBHFoggyIslandBay147	PUBH	DEPRESS	Area	0.094687 Acre TNWW	70.206068	-147.73737	FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Def Englisher         Desc         Desc <thdesc< th="">         Desc         Desc</thdesc<>	PUBHFoggyIslandBay148	PUBH	DEPRESS	Area	0.348259 Acre TNWW	70.20675	-147.736286		N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Diel augeschaft, 2.     Diel Versen, 2.     Diel Versen, 2.     Die Versen, 2.	PUBHFoggyIslandBay149			Area					N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Dial         Dial <thdial< th="">         Dial         Dial         <thd< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thd<></thdial<>										
Diaff         Diaff <thdiaff< th="">         Diaff         <thd< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thd<></thdiaff<>										
Def Sports         PM         PM         PM         PM         PM         PM         Advanta de lingthony in hundric orgen have in hundric orgen           Def Sports         PM         M										
Deckerganization         EAR         Distance										
Delet Signalistics         Field         Delet Signalistics         Number of Machines in the Action Deservation Deservati										
Diele General         Die General <thdie general<="" th=""> <thdie general<="" th=""></thdie></thdie>										
Out of generalization         NA         Advances beginning to particulation and constrained to partin and constrained to particulation and constrained to pa										
Dieff-späcularity         FM         Dieffestion         NA         Append Support         NA         Append Support         In Support										
Destrogunantian         Destroguna										
Puber Synchronization         Puber Synchronization         Value A         Output Synchronization         Value A         Public Synchronization Synchronization Synchin A         Value A         Value A </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>, , , , , , , , , , , , , , , , , , ,</td> <td>N/A</td> <td></td>								, , , , , , , , , , , , , , , , , , ,	N/A	
Diperspectation         Part PPERS         Ava         0.92433 Box         TVVV         71.9893										
Dip IF opposite         PQBF         Ame         0.51853         Ame         0.51853         Ame         Adjustment         Adjustm				Area			-147.682333			Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
Delef         Open Series         Ame         Open Series         Ame         Adjacent on Neckborn to the Addit Concent           Delef Segniturelly         Auth         Series         Author Series         Auth										
Del Forgunalization         New         DEPTESS         Ave         0.5107/Ave         TOW         72.1103         -147.73555         Forgunalization         NAM         Algest and Negations is the website complex forwas its the Arcis: Column Algest and Negations is the Arcis: Column Algest and							-147.740095	FoggyIslandBay		
Dell'soguiteding/str         Publy         DEPTESS         Ave.         0.4322 Ave.         Partial Control           Dell'soguiteding/str         Publy         0.1284 Str         Ave.         0.4284 Str         Ave.         A										
Del Forgunatediary 18         UBH         DEPRESS         Ava         Alignet and Heightoring 16 medded configs from rule the Acta Costen           Del Forgunatediary 10         PLHE         DEPRESS         Ava         0.89915         Output         Available         Available<										
DuFl Grygnigendary         URID         CPRES         Ne         0.801         No.         Adjust         djust<										
DelB*SignitundBy/10         PUB+         DelPS         Area         0.488071 Am         TWW         TO 2015         1.4772102         SignitundBy/10         NA         Adaport and Neghtoring in the articli Coome.           DelB*SignitundBy/12         PUB+         DePMSS         Area         0.489074 (mm)         TVD 1100000000000000000000000000000000000										
PLBHE oppsisedBar219         PLBH         DEPESS         Asso         0.42426         LAR         TWW         7.03123         1.47.21023         FogsisedBar21         NA         Adapted table State State Company         Inter Ardia Commany										
PLOIF CogNitionAll         PLOIF         PLOIF <td></td>										
PUBE-Egylands/spit         PLBH         DEPTESS         Ava         101203         Dors         TNW         72.02/74         -1477.2407         Foglature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         PLBH         DEPTESS         Ava         3.04213         Available         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By         NA         Adjacent and Neglotory is the welland complex flowing into the Ard: Codem           PLBH=orgylature/By										
PUB# Optimization         PUB# DEPRESS         Ave         0.288845         Ave         0.288855         Ave         0.2888555         Ave         0.2888555         Ave         0.2888555         Ave         0.2888555         Ave         0.2888555         Ave         0.2888555         Ave         0.28885555         Ave         0.28885555         Ave         0.288855555         Ave         Ave         Ave         Ave         Ave         Ave         Ave         Ave        Ave         Ave <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
PLBHE opperations         PLBH         DEPRESS         Area         0.944/21 Are         TWW         TO 201000         1.477.4274         CognytainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBHE oppertainetBay         NA         Adjacent and Neightoring to the wetland complet flowing into the Arctic Ocean           PLBH										
Public Normality         PUBlic Normality<										
PUBH GP/ERS         Ava         0.434555 Avc         NWW         70.200286         1-147.7323         Pogutanosity         NA         Adjacent and Neightoring b the weltand complex flowing into the Arcli Coean           PUBH SogutainandBay 190         PUBH         EPRESS         Avas         0.238421 Avas         NWW         70.198027         -147.73522         PogutainandBay         NA         Adjacent and Neightoring b the weltand complex flowing in the Arcli Coean           PUBH SogutainandBay         PUBH         EPRESS         Avas         0.238421 Avas         NWW         70.198026         -147.71282         PogutainandBay         NA         Adjacent and Neightoring in the Arcli Coean           PUBH SogutainandBay         PUBH         EPRESS         Avas         0.13821 Avas         -147.71282         PogutainandBay         NA         Adjacent and Neightoring in the Arcli Coean           PUBH SogutainandBay         PUBH         EPRESS         Avas         0.138491 Avas         -147.71382         PogutainandBay         NA         Adjacent and Neightoring in the Arcli Coean           PUBH SogutainandBay         PUBH         EPRESS         Avas         0.128691 Avas         -147.73321         PogutainandBay         NA         Adjacent and Neightoring in the Arcli Coean           PUBH SogutainandBay         PUBH         EPRESS         Avas										
PUBH GPQ:SetURDS         PUBH DEPRESS         Area         0.1327         Area         TVMV         T0.1969/201         -147.7407         FoguytainedBay         NA         Adjacent and Neghboring to the welfand complex flowing into the Arctic Ocean           PUBH Gpy(standBay/001         PUBH DEPRESS         Area         0.183698         Area         0.183697         Area         Adjacent and Neghboring to the welfand complex flowing into the Arctic Ocean           PUBH Gpy(standBay/020         PUBH         DEPRESS         Area         0.083614         Area         1.417.72818         Gpy(standBay/020         NA         Adjacent and Neghboring to the welfand complex flowing into the Arctic Ocean           PUBH Gpy(standBay/020         PUBH         DEPRESS         Area         0.038428         Area         7.0213676         1.417.721375         Gpy(standBay/020         NA         Adjacent and Neghboring to the welfand complex flow Arctic Ocean           PUBH		PUBH							N/A	
PuBH E         DEPRESS         Area         0.138088 JAV20         PUBH DEPRESS         Area         0.138088 JAV2         PUBH DEPRESS         Area         0.138088 JAV2         PUBH DEPRESS         Area         0.038921 JAVE         PUBH TO/SVIANDERS		PUBH	DEPRESS		0.163321 Acre TNWW	70.199579	-147.74507		N/A	
PUBH         DPRFESS         Area         0.10372 / Area         TNW         70.19520         -147.72885 [rogsylandBay2         NA         Adjacent and Neighboring to the wetland compace from grints the Arctic Ocean           PUBH         DPRFESS         Area         0.373447 / Area         TNWW         70.19322         -147.72885 [rogsylandBay2         NA         Adjacent and Neighboring to the wetland compace from grints the Arctic Ocean           PUBH         DPRFESS         Area         0.373447 / Area         TNWW         70.11438         -147.72885 [rogsylandBay2         NA         Adjacent and Neighboring to the wetland compace from grints the Arctic Ocean           PUBH         DPRFESS         Area         0.124467 (Area         TNWW         70.21438         -147.721895 [rogsylandBay2         NA         Adjacent and Neighboring to the wetland compace from grints the Arctic Ocean           PUBH         DPRFESS         Area         0.39426 (Area         TNWW         70.214361         -147.73195 [rogsylandBay2         NA         Adjacent and Neighboring to the wetland compace from grints the Arctic Ocean           PUBH         DPRFESS         Area         0.39426 (Area         TNWW         70.214361         -147.73195 [rogsylandBay2         NA         Adjacent and Neighboring to the wetland compace from grints the Arctic Ocean           PUBH         DPRFESS         Area         0.	PUBHFoggylslandBay199			Area			-147.724322	FoggyIslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUB+FogylaindBay203         PUBH         DEPRESS         Area         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUB+FogylaindBay203         PUBH         DEPRESS         Area         0.37447 / acr         TNWW         70.18072         1-147.72026 / pogylaindBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUB+FogylaindBay205         PUBH         DEPRESS         Area         0.128663 / acr         TNWW         70.13187         1-147.73217 / pogylaindBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUB+FogylaindBay205         PUBH         DEPRESS         Area         0.078220 / Acr         TNWW         70.13187         1-147.73205 / pogylaindBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUB+FogylaindBay205         PUBH         DEPRESS         Area         0.10897 / Acr         TNWW         70.21243         1-147.73205 / pogylaindBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFogylaindBay210         PUBH         DEPRESS         Area         0.10897 / Acr         TNWW         70.21243         1-147.73265 / pogylaindBay         NA         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>FoggyIslandBay</td> <td></td> <td></td>								FoggyIslandBay		
PUBH         DEPRESS         Area         0.373447         Acre         TMWW         70:1972         1-17.7327         FoggylatandBay         NA         Adapcent and Neighboring to the welland complex flowing into the Acrici Ocean           PUBH-foggylatandBay205         PUBH         DEPRESS         Area         0.12467         Acre         TMWW         70:1367         1-177.7327         FoggylatandBay         NA         Adapcent and Neighboring to the welland complex flowing into the Acrici Ocean           PUBH-foggylatandBay207         PUBH         DEPRESS         Area         0.039828         Acre         TMWW         70:13931         1-177.73927         FoggylatandBay         NA         Adapcent and Neighboring to the welland complex flowing into the Acrici Ocean           PUBH-foggylatandBay207         PUBH         DEPRESS         Area         0.039828         Acre         TMWW         70:12133         1-177.73987         FoggylatandBay         NA         Adapcent and Neighboring to the welland complex flowing into the Acrici Ocean           PUBH-foggylatandBay201         PUBH         DEPRESS         Area         0.039828         Acre         TMWW         70:12485         1-177.2387         FoggylatandBay         NA         Adapcent and Neighboring to the welland complex flowing in the Acrici Ocean           PUBH-foggylatandBay214         PUBH         DEPRESS <td></td>										
PUBH Foggylandsy205         PUBH         DEPRESS         Area         0.128698         Area         NA         Adjacent and Neghtoring to the vetard complex flowing into the Actic Ocean           PUBH Foggylandsy205         PUBH         DEPRESS         Area         0.124407 JAce         TNVW         72.13961         1-147.73327         Foggylandsy208         NA         Adjacent and Neghtoring to the vetard complex flowing into the Actic Ocean           PUBH Foggylandsy205         PUBH         DEPRESS         Area         0.039428 JAce         TNVW         72.12936         1-147.73327 FoggylandsBy20         NA         Adjacent and Neghtoring to the vetard complex flowing into the Actic Ocean           PUBH FoggylandBagy201         PUBH         DEPRESS         Area         0.10397 JAce         TNVW         72.12438         1-147.73327 FoggylandBay         NA         Adjacent and Neghtoring to the vetard complex flowing into the Actic Ocean           PUBH FoggylandBagy211         PUBH         DEPRESS         Area         0.10897 JAce         TNVW         72.12428         1-147.73327 FoggylandBay         NA         Adjacent and Neghtoring to the vetard complex flowing into the Actic Ocean           PUBH FoggylandBagy214         PUBH         DEPRESS         Area         0.10897 JAce         TNVW         72.12428         1-147.73316 FoggylandBay         NA         Adjacent and Neghtoring to the veta										
PUBH GogylandBay207         PUBH         DEPRESS         Area         0.12447         Area         TWW         70.21301         1.47.25317         PogulandBay207         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH GogylandBay208         PUBH         DEPRESS         Area         0.03821 Arc         TWW         70.21367         1.47.273028         PogulandBay204         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH GogylandBay201         PUBH         DEPRESS         Area         0.103551 Arc         TWWW         70.212483         1.47.737026         PogulandBay20         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH GogylandBay21         PUBH         DEPRESS         Area         0.108571 Arc         TWWW         70.212483         1.47.737267         PogulandBay20         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH GogylandBay21         PUBH         DEPRESS         Area         0.061748 Arc         TWW         70.212482         1.47.732676         PogulandBay0         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBH GogylandBay21         PUBH         DEPRESS         Area         0.06572 A										
PUBH Copyressimalsay207         PUBH         DEPRESS         Area         0.07029 / Loc         TWW         70.21376										
PUBH FoggylandBay208         PUBH         DEPRESS         Area         0.039428 [Area         TNWW         70.212313         -147.737028         FoggylandBay204         NA         Adjacent and Neighboring to the welland complex flowing into the Arclic Ocean           PUBH FoggylandBay211         PUBH         DEPRESS         Area         0.10897 [Ace         TNWW         70.212433         -147.737405         FoggylandBay20         NA         Adjacent and Neighboring to the welland complex flowing into the Arclic Ocean           PUBH FoggylandBay211         PUBH         DEPRESS         Area         0.168394 [Ace         TNWW         70.212423         -147.732475         FoggylandBay20         NA         Adjacent and Neighboring to the welland complex flowing into the Arclic Ocean           PUBH FoggylandBay213         PUBH         DEPRESS         Area         0.66748 [Ace         TNWW         70.21242         -147.732475 [FoggylandBay213         NA         Adjacent and Neighboring to the welland complex flowing into the Arclic Ocean           PUBH FoggylandBay214         PUBH         DEPRESS         Area         0.66748 [Ace         TNWW         70.21242         -147.73247         FoggylandBay24         NA         Adjacent and Neighboring to the welland complex flowing into the Arclic Ocean           PUBH FoggylandBay215         PUBH         DEPRESS         Area         0.1525147 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
PUBHFoggylandBay20         PUBH         DEPRESS         Area         NUW         70.212838         1477.27188         FoggylandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylandBay211         PUBH         DEPRESS         Area         0.19934         Area         TNWW         70.212882         1477.23178         FoggylandBay21         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylandBay213         PUBH         DEPRESS         Area         0.09148         Area         TNWW         70.212862         1477.73568         FoggylandBay2         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylandBay213         PUBH         DEPRESS         Area         0.095156         Area         1.0917282         1.477.73516         FoggylandBay2         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylandBay215         PUBH         DEPRESS         Area         0.05156         Area         0.05156         Area         0.05156         Area         0.05156         Area         0.05168         Area         0.05168         Area         0.05168         Area         0.16201         Art 7.712747         FoggylandBay2										
PUBHFoggylandBay210         PUBH         DEPRESS         Area         0.10897 / Acre         TWW         70.212483         -147.735456         FoggylandBay         NA         Adjacent and Neighboring 1b the wetland complex flowing into the Arctic Ocean           PUBHFoggylandBay212         PUBH         DEPRESS         Area         0.08871 Acre         TWW         70.212482         -147.734575         FoggylandBay213         NIA         Adjacent and Neighboring 1b the wetland complex flowing into the Arctic Ocean           PUBHFoggylandBay214         PUBH         DEPRESS         Area         0.068072         Acre         TWW         70.212882         -147.735015         FoggylandBay         N/A         Adjacent and Neighboring 1b the wetland complex flowing into the Arctic Ocean           PUBHFoggylandBay215         PUBH         DEPRESS         Area         0.05168         Acre         TWW         70.21303         -147.73107         FoggylandBay         N/A         Adjacent and Neighboring 1b the wetland complex flowing into the Arctic Ocean           PUBHFoggylandBay217         PUBH         DEPRESS         Area         0.10808         Acre         TWW         70.21303         -147.73107         FoggylandBay214         N/A         Adjacent and Neighboring 1b the wetland complex flowing into the Arctic Ocean           PUBHFoggylandBay217         PUBH         DEPRESS										
PUBHFoggylsandBay211         PUBH         DEPRESS         Area         0.109394         Ace         TNWW         70.212432         -147.732475         FoggylsandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylsandBay213         PUBH         DEPRESS         Area         0.00872         Ace         TNWW         70.212432         -147.732675         FoggylsandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylsandBay214         PUBH         DEPRESS         Area         0.008072         Ace         TNWW         70.212892         -147.732074         FoggylsandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylsandBay216         PUBH         DEPRESS         Area         0.152231         Ace         TNWW         70.21303         -147.713747         FoggylsandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylsandBay213         PUBH         DEPRESS         Area         0.150281         Ace         TNWW         70.21882         FoggylsandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylsandBay218         PUBH         DEPRESS <td></td>										
PUBH FoggylsiandBay212         PUBH         DEPRESS         Area         0.094813         Area         0.094813         Area         0.084713         Area         0.086072         Area         0.051585         Area         0.051585         Area         0.051585         Area         0.051585         Area         0.051585         Area         0.1723015         FoggylslandBay214         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay218         PUBH         DEPRESS         Area         0.170808         Area         1.147.733015         FoggylslandBay214         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay218         PUBH         DEPRESS         Area         0.151486         Area         1.147.733015         FoggylslandBay214         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           <								FoddylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH FoggylstandBay213         PUBH         DEPRESS         Area         0.061746 / Acre         TNWW         70.211849         -147.733845 / FoggylstandBay         N/A         Adjacent an Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylstandBay215         PUBH         DEPRESS         Area         0.051585 / Acre         TNWW         70.21303         -147.733117         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylstandBay216         PUBH         DEPRESS         Area         0.152231 / Acre         TNWW         70.21303         -147.73117         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylstandBay218         PUBH         DEPRESS         Area         0.152231 / Acre         TNWW         70.210611         -147.73176         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylstandBay218         PUBH         DEPRESS         Area         0.268659 / Acre         TNWW         70.194677         -147.71316         FoggylstandBay         N/A         Adjacent and Neighboring to the welland complex flowing into the Arctic Ocean           PUBHFoggylstandBay222         PUBH         DEPRESS         Area         0.193		PUBH	DEPRESS							
PUBHF oggylslandBay214PUBHDEPRESSArea0.086072ArceTNW70.21282-147.73015FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay215PUBHDEPRESSArea0.051858AcreTNWW70.21303-147.73117FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay216PUBHDEPRESSArea0.152231AcreTNWW70.210811-147.723747FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay216PUBHDEPRESSArea0.058659AcreTNWW70.208025-147.712826FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay220PUBHDEPRESSArea0.168017AcreTNWW70.194679-147.72286FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay221PUBHDEPRESSArea0.168017AcreTNWW70.194679-147.72286FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay222PUBHDEPRESSArea0.18234AcreTNWW70.194679-147.72806FoggylslandBayNAAdjacent and Neighboring to the wetland complex flowing into the Arctic OceanPUBHF oggylslandBay223PUBHDEPRESS <t< td=""><td>PUBHFoggyIslandBay212</td><td></td><td></td><td>Area</td><td>0.169394 Acre TNWW</td><td>70.212652</td><td>-147.734175 -147.732875</td><td>FoggylslandBay FoggylslandBay</td><td>N/A</td><td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean</td></t<>	PUBHFoggyIslandBay212			Area	0.169394 Acre TNWW	70.212652	-147.734175 -147.732875	FoggylslandBay FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHF oggylslandBay216         PUBH         DEPRESS         Area         0.152231         Acre         TNWW         70.210811         -147.723747         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay217         PUBH         DEPRESS         Area         0.150203         Acre         TNWW         70.208025         -147.71826         FoggylslandBay219         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay219         PUBH         DEPRESS         Area         0.551446         Acre         TNWW         70.198479         -147.71187         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay221         PUBH         DEPRESS         Area         0.168017         Acre         TNWW         70.198477         -147.72308         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay221         PUBH         DEPRESS         Area         0.168017         Acre         TNWW         70.198771         -147.72308         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylsl	PUBHFoggyIslandBay213	PUBH PUBH	DEPRESS DEPRESS	Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.061746 Acre TNWW	70.212652 70.212432 70.211849	-147.734175 -147.732875 -147.733845	FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggylslandBay217         PUBH         DEPRESS         Area         0.170808         Acre         TNWW         70.208025         -147.718265         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay218         PUBH         DEPRESS         Area         0.258659         Acre         TNWW         70.198423         -147.718265         FoggylslandBay2         N/A         Adjacent an Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay220         PUBH         DEPRESS         Area         0.193771         Acre         TNWW         70.198457         -147.713266         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay220         PUBH         DEPRESS         Area         0.193771         Acre         TNWW         70.198457         -147.722866         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay223         PUBH         DEPRESS         Area         0.192856         Acre         TNWW         70.198635         -147.719506         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBa	PUBHFoggyIslandBay213	PUBH PUBH PUBH	DEPRESS DEPRESS	Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.061746 Acre TNWW	70.212652 70.212432 70.211849	-147.734175 -147.732875 -147.733845	FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH-GggylslandBay216         PUBH         DEPRESS         Area         0.28659         Area         1.47.71316         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GggylslandBay219         PUBH         DEPRESS         Area         0.551446         Acre         TNWW         70.194679         -147.711873         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GggylslandBay220         PUBH         DEPRESS         Area         0.19371         Acre         TNWW         70.198477         -147.72386         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GggylslandBay222         PUBH         DEPRESS         Area         0.18326         Acre         TNWW         70.198721         -147.72306         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GggylslandBay223         PUBH         DEPRESS         Area         0.123459         Acre         TNWW         70.198636         -147.74206         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-GggylslandBay224         PUBH         DEPRESS	PUBHFoggylslandBay213 PUBHFoggylslandBay214 PUBHFoggylslandBay215	PUBH PUBH PUBH PUBH	DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.061746 Acre TNWW 0.068072 Acre TNWW 0.051585 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.213303	-147.734175 -147.732875 -147.733845 -147.735015 -147.73117	FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH Cogy/slandBay219         PUBH         DEPRESS         Area         0.551446         Acre         TMWW         70.194679         -147.711873         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Foggy/slandBay221         PUBH         DEPRESS         Area         0.168071         Acre         TNWW         70.198457         -147.722886         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Foggy/slandBay222         PUBH         DEPRESS         Area         0.193771         Acre         TNWW         70.198457         -147.723191         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Foggy/slandBay222         PUBH         DEPRESS         Area         0.123459         Acre         TNWW         70.198635         -147.71807         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Foggy/slandBay224         PUB         DEPRESS         Area         0.29246         Acre         TNWW         70.19865         -147.748917         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean         PUBH Foggy/slandBay67 <t< td=""><td>PUBHFoggylslandBay213 PUBHFoggylslandBay214 PUBHFoggylslandBay215 PUBHFoggylslandBay216</td><td>PUBH PUBH PUBH PUBH PUBH</td><td>DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS</td><td>Area Area Area Area Area Area</td><td>0.169394         Acre         TNWW           0.094813         Acre         TNWW           0.061746         Acre         TNWW           0.086072         Acre         TNWW           0.051885         Acre         TNWW           0.051241         Acre         TNWW</td><td>70.212652 70.212432 70.211849 70.212892 70.213303 70.210811</td><td>-147.734175 -147.732875 -147.733845 -147.735015 -147.735117 -147.723747</td><td>FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay</td><td>N/A N/A N/A N/A N/A N/A N/A</td><td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean</td></t<>	PUBHFoggylslandBay213 PUBHFoggylslandBay214 PUBHFoggylslandBay215 PUBHFoggylslandBay216	PUBH PUBH PUBH PUBH PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area	0.169394         Acre         TNWW           0.094813         Acre         TNWW           0.061746         Acre         TNWW           0.086072         Acre         TNWW           0.051885         Acre         TNWW           0.051241         Acre         TNWW	70.212652 70.212432 70.211849 70.212892 70.213303 70.210811	-147.734175 -147.732875 -147.733845 -147.735015 -147.735117 -147.723747	FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHF oggylslandBay220         PUB b         DEPRESS         Area         0.193771         Acre         TNWW         70.198457         -147.722886         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay221         PUBH         DEPRESS         Area         0.193771         Acre         TNWW         70.198457         -147.722886         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay223         PUBH         DEPRESS         Area         0.193267         Acre         TNWW         70.19875         -147.719506         FoggylslandBay2         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay227         PUBH         DEPRESS         Area         0.29232         Acre         TNWW         70.19865         -147.719506         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay227         PUBH         DEPRESS         Area         0.029232         Acre         TNWW         70.208615         -147.746817         FoggylslandBay3         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggyly	PUBHFoggylslandBay213 PUBHFoggylslandBay214 PUBHFoggylslandBay215 PUBHFoggylslandBay216 PUBHFoggylslandBay217	PUBH PUBH PUBH PUBH PUBH PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.061746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.170808 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.21303 70.210811 70.208025	-147.734175 -147.732875 -147.733845 -147.735015 -147.73117 -147.723747 -147.718265	FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHFoggylslandBay221         PUBH         DEPRESS         Area         0.188017         Area         0.198017         Invw         70.918721         -147.723191         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay223         PUBH         DEPRESS         Area         0.19328         Acre         TNWW         70.198721         -147.72308         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay223         PUBH         DEPRESS         Area         0.123459         Acre         TNWW         70.198637         -147.719506         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay224         PUBH         DEPRESS         Area         0.029232         Acre         TNWW         70.19865         -147.748017         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHFoggylslandBay23         PUBH         DEPRESS         Area         0.029232         Acre         TNWW         70.19865         -147.748017         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean	PUBHFoggylslandBay213 PUBHFoggylslandBay214 PUBHFoggylslandBay215 PUBHFoggylslandBay216 PUBHFoggylslandBay217 PUBHFoggylslandBay218	PUBH PUBH PUBH PUBH PUBH PUBH PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.0861746 Acre TNWW 0.086072 Acre TNWW 0.051695 Acre TNWW 0.152231 Acre TNWW 0.15080 Acre TNWW 0.286659 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.21303 70.210811 70.208025 70.195423	-147.734175 -147.732875 -147.733845 -147.735015 -147.735017 -147.73117 -147.723747 -147.718265 -147.71316	i FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A N/A N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBH cogy/slandBay22         PUBH         DEPRESS         Area         0.193265         Area         0.123469         Area         0.193265         Area         0.123469         Area         0.123469         Area         0.193655         147.719065         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Foggy/slandBay224         PUBH         DEPRESS         Area         2.694604         Area         1.127.1740817         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH Foggy/slandBay227         PUBH         DEPRESS         Area         0.292322         Area         1.020456         -147.72331         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF oggy/slandBay67         R2UB         RivERINE         Area         0.339842         Area         0.730663         -147.737051         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF oggy/slandBay67         R2UB	PUBHFoggyIslandBay213           PUBHFoggyIslandBay214           PUBHFoggyIslandBay215           PUBHFoggyIslandBay215           PUBHFoggyIslandBay216           PUBHFoggyIslandBay217           PUBHFoggyIslandBay218           PUBHFoggyIslandBay218           PUBHFoggyIslandBay219	PUBH PUBH PUBH PUBH PUBH PUBH PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.081746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.268659 Acre TNWW 0.551446 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.213303 70.213303 70.210811 70.208025 70.195423 70.194679	-147.734175 -147.732875 -147.733845 -147.735015 -147.73117 -147.713747 -147.71376 -147.71316 -147.71316	FoggylslandBay	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
PUBHF oggylslandBay223         PUBH         DEPRESS         Area         0.123459         Acre         TNWW         70.198635         -147.719506         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay224         PUBH         DEPRESS         Area         2.94404         Acre         TNWW         70.198635         -147.719506         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBHF oggylslandBay23         PUBH         DEPRESS         Area         0.029222         Acre         TNWW         70.198635         -147.719506         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF oggylslandBay53         R2UB         RIVERINE         Area         0.764069         Acre         RPW         70.20815         -147.713706         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF oggylslandBay67         R2UB         RIVERINE         Area         0.764069         Acre         RPW         70.20519         -147.730761         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean         R2UBF oggylslandBay84 <td< td=""><td>PUBHFoggylslandBay213 PUBHFoggylslandBay214 PUBHFoggylslandBay215 PUBHFoggylslandBay216 PUBHFoggylslandBay217 PUBHFoggylslandBay219 PUBHFoggylslandBay219 PUBHFoggylslandBay220</td><td>PUBH PUBH PUBH PUBH PUBH PUBH PUBH PUBH</td><td>DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS</td><td>Area Area Area Area Area Area Area Area</td><td>0.169394 Acre TNWW 0.094813 Acre TNWW 0.061746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.288659 Acre TNWW 0.551446 Acre TNWW</td><td>70.212652 70.212432 70.211849 70.21303 70.210811 70.208025 70.195423 70.195423 70.196459 70.198457</td><td>-147.734175 -147.732875 -147.733845 -147.735015 -147.73117 -147.723747 -147.718265 -147.71316 -147.711873 -147.712886</td><td>FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay</td><td>N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the 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70.196459 70.198457	-147.734175 -147.732875 -147.733845 -147.735015 -147.73117 -147.723747 -147.718265 -147.71316 -147.711873 -147.712886	FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay FoggylslandBay	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex 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PUBH-ggy/slandBay224         PUBH         DEPRESS         Area         2.694604 Aree         TNWW         70.19465         -147.746817         Foggy/slandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           PUBH-ggy/slandBay237         PUBH         DEPRESS         Area         0.029232         Acre         TNWW         70.208615         -147.72331         Foggy/slandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay53         R2UB         RIVERINE         Area         3.539424         Acre         RPW         70.208615         -147.768817         Foggy/slandBay7         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay67         R2UB         RIVERINE         Area         0.764069         Acre         RPW         70.20512         -147.737061         Foggy/slandBay7         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay64         R2UB         RIVERINE         Area         0.150683         Acre         RPW         70.20512         -147.737061         Foggy/slandBay64         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay64         R2UB <td>PUBHFoggylsiandBay213 PUBHFoggylsiandBay215 PUBHFoggylsiandBay215 PUBHFoggylsiandBay216 PUBHFoggylsiandBay217 PUBHFoggylsiandBay218 PUBHFoggylsiandBay220 PUBHFoggylsiandBay220 PUBHFoggylsiandBay221</td> <td>PUBH PUBH PUBH PUBH PUBH PUBH PUBH PUBH</td> <td>DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS</td> <td>Area Area Area Area Area Area Area Area</td> <td>0.169394 Acre TNWW 0.094813 Acre TNWW 0.0861746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.152234 Acre TNWW 0.551446 Acre TNWW 0.551446 Acre TNWW 0.158077 Acre TNWW</td> <td>70.212652 70.212432 70.211849 70.212892 70.212892 70.210811 70.208025 70.195423 70.195423 70.194679 70.196457 70.196871</td> <td>-147.734175 -147.732875 -147.732875 -147.733845 -147.735015 -147.73117 -147.723747 -147.718265 -147.71316 -147.713187 -147.722888 -147.72289</td> <td>FoggylslandBay           FoggylslandBay           FoggylslandBay</td> <td>N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td> <td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the 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TNWW 0.152234 Acre TNWW 0.551446 Acre TNWW 0.551446 Acre TNWW 0.158077 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.212892 70.210811 70.208025 70.195423 70.195423 70.194679 70.196457 70.196871	-147.734175 -147.732875 -147.732875 -147.733845 -147.735015 -147.73117 -147.723747 -147.718265 -147.71316 -147.713187 -147.722888 -147.72289	FoggylslandBay	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing 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PUBHFoggylslandBay227         PUBH         DEPRESS         Area         0.029232         Acre         TNWW         70.208615         -147.723331         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay63         R2UB         RIVERINE         Area         0.593942         Acre         RPW         70.208615         -147.723331         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay67         R2UB         RIVERINE         Area         0.594969         Acre         RPW         70.20812         -147.73061         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay71         R2UB         RIVERINE         Area         0.329566         Acre         RPW         70.20819         -147.73061         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay64         R2UB         RIVERINE         Area         0.329566         Acre         RPW         70.208613         -147.74062         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay64	PUBHFoogylsiandBay213           PUBHFoogylsiandBay214           PUBHFoogylsiandBay215           PUBHFoogylsiandBay215           PUBHFoogylsiandBay216           PUBHFoogylsiandBay217           PUBHFoogylsiandBay218           PUBHFoogylsiandBay219           PUBHFoogylsiandBay220           PUBHFoogylsiandBay220           PUBHFoogylsiandBay220           PUBHFoogylsiandBay221           PUBHFoogylsiandBay221           PUBHFoogylsiandBay221           PUBHFoogylsiandBay221           PUBHFoogylsiandBay222	PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.081746 Acre TNWW 0.086072 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.152246 Acre TNWW 0.268659 Acre TNWW 0.551446 Acre TNWW 0.168017 Acre TNWW 0.193275 Acre TNWW	70.212652 70.212432 70.211849 70.21892 70.21303 70.210811 70.208025 70.195423 70.194679 70.198457 70.198457 70.198721 70.19897	-147.734175 -147.732875 -147.733845 -147.733845 -147.735015 -147.73117 -147.723747 -147.71316 -147.71376 -147.712886 -147.722886 -147.722319 -147.72406	FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
R2UBF ggg/slandBay53         R2UB         RIVERINE         Area         3.539842         Acre         RPW         70.186439         -147.688828         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF ggg/slandBay67         R2UB         RIVERINE         Area         0.784069         Acre         RPW         70.20512         -147.737061         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF ggg/slandBay71         R2UB         RIVERINE         Area         0.784069         Acre         RPW         70.20512         -147.737061         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF ggg/slandBay48         R2UB         RivERINE         Area         0.150683         Acre         RPW         70.190553         -147.74026         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF ggg/slandBay68         R2UB         RIVERINE         Area         0.150683         Acre         RPW         70.190553         -147.73803         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF ggg/slandBay169	PUBHFoggylsiandBay213 PUBHFoggylsiandBay215 PUBHFoggylsiandBay215 PUBHFoggylsiandBay216 PUBHFoggylsiandBay217 PUBHFoggylsiandBay221 PUBHFoggylsiandBay220 PUBHFoggylsiandBay222 PUBHFoggylsiandBay223	PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.0861746 Acre TNWW 0.086072 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.150808 Acre TNWW 0.286659 Acre TNWW 0.551446 Acre TNWW 0.193771 Acre TNWW 0.193271 Acre TNWW 0.193285 Acre TNWW 0.193285 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.213303 70.210811 70.206025 70.195423 70.194679 70.194679 70.198457 70.19897 70.19897	-147.734175 -147.732875 -147.732875 -147.735015 -147.735015 -147.735115 -147.73117 -147.723747 -147.71316 -147.71316 -147.72386 -147.723191 -147.723191 -147.723191 -147.723191	FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
R2UBFoggylslandBay67         R2UB         RIVERINE         Area         0.764069         Acre         RPW         70.20312         -147.737061         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay671         R2UB         RIVERINE         Area         0.239566         Acre         RPW         70.20312         -147.737061         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay84         R2UB         RIVERINE         Area         0.150683         Acre         RPW         70.209519         -147.740265         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay684         R2UB         RIVERINE         Area         0.150683         Acre         RPW         70.209503         -147.74268         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay68         R2UB         RIVERINE         Area         0.225393         Acre         RPW         70.19039         -147.730503         FoggylslandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggylslandBay169 <td>PUBHFoggylsiandBay213 PUBHFoggylsiandBay215 PUBHFoggylsiandBay215 PUBHFoggylsiandBay216 PUBHFoggylsiandBay217 PUBHFoggylsiandBay219 PUBHFoggylsiandBay220 PUBHFoggylsiandBay222 PUBHFoggylsiandBay222 PUBHFoggylsiandBay222 PUBHFoggylsiandBay223 PUBHFoggylsiandBay224</td> <td>PUBH           PUBH           PUBH</td> <td>DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS</td> <td>Area Area Area Area Area Area Area Area</td> <td>0.169394 Acre TNWW 0.094813 Acre TNWW 0.081746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.286599 Acre TNWW 0.28659 Acre TNWW 0.1531446 Acre TNWW 0.193271 Acre TNWW 0.193285 Acre TNWW 0.193285 Acre TNWW 0.2694604 Acre TNWW</td> <td>70.212652 70.212432 70.211849 70.212892 70.213303 70.210811 70.208025 70.195423 70.194679 70.198457 70.198457 70.198721 70.19897 70.198635 70.19465</td> <td>-147.738175 -147.738075 -147.738045 -147.738045 -147.738045 -147.73171 -147.718265 -147.718265 -147.718265 -147.718265 -147.722896 -147.722896 -147.722896 -147.724061</td> <td>FoggylslandBay           FoggylslandBay           FoggylslandBay</td> <td>N/A           N/A           N/A</td> <td>Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean 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R2UBFoggy/slandBay71         R2UB         RIVERINE         Area         0.32956         Acre         RPW         70.205819         -147.740065         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay84         R2UB         RIVERINE         Area         0.50683         Acre         RPW         70.205819         -147.742065         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay84         R2UB         RIVERINE         Area         0.150633         Acre         RPW         70.209803         -147.734206         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay68         R2UB         RIVERINE         Area         0.225393         Acre         RPW         70.209803         -147.738503         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay69         R2UB         RIVERINE         Area         0.225393         Acre         RPW         70.179039         -147.70192         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBFoggy/slandBay	PUBHFoggyIslandBay213 PUBHFoggyIslandBay215 PUBHFoggyIslandBay215 PUBHFoggyIslandBay216 PUBHFoggyIslandBay217 PUBHFoggyIslandBay219 PUBHFoggyIslandBay220 PUBHFoggyIslandBay220 PUBHFoggyIslandBay222 PUBHFoggyIslandBay222 PUBHFoggyIslandBay223 PUBHFoggyIslandBay224 PUBHFoggyIslandBay224 PUBHFoggyIslandBay224 PUBHFoggyIslandBay227	PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS	Area Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.081746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.268659 Acre TNWW 0.268659 Acre TNWW 0.193271 Acre TNWW 0.193271 Acre TNWW 0.193285 Acre TNWW 0.132325 Acre TNWW 0.132325 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.21303 70.210811 70.208025 70.195423 70.194679 70.198457 70.198457 70.198971 70.19893 70.198635 70.208615	-147.738175 -147.738075 -147.738045 -147.738045 -147.738045 -147.73177 -147.718265 -147.718265 -147.718276 -147.718276 -147.72890 -147.72819 -147.72806 -147.746817 -147.728331	FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
R2UBF pogy/slandBay84         R2UE         R2UERINE         Area         0.150633         Area         70.190553         -147.67428         Foggy/slandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF pogy/slandBay86         R2UB         RIVERINE         Area         1.973114         Arce         RPW         70.209803         -147.738503         Foggy/slandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF pogy/slandBay169         R2UB         RIVERINE         Area         0.225393         Arce         RPW         70.179039         -147.738503         Foggy/slandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF pogy/slandBay169         R2UB         RIVERINE         Area         0.225393         Area         RPW         70.179039         -147.70192         Foggy/slandBay         NA         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean	PUBHFoggylslandBay213           PUBHFoggylslandBay214           PUBHFoggylslandBay215           PUBHFoggylslandBay215           PUBHFoggylslandBay216           PUBHFoggylslandBay217           PUBHFoggylslandBay218           PUBHFoggylslandBay221           PUBHFoggylslandBay220           PUBHFoggylslandBay221           PUBHFoggylslandBay222           PUBHFoggylslandBay223           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay224           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234           PUBHFoggylslandBay234      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R2UBF oggy/slandBay86         R2UB         RIVERINE         Area         1.973114         Acre         RPW         70.209803         -147.738503         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean           R2UBF oggy/slandBay169         R2UB         RIVERINE         Area         0.225393         Acre         RPW         70.179039         -147.732620         Foggy/slandBay         N/A         Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean	PUBHFoogylsiandBay213           PUBHFoogylsiandBay214           PUBHFoogylsiandBay215           PUBHFoogylsiandBay215           PUBHFoogylsiandBay216           PUBHFoogylsiandBay217           PUBHFoogylsiandBay218           PUBHFoogylsiandBay219           PUBHFoogylsiandBay220           PUBHFoogylsiandBay221           PUBHFoogylsiandBay220           PUBHFoogylsiandBay221           PUBHFoogylsiandBay222           PUBHFoogylsiandBay223           PUBHFoogylsiandBay224           PUBHFoogylsiandBay224           PUBHFoogylsiandBay227           R2UBFoogylsiandBay53           R2UBFoogylsiandBay67	PUBH           R2UB	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS RIVERINE RIVERINE RIVERINE	Area Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.081746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.286659 Acre TNWW 0.286659 Acre TNWW 0.193271 Acre TNWW 0.193285 Acre TNWW 0.193285 Acre TNWW 0.193285 Acre TNWW 0.2694604 Acre TNWW 0.2694604 Acre TNWW 0.029322 Acre TNWW	70.212652 70.212432 70.211849 70.212892 70.213303 70.210811 70.208025 70.196423 70.198423 70.198427 70.198721 70.198721 70.19897 70.198635 70.19465 70.208815 70.208815 70.186439 70.20312	-147.734175 147.73847 147.73846 147.73846 147.73801 147.73801 147.72874 147.71826 147.71875 147.72846 147.72846 147.72846 147.72846 147.72846 147.72846 147.72846 147.72882 147.73706	FoggylslandBay           FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
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R2UBFoggylslandBay173 R2UB RIVERINE Area 0.747623 Acre RPW 70.180071 -147.699266 FoggylslandBay N/A Adjacent and Neiothboring to the wetland complex flowing into the Arctic Ocean	PUBHFoggylsiandBay213           PUBHFoggylsiandBay215           PUBHFoggylsiandBay215           PUBHFoggylsiandBay215           PUBHFoggylsiandBay215           PUBHFoggylsiandBay216           PUBHFoggylsiandBay217           PUBHFoggylsiandBay218           PUBHFoggylsiandBay221           PUBHFoggylsiandBay220           PUBHFoggylsiandBay221           PUBHFoggylsiandBay222           PUBHFoggylsiandBay223           PUBHFoggylsiandBay224           PUBHFoggylsiandBay227           PUBHFoggylsiandBay63           R2UBFoggylsiandBay71           R2UBFoggylsiandBay71           R2UBFoggylsiandBay71           R2UBFoggylsiandBay71           R2UBFoggylsiandBay71           R2UBFoggylsiandBay71           R2UBFoggylsiandBay84	PUBH           PUBH	DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS DEPRESS RIVERINE RIVERINE RIVERINE RIVERINE	Area Area Area Area Area Area Area Area	0.169394 Acre TNWW 0.094813 Acre TNWW 0.0861746 Acre TNWW 0.086072 Acre TNWW 0.051585 Acre TNWW 0.152231 Acre TNWW 0.152231 Acre TNWW 0.551446 Acre TNWW 0.551446 Acre TNWW 0.551446 Acre TNWW 0.1680017 Acre TNWW 0.193285 Acre TNWW 0.123459 Acre TNWW 0.123459 Acre TNWW 0.123459 Acre TNWW 0.123459 Acre TNWW 0.123459 Acre TNWW 0.028232 Acre RPW 0.764069 Acre RPW 0.329566 Acre RPW 0.329566 Acre RPW	70.212652 70.212432 70.211849 70.212892 70.212892 70.210811 70.208025 70.194679 70.194657 70.198457 70.198635 70.198635 70.19465 70.19465 70.208615 70.208615 70.20819 70.20819 70.19053	-147.734175 -147.73847 -147.73844 -147.73804 -147.73814 -147.73814 -147.71875 -147.71875 -147.71875 -147.71875 -147.71875 -147.72819 -147.72819 -147.72819 -147.72805 -147.748817 -147.72906 -147.73706 -147.73706 -147.73706 -147.73706	FoggylslandBay	N/A	Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean Adjacent and Neighboring to the wetland complex flowing into the Arctic Ocean
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