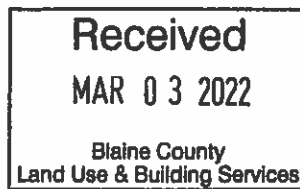


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**SAWTOOTH
ENVIRONMENTAL
CONSULTING, LLC**



Memo

To: Indian Creek Ranch Homeowners Association
Sean Flynn – Galen Engineering, Inc

From: Trent Stumph – Sawtooth Environmental Consulting, LLC

Date: August 18, 2021

Re: Lemhi Drive, Indian Creek Ranches, No. 1 Preliminary Jurisdictional Determination Wetland Delineation

May 19, 2021 Sawtooth Environmental Consulting, LLC (SEC), conducted preliminary jurisdictional determination wetland delineation for the identified project area associated with Lemhi Drive access roadway, Indian Creek Ranches, No. 1, located within Section 33, Township 3 North, Range 18 East, B.M., Blaine County, Idaho.

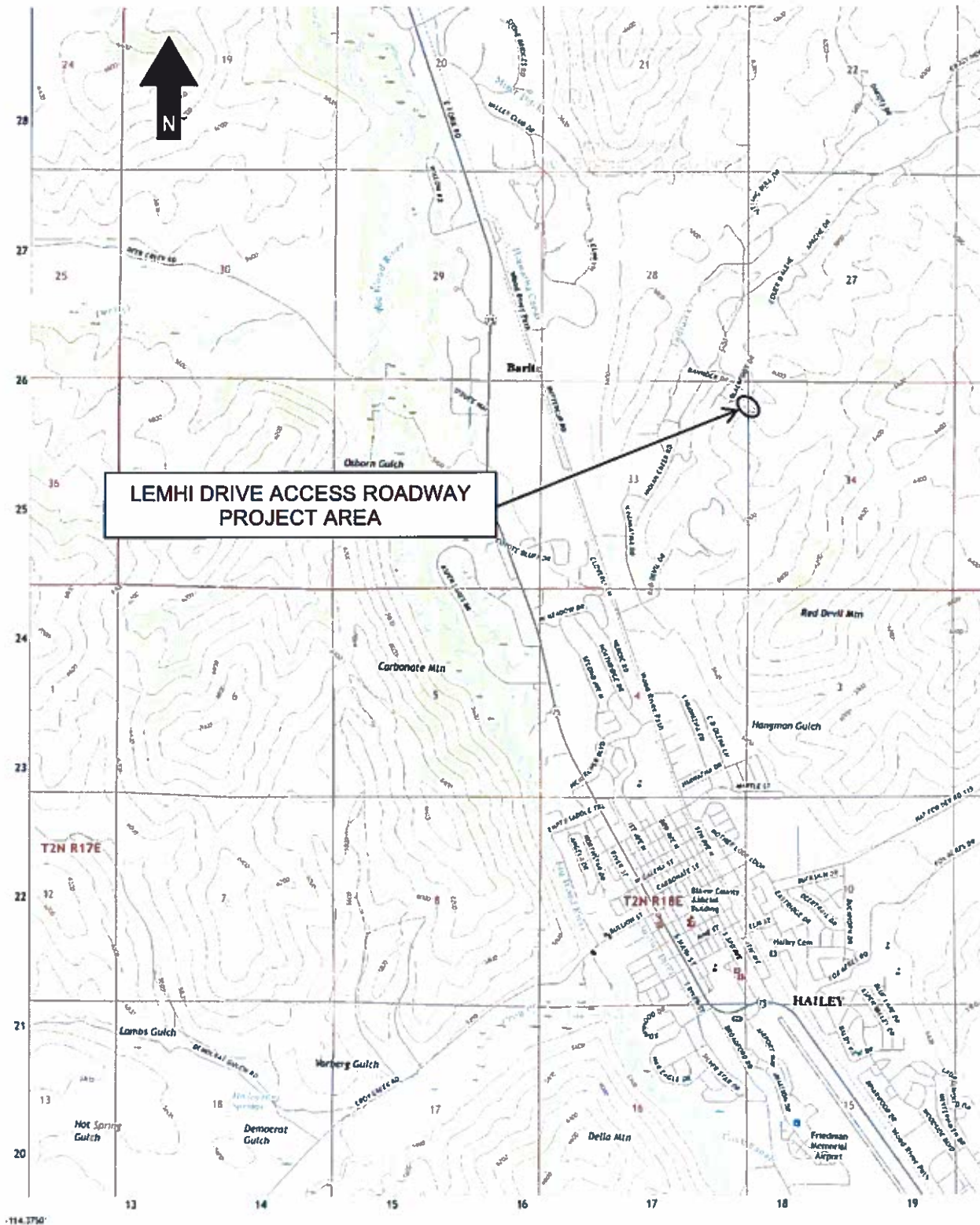
Lemhi Drive, which provides access to lots within the Indian Creek Ranches, No. 1 subdivision is undergoing preliminary planning for roadway improvements to better access the adjacent platted parcels. The jurisdictional determination wetland delineation was specific to the identified project area, which includes wetland resources identified on the National Wetland Inventory positioned within a seasonal drainage, crossed by the Lemhi Drive approach (Figure 1 – Vicinity Map).

The purpose of the preliminary jurisdictional determination wetland delineation was to identify areas within and adjacent to the identified project area that would be considered 'Waters of the United States' including potential jurisdictional wetlands, which are given federal protection under Section 404 of the federal Clean Water Act (CWA). Section 404 of the CWA, provides the regulatory authority of the U.S. Army Corps of Engineers (USACE) over activities that involve the discharge of dredge/fill material into waters of the U.S. The USACE has the authority to approve all jurisdictional determinations and issue relevant permits for activities that involve the discharge of dredge/fill material into waters of the United States. Other Federal, State and local regulations may also have bearing on such activities.

Waters of the United States includes most perennial and intermittent streams, wetlands, natural and man-made lakes and ponds, as well as irrigation and drainage canals and ditches which flow year-round or have continuous flow at least seasonally (e.g. typically three months) and are connected to jurisdictional waters.



FIGURE 1: VICINITY MAP – LEMHI DRIVE INDIAN CREEK RANCHES ACCESS ROADWAY



Base Map: USGS
HAILEY, ID
1967

Indian Creek, its tributaries and associated wetlands may not qualify as jurisdictional waters, 'Waters of the United States' due to the lack of direct connectivity to the Big Wood River. However, the Indian Creek drainage and associated wetlands are within Blaine County jurisdiction and are protected under the County's Wetland Overlay District (9-19-1).

Wetlands are "those areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]). To be determined as a wetland, an area must exhibit positive indicators of wetland hydrology, wetland vegetation and hydric soils.

The scope and intent of this preliminary jurisdictional determination wetland delineation is to describe the findings of the investigation and present a map illustrating the occurrence and distribution of identified wetland resources within the designated project area. The wetland delineation will be used to further plan and design the proposed development applications and help ensure that impacts to jurisdictional resources are avoided and/or minimized.

June 8, 2021, a reconnaissance level field investigation was performed to characterize the site and identify jurisdictional resources, including potential jurisdictional wetlands. The investigation involved an on the ground survey throughout and adjacent to the subject project area to determine the range of conditions present. Site conditions were adequate for a preliminary analysis and sampling of the topography, dominant vegetation types, soils and hydrology elements associated with the parcel.

The Routine On-site Method, as referenced in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), including protocol methods outlined in the Army Corps Interim Regional Supplement for Western Mountains, Valleys, and Coast Region, were used to investigate the occurrence and distribution of 'Waters of the United States' within the defined project area. All relevant environmental information was utilized to further the jurisdictional determination wetland analysis. Information included topographical maps and aerial images from the United States Geological Services (USGS), Blaine County GIS Map Services and the National Wetland Inventory Map (NWI).

The subject parcel is located approximately 3.5 miles northeast of Hailey, ID, and lies within the Big Wood River Indian Creek sub-basin. The parcel is located within mid-elevation hillside topography, with the project area positioned within a drainage catchment area, crossed by Lemhi Drive. Seasonal snowmelt and stormwater runoff generated from the adjacent hillsides is conveyed through the project area by means of the identified drainageway. The duration of surface water flows within the drainage is directly correlated to precipitation, primarily snow throughout the winter months.

Predominant landscape cover type associated with the project area is forested scrub-shrub riparian and sagebrush steppe habitat.

The project area supports a mix of seasonal surface water resources, ground water influenced forested scrub-shrub wetland habitat elements intermixed with upland habitat elements. Identified surface water resources and wetland habitat elements are of good quality and perform important functional values with management of surface water runoff, water quality and wildlife habitat being the primary functions associated with the identified resource.

Wetlands

Based on the information gathered during the onsite investigation and best professional assessment of the investigator support the findings that wetland resources do exist within the defined project area. The identified wetland areas occupy lowland topographic features directly adjacent to the drainageway, where hydrologic inputs are sufficient enough to support wetland characteristics, while non-wetlands and/or uplands occupy the drier and topographically higher areas.

On-site sampling within the identified wetland area revealed the positive occurrence of hydric soils, wetland hydrology and wetland vegetation. The wetland boundary was recognized and selected in the field along a distinctive transitional zone between topographic features, vegetation types, soil characteristics and hydrologic conditions.

The boundary for the identified wetland area was marked in the field with survey pin flags so the location and boundary of the identified wetland resources can be surveyed and accurately mapped.

Findings

Jurisdictional wetland areas identified within the parcel are illustrated on the ***Lemhi Drive Access Roadway, Preliminary Wetland Delineation Site Plan Map***, Figure 2. Based on criteria for the delineation of wetlands and the information gathered during the on-site investigation the following wetland resources has been identified.

Forested Shrub wetland habitat, Palustrine Scrub-Shrub Seasonally Flooded (PSSC), represented by the presence of Aspen trees, native willows and herbaceous wetland plant species and other facultative grass species. This habitat cover type occupies the lowland area within and immediately adjacent to the identified drainage.

Soils

Characteristics for the soils associated with the project area are consistent with the soil types and characteristics defined by the USDA Soil Map Unit for Blaine County Idaho (USDA Web Soil Survey).

Sample soil investigations made during the investigation consisted predominantly of a gravelly loam soil. Soils within the identified drainageway and associated wetland areas consisted of gravelly soils with pockets of fine loamy soils. Soils associated with non-wetland areas, primarily consisted of a dry, well drained very gravelly loam from the surface to a depth of 12(+) inches, with a dark grayish brown soil color (10YR 3/2).

Dominant hydric soil characteristics observed within the designated wetland area consisted primarily of low matrix chroma colors (10YR 2/1), evident at the soil surface, as well as the saturated soil conditions present at the time of the field investigation. It's apparent that the soils associated with the designated wetland area have formed under hydric conditions, and have sufficient hydrology under present conditions to be designated as a hydric wetland soil.

Hydrology

In general, direct precipitation, surface water and spring seeps comprise the hydrologic regime of the identified wetland resource. These hydrologic resources combine to create seasonal saturation and/or inundation for significant time periods during the growing season to support wetland conditions within the drainage.

Surface water and saturated soil conditions observed during the field investigation provided the primary indicators for wetland hydrology used to support wetland determination.

Vegetation

Vegetation communities associated with the defined project area include: sage steppe and forested scrub-shrub riparian wetland habitat.

Sage steppe upland areas consist of extensive sagebrush communities intermixed with various upland grasses and assorted forbs. Dominant species included Mountain Big Sagebrush (*Artemisia tridentata*), common chokecherry (*Prunus virginiana*), Idaho fescue (*Festuca idahoensis*), Great Basin Wildrye (*Elymus cinereus*), Cheatgrass (*Bromus tectorum*), Smooth brome (*Bromus inermis*) and common yarrow (*Achillea millefolium*).

Vegetation associated with the identified riparian wetland habitat consists of a upper canopy tree community comprised of Quaking aspen (*Populus tremuloides*), a woody shrub component consisting of native willows (*Salix spp.*), woods rose (*Rosa woodsii*) and currant (*Ribes spp.*) shrub species, and a diverse ground cover with predominate make up of species including Facultative (FAC), Facultative Wet (FACW) and Obligate (OBL) plant types. Primary herbaceous species present include sedges (*Carex spp.*), Bluejoint reedgrass (*Calamagrostis canadensis*), rushes (*Juncus spp.*), Bluegrass (*Poa spp.*) and other facultative grasses and forbs.

Vegetation within the identified wetland areas is dominated by plant species with FAC, FACW and OBL indicator status. The presence of native willows, sedges and Bluejoint reedgrass provided the primary indicator species used to support wetland designation.

Summary

Based on the information gathered during the onsite investigation, the interpretations of wetland characteristics based on the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and the best professional assessment of the investigator, support the findings that wetland resources do exist within the defined project, Lemhi Drive Access Roadway, Indian Creek Ranches No. 1, located within Section 33, Township 3 North, Range 18 East, B.M., Blaine County, Idaho.

The identified wetland area occupies lowland topographic features within and adjacent to the identified drainageway, in areas where hydrologic inputs are sufficient enough to support wetland characteristics, while non-wetlands and/or uplands occupy the drier and topographically higher areas.

The identified wetland areas are of good quality and perform important functional values in biological and physical systems such as providing wildlife habitat, managing surface water runoff, and improving water quality by filtering pollutants, sediment trapping, nutrient retention and groundwater recharge. The functional values of the drainage area and associated wetland habitat should be protected when possible, or impacts minimized if development applications encroach into the delineated wetland resources.

It is important for all future proposed project applications to be in compliance with all local, state and federal laws. If any proposed construction activities involve the discharge of dredge and/or fill into the identified wetland area, the project must be approved by all regulatory agencies. This may include, but not limited to Section 404 of the CWA regulated by the U.S. Army Corps of Engineers, State of Idaho Water Quality Certification and Blaine County's Wetland Overlay District (9-19-1).

Should future development applications occur within or directly adjacent to the identified jurisdictional resources it is recommended that the applicant contact Federal, state and local agencies for advice concerning specific regulatory requirements and proprietary jurisdictions that may affect the planned development applications prior to any site alterations.

Please don't hesitate to call me if you have any questions or if I can be of any further assistance.

Trent Stumph
Sawtooth Environmental Consulting, LLC

INDIAN CREEK RANCHES - LEMHI DRIVE ACCESS ROADWAY
 PRELIMINARY WETLAND DELINEATION SITE PLAN MAP



NOTES

- 1 Identified Wetland Resources are per delineation performed by Sawtooth Environmental Consulting, LLC, performed May 19, 2021
- 2 Boundary information is approximate and based Blaine County GIS data
- 3 Aerial image is from Google Earth dated 7/2016

GRAPHIC SCALE
 1 inch = 100 ft



REUSE OF DRAWINGS: These drawings, or any portion thereof, shall not be used on any Project or extension of this Project except by agreement in writing with Galena Engineering, Inc.

Galena Engineering Inc.	Civil Engineers & Land Surveyors 31714 River Street Hwyley, Idaho 83333 (208) 788-1705 (208) 788-4512 fax email galena@galena-engineering.com	AN EXHIBIT SHOWING WETLAND LOCATIONS FOR LEMHI DRIVE - INDIAN CREEK RANCHES LOCATED WITHIN SECTIONS 33 & 34 T 3 N R 18 E B M BLAINE COUNTY, IDAHO PREPARED FOR INDIAN CREEK HOA	SHT 1 OF 1
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**INDIAN CREEK RANCHES - LEMHI DRIVE ACCESS ROADWAY
PRELIMINARY JURISDICTIONAL DETERMINATION WETLAND DELINEATION**



**INDIAN CREEK RANCHES - LEMHI DRIVE ACCESS ROADWAY
PRELIMINARY JURISDICTIONAL DETERMINATION WETLAND EVALUATION**



APPENDIX A

WETLAND DATA FORMS

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Indian Creek Lemhi Drive Access Roadway City/County: Blaine County Sampling Date: May-19, 2021

Applicant/Owner: Galena Engineering / Indian Creek Ranch Homeowners Association State: ID Sampling Point: SP-1

Investigator(s): SEC - T. Stumph Section, Township, Range: Section 33, T.3N., R.18E.

Landform (hillslope, terrace, etc.): Foothill/Hillslope Local relief (concave, convex, none): concave Slope (%): < 1.0%

Subregion (LRR): B - Columbia/Snake River Plateau Lat: 43.556245° N Long: -114.311131° W Datum: NAD83

Soil Map Unit Name: MU#40: Friedman-Elksel-Winridge complex, 30 to 60percent slopes NWI classification: Wetland - PSSC (NWI)

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

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: Designated wetland plot, due to the positive WL indicators present at time of survey (vegetation, soils and hydrology). NOTE: Subject wetland area may not be considered jurisdictional 'Waters of the US' due to lack of direct connectivity to the Indian Creek - Big Wood River. Identified wetland resources regulated by Blaine County Wetland Overlay District (9-19-1).	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>POTR - Quaking aspen</i>	35	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____				
4. _____				
Total Cover: <u>35 %</u>				
Sapling/Shrub Stratum				Prevalence Index worksheet:
1. <i>SALIX - Native willow</i>	30	Yes	FACW	Total % Cover of: Multiply by:
2. <i>RIAU - Golden currant</i>	15	Yes	FAC	OBL species x 1 = <u>0</u>
3. _____				FACW species <u>65</u> x 2 = <u>130</u>
4. _____				FAC species <u>15</u> x 3 = <u>45</u>
5. _____				FACU species x 4 = <u>0</u>
Total Cover: <u>45 %</u>				UPL species x 5 = <u>0</u>
Herb Stratum				Column Totals: <u>80</u> (A) <u>175</u> (B)
1. <i>CAREX - Sedge (mixed)</i>	20			Prevalence Index = B/A = <u>2.19</u>
2. _____				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <u>20 %</u>				
Woody Vine Stratum				Hydrophytic Vegetation Present?
1. _____				Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		

Remarks: Riparian / wetland plant community present - wetland plant dominant (FACW and FAC) species present

SOIL

Sampling Point: SP-1

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

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6"	10YR 2/1						loam	Wet / Saturated

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		Indicators for Problematic Hydric Soils:⁴ <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)		⁴ Indicators of hydrophytic vegetation and wetland hydrology must be present.	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>
--	---

Remarks: Observed soil type is not consistent with mapped soil type and associated criteria [MU#40: Friedman-Elksel-Winridge complex]. Soils associated with identified wetland area considered to be inclusion, functioning as hydric [2b3], WL hydrology observed at time of investigation.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)	

Field Observations:			
Surface Water Present?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches):	seasonal
Water Table Present?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches):	surface
Wetland Hydrology Present?			Yes <input checked="" type="radio"/> No <input type="radio"/>

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

Remarks:
 Positive wetland hydrology indicators present at time of field investigation.