APPENDIX 9

Wetlands Delineation

TECHNICAL MEMORANDUM

TO: U.S. Army Corps of Engineers
FROM: DOT&PF
DATE: {DATE}
PROJECT: Midtown Congestion Relief

BACKGROUND

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) is evaluating improvements to the Seward Highway corridor from the Tudor Road interchange to approximately the 20th Avenue intersection through Midtown Anchorage, Alaska (61.1935 North Latitude; 149.8678 West Longitude) (Attachment 1; Figure 1).

Proposed improvements may include expansion of road facilities into undeveloped areas which have been mapped by the Municipality of Anchorage as containing wetlands. DOWL has conducted a Preliminary Wetland Delineation of an approximately 13.4-acre study area to identify areas that may fall under the United States Army Corps of Engineers (USACE) jurisdiction per Section 404 of the Clean Water Act (CWA). The intent of this delineation is only to establish jurisdictional limits potentially affected by future projects, therefore functions and values were not assessed.

The data herein is intended to provide the USACE with sufficient information to determine regulatory jurisdiction of aquatic resources subject to Section 404 of the CWA, and to evaluate the hydrological connectivity of such resources to a traditional navigable waterway, territorial sea, or navigable interstate waterway.

The study area was selected based on possible areas of impact from future road expansion and contain areas mapped by the Municipality of Anchorage (MOA).

METHODS

DOWL staff conducted the wetland delineation fieldwork on September 11 and 18, 2018 to verify or update Anchorage Wetland Management Plan wetland maps. *Part IV* of the *1987 Corps of Engineers Wetlands Delineation Manual* and the 2007 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Alaska Region Version 2.0* were used for verification and adjustment as needed.

Data for each sampling site's vegetation, topography, hydrology indicators, and soil profiles was recorded on Corps Routine Wetland Determination (RWD) forms and in photos (Attachment 2). In the event soil excavation was not necessary to make a wetland/upland determination, a photographic point was taken. Using ArcMap GIS, an aerial was used as a basemap to digitally map wetland boundaries.

FINDINGS

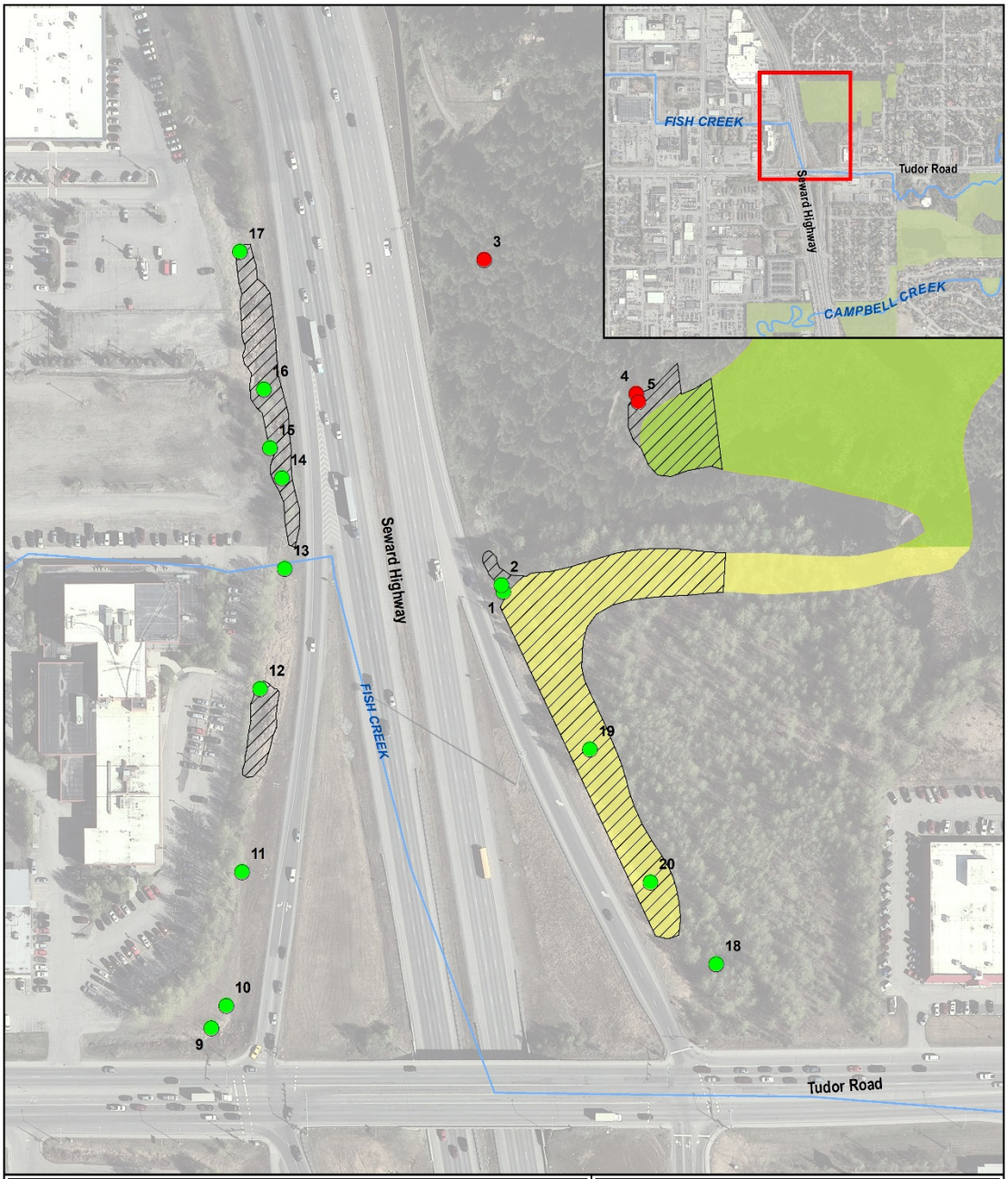
Three RWD forms were completed and 17 other locations were photographed:

Data #	Data Type	Jurisdictional Status	MOA Wetland Designation
1	Photo	Wetland	Wetland
2	Photo	Wetland	Upland
3	RWD	Upland	Upland
4	RWD	Wetland	Upland
5	Photo	Wetland	Upland
6	Photo	Upland	Upland
7	RWD	Wetland	Wetland
8	Photo	Wetland	Wetland
9	Photo	Upland	Upland
10	Photo	Upland	Upland
11	Photo	Upland	Upland
12	Photo	Wetland	Upland
13	Photo	Upland	Upland
14	Photo	Wetland	Upland
15	Photo	Wetland	Upland
16	Photo	Wetland	Upland
17	Photo	Wetland	Upland
18	Photo	Wetland	Wetland
19	Photo	Wetland	Wetland
20	Photo	Wetland	Wetland

DOWL identified 1.66 acres of wetlands, of which 1.11 acres were mapped as wetlands by the MOA. Of the 1.66 acres identified, 1.52 acres are connected hydrologically to Fish Creek via surface and subsurface drainage infrastructure and 0.14 acres connect hydrologically to Chester Creek via subsurface drainage. Fish Creek is a Relatively Permanent Water (RPW) which directly connects to Cook Inlet, a Traditionally Navigable Water (TNW).Chester Creek is a TNW, therefore all wetlands identified are considered Waters of the U.S. Boundaries between uplands and wetlands determined by the MOA were shifted as follows (Figure 2):

- Wetland boundary represented by data points 1, 2, and 18-20 was shifted 50 feet north (represented by) due to proximity to the storm water culvert.
- Wetland boundary represented by data points 4 and 5 was shifted 25 feet north as the wetland has grown closer to the southeast side of the boardwalk.
- Area represented by data points 12, and 14-17 were previously mapped as uplands, however wetlands have developed by the storm water culvert in a swale (approximately 115 ft by 30 ft), and in another area along the fence line (approximately 400 ft by 1 ft). Wetland vegetation is present throughout, most likely formed from a mixture of seasonal melt and storm water drainage.
- Wetland boundary represented by data point 7 was shifted approximately 125 feet to the north and the wetland area is smaller than previously mapped. The wetlands were moved north and out of the forest and into the grassy field.


KNIK ARM
PROJECT LOCATION
ANCHORAGE
FIRE ISLAND
CHUGACH STATE PARK
TURNAGAIN ARM
SHIP CREEK
Glenn Highway
BOOTLEGGER COVE
MERRILL FIELD
RUSSIAN JACK SPRING PARK
CHESTER CREEK
Minnesota Drive
Study Area
FISH CREEK
Tudor Road
HOOD LAKE
Seward Highway
FAR NORTH BICENTENNIAL PARK
CONNORS LAKE PARK
CAMPBELL CREEK
Minnesota Drive
1
N
Miles
0
0.5
1
Location and Vicinity Map
Midtown Congestion Relief
DOWL
Date: July 10, 2019
Figure 1
Q:\24\62458-01\60GIS\ENV\Wetland Delineation\Figure 1 Location Map.mxd Jul 10, 2019 10:53:22 AM User: tjameson


FISH CREEK
Tudor Road
Seward Highway
CAMPBELL CREEK
Seward Highway
FISH CREEK
Tudor Road
1
2
3
4
5
9
10
11
12
13
14
15
16
17
18
19
20
Wetland Delineation
Full
Photo
DOWL Adjusted Boundary
MOA Wetland Designation
Class A
Class B
Feet
0
100
200
N
Wetlands and Photo Points 1 - 5, 9 - 20
Midtown Congestion Relief
DOWL
Date: July 10, 2019
Figure 2
Q:\24\62458-01\60GIS\ENV\Wetland Delineation\Mapped Wetlands and Photo Points 1-5 and 9-20.mxd Jul 10, 2019 9:36:50 AM User: tjameson