
APPENDIX C

WETLANDS DELINEATION AND PRELIMINARY JURISDICTIONAL DETERMINATION

APPENDIX C Wetlands Delineation and Preliminary Jurisdictional Determination

This report presents the results of the 2013 wetlands delineation for the Kwigillingok Airport Improvements Environmental Assessment (EA), developed by PDC Inc. Engineers (PDC) for the Department of Transportation and Public Facilities (DOT&PF) on behalf of the Federal Aviation Administration (FAA). The purpose of the delineation is to identify wetlands within the project area in compliance with the Clean Water Act. The delineation is also used in permit preparation and coordination with the U.S. Army Corps of Engineers (USACE).

1 LOCATION

Kwigillingok is located on the western shore of the Kuskokwim Bay near the mouth of the Kuskokwim River, 77 miles southwest of Bethel and 388 miles west of Anchorage. The Kwigillingok Airport is located west of the community, within the U.S. Geological Survey (USGS) Kuskokwim Bay (D-4) quadrangle, Seward Meridian, in Sections 26, 27, 34, 35, T3S, and R81W.

2 BACKGROUND

In 1996, the USACE provided a jurisdictional determination of the area in preparation for an EA prepared that same year. The map generated for the EA was low resolution and did not include wetlands characterization.

In 2004, a Supplemental EA was prepared for FAA by HDR Alaska, Inc. on behalf of the Native Village of Kwigillingok. It included a wetlands delineation consisting of four categories: Palustrine emergent, regularly flooded wetlands; Riverine Tidal/Lower Perennial wetlands; and uplands.

3 METHODS

In February 2013, PDC staff reviewed the National Wetlands Inventory (NWI) database for the Kwigillingok area (Figure 1). The study area was defined by the proposed action. After consultation with the USACE and DOT&PF, and due to the ubiquity of wetlands in the area, it was determined that a desktop wetland delineation was sufficient and a field delineation was not needed for the proposed project area.

The desktop delineation was conducted using aerial photography provided by ETERRA, LLC. site photographs, and the most currently available NWI maps provided by the U.S. Fish and Wildlife Service (USFWS). The photography was collected in June 2011 when DOT&PF and PDC staff travelled to the site and explored the existing landscape.

Wetland vegetation boundaries were digitized using ArcMap GIS 10.1 software. The project area was delineated in accordance with the *USACE Wetland Delineation Manual* along with the *2006 Alaska Regional Supplement*. See Figure 2.

4 WETLAND TYPES

Wetlands, including open water, are abundant in the Kwigillingok vicinity and region. The most common wetland type found at Kwigillingok consists of palustrine emergent, primarily associated with low lying flat areas surrounding rivers. Most of these wetlands are seasonally flooded after spring snowmelt and with summer rains. Some wetlands are also flooded by the twice-daily tides impacting the area. They are typically saturated on the surface with areas of open water.

The entire proposed project area is located in Palustrine Emergent Wetlands and open water with the exception of existing human disturbance delineated as Uplands. Uplands are mainly associated with the existing airport (runway, taxiway, apron, and access road). The trail between the existing barge landing at the mouth of the Kwigillingok River to the community also accounts for a portion of the uplands.

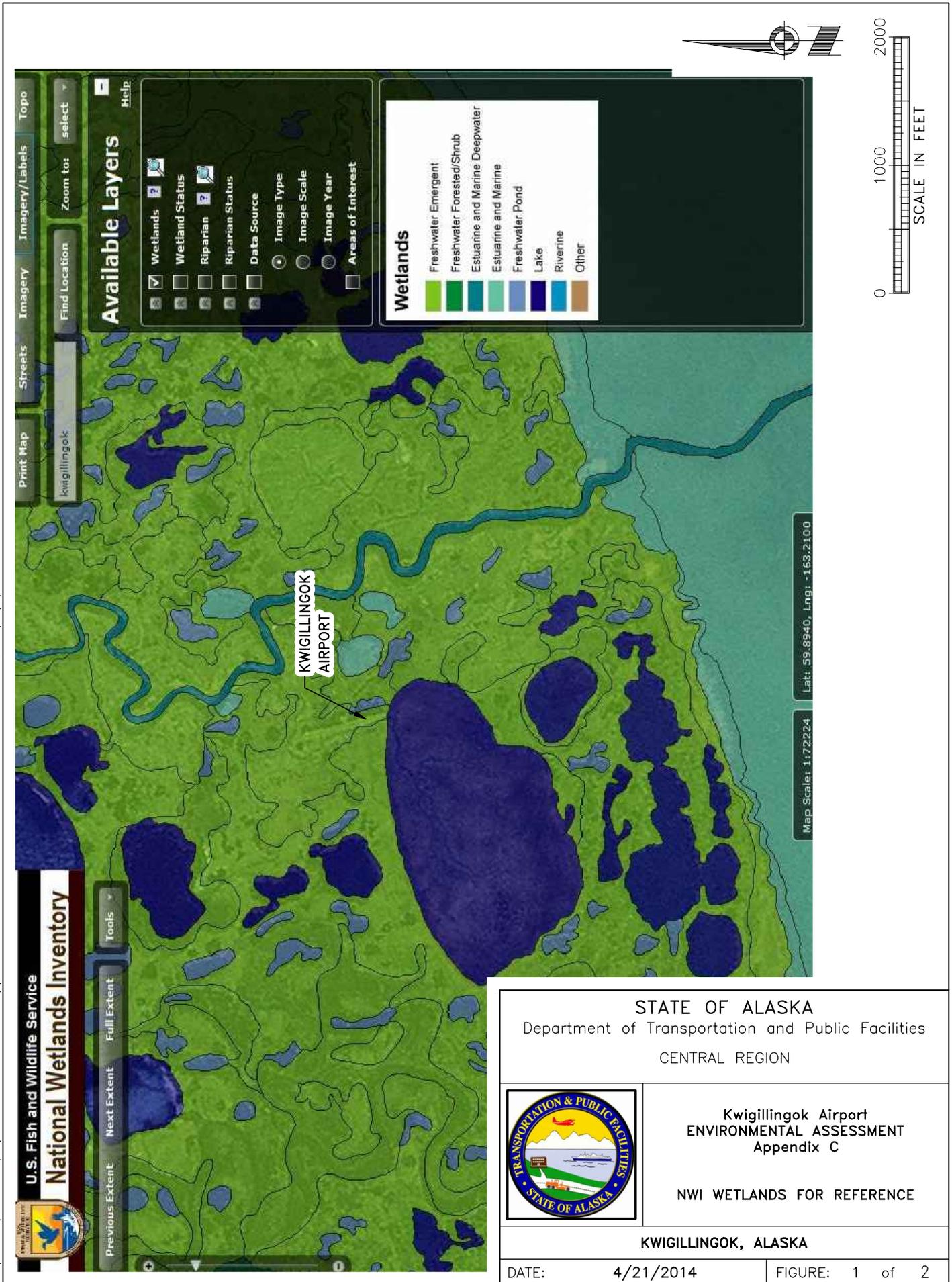
5 JURISDICTION

Based on the information documented in the determination, DOT&PF believes that the proposed project would affect wetlands and waters of the US under the regulatory jurisdiction of the USACE. There will be a request for the USACE to concur with this determination.

USACE authorization is required to place dredged and/or fill material into waters of the US, including wetlands. The USACE defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

6 FUNCTION AND VALUE

Wetlands surrounding Kwigillingok function to improve water quality in the Kwigillingok River because of their ability to retain sediments and pollutants. Wetlands also function to retain floodwaters resulting from heavy precipitation events and coastal storm surges. The wetlands also function as a habitat for birds and aquatic species.

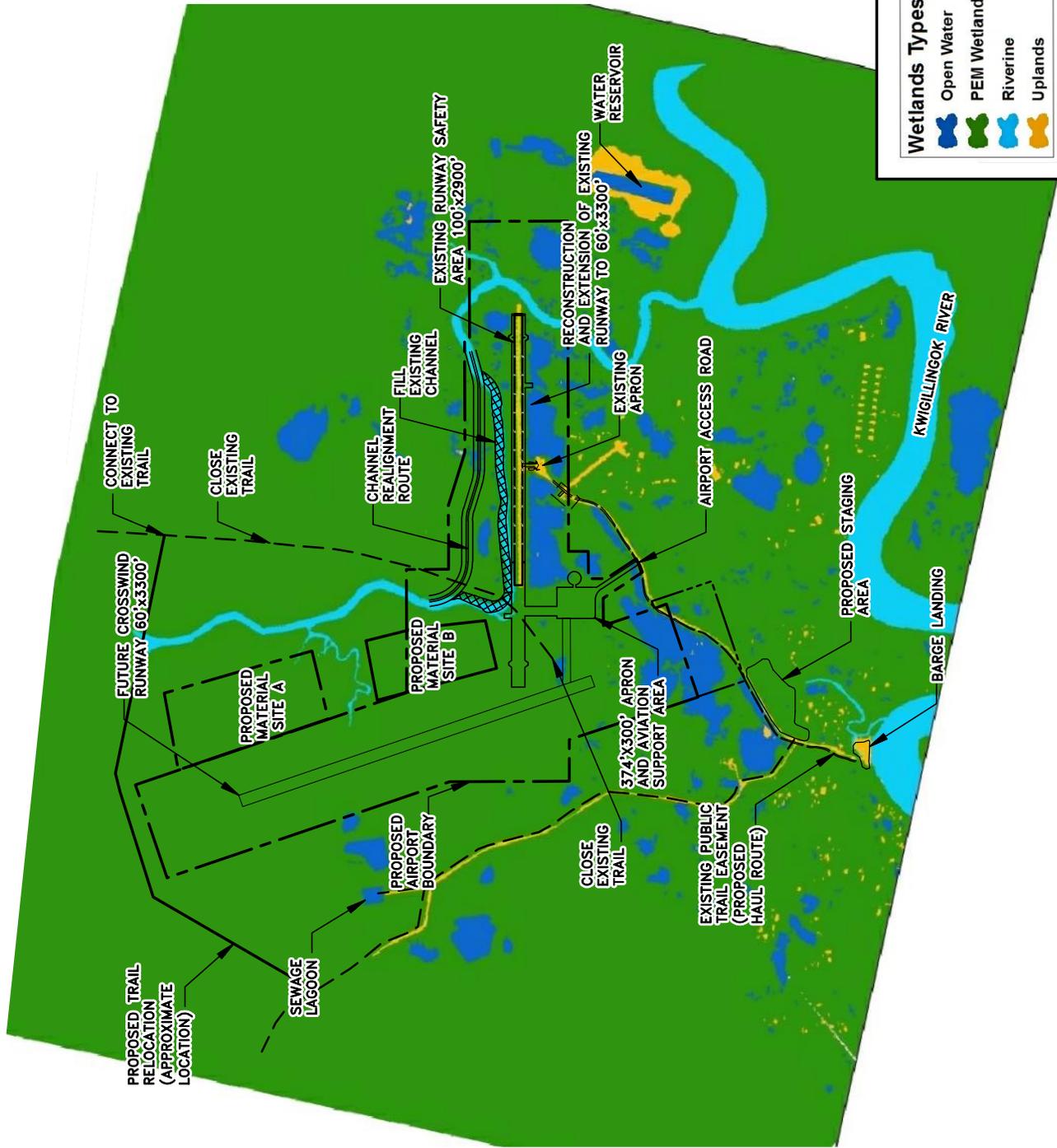


<p>STATE OF ALASKA Department of Transportation and Public Facilities CENTRAL REGION</p>	
	<p>Kwigillingok Airport ENVIRONMENTAL ASSESSMENT Appendix C</p>
<p>NWI WETLANDS FOR REFERENCE</p>	
<p>KWIGILLINGOK, ALASKA</p>	
DATE:	4/21/2014
FIGURE:	1 of 2



NOTES:

1. THE 2013 WETLANDS DELINEATION WAS DEVELOPED USING ETERRA PHOTOGRAPHY, SITE PHOTOGRAPHS, AND THE MOST CURRENT AVAILABLE NWI MAPS PROVIDED BY THE U.S. FISH AND WILDLIFE SERVICE.



STATE OF ALASKA Department of Transportation and Public Facilities CENTRAL REGION	
	Kwigillingok Airport ENVIRONMENTAL ASSESSMENT Appendix C
2013 WETLANDS DELINEATION SHOWING PROPOSED ACTION	
KWIGILLINGOK, ALASKA	
DATE:	2/28/2014
FIGURE:	2 of 2