GG Environmental, LLC
WETLANDS • FISH • WILDLIFE

Geoffrey Gray, MA, PWS
151 Poulin Rd. Selah, WA 98942
509-426-5645 mobile/text
gg@gg-env.com | www.gg-env.com

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

August 12, 2026

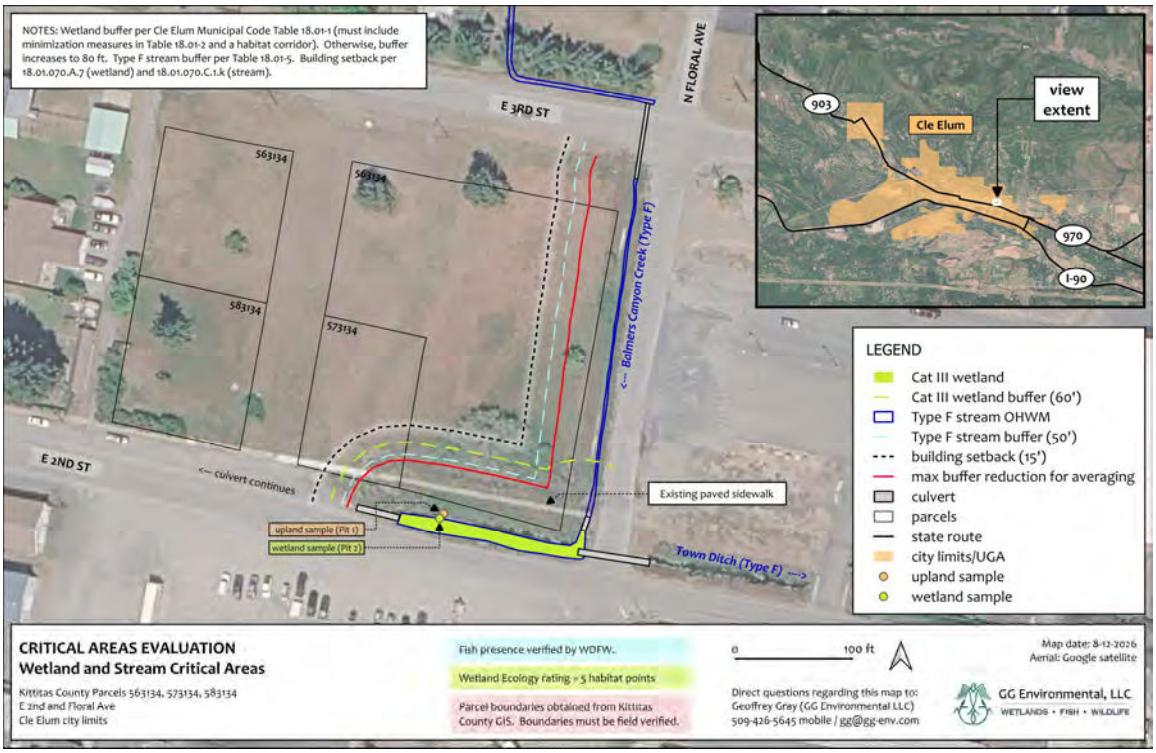
Daniel McCune, Senior Project Manager, Development
Habitat for Humanity Seattle-King and Kittitas Counties
daniel.mccune@habitatskc.org | 206-584-7257

RE: Wetland and Stream Critical Areas Evaluation for Kittitas County parcels #563134, 573134, 583134 at E 2nd and Floral Ave (Cle Elum city limits) – August 2026 Update.

Mr. McCune,

The purpose of this memorandum is to document the field methods and findings of a wetland and stream critical areas evaluation for parcels #563134, 573134, and 583134, located at the northwest corner of E 2nd St and N Floral Ave, within the city limits of Cle Elum, Kittitas County, Washington (**Figure 1**).

Figure 1. Location Map and Evaluation Results



RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

The undeveloped parcels are fallow and weedy, supporting annual upland grasses and several upland shrubs and trees. Grasses are mowed. The parcels are entirely surrounded by urban development, including residences to the north and west, Dru Bru Brewery to the east, and commercial buildings to the south. Topography is flat with a slight southeast aspect.

Soils

The local soil unit mapped by the NRCS[1] is *Patnish-Mippon-Myzel complex 0 to 3 percent slopes* (Unit 208). *Patnish* is associated with floodplains and parent material consists of alluvium mixed with volcanic ash in the upper part. The typical soil profile includes ashy loam from 0 to 7 inches (in), ashy loam from 7 to 14 in, loam from 14 to 27 in, very gravelly sandy loam from 27-35 in, and extremely cobbly loamy sand from 35-60 in. Depth to restrictive feature is 25 to 35 in to strongly contrasting textural stratification. Moderately well-drained, depth to water table is about 35 to 60 in. The soil unit occasionally floods, but does not pond, and is not listed as a hydric soil. *Mippon* is associated with stream terraces and parent material consists of alluvium. The typical soil profile includes moderately decomposed plant material from 0-1 in, very cobbly loam from 1-12 in, very gravelly sandy loam from 12-18 in, and extremely cobbly loamy sand from 18-60 in. Depth to restrictive feature is 10 to 27 in to strongly contrasting textural stratification. Moderately well-drained, depth to water table is about 35 to 60 in. The soil unit occasionally floods but does not pond. The soil unit is not listed as a hydric soil. *Myzel* is associated with alluvial fans and floodplains with parent material consisting of alluvium with an influence of volcanic ash in the upper part. The typical soil profile includes ashy sandy clay loam from 0-38 in and sandy clay loam from 38-60 in. Depth to restrictive feature is more than 80 in. Moderately well-drained, depth to water table is about 35 to 57 in. The soil unit occasionally floods but does not pond. It is not listed as a hydric soil.

Streams

Historic topographic maps[2] do not indicate a stream in the vicinity. However, an intermittent stream, locally referred to as the "Town Ditch," is mapped along the westbound (north) shoulder of E 2nd St by the National Hydrography Dataset (NHD).[3] This stream is also mapped as *Type 4 Seasonal (N)* by Kittitas County[4] and as *Type N* by the Department of Natural Resources (DNR).[5] The Town Ditch is managed by the city to

[1] Natural Resources Conservation Service (NRCS). Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
[2] United States Geological Survey (USGS). topoView. Available at: https://ngmdb.usgs.gov/topoview/viewer/#4/40.00/-100.00
[3] Available via Ecology Water Quality Atlas at: https://apps.ecology.wa.gov/waterqualityatlas/wqa/map
[4] Kittitas County COMPAS. Available at: https://kitcogis.maps.arcgis.com/apps/webappviewer/index.html?id=8bcc146d9c2847acb2e9aa239187c25e
[5] Forest Practices Application Mapping Tool (FPAMT). Available at: https://fpamt.dnr.wa.gov/2d-view

GG Environmental, LLC
151 Poulin Rd. Selah, WA 98942
(509) 426-5645 mobile
gg@gg-env.com | www.gg-env.com

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

accommodate ephemeral stream tributary flows and urban stormwater runoff. Banks are excavated and steep, vegetation is trimmed, and debris is regularly cleared.

A second intermittent stream, referred to as "Balmers Canyon Creek," approaches the parcels from the north, is culverted under E 3rd St, and flows along the southbound (west) shoulder of N Floral Ave before merging with the Town Ditch. Flows in Balmers Canyon Creek are largely limited to ephemeral hillside runoff during the winter and spring. Dry during the summer, vegetation along the creek is limited to upland grasses and several upland shrubs.

The Washington Department of Fish and Wildlife (WDFW) confirms that fish, including Mid-Columbia River Distinct Population Segment steelhead (federally Threatened), can access both streams (**Attachment 1**).

Since both streams are considered to be Type F (fish-bearing), the city is likely to require a 50-foot (ft) stream buffer plus a 15-ft building setback, (totaling 65 ft) (**Figure 1**) per the Cle Elum Municipal Code (CEMC[6]) Table 18.01-5 and CEMC section 18.01.070.C.1.k, respectively.

Wetlands

The National Wetlands Inventory (NWI)[7] maps the Town Ditch as "Riparian" but does not demarcate wetlands in the vicinity or show the presence of Balmers Canyon Creek. However, Kittitas County[8] maps potential wetlands in association with the Town Ditch.

A reconnaissance-level wetland evaluation was completed for the parcels on November 22, 2023 and a verification visit to confirm evaluation findings was performed on September 30, 2025. Wetlands were investigated following routine methods described in the *Corps of Engineers Wetlands Delineation Manual*[9] and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*.[10] Plants were identified by scientific name, with their wetland ratings listed per Corps (2022).[11] Wetlands were rated in reference to the *Washington State Wetland Rating System for Eastern Washington – 2014 Update*[12] and classified

[6] Cle Elum Municipal Code (current as of 8/12/2025) available at: https://cleelum.municipal.codes/
[7] United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI). NWI Mapper. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/
[8] Kittitas County COMPAS. Available at: https://kitcogis.maps.arcgis.com/apps/webappviewer/index.html?id=8bcc146d9c2847acb2e9aa239187c25e
[9] Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Vicksburg (MS): US Army Engineer Waterways Experiment Station. Technical Report Y-87-1. Available at: https://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf
[10] US Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast (Version 2.0), Wakeley JS, Lichvar RW, Noble CV, editors. Vicksburg (MS): US Army Engineer Research and Development Center. ERDC/EL TR-08-28. Available at: https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/. Available at: https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/
[11] U.S. Army Corps of Engineers. 2022. National Wetland Plant List, version 3.6. https://wetland-plants.sec.usace.army.mil/
[12] Hruby T. 2014. Washington State Wetland Rating System for Eastern Washington – 2014

GG Environmental, LLC
151 Poulin Rd. Selah, WA 98942
(509) 426-5645 mobile
gg@gg-env.com | www.gg-env.com

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

following the United States Fish and Wildlife Service (USFWS) *Cowardin Classification System*[13] and *Hydrogeomorphic Classification System* (HGM)[14].

Shallow water was flowing in the Town Ditch during fieldwork, supporting patches of watercress (*Nasturtium officinale*) (OBL[15]) and trace cattails (*Typha latifolia*) (OBL). Dry (upland) banks support coyote willow (*Salix exigua*) (FACW), rose (*Rosa* sp.) (likely FAC), and snowberry (*Symphoricarpos albus*) (FACU). Two delineation samples were evaluated (**Figure 1**). Since all three requisite wetland indicators (hydrology, hydric soil, and wetland plants) were observed in the lower portion of the ditch, a single *Riverine* wetland unit (Wetland Unit 1 (WU-1)) was delineated, encompassing the ditch bottom.

WU-1 rated as Category III with 5 habitat points. As such, the city is likely to require a 60-foot (ft) wetland buffer plus a 15-ft building setback, (totaling 75 ft) (**Figure 1**) per CEMC Table 18.01-1 and CEMC section 18.01.070.A.7, respectively.

An Ecology rating form for WU-1 and delineation forms are included as **Attachment 2**.

Notes:

1. For the wetland buffer to be 60 ft per CEMC Table 18-01-1, minimization measures must be implemented per CEMC Table 18.01-2 and a habitat corridor provided.
2. Since the wetland rating habitat score is 5 points, only Table 18.01-2 is required for the use of Table 18.01-1, per CEMC 18.01.070(A)(2)(b).
3. Buffer radii may be reduced up to 25% via *Buffer Averaging* (CEMC 18.01.070.A.8 for wetlands, CEMC 18.01.070(C)(1)(i) for streams). Greater reduction may be possible if the applicant can demonstrate an acceptable *Reasonable Use* as described in CEMC Section 18.01.090. Total buffer area after averaging must equal the area required without averaging.
4. A buffer can be interrupted by an existing legally established public road, private access road, and/or buildings. As such, the city may determine that the buffer does not extend landward of the existing improvements, provided that the proposed use and/or development will not have a detrimental impact to the critical area (CEMC 18.01.070(A)(4) for wetlands, CEMC 18.01.070(C)(1)(h) for

---

Update. Department of Ecology Publication. Publication #14-06-030. Available at: https://fortress.wa.gov/ecy/publications/SummaryPages/1406030.html

[13] Cowardin L.M., Carter V., Golet F.C., LaRoe E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States. US Fish and Wildlife Service. Washington DC. FWS/OBS-79/31. Available at: https://www.fws.gov/wetlands/Documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States.pdf

[14] Brinson, M.M. 1993. A Hydrogeomorphic Classification for Wetlands. Vicksburg (MS): US Army Engineer Waterways Experiment Station. Technical Report WRP-DE-4.

[15] Wetland obligate plants (OBL) almost always occurs in wetlands; FACW Facultative Wetland Plants that usually occurs in wetlands but may occur in non-wetlands; FAC Facultative Wetland Plants that occur in wetlands and non-wetlands; FACU Facultative Upland Plants that usually occur in non-wetlands but may occur in wetlands. See: https://www.fws.gov/wetlands/documents/National-Wetland-Plant-List-Indicator-Rating-Definitions.pdf

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

streams). NOTE: It is possible that the wetland buffer is entirely interrupted by the encompassing paved sidewalk and roadway surfaces.

5. A fifteen-foot building setback is required from the landward edge of any wetland or stream buffer (CEMC 18.01.070(A)(7) for wetlands, CEMC 18.01.070(C)(1)(k) for streams). Minor intrusions into the area of the building setback may be allowed if the city determines that such intrusions will not negatively impact the wetland. The setbacks shall be shown on all site plans submitted with the application.
6. WDFW has expressed interest in providing assistance with buffer challenges relative to the streams (**Attachment 1**). A conversation with WDFW is recommended to get a feel for what options are possible in designing the project to accommodate critical areas protection.

Limitations:

The data presented herein reflect site conditions encountered on November 22, 2023 and September 30, 2025. Work was performed in accordance with accepted standards for professional wetland biologists and applicable federal, state, and local ordinances. Although these findings are accurate and complete to the best of scientific knowledge, the conclusions herein should be considered as preliminary until they have been reviewed and approved in writing by the appropriate jurisdictional authorities.

Should you have any questions or comments regarding the contents of this memorandum, please feel free to reach out at any time.

Best Regards,



Geoffrey Gray, MA, PWS
GG Environmental, LLC
151 Poulin Rd. Selah, WA 98942
gg@gg-env.com. www.gg-env.com
509-426-5645 mobile

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

Attachment 1. Fish Presence – WDFW Email

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

Geoffrey Gray

From: Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>
Sent: Monday, November 27, 2023 8:46 AM
To: Geoffrey Gray; Downes, Scott G (DFW)
Cc: Torrey, Elizabeth M (DFW)
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

Geoff,
While there are some fish passage issues from the mainstem Yakima to the point where Town Ditch daylights, it is possible O. mykiss are present.
Jen

From: Geoffrey Gray <gg@gg-env.com>
Sent: Wednesday, November 22, 2023 5:18 PM
To: Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>; Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>
Cc: Torrey, Elizabeth M (DFW) <Elizabeth.Torrey@dfw.wa.gov>
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

External Email

Thanks for the phone conversation today, Jen.

As I shared on the phone, I stopped by City Public Works (E 3rd St/Short Ave) today and spoke with "Aaron." He said the culvert that feeds the upper end of Town Ditch is really long, paralleling E 2nd Street underground with no daylighting. It collects city stormwater runoff as well as hillside ephemeral flow from the north.

One more question, since it impacts the wetland rating form: would you consider the Town Ditch to be habitat for ESA-listed bull trout or steelhead? Thanks! GG

From: Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>
Sent: Wednesday, November 22, 2023 7:41 AM
To: Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>; Geoffrey Gray <gg@gg-env.com>
Cc: Torrey, Elizabeth M (DFW) <Elizabeth.Torrey@dfw.wa.gov>
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

I would also add that currently there is very little vegetation along either watercourse on this parcel, so not only the setback, but anything you could do to help to advocate for some planting (even just shrubs, trees would be awesome though) along the water course would be a great benefit to the streams. If they were interested, I'm sure we could help them out on some planting ideas.

Scott
Scott Downes
Fish & Wildlife Habitat Biologist
Washington Department of Fish and Wildlife
Region 3 Habitat Program
1701 South 24th Ave
Yakima, WA 98902-5720

Scott.Downes@dfw.wa.gov
Cell-509-607-3578

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

From: Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>
Sent: Wednesday, November 22, 2023 7:36 AM
To: Geoffrey Gray <gg@gg-env.com>; Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>
Cc: Torrey, Elizabeth M (DFW) <Elizabeth.Torrey@dfw.wa.gov>
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

Yes, Geoff, we would expect the City to regulate this critical area according to their recently approved ordinance or future ordinances at the time of a project application. They will have their periodic update again in 2026 and while I can't predict the future, buffers don't usually decrease and we will advocate for buffers in alignment with our BAS and PHS recommendations.

I hope this helps,
Jen

From: Geoffrey Gray <gg@gg-env.com>
Sent: Tuesday, November 21, 2023 5:54 PM
To: Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>; Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>
Cc: Torrey, Elizabeth M (DFW) <Elizabeth.Torrey@dfw.wa.gov>
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

External Email

Thank you both for your feedback. Wowsers, Jen – that information is super useful.

The parcel is for sale and I am working with a potential buyer – who wants me to complete a critical areas risk assessment. Since the two streams exhibit alignments in close proximity to the parcel boundary, I would imagine they could be largely avoided. However, if buffers are set at 50 ft (Type F) + 15-ft building setback, that would eat into the buildable area. Plus, fish passage for crossing either stream would cost $$ as well.

Jen - based on prior precedent, would you expect the city to apply a 50-ft Type F buffer for both streams in this case?

BTW, I have an inquiry in with Mike Englehardt regarding the water source in Town Ditch. I'll pass along whatever I find out.

Thanks again, you two. Happy Thanksgiving!!

Geoffrey Gray, MA, PWS
GG Environmental - Wetlands. Fish. Wildlife.
151 Poulin Rd. Selah, WA 98942
509.426.5645 mobile/text
gg@gg-env.com. www.gg-env.com

From: Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>
Sent: Tuesday, November 21, 2023 4:45 PM

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

To: Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>; Geoffrey Gray <gg@gg-env.com>
Cc: Torrey, Elizabeth M (DFW) <Elizabeth.Torrey@dfw.wa.gov>
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

Hi Geoff,
You're right at the location where "Town Ditch" daylights and Balmer's Canyon Creek flows into it. The origins of Town Ditch are a bit of a mystery (to me), but from this point where it daylights and joins with Balmer's, we consider it a fish bearing stream. As Scott mentioned, we have documented fish upstream and downstream of this location.

In 2017-2018 I met with Lucy (City planner) and some project proponents who were planning a project and we told them we were going to require fish passage at this location. I've attached some annotated photos from that exercise.

I'd be more than happy to chat more about their plans, concerns, or questions.

Thanks for checking in with us, Geoff!
Happy Thanksgiving,
Jen

Jennifer Nelson
Washington Department of Fish and Wildlife
Habitat Program
Ellensburg, WA 98926
(509) 961-6639 Mobile

From: Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>
Sent: Tuesday, November 21, 2023 4:04 PM
To: Geoffrey Gray <gg@gg-env.com>
Cc: Nelson, Jennifer L (DFW) <Jennifer.Nelson@dfw.wa.gov>
Subject: RE: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought

Geoff,
Sorry was in the field today, actually in Cle Elum. I believe that stream has fish. The stream right behind it (next to Dru Brew) is Balmer's Canyon Stream and we've seen fish right next to Dru Brew. Cc'ing Jen so she can weigh in. I'm more familiar with Balmer's and she probably is more familiar with this adjacent watercourse. Are you at liberty to say what's planned for that lot? It doesn't have much now, but would be great to get some plants along the waterway, including up along Balmer's.

Scott
Scott Downes
Fish & Wildlife Habitat Biologist
Washington Department of Fish and Wildlife
Region 3 Habitat Program
1701 South 24th Ave
Yakima, WA 98902-5720
Scott.Downes@dfw.wa.gov
Cell-509-607-3578

From: Geoffrey Gray <gg@gg-env.com>
Sent: Tuesday, November 21, 2023 8:32 AM
To: Downes, Scott G (DFW) <Scott.Downes@dfw.wa.gov>
Subject: Type 4N stream in downtown Cle Elum - FIsh Presence Input Sought
Importance: High

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

External Email

Good Morning, Scott.

I am conducting a critical areas risk assessment for a city block in Cle Elum within which a stream is mapped. The county shows it as Type 4N, DNR = N, and the NHD maps it as an intermittent stream. Historic topo maps back to 1897 do not map a stream in this location. The stream is fed by a culvert. I will be contacting the city to determine where this water comes from, but if you know already, I'd appreciate the information.

The attached Google Earth KML will show you where the stream is.

Given that Thanksgiving is around the corner, I wouldn't be surprised if you are hard to reach this week but I'll follow up with a text and phone call to see if you are around.

Cheers, GG

Geoffrey Gray, MA, PWS
GG Environmental - Wetlands. Fish. Wildlife.
151 Poulin Rd. Selah, WA 98942
509.426.5645 mobile/text
gg@gg-env.com. www.gg-env.com

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

Attachment 2. Ecology Rating and Wetland Delineation forms

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

RATING SUMMARY – Eastern Washington

Name of wetland (or ID #): Wetland Unit 1 (WU-1) Date of site visit: 11/22/2023

Rated by Geoffrey Gray, MA, PWS Trained by Ecology? ☑ Yes ☐ No Date of training 2014, 2018

HGM Class used for rating Riverine Wetland has multiple HGM classes? ☐ Yes ☑ No

NOTE: Form is not complete with out the figures requested (*figures can be combined*).
Source of base aerial photo/map Google Satellite

OVERALL WETLAND CATEGORY III (based on functions ☑ or special characteristics ☐)

1. Category of wetland based on FUNCTIONS

_____ **Category I** - Total score = 22 - 27
_____ **Category II** - Total score = 19 - 21
X **Category III** - Total score = 16 - 18
_____ **Category IV** - Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	List appropriate rating (H, M, L)			
Site Potential	L	L	L	
Landscape Potential	H	M	L	
Value	H	M	H	**Total**
Score Based on Ratings	7	5	5	**17**

Score for each function based on three ratings (*order of ratings is not important*)

9 = H, H, H
8 = H, H, M
7 = H, H, L
7 = H, M, M
6 = H, M, L
6 = M, M, M
5 = H, L, L
5 = M, M, L
4 = M, L, L
3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Vernal Pools	
Alkali	
Wetland of High Conservation Value	
Bog and Calcareous Fens	
Old Growth or Mature Forest - slow growing	
Aspen Forest	
Old Growth or Mature Forest - fast growing	
Floodplain forest	
None of the above	**X**

Maps and Figures required to answer questions correctly for Eastern Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	D 1.3, H 1.1, H 1.5	
Hydroperiods (including area of open water for H 1.3)	D 1.4, H 1.2, H 1.3	
Location of outlet (*can be added to map of hydroperiods*)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (*can be added to another figure*)	D 2.2, D 5.2	
Map of the contributing basin	D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	1
Hydroperiods	H 1.2, H 1.3	1
Ponded depressions	R 1.1	1
Boundary of area within 150 ft of the wetland (*can be added to another figure*)	R 2.4	1
Map of the contributing basin	R 2.2, R 2.3, R 5.2	2
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	1
Width of wetland vs. width of stream (*can be added to another figure*)	R 4.1	1
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	3
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	4
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	R 3.2, R 3.3	4

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	L 1.1, L 4.1, H 1.1, H 1.5	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (*can be added to another figure*)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	
Hydroperiods	H 1.2, H 1.3	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above*)	S 4.1	
Boundary of area within 150 ft of the wetland (*can be added to another figure*)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	S 3.3	

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

HGM Classification of Wetland in Eastern Washington

For questions 1 - 4, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1 - 4 apply, and go to Question 5.

1. Does the entire unit **meet both** of the following criteria?
   - ☐ The vegetated part of the wetland is on the water side of the Ordinary High Water Mark of a body of permanent open water (without any plants on the surface) that is at least 20 ac (8 ha) in size
   - ☐ At least 30% of the open water area is deeper than 10 ft (3 m)

   ☑ NO - go to 2 ☐ **YES** - The wetland class is **Lake Fringe** (Lacustrine Fringe)

2. Does the entire wetland unit meet all of the following criteria?
   - ☐ The wetland is on a slope (*slope can be very gradual*),
   - ☐ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks;
   - ☐ The water leaves the wetland **without being impounded**.

   ☑ NO - go to 3 ☐ **YES** - The wetland class is **Slope**

   NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 foot deep).

3. Does the entire wetland unit **meet all** of the following criteria?
   - ☑ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river;
   - ☑ The overbank flooding occurs at least once every 10 years.

   ☐ NO - go to 4 ☑ **YES** - The wetland class is **Riverine**

   NOTE: The Riverine wetland can contain depressions that are filled with water when the river is not flooding.

4. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

   ☑ NO - go to 5 ☐ **YES** - The wetland class is **Depressional**

5. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1 - 4 APPLY TO DIFFERENT AREAS IN THE WETLAND UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM Class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine (the riverine portion is within the boundary of depression)	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine

If you are still unable to determine which of the above criteria apply to your wetland, or if you have ***more than 2 HGM classes*** *within a wetland boundary, classify the wetland as Depressional for the rating.*

NOTES and FIELD OBSERVATIONS:
Town Ditch is fed by city stormwater runoff and ephemeral stream flow. Very steep, excavated, and maintained ditch banks are trimmed of vegetation and the ditch is kept clear of accumulated debris and sediment.

The wetland occurs at the ditch bottom, the boundary of which terminates at the bank toe. The wetland supports patches of watercress with trace cattails at the west end. The banks (upland) support coyote willow (along with rose and snowberry) but woody vegetation is mowed and not significantly rooted within the wetland boundary. Watercress, although classified as a Palustrine Emergent (PEM) plant, does little to reduce flood flows per question R 4.2.

R 1.2 - Wetland banks are mowed which functionally equates to grazing.
R 5.1 - Given the steep banks of the ditch, the stream is considered to function as downcut.
H 3.1, Appendix B - No PHS-listed habitats or species are present within the immediate vicinity of the Cle Elum city limits. WDFW considers the Town Ditch to support MCR DPS steelhead (federally Threatened).

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

RIVERINE WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

	Points (only 1 score per box)
R 1.0. Does the site have the potential to improve water quality?	
R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:	
Depressions cover > $^1/_3$ area of wetland — points = 6	0
Depressions cover > $^1/_{10}$ area of wetland — points = 3	
Depressions present but cover < $^1/_{10}$ area of wetland — points = 1	
No depressions present — points = 0	
R 1.2. Structure of plants in the wetland (areas with > 90% cover at person height; **not** Cowardin classes):	
Forest or shrub > $^2/_3$ the area of the wetland — points = 10	2
☐ Forest or shrub $^1/_3 - ^2/_3$ area of the wetland — points = 5	
☐ Ungrazed, herbaceous plants > $^2/_3$ area of wetland — points = 5	
Ungrazed herbaceous plants $^1/_3 - ^2/_3$ area of wetland — points = 2	
Forest, shrub, and ungrazed herbaceous < $^1/_3$ area of wetland — points = 0	
Total for R 1 — Add the points in the boxes above	**2**

Rating of Site Potential If score is: ☐ **12 - 16 = H** ☐ **6 - 11 = M** ☑ **0 - 5 = L** *Record the rating on the first page*

R 2.0. Does the landscape have the potential to support the water quality function of the site?		
R 2.1. Is the wetland within an incorporated city or within its UGA?	Yes = 2 No = 0	2
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area?	Yes = 1 No = 0	1
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years?	Yes = 1 No = 0	0
R 2.4. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	1
R 2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R 2.1 - R 2.4? Sources Stormwater runoff culverted into wetland.	Yes = 1 No = 0	1
Total for R 2	Add the points in the boxes above	**5**

Rating of Landscape Potential If score is: ☑ **3 - 6 = H** ☐ **1 or 2 = M** ☐ **0 = L** *Record the rating on the first page*

R 3.0. Is the water quality improvement provided by the site valuable to society?		
R 3.1. Is the wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	Yes = 1 No = 0	0
R 3.2. Does the river or stream have TMDL limits for nutrients, toxics, or pathogens?	Yes = 1 No = 0	0
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (*Answer YES if there is a TMDL for the drainage in which the unit is found*).	Yes = 2 No = 0	2
Total for R 3	Add the points in the boxes above	**2**

Rating of Value If score is: ☑ **2 - 4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

RIVERINE WETLANDS

Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosion

Points (only 1 score per box)

R 4.0. Does the site have the potential to reduce flooding and erosion?

R 4.1. Characteristics of the overbank storage the wetland provides:

Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between banks).

If the ratio is more than 2	points = 10	1
If the ratio is 1 - 2	points = 8	
If the ratio is ½ - < 1	points = 4	
If the ratio is ¼ - < ½	points = 2	
If the ratio is < ¼	points = 1	

R 4.2. Characteristics of plants that slow down water velocities during floods: *Treat large woody debris as forest or shrub. Choose the points appropriate for the best description (polygons need to have > 90% cover at person height. These are NOT Cowardin classes).*

Forest or shrub for more than $^2/_3$ the area of the wetland	points = 6	2
Forest or shrub for > $^1/_3$ area OR emergent plants > $^2/_3$ area	points = 4	
Forest or shrub for > $^1/_{10}$ area OR emergent plants > $^1/_3$ area	points = 2	
Plants do not meet above criteria	points = 0	

Total for R 4	Add the points in the boxes above	**3**

Rating of Site Potential If score is: ☐ **12 - 16 = H** ☐ **- 11 = M** ☑ **) - 5 = L** *Record the rating on the first page*

R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?

R 5.1. Is the stream or river adjacent to the wetland downcut?	Yes = 0 No = 1	0
R 5.2. Does the up-gradient watershed include a UGA or incorporated area?	Yes = 1 No = 0	1
R 5.3. Is the up-gradient stream or river controlled by dams?	Yes = 0 No = 1	1
Total for R 5	Add the points in the boxes above	**2**

Rating of Landscape Potential If score is: ☐ **3 = H** ☑ **or 2 = M** ☐ **) = L** *Record the rating on the first page*

R 6.0. Are the hydrologic functions provided by the site valuable to society?

R 6.1. Distance to the nearest areas downstream that have flooding problems?

Choose the description that best fits the site.

The sub-basin immediately down-gradient of the site has flooding problems that result in damage to human or natural resources	points = 2	1
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
No flooding problems anywhere downstream	points = 0	

R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	Yes = 2 No = 0	0
Total for R 6	Add the points in the boxes above	**1**

Rating of Value If score is: ☐ **2 - 4 = H** ☑ **1 = M** ☐ **0 = L** *Record the rating on the first page*

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

(only 1 score per box)

H 1.0. Does the wetland have the potential to provide habitat for many species?

H 1.1. Structure of plant community:

Check the Cowardin vegetation classes present and categories of emergent plants. Size threshold for each category is > = ¼ ac or > = 10% of the wetland if wetland is < 2.5 ac.

- ☐ Aquatic bed
- ☑ Emergent plants 0 - 12 in (0-30 cm) high are the highest layer and have > 30% cover
- ☐ Emergent plants > 12 - 40 in (> 30-100 cm) high are the highest layer with >30% cover
- ☐ Emergent plants > 40 in (> 100 cm) high are the highest layer with >30% cover
- ☐ Scrub-shrub (areas where shrubs have > 30% cover)
- ☐ Forested (areas where trees have > 30% cover)

4 or more checks: points = 3
3 checks: points = 2
2 checks: points - 1
1 check: points = 0

0

H 1.2. Is one of the vegetation types Aquatic Bed? Yes = 1 No = 0 — 0

H 1.3. Surface water

H 1.3.1. Does the wetland have areas of open water (without emergent or shrub plants) over at least ¼ ac **OR** 10% of its area during the March to early June **OR** in August to the end of September? *Answer YES for Lake Fringe wetlands.*

☐ Yes = 3 points & go to H 1.4 No = go to H 1.3.2

H 1.3.2. Does the wetland have an intermittent or permanent, and unvegetated stream within its boundaries, or along one side, over at least ¼ ac or 10% of its area? *Answer yes only if H 1.3.1 is No.*

☑ Yes = 3 No = 0

3

H 1.4. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2. *Different patches of the same species can be combined to meet the size threshold. You do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Russian olive, Phragmites, Canadian thistle, yellow-flag iris, and saltcedar (Tamarisk)*

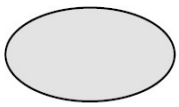
# of species _____

Scoring: > 9 species: points = 2
4 - 9 species: points = 1
< 4 species: points = 0

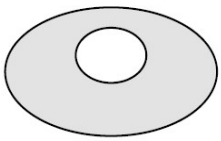
0

H 1.4. Interspersion of habitats

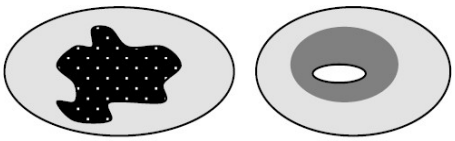
Decide from the diagrams below whether interspersion among types of plant structures (described in H 1.1), and unvegetated areas (open water or mudflats) is high, moderate, low, or none. *Use map of Cowardin and emergent plant classes prepared for questions H 1.1 and map of open water from H 1.3. If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

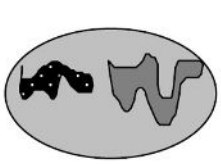


Low = 1 point

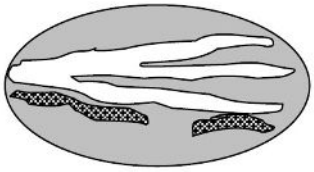


Moderate = 2 points

All three diagrams in this row are **HIGH** = 3 points







Riparian braided channels with 2 classes

0

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

H 1.6. Special habitat features:	
Check the habitat features that are present in the wetland. The number of checks is the number of points. ☐ Loose rocks larger than 4 in OR large, downed, woody debris (> 4 in diameter) within the area of surface ponding or in stream. ☑ Cattails or bulrushes are present within the wetland. ☐ Standing snags (diameter at the bottom > 4 in) in the wetland or within 30 m (100 ft) of the edge. ☑ Emergent or shrub vegetation in areas that are permanently inundated/ponded. ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 45 degree slope) OR signs of recent beaver activity ☑ Invasive species cover less than 20% in each stratum of vegetation (*canopy, sub-canopy, shrubs, herbaceous, moss/ground cover*)	3
Total for H 1 — Add the points in the boxes above	**6**

Rating of Site Potential If Score is: ☐ **15 - 18 = H** ☐ **7 - 14 = M** ☑ **0 - 6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support habitat functions of the site?	
H 2.1 Accessible habitat (only area of habitat abutting wetland). If total accessible habitat is: *Calculate:* 0 % undisturbed habitat + (0 % moderate & low intensity land uses / 2) = 0% > 1/3 (33.3%) of 1 km Polygon — points = 3 20 - 33% of 1 km Polygon — points = 2 10 - 19% of 1 km Polygon — points = 1 < 10 % of 1 km Polygon — points = 0	0
H 2.2. Undisturbed habitat in 1 km Polygon around wetland. *Calculate:* 16 % undisturbed habitat + (33 % moderate & low intensity land uses / 2) = 32.5% Undisturbed habitat > 50% of Polygon — points = 3 Undisturbed habitat 10 - 50% and in 1 - 3 patches — points = 2 Undisturbed habitat 10 - 50% and > 3 patches — points = 1 Undisturbed habitat < 10% of 1 km Polygon — points = 0	2
H 2.3 Land use intensity in 1 km Polygon: > 50% of 1 km Polygon is high intensity land use — points = (-2) Does not meet criterion above — points = 0	-2
H 2.4. The wetland is in an area where annual rainfall is less than 12 in, and its water regime is not influenced by irrigation practices, dams, or water control structures. *Generally, this means outside boundaries of reclamation areas, irrigation districts, or reservoirs* Yes = 3 No = 0	0
Total for H 2 — Add the points in the boxes above	**0**

Rating of Landscape Potential If Score is: ☐ **4 - 9 = H** ☐ **1 - 3 = M** ☑ **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated* . Site meets ANY of the following criteria: — points = 2 ☐ It has 3 or more priority habitats within 100 m (see Appendix B) ☑ It provides habitat for Threatened or Endangered species (any plant or animal on state or federal lists) ☐ It is mapped as a location for an individual WDFW species ☐ It is a Wetland of High Conservation Value as determined by the Department of Natural Resources ☐ It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats within 100 m (see Appendix B) — points = 1 Site does not meet any of the criteria above — points = 0	2

Rating of Value If Score is: ☑ **2 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Please determine if the wetland meets the attributes described below and circle the appropriate category. NOTE: A wetland may meet the criteria for more than one set of special characteristics. Record all those that apply. NOTE: All wetlands should also be characterized based on their functions.

Wetland Type	Category
Check off any criteria that apply to the wetland. List the category when the appropriate criteria are met.	
SC 1.0. Vernal Pools Is the wetland **less than 4000 ft²**, and does it meet at least **two** of the following criteria? ☐ Its only source of water is rainfall or snowmelt from a small contributing basin and has no groundwater input. ☐ Wetland plants are typically present only in the spring; the summer vegetation is typically upland annuals. *If you find perennial, obligate, wetland plants, the wetland is probably NOT a vernal pool.* ☐ The soil in the wetland is shallow [< 1 ft (30 cm) deep] and is underlain by an impermeable layer such as basalt or clay. ☐ Surface water is present for less than 120 days during the wet season. ☐ Yes - Go to **SC 1.1** ☑ No = **Not vernal pool** SC 1.1. Is the vernal pool relatively undisturbed in February and March? ☐ Yes – Go to **SC 1.2** ☐ No = **Not a vernal pool with special characteristics**	
SC 1.2. Is the vernal pool in an area where there are at least 3 separate aquatic resources within 0.5 mi (other wetlands, rivers, lakes etc.)? ☐ Yes = **Category II** ☐ No = **Category III**	
SC 2.0. Alkali wetlands Does the wetland meet **one** of the following criteria? ☐ The wetland has a conductivity > 3.0 mS/cm. ☐ The wetland has a conductivity between 2.0 and 3.0 mS, and more than 50% of the plant cover in the wetland can be classified as "alkali" species (see Table 4 for list of plants found in alkali systems). ☐ If the wetland is dry at the time of your field visit, the central part of the area is covered with a layer of salt. **OR** does the wetland unit meet two of the following three sub-criteria? ☐ Salt encrustations around more than 75% of the edge of the wetland ☐ More than ¾ of the plant cover consists of species listed on Table 4 ☐ A pH above 9.0. All alkali wetlands have a high pH, but please note that some freshwater wetlands may also have a high pH. Thus, pH alone is not a good indicator of alkali wetlands. ☐ Yes = **Category I** ☑ No = **Not an alkali wetland**	
SC 3.0. Wetlands of High Conservation Value (WHCV) SC 3.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? ☑ Yes - Go to **SC 3.2** ☐ No - Go to **SC 3.3** SC 3.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = **Category I** ☑ No = **Not WHCV** SC 3.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf ☐ Yes - **Contact WNHP/WDNR and to SC 3.4** ☐ No = **Not WHCV** SC 3.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? ☐ Yes = **Category I** ☐ No = **Not WHCV**	

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

SC 4.0. Bogs and Calcareous Fens

Does the wetland (or any part of the wetland unit) meet both the criteria for soils and vegetation in bogs or calcareous fens? Use the key below to identify if the wetland is a bog or calcareous fen. ***If you answer yes you will still need to rate the wetland based on its functions.***

SC 4.1. Does an area within the wetland have organic soil horizons (i.e., layers of organic soil), either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? *See Appendix C for a field key to identify organic soils.*

☐ Yes - Go to **SC 4.3** ☑ No - Go to **SC 4.2**

SC 4.2. Does an area within the wetland have organic soils, either peats or mucks, that are less than 16 in deep over bedrock or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?

☐ Yes - Go to **SC 4.3** ☑ No = **Is not a bog for rating**

SC 4.3. Does an area within the wetland have more than 70% cover of mosses at ground level AND at least 30% of the total plant cover consists of species in Table 5?

☐ Yes = **Category I bog** ☐ No - Go to **SC 4.4**

NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 5 are present, the wetland is a bog.

SC 4.4. Is an area with peats or mucks forested (> 30% cover) with subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 5 provide more than 30% of the cover under the canopy?

☐ Yes = **Category I bog** ☐ No - Go to **SC 4.5**

SC 4.5. Do the species listed in Table 6 comprise at least 20% of the total plant cover within an area of peats and mucks?

☐ Yes = **Is a Calcareous Fen for purpose of rating** ☐ No - Go to **SC 4.6**

SC 4.6. Do the species listed in Table 6 comprise at least 10% of the total plant cover in an area of peats and mucks, AND one of the two following conditions is met:

☐ Marl deposits [calcium carbonate ($CaCO_3$) precipitate] occur on the soil surface or plant stems

☐ The pH of free water is ≥ 6.8 AND electrical conductivity is ≥ 200 uS/cm at multiple locations within the wetland

☐ Yes = **Is a Category I calcareous fen** ☐ No = **Is not a calcareous fen**

SC 5.0. Forested Wetlands

Does the wetland have an area of forest rooted within its boundary that meets **at least one** of the following three criteria? (*Continue only if you have identified that a forested class is present in question H*

☐ The wetland is within the 100 year floodplain of a river or stream

☐ Aspen (*Populus tremuloides*) represents at least 20% of the total cover of woody species

☐ There is at least ¼ ac of trees (even in wetlands smaller than 2.5 ac) that are "mature" or "old-growth" according to the definitions for these priority habitats developed by WDFW (*see definitions in question H3.1*)

☐ Yes - Go to **SC 5.1** ☑ No = **Not a forested wetland with special characteristics**

SC 5.1. Does the wetland have a forest canopy where more than 50% of the tree species (by cover) are slow growing native trees (*see Table 7*)?

☐ Yes = **Category I** ☐ No - Go to **SC 5.2**

SC 5.2. Does the wetland have areas where aspen (*Populus tremuloides*) represents at least 20% of the total cover of woody species?

☐ Yes = **Category I** ☐ No - Go to **SC 5.3**

SC 5.3. Does the wetland have at least ¼ acre with a forest canopy where more than 50% of the tree species (by cover) are fast growing species (*see Table 7*)?

☐ Yes = **Category II** ☐ No - Go to **SC 5.4**

SC 5.4. Is the forested component of the wetland within the 100 year floodplain of a river or stream?

☐ Yes = **Category II** ☐ No = **Not a forested wetland with special characteristics**

Category of wetland based on Special Characteristics

Choose the highest rating if wetland falls into several categories

If you answered No for all types, enter "Not Applicable" on Summary Form

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

Appendix B: WDFW Priority Habitats in Eastern Washington

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp.
http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here:
http://wdfw.wa.gov/conservation/phs/list/

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE**: This question is independent of the land use between the wetland unit and the priority habitat.*

- ☐ **Aspen Stands**: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- ☐ **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- ☐ **Old-growth/Mature forests**: Old-growth east of Cascade crest – Stands are highly variable in tree species composition and structural characteristics due to the influence of fire, climate, and soils. In general, stands will be >150 years of age, with 10 trees/ac (25 trees/ha) that are > 21 in (53 cm) dbh, and 1-3 snags/ac (2.5-7.5 snags/ha) that are > 12-14 in (30-35 cm) diameter. Downed logs may vary from abundant to absent. Canopies may be single or multi-layered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem's essential structures and functions. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west and 80-160 years old east of the Cascade crest.
- ☐ **Oregon White Oak**: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- ☐ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- ☐ **Caves**: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- ☐ **Cliffs**: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- ☐ **Talus**: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- ☐ **Snags and Logs**: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.
- ☐ **Shrub-steppe**: A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).
- ☐ **Eastside Steppe**: Nonforested vegetation type dominated by broadleaf herbaceous flora (i.e., forbs), perennial bunchgrasses, or a combination of both. Bluebunch wheatgrass (*Pseudoroegneria spicata*) is often the prevailing cover component along with Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda*), rough fescue (*F. campestris*), or needlegrasses (*Achnatherum* spp.).
- ☐ **Juniper Savannah**: All juniper woodlands.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

WU-1 (RIVERINE)
R 1.1: no depressions
R 1.2: PEM 1/3-2/3 wetland area
R 2.4: >10% within 150' generates pollutants
R 4.1: wetland to stream ratio: <1/4
R 4.2: PEM > 1/3 area
H 1.1: emergents 0-12 in @ >30% cover
H 1.2: no aquatic bed
H 1.3: stream present
H 1.5: no interspersion

N Floral Ave

E 2nd St

Town Ditch --->

Town Ditch --->

LEGEND

- 150-ft radius
- Wetland Unit 1 (WU-1)
- Type F stream OHWM
- culvert

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

Direct questions regarding this map to:
Geoffrey Gray, MA, PWS (GG Environmental, LLC)
509-426-5645 mobile | gg@gg-env.com

ECOLOGY RATING FORM - FIGURE 1

Map date: November 27, 2023
Aerial: April 17, 2021 (Google)

Kittitas County Parcels 563134, 573134, 583134
E 2nd St and N Floral Ave
Cle Elum city limits

0 50 ft

GG Environmental, LLC
WETLANDS • FISH • WILDLIFE

LEGEND

watershed (2 drainages)

CityUGA

WU-1

Direct questions regarding this map to:
Geoffrey Gray, MA, PWS (GG Environmental, LLC)
509-426-5645 mobile | gg@gg-env.com

ECOLOGY RATING FORM - FIGURE 2

Kittitas County Parcels 563134, 573134, 583134
E 2nd St and N Floral Ave
Cle Elum city limits

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

0 1,000 ft

Map date: November 26, 2023
Watersheds: USGS StreamStats

GG Environmental, LLC
WETLANDS • FISH • WILDLIFE

WU-1

1-km radius (790 ac) - 100%

Habitat Disturbance

- high (400 ac) - 51%
- moderate (269 ac) - 33%
- low (121 ac) 16%
- accessible habitat (3 ac) - <1%

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

Direct questions regarding this map to:
Geoffrey Gray, MA, PWS (GG Environmental, LLC)
509-426-5645 mobile | gg@gg-env.com

ECOLOGY RATING FORM - FIGURE 3

Kittitas County Parcels 563134, 573134, 583134
E 2nd St and N Floral Ave
Cle Elum city limits

0 1,000 ft

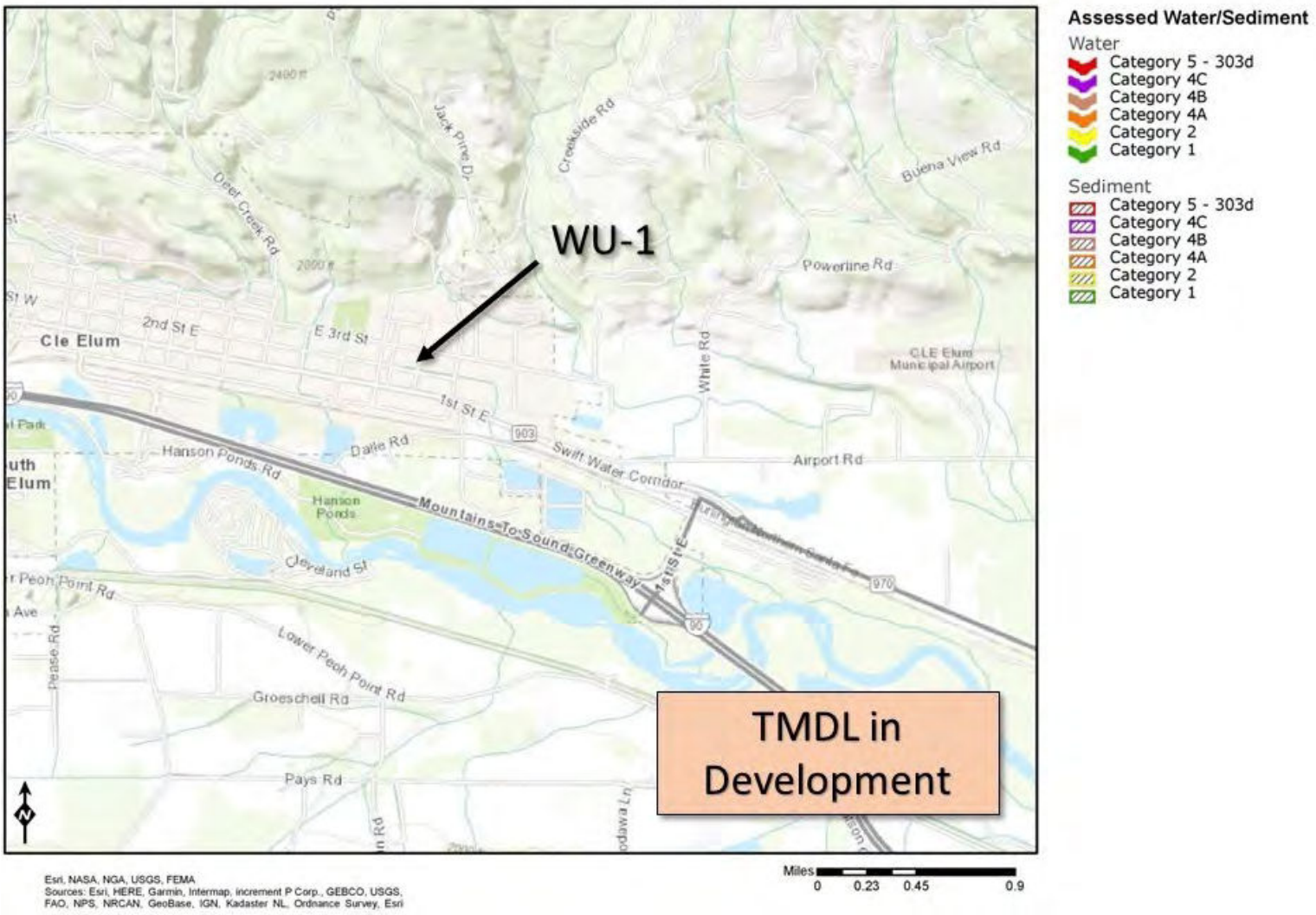
Map date: November 26, 2023
Aerial: Google satellite

GG Environmental, LLC
WETLANDS • FISH • WILDLIFE

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

November 26, 2023

ECOLOGY RATING – FIGURE 4



U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region

See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Cle Elum parcels 563134, 573134, 583134 City/County: Cle Elum/Kittitas County Sampling Date: 11-22-2023

Applicant/Owner: Habitat for Humanity - Seattle-King & Kittitas Counties State: WA Sampling Point: 1

Investigator(s): Geoffrey Gray, MA, PWS Section, Township, Range: T20N-R15E-S25

Landform (hillside, terrace, etc.): ditch (stream) bank Local relief (concave, convex, none): convex Slope (%): 45

Subregion (LRR): LRR A, MLRA 6 Lat: 47°11'36.69"N Long: 120°55'8.80"W Datum: WGS84

Soil Map Unit Name: 208—Patnish-Mippon-Myzel complex, 0 to 3 percent slopes NWI classification: UPLAND

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Town Ditch receives culverted stormwater and hillside stream runoff. Banks excavated (steep), located in Cle Elum city limits, and ditch is subject to regular vegetation control and culvert maintenance. Wetland boundary occurs at the bank toe (at OHWM).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 20 ft x 20 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft x 15 ft)			
1. *Symphoricarpos albus*	80	Yes	FACU
2. *Salix exigua*	10	No	FACW
3.			
4.			
5.			
	90	=Total Cover	
Herb Stratum (Plot size: 5 ft x 5 ft)			
1. *Cirsium arvense*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10	=Total Cover	
Woody Vine Stratum (Plot size: 5 ft x 5 ft)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		370 (B)

Prevalence Index = B/A = 3.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ 5 - Wetland Non-Vascular Plants[1]
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:
Shrubs were recently trimmed and their stems exhibit 100% coverage at the herbaceous level.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetter than normal climatic conditions prevailed the three aggregate months prior to fieldwork.

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region

See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Cle Elum parcels 563134, 573134, 583134 City/County: Cle Elum/Kittitas County Sampling Date: 11-22-2023

Applicant/Owner: Habitat for Humanity - Seattle-King & Kittitas Counties State: WA Sampling Point: 2

Investigator(s): Geoffrey Gray, MA, PWS Section, Township, Range: T20N-R15E-S25

Landform (hillside, terrace, etc.): ditch (stream) bank Local relief (concave, convex, none): convex Slope (%): 45

Subregion (LRR): LRR A, MLRA 6 Lat: 47°11'36.69"N Long: 120°55'8.80"W Datum: WGS84

Soil Map Unit Name: 208—Patnish-Mippon-Myzel complex, 0 to 3 percent slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Town Ditch receives culverted stormwater and hillside stream runoff. Excavated (steep banks) and located in Cle Elum city limits, the ditch is subject to regular vegetation control and culvert maintenance. Wetland boundary occurs at the bank toe (at OHWM). Pit dug at bank toe.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 20 ft x 20 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft x 15 ft)			
1. *Salix exigua*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5 ft x 5 ft)			
1. *Typha latifolia*	50	Yes	OBL
2. *Rumex crispus*	40	Yes	FAC
3. *Epilobium ciliatum*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 5 ft x 5 ft)			
1.			
2.			
	____ =Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	20	x 2 =	40
FAC species	40	x 3 =	120
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	110 (A)		210 (B)

Prevalence Index = B/A = 1.91

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ 5 - Wetland Non-Vascular Plants[1]
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:
Salix exigua was trimmed.

RECEIVED
By Virgil Amick at
11:45 am, October 8, 2026

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/2	100					Loamy/Clayey	
6-14	10Y 4/1	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- X Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetter than normal climatic conditions prevailed the three aggregate months prior to fieldwork. Oxidized root channels observed in a thin band from 5-6 inches in depth.