

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

Significant Nexus

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 04 March 2008.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District, Mohawk Northern Plastics/City of Auburn, NWS-2007-1913-NO.

Name of water being evaluated on this JD form: Wetland A

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Washington County: King City: Auburn

Center coordinates of site (lat/long in degree decimal format): Lat: 47.31260 N, Long: -122.231723 W

Universal Transverse Mercator:

Name of nearest waterbody: Mill Creek.

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Green River.

Name of watershed or Hydrologic Unit Code (HUC): 17110013.

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. List other JDs: _____

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: 11 February 2008 and on previous area jurisdictional determinations.

Field Determination. Date(s): 4 November 2007 (Bennett).

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** "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 waters² (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: _____ linear feet _____ width (ft) and/or _____ acres.

Wetlands: 1.61 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, and Pick List

Elevation of established OHWM (if known): _____.

2. Non-regulated waters/wetlands (check if applicable):³

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

Explain: _____.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. 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):

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. If the waterbody⁴ 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

(i) General Area Conditions:

Watershed size: 487 square miles

Drainage area: 22 square miles

Average annual rainfall: 36 inches

Average annual snowfall: _____ inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 1 tributaries before entering TNW.

Project waters are 1-2 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 1-2 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: _____.

Identify flow route to TNW⁵: The wetland is approx. 1 mile east of Mill Creek. Mill Creek then flows 1.4 miles to the Green River, a TNW.

Tributary stream order, if known: _____.

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural

Artificial (man-made). Explain: _____.

Manipulated (man-altered). Explain: tributary has been straightened, relocated, and excavated.

Tributary properties with respect to top of bank (estimate):

Average width: 5 feet

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ 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.

Average depth: 2 feet
Average side slopes: **4:1 (or greater)**.

Primary tributary substrate composition (check all that apply):

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input checked="" type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: _____ | |
| <input type="checkbox"/> Other. Explain: _____. | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:.

Presence of run/riffle/pool complexes. Explain: none.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 0.6 %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: Perennial Stream.

Other information on duration and volume: _____.

Surface flow is: **Discrete and confined**. Characteristics: _____.

Subsurface flow: **Yes**. Explain findings: sand strata below 27 inches in Snohomish series soils provides moderately rapid lateral subsurface flow.

Dye (or other) test performed: _____.

Tributary has (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input checked="" type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away | <input checked="" type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): _____ | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: _____. | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): _____ | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: usually moderately turbid during the wet season, nearly clear as dry season approaches; substantial TSS, coliform bacteria; low oxygen and high temperatures during later spring, summer and early fall.

Identify specific pollutants, if known: _____.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): 100 ft.
- Wetland fringe. Characteristics: See Mill Creek SAMP report - Mill Creek surrounded by wetlands.
- Habitat for:
 - Federally Listed species. Explain findings: _____.
 - Fish/spawn areas. Explain findings: _____.
 - Other environmentally-sensitive species. Explain findings: _____.

⁶A 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.

⁷Ibid.

Aquatic/wildlife diversity. Explain findings: probably limited due to seasonally high temperatures, turbidity, low oxygen, muck substrate in places.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: 1.6 acres

Wetland type. Explain: Palustrine, emergent, occasionally flooded, seasonally saturated wetland.

Wetland quality. Explain: Category IV: Moderate water quality and low hydrologic functions and habitat functions.

Project wetlands cross or serve as state boundaries. Explain: _____.

(b) General Flow Relationship with Non-TNW:

Flow is: **No Flow** . Explain: Wetland has some ponding during the wet season but appears to have no surface water outlet. It likely drains via underlying sand substrata to the SAMP wetland 50 mitigation site as well as other nearby wetlands. There are no surface water connections from the wetland to Mill Creek because of the man-made berms for SR 169, industrial development, and two railroad berms. There are no outlet ditches present on-site.

Surface flow is: **Not present**

Characteristics: _____.

Subsurface flow: **Yes**. Explain findings: possible because of the broad continuum of hydric soils in the area which contain sand strata. There is also a high groundwater table as indicated by a recently excavated (February 2008) stormwater pond on site. Further, the wetland likely flows sub-surface to other wetlands as shown by the attached wetland drawings that has a series of wetlands in the immediate vicinity.

Dye (or other) test performed: _____.

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: see subsurface flow description above.

Ecological connection. Explain: _____.

Separated by berm/barrier. Explain: Although the wetland was historically part of the 100-year floodplain of Mill Creek, the floodplain now exists approximately 2800 feet to the west due to the SR 169 highway berm, industrial development, and two railroad berms.

(d) Proximity (Relationship) to TNW

Project wetlands are **2-5** river miles from TNW.

Project waters are **1-2** aerial (straight) miles from TNW.

Flow is from: **Wetland to/from navigable waters(subsurface).**

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: _____.

Identify specific pollutants, if known: _____.

(iii) Biological Characteristics. Wetland supports (check all that apply):

Riparian buffer. Characteristics (type, average width): _____.

Vegetation type/percent cover. Explain: _____.

Habitat for:

Federally Listed species. Explain findings: _____.

Fish/spawn areas. Explain findings: _____.

Other environmentally-sensitive species. Explain findings: _____.

Aquatic/wildlife diversity. Explain findings: _____.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **30 (or more)**

Approximately (2000) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

See attached SAMP Map and Spreadsheet -

Summarize overall biological, chemical and physical functions being performed: See Section C.3. for summary.

C. SIGNIFICANT NEXUS DETERMINATION

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: Wetlands in this reach totaling about 2000 acres sustain groundwater and some overland surface flows which in turn helps sustain (feeding, migration, reproduction) fish and other aquatic organisms including ESA listed and unlisted species of salmon in the Green River (TNW). All of the wetlands in this reach are depressional (constricted) outflow wetlands and perform sediment trapping, water quality improvement (especially total suspended solids, temperature, nitrogen reduction), and flood flow attenuation functions. All of the wetlands contribute or have the potential to contribute cooler (and better oxygenated) water during the spring, summer and early fall to the TNW, presently a water quality limiting factor in the TNW and Mill Creek. Mill Creek, in combination with all of their adjacent wetlands, form a riparian corridor to the TNW along which spiny ray fish, minnows, Chinook coho salmon, beaver, muskrats, various rodents, fly larvae, various passerine and shore birds, waterfowl, raptors, and coyotes travel, feed, and reside. Steelhead and bull trout, chum and pink salmon migrate in the Green River (TNW). The relevant reach extends from SR 18 to the Green River.

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 perennial: _____.
 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: _____.

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-RPWs⁸ 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: _____ linear feet _____ width (ft).
 Other non-wetland waters: _____ acres.
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. Provide rationale indicating that wetland is directly abutting an RPW: _____
 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: _____ acres.

⁸See Footnote # 3.

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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 1.6 acres.

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: _____ acres.

7. **Impoundments of jurisdictional waters.⁹**

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).

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰**

- 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: _____.

Identify 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.

F. **NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- 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: _____.
 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 factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (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: _____ acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a 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: _____.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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 Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Wetlands: _____ acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: _____.
- 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: _____
- USDA Natural Resources Conservation Service Soil Survey. Citation: _____.
- National wetlands inventory map(s). Cite name: _____.
- State/Local wetland inventory map(s): _____
- FEMA/FIRM maps: _____.
- 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): _____
or Other (Name & Date): _____.
- Previous determination(s). File no. and date of response letter: Mill Creek Special Area Management Plan, Seattle District, April 2000; NWS-2007-1905 Jurisdictional Determination for City of Auburn, NWS-2003-0648 Lyden (pre-Rapanos), NWS-1999-0090 Gates, Gates, and Gates (Pre-Rapanos).
- Applicable/supporting case law: _____.
- Applicable/supporting scientific literature: _____.
- Other information (please specify): _____.

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland 1 was once within the historic 100-year floodplain for Mill Creek. Mill Creek flows into the Green River, a TNW. When SR 167 was constructed, as well as two railroads, they created man-made berms that now separate the wetland from Mill Creek. The new floodplain is defined as 2800 feet west of the project site, west of SR 167. Although this wetland is not part of the Mill Creek SAMP (as shown in SAMP drawing), it still provides water quality benefits. It also functions in conjunction with other nearby wetlands, as shown in the attached figure. See Section C3. for additional information. Please note that while this jurisdictional determination has been pending, the applicant has filled the 1.6 acre wetland. We are working with the applicant to resolve this potential violation (It is considered 'potential' until we have an approved j.d.).