### APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

Form 1 of 2 – Wetlands A and C

# SECTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 29 April 2020 B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District – Grandview Inc., NWS-2019-1012 C. PROJECT LOCATION AND BACKGROUND INFORMATION: County/parish/borough: Whatcom State: WA City: Ferndale Center coordinates of site (lat/long in degree decimal format): Lat: 48.869229° Long: -122.581533° Universal Transverse Mercator: Zone 10 N E Name of nearest waterbody: Whiskey Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Nooksack River Name of watershed or Hydrologic Unit Code (HUC): 17110004 (Nooksack River) Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form. D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: 14 April 2020 Field Determination. Date(s): 26 March 2020 SECTION II: SUMMARY OF FINDINGS A. RHA SECTION 10 DETERMINATION OF JURISDICTION. There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: B. CWA SECTION 404 DETERMINATION OF JURISDICTION. There Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required] 1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): 1 TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: Wetlands: 1.75 acres

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain:

**c. Limits (boundaries) of jurisdiction** based on: Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

### **SECTION III: CWA ANALYSIS**

### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under Rapanos have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

# 1. Characteristics of non-TNWs that flow directly or indirectly into TNW Non-TNW is a ditch running between the subject property and Kaas Road.

(i)	General Area Conditions:
	Watershed size: HUC 17110004 (Nooksack River) 795 square miles
	Drainage area: 39 acres
	Average annual rainfall: 37 inches
	Average annual snowfall: 8 inches
(ii)	Physical Characteristics:
	(a) Relationship with TNW:
	Tributary flows directly into TNW.
	Tributary flows through 2 tributaries before entering TNW.
	Project waters are <b>1 (or less)</b> river miles from TNW.
	Project waters are 1 (or less) aerial (straight) miles from TNW.
	Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>: Wetlands A and C are adjacent to the offsite ditch which flows easterly for 0.16 of a mile before flowing into an unnamed tributary of Whiskey Creek, which flows 0.07 of a mile before entering Whiskey Creek, which flows 0.56 of a mile into the Nooksack River, a designated Section 10 waterway. Whiskey Creek flows through a floodgate at the confluence with the Nooksack River.

Tributary stream order, if known: 1.

(b)	General Tributary	Characteristics (check all that apply):
	Tributary is:	Natural
		Artificial (man-made). Explain: Ditch may have replaced natural drainages in the area.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3-4 feet Average depth: 4 feet Average side slopes: 3:1.
	Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: 90% grass species Other. Explain: .
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable and routinely maintained. Presence of run/riffle/pool complexes. Explain: none. Tributary geometry: <b>Relatively straight</b> Tributary gradient (approximate average slope): 2 %
(c)	Flow: Tributaries provides for: Ephemeral flow Estimate average number of flow events in review area/year: 11-20 Describe flow regime: Flow during and for a short period after precipitation events. Other information on duration and volume:
	Surface flow is: <b>Confined.</b> Characteristics: See additional information below.
	Subsurface flow: Unknown. Explain findings:  Dye (or other) test performed:
	Tributaries have (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition sediment deposition water staining other (list):  Discontinuous OHWM. <sup>7</sup> Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):    High Tide Line indicated by:
Cha	emical Characteristics: uracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Water is clear with moderate organic debris and minimal sediment load, general water quality is good, watershed has been extensively developed for commercial, agricultural, and residential uses, downstream waters of the Nooksack River are listed on the WA State 303(d) list.  https://doi.org/10.1001/journal.pub.2016/jo
ruci	and specific politicines, it known. Herofetices, fertilizers, petrochemicals (total funotio.

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

(iii)

	(iv)	$\boxtimes$	Riparian corridor. Characteristics (type, average width): herbaceous, 20+ feet.  Wetland fringe. Characteristics: PEM wetlands extend to edge of ditch byt are seperated by a man-made berm.  Habitat for:  Federally Listed species. Explain findings:  Standard Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain findings:  Aquatic/wildlife diversity. Explain findings:
2.	Cha (i)	Phy	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW  visical Characteristics:  General Wetland Characteristics:  Properties:  Wetland size: 1.75 acres  Wetland type. Explain: PEM depressional  Wetland quality. Explain: Category III (Wetland C) and IV (Wetland A) per the Washington State wetland rating  System (based on a scale of I to IV, I being the highest functioning)
		(b)	Project wetlands cross or serve as state boundaries. Explain:  General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Surface and shallow subsurface flow is downslope away from ditch.  Surface flow is: Overland sheetflow Characteristics:  Subsurface flow: Unknown. Explain findings:
		(c)	<ul> <li>□ Dye (or other) test performed:</li> <li>Wetland Adjacency Determination with Non-TNW:</li> <li>□ Directly abutting</li> <li>□ Not directly abutting</li> <li>□ Discrete wetland hydrologic connection. Explain: See additional information section.</li> <li>□ Ecological connection. Explain:</li> <li>□ Separated by berm/barrier. Explain: Berm between wetlands and ditch appears to be old sidecast material from ditch cleaning.</li> </ul>
		(d)	Proximity (Relationship) to TNW Project wetlands are 1 (or less) river miles from TNW. Project waters are 1 (or less) aerial (straight) miles from TNW. Flow is from: No Flow. Estimate approximate location of wetland as within the 500-year or greater floodplain.
	ì	Cha	emical Characteristics:  aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water flowing from wetlands is clear, general water quality is good, watershed has been extensively developed for commercial, agricultural, and residential uses, downstream waters of Nooksack River are on the WA State 303(d) list.  Intify specific pollutants, if known: herbicides, fertilizers.  **logical Characteristics. Wetland supports (check all that apply):**  Riparian buffer. Characteristics (type, average width): Emergent (herbaceous) 30-70 feet.  Vegetation type/percent cover. Explain: Emergent (grass species) 100% cover.  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:
3	Chs	ract	☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: eristics of all wetlands adjacent to the tributary (if any)

# 3.

All wetland(s) being considered in the cumulative analysis: 3
Approximately 2.75 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Wetland</u>	<u>Directly abuts? (Y/N)</u>	Size (in acres)
A - onsite	N	0.71
C – onsite	N	1.04
G – offsite	N	1.00 (estimated)
*estimated		

NWI mapping does not show wetland polygons in the drainage basin area; Wetland G mapped by City of Ferndale.

Summarize overall biological, chemical and physical functions being performed: see Section C below for summary.

### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Subject wetlands do not have a significant nexus to downstream TNW.

The subject reach includes the on- and offsite wetlands and the off-site conveyance (ditch) to the Nooksack River. Water from the offsite wetland on property to the north flows into a roadside ditch, which flows into an unnamed tributary of Whiskey Creek, and then into the Nooksack River, a designated Section 10 navigable waterway approximately 0.79 of a mile downstream from the subject site. Water from on-site wetlands A and C flows downhill to the south, away from the roadside ditch, and into an upland area with moderately well drained soils.

The watershed has been extensively developed for commercial, residential and agricultural uses; downstream waters of the Nooksack River receive stormwater and urban runoff from the 39 acre subject basin. Essential Fish Habitat for Pacific Salmon (designated under the Magnuson-Stevens Fishery Conservation and Management Act) occurs in the TNW (Nooksack River). Fish species listed under the Endangered Species Act utilize the waters of the Nooksack River; designated critical habitat for chinook salmon, steelhead, and bull trout exists in the Nooksack River.

Associated wetland functions are minimal to moderate wildlife habitat and habitat diversity, minimal enhanced food web support, minimal floodwater storage/attenuation, and minimal sediment input reduction and toxin removal.

Only Wetland G would contribute flow and perform functions that would affect the downstream TNW. Wetland A and C do not contribute to improving water quality in the Nooksack River because both drain away from the ditch and into uplands. Also,

because these wetlands are separated from the roadside ditch by a berm, they do not have the opportunity to attenuate downstream flooding or erosion by receiving water from the ditch. Given the relatively small wetland area, the minimal volume of water the subject wetlands intercept, and no flow from Wetlands A and C to the Nooksack River, contributions to the TNW are negligible; therefore, there is no significant nexus to a TNW.

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:  TNWs: linear feet width (ft), Or, acres.  Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.  Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide rationale indicating that tributary flows seasonally:  Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Tributaries identified as having continuous flow for 3-6 months. See additional information for details.
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters:  Other non-wetland waters:  Identify type(s) of waters:  .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above.
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: 8.6 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area:.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area:.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  Demonstrate that water is isolated with a nexus to commerce (see E below).

<sup>8</sup>See Footnote # 3

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes.  from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.  which are or could be used for industrial purposes by industries in interstate commerce.
Interstate isolated waters. Explain:  Other factors. Explain:
dentify water body and summarize rationale supporting determination:
Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters:  Wetlands: acres.
If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.  Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).  Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Wetlands A and C do not flow into any tributary of the TNW and do not provide a significant affect to the chemical, physical, and biological integrity of a TNW.  Other: (explain, if not covered above):
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR actors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional adgment (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: .  Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such finding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: 1.75 acres.
TON IV: DATA SOURCES.  JPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland delineation report dated May 2006.  Data sheets prepared/submitted by or on behalf of the applicant/consultant.  Office concurs with data sheets/delineation report.  Office does not concur with data sheets/delineation report.  Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas:  USGS NHD data.  USGS 8 and 12 digit HUC maps.  U.S. Geological Survey map(s). Cite scale & quad name: Anacortes South Quad  USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): WA State Department of Ecology, 2001  FEMA/FIRM maps:  100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)  Photographs: Aerial (Name & Date): Google Earth 2015.

 $<sup>^{10}</sup>$  Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA  $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$ .

	or Other (Name & Date):	
	Previous determination(s). File no. and date of response letter:	
	Applicable/supporting case law: .	
	Applicable/supporting scientific literature: .	
$\Box$	Other information (please specify):	

### **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Date of Site Visit: 26 March 2020

**Investigator(s):** Randel Perry, Jeff Mallahan (consultant).

NOTE: Due to COVID protection measures, Corps PM did not meet with consultant on-site. Corps PM conducted a "drive-by" inspection of the perimeter of the site to observe local drainage features (ditches) and site topography. Consultant was on-site and communicated by phone with Corps PM to provide additional info (photos, etc.).

- 1. Site Description and Significant Resources in the area: The site consists of one tax parcel totaling of 18 acres. The site is rectangular in shape with a general slope to the south. Surrounding vicinity has been substantially developed for agricultural, commercial and residential uses. The site is bounded by Kaas Road to the north, a residential development to the south, undeveloped property to the east, and Portal Way to the west. Site was historically used for agricultural purposes and continues to be regularly mowed. The site is currently undeveloped and primarily vegetated with a field grasses. Wetlands in question are scattered across the properties. There are identified tributaries adjacent to the project site that flow into Whiskey Creek, a tributary of the Nooksack River. Whiskey Creek is located approximately 400 feet southeast of the site at its closest point.
- **2. Delineation:** A wetland delineation dated 20 November 2019 was provided for the site. Sampling for the report occurred between September and November 2019. The report identified four wetlands on the subject property. Three off-site wetlands and one off-site stream were identified within 300 feet of the subject property.
- 3. Project Purpose and Description: Provide information for site development planning.
- 4. Physical / Chemical Characteristics:
  - a. Streamflow c.f.s.:
  - b. Salinity: NA
  - c. Soils: Mapped units are:

45 - Edmonds-Woodlyn loams, 0 to 2 percent slopes – Non-hydric with hydric inclusions (Woodlyn, Fishtrap, Hale, Woodlyn undrained)

100 - Lynden sandy loam, 3 to 8 percent slopes - Non-hydric with hydric inclusions (Hale)

165 - Tromp loam, 0 to 2 percent slopes - Non-hydric with hydric inclusions (Hale)

Soil Colors:

Wetlands - 0" to 4" - 10YR 3/2 sandy loam; 4" to 22" - 10YR 3/2 sandy loam w/ 7.5 YR 3/4 concretions (10%, matrix)

Uplands – 0" to 16" - 10YR 3/3 and 10YR 3/2 sandy loam, no concretions

d. Hydrology: Minor amount of rainfall (0.3 inches) in week preceding site visit. Saturation starting between 4" and 8" from surface in wetlands reported by consultant on day of site visit. Delineation report indicates oxidized rhizospheres along living roots and saturation visible on aerial imagery

### 5. Biological Characteristics:

- a. Percentage of dominant vegetation FAC or wetter: 95% in wetlands
- b. Vegetation species list:

Field wetlands (A, C, and D)

Agrostis spp. FAC

Whit clover (Trifolium repens), FAC

Reed canarygrass (Phalaris arundinacea), FACW

Hairy cat's-ear (Hypocharis radicata) FACU

Common dandelion (Taraxacum officinale) FACU

Creeping buttercup (Ranunculus repens), FACW

Field Uplands

Poa spp., FAC

Common tansy (Tanacetum vulgare), FACU Narrow-leaf plantain (Plantago lanceolata), FACU Common sheep sorrel (Rumex acetosella), FACU Canadian thistle (*Cirsium arvense*), FACU

c. Fauna: bird presence.

d. NWI Classification, associations/communities: PEM

## 6. Lateral Extent of Jurisdiction:

- a. OHW, MHHW, MHW and datum:
- b. Acreage of wetlands to be impacted: Unknown.
- c. Total acreage of wetlands/waters on site: 2.04 acres of wetlands (see Form 2 for information on isolated wetlands).
- **7.** Additional information: Corps PM has reviewed all information submitted for the site and determined that the flagged wetland boundaries appear to accurately delineate the wetland edges. Topography of the project site has been altered by historic agricultural activities. Local drainage patterns have been altered by developments; most previously existing streams or drainage channels in the area have been routed into ditches. A wetland and stream headwater ("Stream A") exists offsite between the southern project site border and the residential area to the south. This system would convey water eastward into an unnamed tributary of Whiskey Creek. Overland and channelized flows from the north would be intercepted by the ditch along the south side of Kaas Road and conveyed east to Whiskey Creek.

Wetland A and C are in close proximity to the Kaas Road ditch, but are separated from the ditch by an upland berm approximately 10 feet wide and approximately 3 feet high. During the site visit, no breaks or other flow paths through the berm were observed. In addition, based on the slope of terrain – north to south – water would not flow from the wetlands into the ditch. Mapped soils for these areas are non-hydric, although they may have hydric inclusions. There are no discernible flow paths from the south end of these wetlands towards the wetland/stream headwater to the south. The NWI shows a long, thin PEM wetland feature in the area of Wetland C connected to offsite wetlands to the south. However, site visit observations confirm that this feature is an old agriculture access road and not a water conveyance feature. Wetland A is approximately 740 feet from the wetland/stream; Wetland C is approximately 1,105 feet away. The intervening area meets upland criteria.

**8.** Conclusions: Areas are not jurisdictional wetlands. Wetlands A and C do not have a surface water connection to other navigable or interstate waters of the U. S. These wetlands do not have a significant nexus with any downstream waters TNW and are, therefore, not waters of the U. S. On 29 April 2020, the Environmental Protection Agency concurred with these findings.