

Eagles Grove

Aquatic Feature Delineation

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EXECUTIVE SUMMARY

Morrison-Maierle, Inc. delineated wetlands and other aquatic features within a 22.2-acre area of investigation (AOI) near West Yellowstone within Gallatin County, Montana. The following legal description describes the AOI; a vicinity map is provided in Appendix A (Figure 1).

S21, T13 S, R04 E, ACRES 15.43, THAT PORTION E2NE4SW4 LYING W OF LAZY A SUB & S OF W Y HW

Prior to the field investigation, our environmental scientists review existing literature relevant to the project area, historical aerial photography, topographic maps, and hydrologic data. Field delineation of wetlands and other aquatic features is based on identification of hydric soil conditions, wetland hydrology, and hydrophytic vegetation. The AOI is evaluated based on criteria set forth in the 2010 Regional Supplement to the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual: Western Mountains, Valleys, and Coast (Version 2.0) (Environmental Laboratory 2010).

Based on the wetland delineation presented in this report and the data collected, it is Morrison-Maierle's professional judgement that wetlands and waterways are present within the project area. **The AOI contains 6,610.1 linear feet¹ of the Ordinary High Water mark (OHWM) of East Fork Denny Creek and 1.37 acres of palustrine scrub-shrub (PSSC) wetlands fringing the creek.** Figures in Appendix A detail the AOI and delineated features. **Error! Reference source not found.** Table 4. Wetlands in the AOI summarizes wetlands and other aquatic features delineated within the AOI.

The USACE and the U.S. Environmental Protection Agency (EPA) are the final authority over the jurisdictional status of both wetlands and waters of the U.S. according to Section 404 of the Clean Water Act. The findings discussed in this report are solely the opinion of Morrison-Maierle and have not been verified by the regulatory government agencies.

¹ Value reflects OHWM measured on both banks.

1 INTRODUCTION

1.1 Purpose and Scope

Morrison-Maierle, Inc. delineated wetlands and other aquatic features within a 22.2-acre area of investigation (AOI) near West Yellowstone within Gallatin County, Montana. The following legal description describes the AOI:

S21, T13 S, R04 E, ACRES 15.43, THAT PORTION E2NE4SW4 LYING W OF LAZY A SUB & S OF W Y HW

1.2 Objectives

This report documents the presence and extent of aquatic features within the AOI.

1.3 Site Description and Background Information

The AOI lies approximately 10.5 miles west of the Yellowstone National Park (YNP) administrative boundary and occupies a transitional zone between native coniferous forest and montane sagebrush steppe habitats with developed residential parcels interspersed throughout (MSDI 2023). The surrounding landscape includes low-density private residences intermingled with commercial recreational developments. A paved two-lane highway (U.S. Route 20) forms the northern boundary of the AOI, separating the site from a commercial campground and RV resort. The Town of West Yellowstone, a regional gateway community for YNP tourism, is located approximately 7.5 miles to the east.

According to the Montana Spatial Data Infrastructure (MSDI) Land Use dataset, the APE is classified as primarily commercial/industrial, in contrast with the adjacent landscape, which is mapped as low-density residential or undeveloped forest and shrubland. This classification reflects the property's historical use as a commercial recreational site, formerly developed as a mini golf course that has since been abandoned.

The AOI landscape includes a patchwork of open meadow with scattered sagebrush, coniferous forest, and riparian areas. East Fork Denny Creek, a perennial stream, flows north through the AOI and supports a corridor of riparian and wetland vegetation. The northern half of the site contains previous disturbances associated with a former miniature golf course, including concrete pads and four large, dilapidated buildings.

1.3.1 Climate and Hydroperiod

The AOI, located just west of Yellowstone National Park, experiences measurably colder and wetter conditions than those typical of the overall southwestern Montana region. According to data from the Western Regional Climate Center, the West Yellowstone area receives an average annual precipitation of approximately 21.56 inches, distributed throughout all seasons. Snowfall constitutes a significant portion of this total, with an average of 160 inches of snow annually, most of which accumulates between October and May. Additional climate data are provided in Table 1

Table 1. Climate Summary for West Yellowstone, MT.

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	24.2	30.8	38.0	47.6	59.3	68.5	79.2	77.2	66.4	52.5	34.5	25.3	50.3
Average Min. Temperature (F)	-0.2	2.5	8.7	19.7	28.7	35.3	39.6	37.2	29.4	22.1	10.3	1.8	19.6
Average Total Precipitation (in.)	2.14	1.72	1.72	1.53	2.05	2.37	1.50	1.37	1.48	1.54	1.95	2.20	21.56
Average Total Snow Fall (in.)	32.9	26.6	23.3	10.7	3.3	0.6	0.0	0.1	1.1	7.3	22.9	31.4	160.1
Average Snow Depth (in.)	30	38	38	21	1	0	0	0	0	1	7	18	13

Data source: Western Regional Climate Center. WEST YELLOWSTONE, MONTANA (248857) Period of Record Monthly Climate Summary. Period of Record : 01/02/1924 to 06/30/2013.

Considering the high-elevation setting and substantial snowpack of the West Yellowstone area, the hydroperiod of wetlands within the APE is strongly influenced by snowmelt-driven hydrology. Snow accumulation persists late into spring, and meltwater typically provides the primary source of surface saturation and shallow groundwater recharge. As a result, wetlands in this region often exhibit:

- A prolonged early-season saturation period, typically beginning in late spring.
- Seasonally high water tables, which may remain near or at the surface into early summer, depending on annual snowpack depth and melt timing.
- Gradual drawdown through mid- to late summer as temperatures increase and evapotranspiration rates rise.
- Potential for intermittent re-saturation following summer precipitation events, though these events typically contribute less to sustained inundation compared to snowmelt.

In years with above-average winter snowfall or delayed spring thaw, the hydroperiod may be extended, resulting in longer periods of saturation or ponding. Conversely, in lower-snowpack years, wetlands may transition to drier conditions earlier in the summer season.

1.3.2 National Wetlands Inventory (NWI)

Data from the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI)² depicts a linear palustrine scrub-shrub³ (PSSC) wetland bordering an intermittent stream (R4SBC) feature, both of which are classified as "seasonally flooded" on the east portion of the AOI (USFWS 2025). See Figure 5 in Appendix A for an NWI map of the AOI.

1.3.3 Streams & Topography

The subject property ranges in elevation from approximately 6,700 to 6,800 feet above sea level (USGS 2024). East Fork Denny Creek flows northwards through the property towards its

² The USFWS maintains the NWI database, a publicly available resource providing detailed information on the abundance, characteristics, and distribution of U.S. wetlands. The NWI database is based on a model that predicts the presence of wetlands from various parameters and does not necessarily reflect ground conditions.

³ A non-tidal wetland dominated by shrubs and young trees under 20 feet tall, typically with seasonally or permanently saturated soils (Cowardin et al. 1979).

confluence with West Fork Denny Creek just north of the AOI (USGS 2024). Wetland and/or marsh areas are depicted bordering the creek.

The subject property and surrounding area are depicted on both the Madison Arm, MT and Targhee Pass, ID 2024 USGS 7.5-minute topographic maps. A custom USGS topographic map of the subject property is provided in Appendix A (Figure 2).

1.3.4 Soils

Soils on the subject property are deep, derived from volcanic materials, and experience 45-70 frost free days annually (NRCS 2025). These soils support forested and riparian vegetation as well as a former miniature golf course and associated recreation buildings. The soil unit within the eastern portion of the AOI near West Fork Denny Creek is rated as 100% comprised of hydric components (Table 2).

Hydric soils are defined by the National Technical Committee for Hydric soils as:

"Soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation."

Table 2. Soil units within the AOI.

Map Unit Symbol	Soil Unit	Hydric Rating	Acres	% of AOI
53-3C	Mollic Cryoboralfs, mountain slopes	0	17.6	79.3%
66-1A	Cryaquolls and Cryaquents, flood plains	100	4.6	20.7%
Total:			16.2	100%

A custom soil report and hydric rating by map unit for the AOI, from the NRCS Web Soil Survey, is provided in Appendix B. Figure 4 in Appendix A depicts mapped soil units in the AOI.

1.3.5 Floodplains

The subject property was identified on FEMA Panel 30031C1600D and 30031C1575D for Gallatin County with an effective date of September 2, 2011. The area is not within a 100-year floodplain. A custom FEMA map for the subject property is provided in Appendix A.

1.4 Sampling Protocol

This wetland delineation utilizes the methodology presented in the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and subsequent modifications outlined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast (Version 2.0) (Environmental Laboratory 2010). The methodology includes sampling procedures for vegetation, hydrology, and soil parameters.

1.5 Wetland Indicators

1.5.1 Vegetation

Vegetation at upland and wetland data points is classified based on wetland indicator status. The indicator status of vegetation is derived from the USACE 2020 National Wetlands Plant List (NWPL). Using the current plant list, vegetation cover qualified as hydrophytic where over 50% of the dominant plant species had an indicator status of obligate (OBL), facultative wet (FACW), and/or facultative (FAC). FAC plants, such as Canada thistle (*Cirsium arvense*), are equally likely to occur in wetlands and non-wetlands. Vegetation cover was considered as upland where over 50% of the dominant plant species were classified as upland (UPL), and/or facultative upland (FACU). Plants observed within each data plot were identified using Montana Manual of Vascular Plants (Lesica 2012). Vegetation nomenclature follows USACE NWPL (2020) and Lesica (2012).

1.5.2 Soil

Wetlands must meet the qualifications of at least one hydric soil indicator or meet the definition of a hydric soil (a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NRCS 2019a)). Soils at each data point were evaluated and described noting the depth, matrix color, mottle abundance and contrast (if present), texture, etc. (Environmental Laboratory, 1987 and 2010). Moist matrix color and moist mottle color of the soils were determined utilizing the Munsell Soil Color Chart (Kollmorgan Instruments Corporation, 2009).

1.5.3 Hydrology

Primary and secondary hydrologic indicators were assessed at each data point; one primary indicator or two secondary indicators are required to qualify the area as containing wetland hydrology. Examples of primary hydrology indicators are saturation within 12 inches of the ground surface, surface water, and water table within 12 inches of the ground surface. Examples of secondary hydrology indicators are FAC-neutral test and geomorphic position on the landscape.

1.6 Delineation Procedure

Upland data points (UDP) and wetland data points (WDP) are established as required during the field investigation. Vegetation, hydrology, and soils data is collected in the field according to protocols established by the USACE and recorded on USACE *Wetland Determination Data Forms* (Environmental Laboratory 1987). Photographs are taken at each data point to document conditions. Sample points are collected with a handheld GPS device.

If present, the Ordinary High Water Mark (OHWM)⁴ of aquatic features are delineated following the methodology outlined in the *USACE National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams, Final Version* (David et al., 2025).

Aquatic feature boundaries, if present, are collected with a resource-grade GPS with sub-meter accuracy, by a Morrison-Maierle environmental scientist. We postprocess all spatial data in ArcGIS Pro, apply QAQC procedures to ensure data integrity and spatial accuracy, generate maps, and perform spatial analyses. When available, we review Morrison-Maierle survey data (topography lines, drone aerial imagery) to verify site conditions.

2 RESULTS

2.1 Aquatic Feature Types and Boundaries

Morrison-Maierle environmental scientists delineated approximately 6,610.1 linear feet⁵ of the OHWM of East Fork Denny Creek and 1.37 acres of palustrine scrub-shrub (PSSC) wetland (Wetland A) fringing the creek, as summarized in Table 4. See Figure 6 in Appendix A for a map of the delineated features within the AOI.

2.1.1 Wetland A

Wetland A covers approximately 1.37 acres within the AOI, bordering East Fork Denny Creek and a primary side channel as they flow north through the property. This wetland is classified under the Cowardin system as a palustrine scrub-shrub system with seasonal flooding (PSSC). Field vegetation data confirm that the wetland meets the criteria for a scrub-shrub wetland, with at least 30% areal cover of woody vegetation under 6 meters (20 feet) in height (Cowardin et al. 1979).

The wetland exhibits consistent characteristics across the AOI and is distinguished from adjacent uplands by both topographic position and a shift in dominant vegetation from hydrophytic to upland species. It occupies a low-lying floodplain position, where surface and shallow subsurface hydrology from the creek and side channel drive wetland formation and persistence.

Wetland A exhibits a seasonal hydroperiod, with saturation and shallow inundation occurring primarily during spring snowmelt and early summer (Section 2.3.3). Areas closest to the creek likely remain saturated for extended periods, supporting obligate wetland species (Section 2.3.1). In contrast, the outer wetland fringe supports facultative and some upland species, reflecting shorter saturation duration and greater variability in soil moisture.

This hydroperiod pattern is typical of high-elevation riparian systems in the Western Mountains, Valleys, and Coast Region, where snowmelt and seasonal precipitation are the primary hydrologic drivers.

⁴ The ordinary high water mark (OHWM) defines the lateral extent of non-tidal aquatic features in the absence of adjacent wetlands (USACE 2025). The OHWM is defined in 33 CFR 328.3(c)(4) and 33 CFR 329.11(a)(1).

⁵ Value reflects OHWM measured on both banks.

2.1.2 East Fork Denny Creek

The AOI contains 6,610.1 linear feet⁶ of East Fork Denny Creek, a perennial stream with flows that likely vary from year to year, flows north through the property. A side channel of the creek parallels the main channel to the west and converges at the northern end of the property. A ponded area of clear, still water occurs within the side channel, likely formed by a manmade impoundment that restricts downstream flow at this location.

In some areas, dense vegetation along the side channel prevented accurate GPS data collection. In these cases, the OHWM was inferred from aerial imagery and site surveyed contours. See Figure 6 in Appendix A for a map of the OHWM.

2.2 Upland Areas

Upland areas within the AOI consist of a mosaic of open meadow with scattered sagebrush and other shrubs, interspersed with coniferous forest. According to the MSDI Land Use dataset, the AOI is classified as a mixture of developed and natural landscape. Much of the northern portion of the site has been previously disturbed, while forested areas and land adjacent to East Fork Denny Creek remain largely natural. The developed portions of the property are consistent with adjacent residential development to the east, whereas the southern boundary transitions into undeveloped forest and shrubland associated with U.S. Forest Service (USFS) lands (MSDI 2023).

The primary land cover classifications present within the AOI include:

- Developed – Roads
- Developed and Urban Vegetation
- Rocky Mountain Lodgepole Pine Forest
- Rocky Mountain Lower Montane – Foothill Riparian Woodland

This pattern reflects the property's historical use as a commercial recreational facility (miniature golf course), which has since been abandoned, leaving remnant infrastructure interspersed within otherwise native cover types.

Upland areas surrounding, and in some locations interspersed within, Wetland A are characterized by the dominance of upland plant species, an absence of wetland hydrology indicators, and non-hydric soils. Delineation of upland boundaries followed changes in vegetation composition, proximity to surface hydrology, and transitions in soil characteristics observed during the field investigation.

2.3 Data Summary

The vegetation, hydrology, and soil characteristics at 13 data points were documented in the field and recorded on USACE *Wetland Determination Data Forms for the Western Mountains, Valleys, and Coast* (USACE 2024). See Table 3 for a summary of collected data. All data points are labeled on Figure 6, in Appendix A; Appendix C contains PDFs of the USACE data forms.

⁶ Value reflects OHWM measured on both banks.

Table 3. Wetland delineation data summary table

Feature	Data Point	Hydrophytic Vegetation Indicator(s)	Hydric Soil Indicator(s)	Hydrology Indicator(s)
Wetland A	WDP1	2-Dominance Test is >50%, 3-Prevalence Index is ≤3.0	Loamy Gleyed Matrix (F2), Loamy Mucky Mineral (F1)	High Water Table (A2), Saturation (A3)
	WDP2	2-Dominance Test is >50%, 3-Prevalence Index is ≤3.0	Loamy Mucky Mineral (F1)	High Water Table (A2), Saturation (A3), Water-Stained Leaves (B9) *
	WDP3	2-Dominance Test is >50%, 3-Prevalence Index is ≤3.0	Loamy Mucky Mineral (F1)	Drift Deposits (B3), High Water Table (A2), Saturation (A3)
	WDP4	2-Dominance Test is >50%, 3-Prevalence Index is ≤3.0	Loamy Mucky Mineral (F1)	High Water Table (A2), Saturation (A3), Surface Water (A1)
	WDP5	2-Dominance Test is >50%, 3-Prevalence Index is ≤3.0	Loamy Mucky Mineral (F1)	High Water Table (A2), Saturation (A3), Surface Water (A1), Water Marks (B1)
	UDP1	2-Dominance Test is >50%	None	None
	UDP2	None	None	None
	UDP3	None	None	None
	UDP4	None	None	None
	UDP5	None	None	None
	UDP6	None	None	None
	UDP7	None	None	None
	UDP8	2-Dominance Test is >50%, 3-Prevalence Index is ≤3.0	None	None

*Secondary indicator

2.3.1 Vegetation

Vegetation across the site falls into three groups: lodgepole pine-dominated forest, sagebrush-wildflower meadows, and riparian. Forested areas are thick, with Douglas fir and lodgepole overstory and deciduous shrub and forb understory. Meadow areas support a diverse native plant community including lupine, sticky geranium, cinquefoil, goldenrod, sagebrush, arrow leaf balsamroot, willows, and currants. Wetland and riparian areas fringing the creek support dense willow shrubs, as well as rushes, sedges, and forbs. Dominant species within the wetland include:

- Booth's willow (*Salix boothii*), FACW
- Common horsetail (*Equisetum arvense*), FAC
- Creeping spikerush (*Eleocharis radicans*), OBL
- Nebraska sedge (*Carex nebrascensis*), OBL
- Softstem bulrush (*Schoenoplectus tabernaemontani*), OBL
- Sticky geranium (*Geranium viscosissimum*), FACU

Lesser amounts of FACU or NI⁷ species such as wild strawberry (*Fragaria vesca*) and a *Castilleja* species were also observed on the outer fringe of Wetland A.

Upland vegetation in surrounding areas is a patchwork of shrubs and open meadow habitat, with conifer forest fringing the western edge. One upland point (UDP8) exhibited dominant FACW/U vegetation, but lack of hydric soil indicators and wetland hydrology confirmed upland conditions. Dominant upland species observed within the AOI include:

⁷ Non-indicator, or no wetland indicator defined.

- Booth's willow (*Salix boothii*), FACW
- Canada goldenrod (*Solidago canadensis*), FACU
- Common dandelion (*Taraxacum officinale ssp. officinale*), NI
- Common sagebrush (*Artemisia tridentata*), NI
- European gooseberry (*Ribes uva-crispa*), NI
- Kentucky blue grass (*Poa pratensis*), FAC
- Lodgepole pine (*Pinus contorta*), FAC
- Old man's beard (*Geum triflorum*), FACU
- Shrubby cinquefoil (*Dasiphora fruticosa*), FAC
- Silver lupine (*Lupinus albifrons var. flumineus*), NI
- Smooth brome (*Bromus inermis*), UPL
- Sticky geranium (*Geranium viscosissimum*), FACU

2.3.2 Soil

3.3.2.1. Summary

The soil analysis conducted in the field utilized the Munsell Soil Color Charts for texture and color assessment (Munsell 2009).

Soils within Wetland A consistently exhibited dark matrix colors, ranging from very dark grayish brown (10YR 3/2) to very dark gray (10YR 3/1), indicative of prolonged saturation and organic accumulation. Surface horizons frequently contained muck or mucky mineral loam textures, with greasy-feeling, high-organic content consistent with the Loamy Mucky Mineral (F1) hydric soil indicator. Gleyed material and redox concentrations were observed in several profiles, confirming prolonged anaerobic conditions.

Textural stratification was common across sample points, with upper horizons composed of muck or silt loam transitioning to coarse sand or fine sandy loam at depth. Saturation was typically recorded within the upper 4 to 8 inches of the profile, and in some cases, gravel or cobble layers were encountered below 12 inches. These features reflect the influence of fluvial processes and seasonal inundation associated with East Fork Denny Creek and its side channels.

No restrictive layers were identified, and all wetland soil profiles met hydric criteria under the Western Mountains, Valleys, and Coast Region supplement. In contrast, upland soils lacked hydric indicators and were characterized by loam textures and dark coloration (10YR 3/2) without redoximorphic features or saturation.

2.3.3 Hydrology

Wetland A exhibits multiple primary and secondary indicators of wetland hydrology, consistent with seasonal saturation and shallow inundation driven by proximity to East Fork Denny Creek and its side channels. Primary indicators observed across wetland data points include high water table (A2), saturation within the upper 12 inches (A3), surface water (A1), drift deposits (B3), water-stained leaves (B9), and water marks (B1). These indicators confirm that the wetland experiences regular and sustained hydrologic inputs during the growing season.

Secondary indicators were also consistently documented, including geomorphic position (D2), FAC-Neutral Test (D5), and saturation visible on aerial imagery (C9). These features suggest that hydrology is influenced by overbank flooding, shallow groundwater, and seasonal precipitation, particularly in low-lying areas adjacent to the stream and ponded zones. Wetland hydrology was

most obvious at data points located within 3-6 feet of the creek, where saturation and surface water were directly observed.

No indicators of wetland hydrology were observed in upland data points.

2.4 Hydrologic Connectivity

East Fork Denny Creek within the AOI drains a contributing watershed of approximately 1,441 acres, as delineated using standard watershed analysis tools⁸ (ESRI 2025). Flow from this stream enters the main channel of Denny Creek, approximately 0.15 miles north of the AOI boundary. From there, water continues downstream through the South Fork of the Madison River, into Hebgen Lake, and subsequently through the Madison River, passing through Earthquake Lake and Ennis Lake before reaching the confluence with the Missouri River at Three Forks, Montana.

The Missouri River flows for approximately 2,341 miles from Three Forks to its confluence with the Mississippi River near St. Louis, Missouri. The combined Missouri–Mississippi system then continues for an additional approximately 1,500 miles to the Gulf of Mexico.

3 CONCLUSION

Morrison-Maierle’s aquatic feature delineation at the Eagles Grove property determined the presence of 6,610.1 linear feet⁹ of the OHWM of East Fork Denny Creek and 1.37 acres of PSSC wetland (Wetland A) within the AOI. These features are summarized in Table 4.

Table 4. Wetlands in the AOI.

Name	Cowardin Classification		Description	Acres	Linear Feet
	Type	Code			
Wetland A	Palustrine scrub-shrub, seasonally flooded	PSSC	Wetland area with dominant shrub species bordering East Fork Denny Creek	1.37	-
East Fork Denny Creek	Riverine, perennial stream, seasonally flooded	R3UBC	Primary stream channel and parallel side channel; both with defined bed and bank	-	6,610.1 ⁹
Totals:				1.37	6,610.1⁹

Hydrologic connectivity between East Fork Denny Creek and downstream navigable waters (Section 2.4), and the direct abutment of Wetland A to this relatively permanent waterway indicate that both features are likely jurisdictional¹⁰ under the Clean Water Act (USEPA and USACE 2008 and 2015).

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) are the final authority over the jurisdictional status of both wetlands and waters of the U.S. per

⁸ To evaluate the hydrologic connectivity of the creek and Wetland A, ESRI’s geoprocessing tools (Trace Downstream and Watershed) were utilized in ArcGIS Pro. These tools leverage elevation datasets and preprocessed hydrologic models to delineate flow paths and contributing drainage areas (ESRI 2025).

⁹ Value reflects OHWM measured on both banks.

¹⁰ A jurisdictional wetland is a wetland regulated under the Clean Water Act because it meets the legal definition of a “Water of the United States” (WOTUS). Jurisdictional wetlands are regulated under Section 404 of the Clean Water Act and require a permit for activities that involve excavating or placing fill material in the wetland.

Section 404 of the Clean Water Act. The findings discussed in this report are solely the opinion of Morrison-Maierle and have not yet been verified by the aforementioned regulatory government agencies.

This delineation was conducted in accordance with the 2010 Regional Supplement to the US Army Corps of Engineers Wetland Delineation Manual, incorporating criteria related to hydrology, vegetation, and soil conditions. See Figure 6 for a map of delineated features, including data points (Appendix A). Photos of the AOI and the delineated features are provided with the USACE data sheets in Appendix C.

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APPENDIX A: FIGURES



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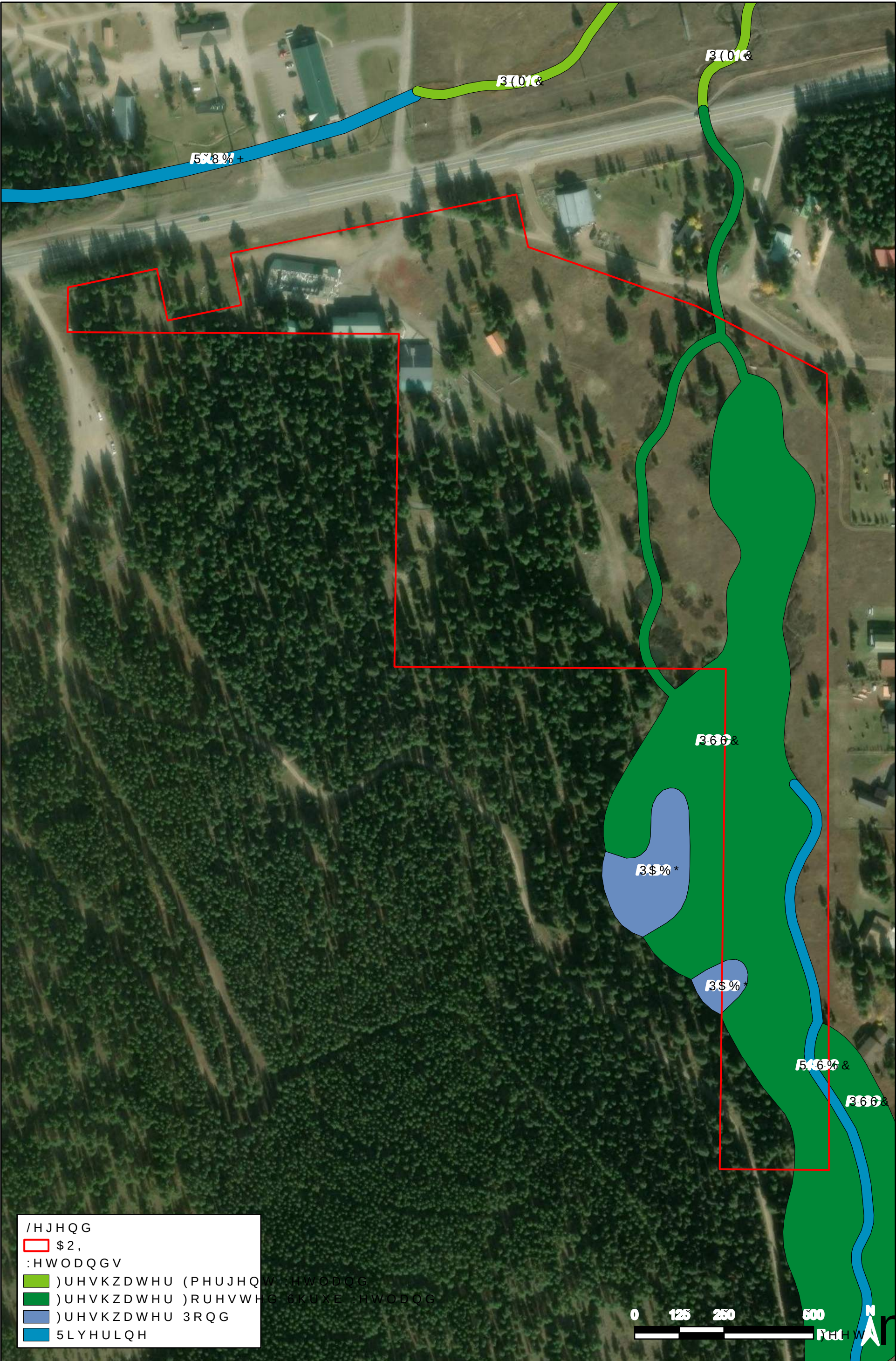
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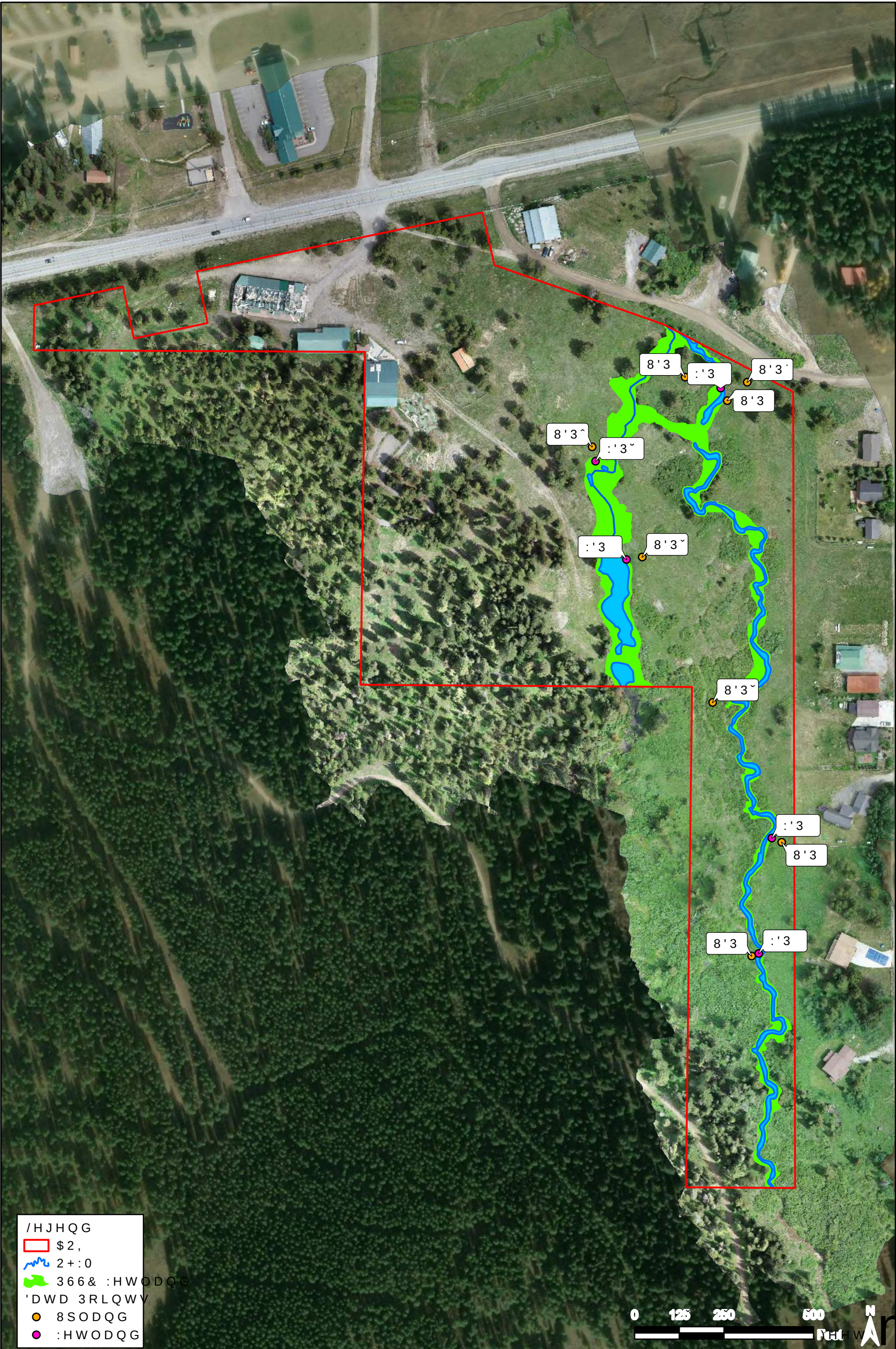
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APPENDIX B: NRCS SOIL REPORT & MAPS



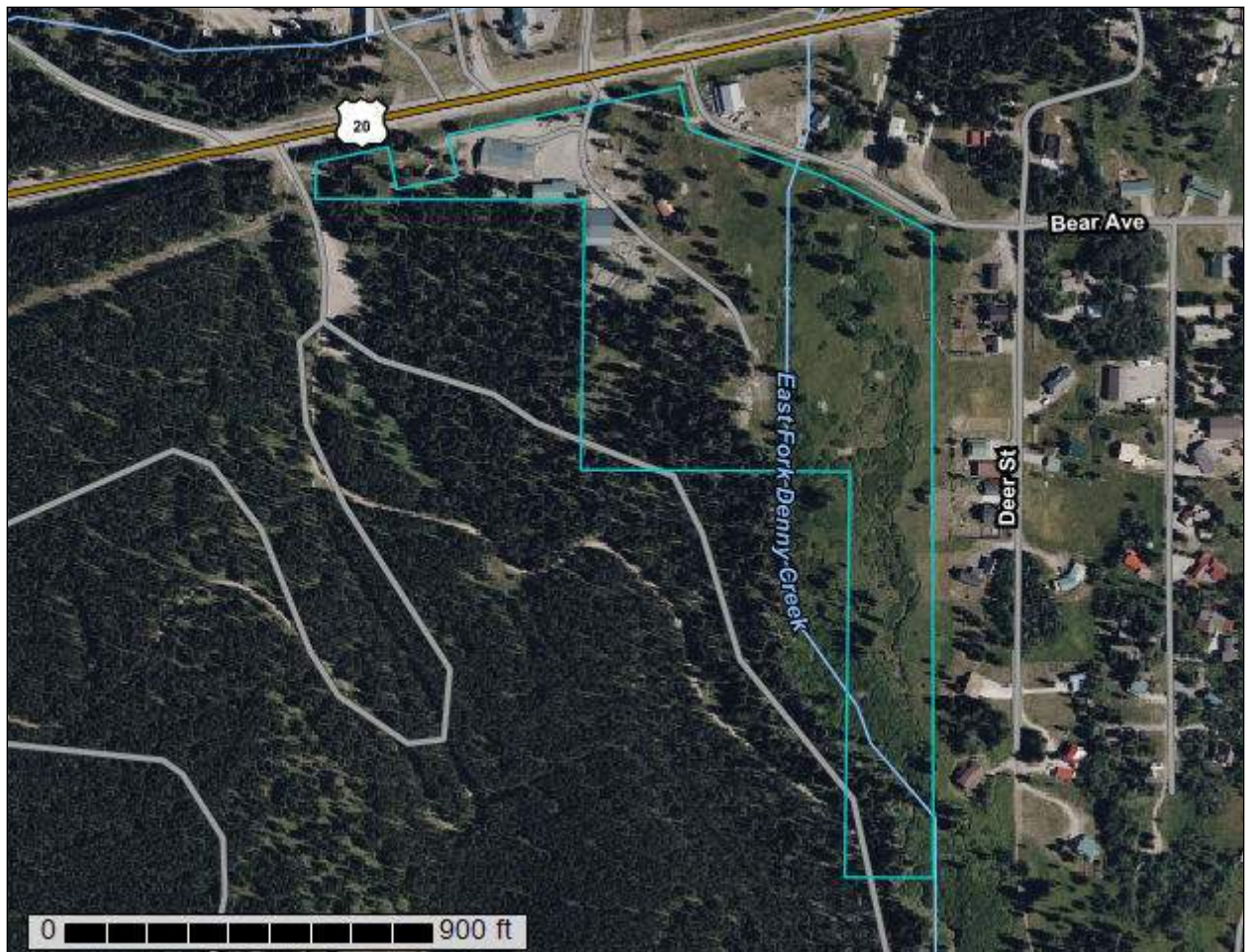
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Gallatin National Forest Area, Montana



August 15, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

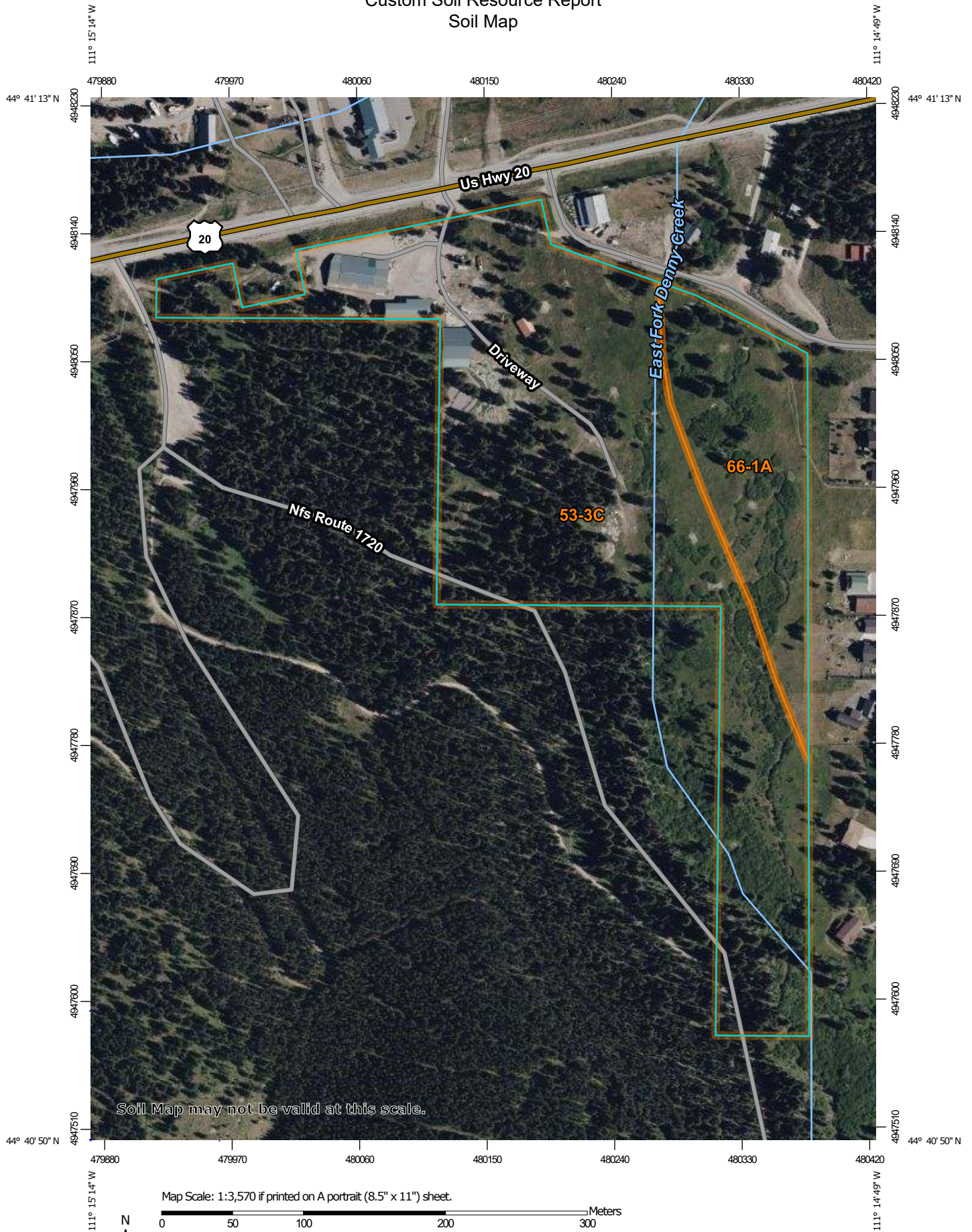
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Gallatin National Forest Area, Montana
Survey Area Data: Version 15, Aug 28, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 22, 2022—Aug 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
53-3C	Mollic Cryoboralfs, mountain slopes	17.6	79.3%
66-1A	Cryaquolls and Cryaquents, flood plains	4.6	20.7%
Totals for Area of Interest		22.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Gallatin National Forest Area, Montana

53-3C—Mollic Cryoboralfs, mountain slopes

Map Unit Setting

National map unit symbol: 58kj
Elevation: 6,500 to 7,800 feet
Mean annual precipitation: 20 to 35 inches
Mean annual air temperature: 34 to 37 degrees F
Frost-free period: 50 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Mollic cryoboralfs and similar soils: 80 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mollic Cryoboralfs

Setting

Landform: Hills
Parent material: Loamy colluvium derived from basic volcanic breccia

Properties and qualities

Slope: 10 to 45 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F043BP909MT - Upland Cold Woodland Group
Other vegetative classification: subalpine fir/twinflower (PK660)
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Other vegetative classification: subalpine fir/twinflower (PK660)

66-1A—Cryaquolls and Cryaquents, flood plains

Map Unit Setting

National map unit symbol: 58l5

Elevation: 6,600 to 8,600 feet

Mean annual precipitation: 20 to 50 inches

Mean annual air temperature: 37 to 41 degrees F

Frost-free period: 30 to 60 days

Farmland classification: Not prime farmland

Map Unit Composition

Cryaquolls and similar soils: 51 percent

Cryaquents and similar soils: 49 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cryaquolls

Setting

Landform: Flood plains

Properties and qualities

Slope: 0 to 10 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: About 0 to 30 inches

Frequency of flooding: Frequent

Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: B/D

Ecological site: R043BP801MT - Bottomland Group

Other vegetative classification: deschampsia caespitosa/carex spp. h.t. (MS0501)

Hydric soil rating: Yes

Description of Cryaquents

Setting

Landform: Flood plains

Properties and qualities

Slope: 0 to 10 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: About 12 to 24 inches

Frequency of flooding: Rare

Custom Soil Resource Report

Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: B/D

Ecological site: R043BP801MT - Bottomland Group

Other vegetative classification: deschampsia caespitosa/carex spp. h.t. (MS0501)

Hydric soil rating: Yes

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Rating by Map Unit

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Custom Soil Resource Report

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

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Federal Register. September 18, 2002. Hydric soils of the United States.

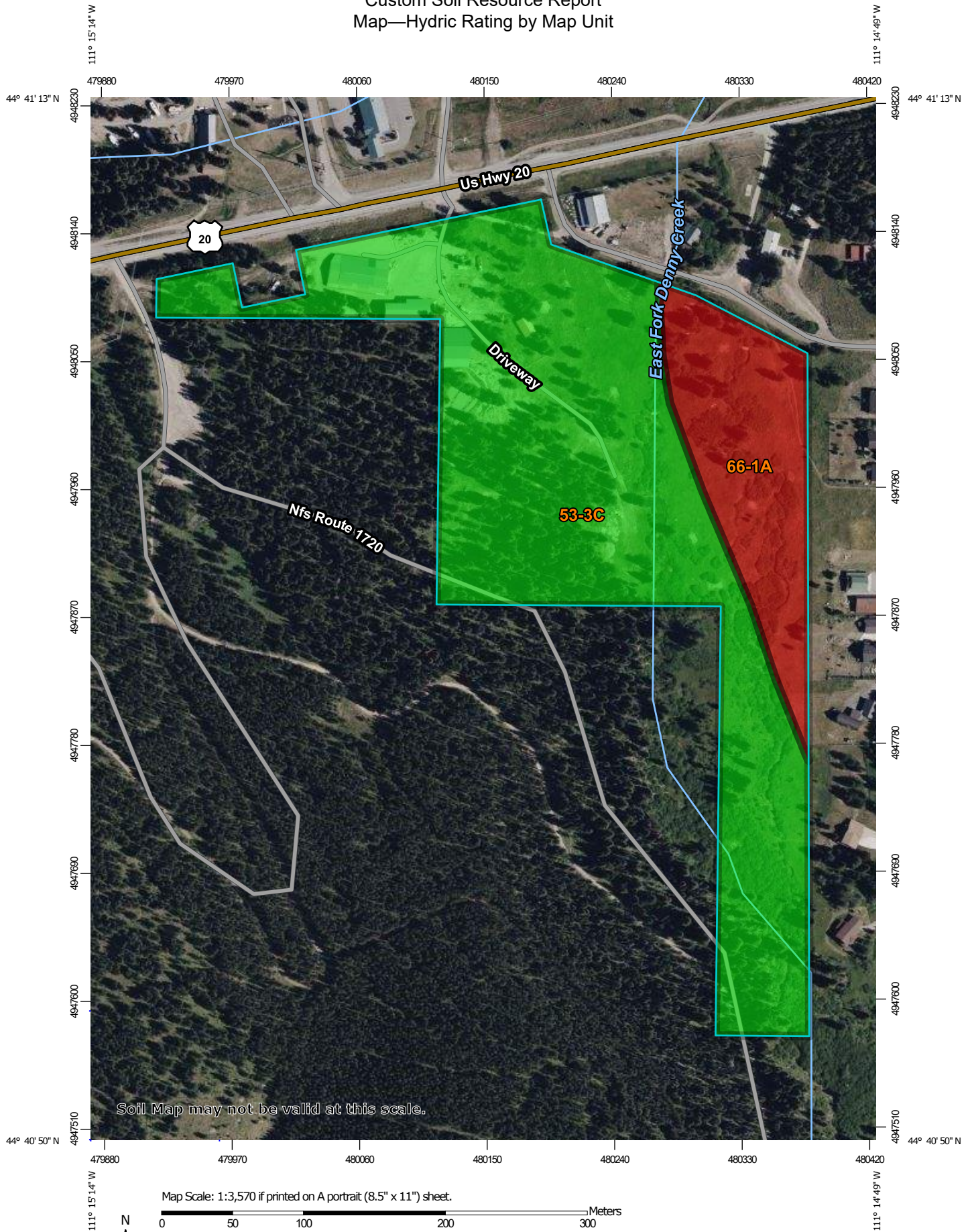
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Custom Soil Resource Report Map—Hydric Rating by Map Unit



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available

Soil Rating Lines

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available

Soil Rating Points

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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Soil Survey Area: Gallatin National Forest Area, Montana
 Survey Area Data: Version 15, Aug 28, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 22, 2022—Aug 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
53-3C	Mollic Cryoboralfs, mountain slopes	0	17.6	79.3%
66-1A	Cryaquolls and Cryaquents, flood plains	100	4.6	20.7%
Totals for Area of Interest			22.2	100.0%

Rating Options—Hydric Rating by Map Unit

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

References

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APPENDIX C: USACE WETLAND DETERMINATION DATA FORMS AND PHOTOGRAPHS

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>UDP1</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Field at stream bank</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.68554216666666</u>	Long: <u>-111.24810733333333</u>
Soil Map Unit Name: <u>Cryaquolls and Cryaquents, flood plains</u>	NWI classification: <u>PSSC</u>	Datum: <u>WSG-84</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: On upland bench that exhibits non-hydrophytic vegetation; paired with WDP1.	

VEGETATION - Use scientific names of plants.

<table><tr><td>Tree Stratum (Plot size: <u>30-ft</u>)</td><td>Absolute % Cover</td><td>Dominant Species?</td><td>Indicator Status</td></tr><tr><td>1. <u>Pinus contorta</u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>10</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Artemisia tridentata</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>NI</u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>15</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Herb Stratum (Plot size: <u>5-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Bromus inermis</u></td><td><u>25</u></td><td><u>Yes</u></td><td><u>UPL</u></td></tr><tr><td>2. <u>Dasiphora fruticosa</u></td><td><u>20</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>3. <u>Poa pratensis</u></td><td><u>20</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>4. <u>Taraxacum officinale ssp. officinale</u></td><td><u>10</u></td><td><u>No</u></td><td><u>NI</u></td></tr><tr><td>5. <u>Tragopogon dubius</u></td><td><u>10</u></td><td><u>No</u></td><td><u>NI</u></td></tr><tr><td>6. <u>Cirsium arvense</u></td><td><u>5</u></td><td><u>No</u></td><td><u>FAC</u></td></tr><tr><td>7. <u>Saxifraga oregana</u></td><td><u>5</u></td><td><u>No</u></td><td><u>NI</u></td></tr><tr><td>8. <u>Geum triflorum</u></td><td><u>5</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>9. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>10. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>11. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>100</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Woody Vine Stratum (Plot size: <u>30-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>0</u></td><td colspan="2">= Total Cover</td></tr><tr><td>% Bare Ground in Herb Stratum <u>0</u></td><td></td><td></td><td></td></tr></table>	Tree Stratum (Plot size: <u>30-ft</u>)	Absolute % Cover	Dominant Species?	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Remarks:

SOIL

Sampling Point: UDP1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					Clay Loam	Fine roots
4-12	10YR 3/2	100					Clay Loam	Fewer roots. Ant activity.
12-20	10YR 3/2	100					Clay Loam	Increased density, rocks.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u> X </u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u> X </u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks: No wetland hydrology observed. Animal burrows through area.





SOIL

Sampling Point: UDP2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					Clay Loam	Fine roots
4-12	10YR 3/2	100					Clay Loam	Fewer roots. Ant activity.
12-20	10YR 3/2	100					Clay Loam	Increased density.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u> X </u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u> X </u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks: Animal burrows through area.



SOIL

Sampling Point: UDP3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					Clay Loam	Fine roots
5-12	10YR 3/2	100					Clay Loam	Fewer roots. Ant activity.
12-20	10YR 3/2	100					Clay Loam	Increased density and rocks.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ☐
- Water-Stained Leaves (B9)
- (MLRA 1, 2, 4A, and 4B)**
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-
- ☐
- 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 <u> X </u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u> X </u>	Depth (inches): _____

 (includes capillary fringe)
Wetland Hydrology Present? Yes _____ No X

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

Remarks: No wetland hydrology observed.



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>UDP4</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Meadow</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.682521</u>	Long: <u>-111.247921</u>
Soil Map Unit Name: <u>Mollic Cryoboralfs, mountain slopes</u>	Datum: <u>WSG-84</u>	
NW1 classification: <u>PSSC</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed?		Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Open meadow with shrub mosaic.	

VEGETATION - Use scientific names of plants.

<table><tr><td>Tree Stratum (Plot size: <u>30-ft</u>)</td><td>Absolute % Cover</td><td>Dominant Species?</td><td>Indicator Status</td></tr><tr><td>1. <u><i>Pinus contorta</i></u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>10</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u><i>Salix boothii</i></u></td><td><u>30</u></td><td><u>Yes</u></td><td><u>FACW</u></td></tr><tr><td>2. <u><i>Ribes uva-crispa</i></u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>NI</u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>40</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Herb Stratum (Plot size: <u>5-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u><i>Geranium viscosissimum</i></u></td><td><u>20</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>2. <u><i>Lupinus albilfrons var. flumineus</i></u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>NI</u></td></tr><tr><td>3. <u><i>Bromus inermis</i></u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>UPL</u></td></tr><tr><td>4. <u><i>Poa pratensis</i></u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>5. <u><i>Dasiphora fruticosa</i></u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>6. <u><i>Geum triflorum</i></u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>7. <u><i>Fragaria vesca</i></u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>8. <u><i>Taraxacum officinale ssp. officinale</i></u></td><td><u>5</u></td><td><u>No</u></td><td><u>NI</u></td></tr><tr><td>9. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>10. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>11. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>110</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Woody Vine Stratum (Plot size: <u>30-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>0</u></td><td colspan="2">= Total Cover</td></tr><tr><td>% Bare Ground in Herb Stratum <u>0</u></td><td></td><td></td><td></td></tr></table>	Tree Stratum (Plot size: <u>30-ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u><i>Pinus contorta</i></u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>10</u>	= Total Cover		Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)				1. <u><i>Salix boothii</i></u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	2. <u><i>Ribes uva-crispa</i></u>	<u>10</u>	<u>Yes</u>	<u>NI</u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>40</u>	= Total Cover		Herb Stratum (Plot size: <u>5-ft</u>)				1. <u><i>Geranium viscosissimum</i></u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	2. <u><i>Lupinus albilfrons var. flumineus</i></u>	<u>15</u>	<u>Yes</u>	<u>NI</u>	3. <u><i>Bromus inermis</i></u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>	4. <u><i>Poa pratensis</i></u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	5. <u><i>Dasiphora fruticosa</i></u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	6. <u><i>Geum triflorum</i></u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	7. <u><i>Fragaria vesca</i></u>	<u>10</u>	<u>No</u>	<u>FACU</u>	8. <u><i>Taraxacum officinale ssp. officinale</i></u>	<u>5</u>	<u>No</u>	<u>NI</u>	9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	11. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>110</u>	= Total Cover		Woody Vine Stratum (Plot size: <u>30-ft</u>)				1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>0</u>	= Total Cover		% Bare Ground in Herb Stratum <u>0</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>37.5</u> (A/B) Prevalence Index worksheet: <table><tr><td>Total % Cover of:</td><td>Multiply by:</td></tr><tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr><tr><td>FACW species <u>30</u></td><td>x 2 = <u>60</u></td></tr><tr><td>FAC species <u>30</u></td><td>x 3 = <u>90</u></td></tr><tr><td>FACU species <u>45</u></td><td>x 4 = <u>180</u></td></tr><tr><td>UPL species <u>45</u></td><td>x 5 = <u>225</u></td></tr><tr><td>Column Totals: <u>150</u> (A)</td><td><u>555</u> (B)</td></tr></table> Prevalence Index = B/A = <u>3.7</u> Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index ≤3.0¹ <u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants¹ <u> </u> Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>45</u>	x 5 = <u>225</u>	Column Totals: <u>150</u> (A)	<u>555</u> (B)
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2. <u><i>Lupinus albilfrons var. flumineus</i></u>	<u>15</u>	<u>Yes</u>	<u>NI</u>																																																																																																																																								
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6. <u><i>Geum triflorum</i></u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																																																																																																																																								
7. <u><i>Fragaria vesca</i></u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																																																																																																																								
8. <u><i>Taraxacum officinale ssp. officinale</i></u>	<u>5</u>	<u>No</u>	<u>NI</u>																																																																																																																																								
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UPL species <u>45</u>	x 5 = <u>225</u>																																																																																																																																										
Column Totals: <u>150</u> (A)	<u>555</u> (B)																																																																																																																																										

Remarks:

SOIL

Sampling Point: UDP4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					Clay Loam	Fine roots
5-10	10YR 3/2	100					Clay Loam	Fewer roots.
10-20	10YR 3/2	100					Clay Loam	Rocks, increased density.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u>X</u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____

 (includes capillary fringe)
Wetland Hydrology Present? Yes _____ No X

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

Remarks: No wetland hydrology observed.



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>UDP5</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Meadow with shrubby willows</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.683901</u>	Long: <u>-111.24822</u>
Soil Map Unit Name: <u>Mollic Cryoboralfs, mountain slopes</u>	Datum: <u>WSG-84</u>	NWI classification: <u>None</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed? Yes <u>X</u> No <u> </u>		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Upland meadow area west of stream; side channel of stream further to the west.	

VEGETATION - Use scientific names of plants.

<table><tr><td>Tree Stratum (Plot size: <u>30-ft</u>)</td><td>Absolute % Cover</td><td>Dominant Species?</td><td>Indicator Status</td></tr><tr><td>1. <u>Pinus contorta</u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>10</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Salix boothii</u></td><td><u>30</u></td><td><u>Yes</u></td><td><u>FACW</u></td></tr><tr><td>2. <u>Ribes uva-crispa</u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>NI</u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>40</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Herb Stratum (Plot size: <u>5-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Bromus inermis</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>UPL</u></td></tr><tr><td>2. <u>Geum triflorum</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>3. <u>Geranium viscosissimum</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>4. <u>Dasiphora fruticosa</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>5. <u>Agrostis gigantea</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FAC</u></td></tr><tr><td>6. <u>Fragaria vesca</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>7. <u>Cirsium arvense</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FAC</u></td></tr><tr><td>8. <u>Achillea millefolium</u></td><td><u>5</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>9. <u>Castilleja miniata</u></td><td><u>5</u></td><td><u>No</u></td><td><u>FACW</u></td></tr><tr><td>10. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>11. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>100</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Woody Vine Stratum (Plot size: <u>30-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>0</u></td><td colspan="2">= Total Cover</td></tr><tr><td>% Bare Ground in Herb Stratum <u>0</u></td><td></td><td></td><td></td></tr></table>	Tree Stratum (Plot size: <u>30-ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Pinus contorta</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>10</u>	= Total Cover		Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)				1. <u>Salix boothii</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	2. <u>Ribes uva-crispa</u>	<u>10</u>	<u>Yes</u>	<u>NI</u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>40</u>	= Total Cover		Herb Stratum (Plot size: <u>5-ft</u>)				1. <u>Bromus inermis</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>	2. <u>Geum triflorum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	3. <u>Geranium viscosissimum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	4. <u>Dasiphora fruticosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	5. <u>Agrostis gigantea</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	6. <u>Fragaria vesca</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	7. <u>Cirsium arvense</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	8. <u>Achillea millefolium</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	9. <u>Castilleja miniata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	11. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>100</u>	= Total Cover		Woody Vine Stratum (Plot size: <u>30-ft</u>)				1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>0</u>	= Total Cover		% Bare Ground in Herb Stratum <u>0</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3</u> (A/B) Prevalence Index worksheet: <table><tr><td>Total % Cover of:</td><td>Multiply by:</td></tr><tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr><tr><td>FACW species <u>35</u></td><td>x 2 = <u>70</u></td></tr><tr><td>FAC species <u>35</u></td><td>x 3 = <u>105</u></td></tr><tr><td>FACU species <u>45</u></td><td>x 4 = <u>180</u></td></tr><tr><td>UPL species <u>25</u></td><td>x 5 = <u>125</u></td></tr><tr><td>Column Totals: <u>140</u> (A)</td><td><u>480</u> (B)</td></tr></table> Prevalence Index = B/A = <u>3.43</u> Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index ≤3.0¹ <u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants¹ <u> </u> Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>140</u> (A)	<u>480</u> (B)
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OBL species <u>0</u>	x 1 = <u>0</u>																																																																																																																																										
FACW species <u>35</u>	x 2 = <u>70</u>																																																																																																																																										
FAC species <u>35</u>	x 3 = <u>105</u>																																																																																																																																										
FACU species <u>45</u>	x 4 = <u>180</u>																																																																																																																																										
UPL species <u>25</u>	x 5 = <u>125</u>																																																																																																																																										
Column Totals: <u>140</u> (A)	<u>480</u> (B)																																																																																																																																										

Remarks:

SOIL

Sampling Point: UDP5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					Clay Loam	Fine roots
6-18	10YR 3/2	100					Clay Loam	
18-20	10YR 3/2	100					Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u>X</u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____

 (includes capillary fringe)
Wetland Hydrology Present? Yes _____ No X

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

Remarks: No wetland hydrology observed.



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site:	Eagle's Landing	City/County:	Gallatin County	Sampling Date:	06/18/2025
Applicant/Owner:		State:	MT	Sampling Point:	UDP6
Investigator(s):	Faith Doty, Christine Pearcy	Section, Township, Range:	S21 T13S R4E		
Landform (hillslope, terrace, etc):	Meadow	Local relief (concave, convex, none):	none	Slope (%):	0
Subregion (LRR):	LRR E, MLRA 49	Lat:	44.684692	Long:	-111.248758
Soil Map Unit Name:	Mollic Cryoboralfs, mountain slopes	Datum:	WSG-84		
		NWI classification:	None		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)					
Are Vegetation ☐ No, Soil ☐ No, or Hydrology ☐ No significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐					
Are Vegetation ☐ No, Soil ☐ No, or Hydrology ☐ No 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 ☒	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		
Remarks: Upland meadow between main and side channel of stream. Near ponded area.			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft) 1. <i>Pinus contorta</i> 10 Yes FAC 2. 5 = Total Cover Sapling/Shrub Stratum (Plot size: 15-ft) 1. <i>Salix boothii</i> 10 Yes FACW 2. <i>Pinus contorta</i> 5 Yes FAC 3. 15 = Total Cover Herb Stratum (Plot size: 5-ft) 1. <i>Taraxacum officinale ssp. officinale</i> 25 Yes NI 2. <i>Geranium viscosissimum</i> 20 Yes FACU 3. <i>Bromus inermis</i> 15 Yes UPL 4. <i>Dasiphora fruticosa</i> 15 Yes FAC 5. <i>Poa pratensis</i> 10 No FAC 6. <i>Fragaria vesca</i> 10 No FACU 7. <i>Equisetum arvense</i> 5 No FAC 8. 100 = Total Cover Woody Vine Stratum (Plot size: 30-ft) 1. 0 = 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: 6 (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 35 x 3 = 105 FACU species 30 x 4 = 120 UPL species 40 x 5 = 200 Column Totals: 115 (A) 445 (B) Prevalence Index = B/A = 3.87 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes ☐ No ☒
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Remarks:

SOIL

Sampling Point: UDP6

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					Clay Loam	Fine roots
6-12	10YR 3/2	100					Clay Loam	Fewer roots
12-20	10YR 3/2	100					Clay Loam	Increased density.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u>X</u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks: No wetland hydrology observed. Animal burrows through area.



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>UDP7</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Meadow</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.685291</u>	Long: <u>-111.249142</u>
Soil Map Unit Name: <u>Mollic Cryoboralfs, mountain slopes</u>	Datum: <u>WSG-84</u>	
NW1 classification: <u>None</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed?		Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Upland meadow area between wetland and forest edge.	

VEGETATION - Use scientific names of plants.

<table><tr><td>Tree Stratum (Plot size: <u>30-ft</u>)</td><td>Absolute % Cover</td><td>Dominant Species?</td><td>Indicator Status</td></tr><tr><td>1. <u>Pinus contorta</u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>10</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Salix boothii</u></td><td><u>10</u></td><td><u>Yes</u></td><td><u>FACW</u></td></tr><tr><td>2. <u>Pinus contorta</u></td><td><u>5</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>15</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Herb Stratum (Plot size: <u>5-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Taraxacum officinale ssp. officinale</u></td><td><u>25</u></td><td><u>Yes</u></td><td><u>NI</u></td></tr><tr><td>2. <u>Geranium viscosissimum</u></td><td><u>20</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>3. <u>Dasiphora fruticosa</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>4. <u>Bromus inermis</u></td><td><u>15</u></td><td><u>Yes</u></td><td><u>UPL</u></td></tr><tr><td>5. <u>Poa pratensis</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FAC</u></td></tr><tr><td>6. <u>Fragaria vesca</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>7. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>8. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>9. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>10. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>11. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>95</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Woody Vine Stratum (Plot size: <u>30-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr><tr><td></td><td><u>0</u></td><td colspan="2">= Total Cover</td></tr><tr><td>% Bare Ground in Herb Stratum <u>5</u></td><td></td><td></td><td></td></tr></table>	Tree Stratum (Plot size: <u>30-ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Pinus contorta</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>10</u>	= Total Cover		Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)				1. <u>Salix boothii</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	2. <u>Pinus contorta</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>15</u>	= Total Cover		Herb Stratum (Plot size: <u>5-ft</u>)				1. <u>Taraxacum officinale ssp. officinale</u>	<u>25</u>	<u>Yes</u>	<u>NI</u>	2. <u>Geranium viscosissimum</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	3. <u>Dasiphora fruticosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	4. <u>Bromus inermis</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>	5. <u>Poa pratensis</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	6. <u>Fragaria vesca</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	11. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>95</u>	= Total Cover		Woody Vine Stratum (Plot size: <u>30-ft</u>)				1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		<u>0</u>	= Total Cover		% Bare Ground in Herb Stratum <u>5</u>				<table><tr><td colspan="2">Dominance Test worksheet:</td></tr><tr><td colspan="2">Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)</td></tr><tr><td colspan="2">Total Number of Dominant Species Across All Strata: <u>6</u> (B)</td></tr><tr><td colspan="2">Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0</u> (A/B)</td></tr><tr><td colspan="2">Prevalence Index worksheet:</td></tr><tr><td>Total % Cover of:</td><td>Multiply by:</td></tr><tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr><tr><td>FACW species <u>10</u></td><td>x 2 = <u>20</u></td></tr><tr><td>FAC species <u>30</u></td><td>x 3 = <u>90</u></td></tr><tr><td>FACU species <u>30</u></td><td>x 4 = <u>120</u></td></tr><tr><td>UPL species <u>40</u></td><td>x 5 = <u>200</u></td></tr><tr><td>Column Totals: <u>110</u> (A)</td><td><u>430</u> (B)</td></tr><tr><td colspan="2">Prevalence Index = B/A = <u>3.91</u></td></tr><tr><td colspan="2">Hydrophytic Vegetation Indicators:</td></tr><tr><td colspan="2"><u> </u> 1 - Rapid Test for Hydrophytic Vegetation</td></tr><tr><td colspan="2"><u> </u> 2 - Dominance Test is >50%</td></tr><tr><td colspan="2"><u> </u> 3 - Prevalence Index ≤3.0¹</td></tr><tr><td colspan="2"><u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</td></tr><tr><td colspan="2"><u> </u> 5 - Wetland Non-Vascular Plants¹</td></tr><tr><td colspan="2"><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</td></tr><tr><td colspan="2">¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</td></tr><tr><td colspan="2">Hydrophytic Vegetation Present? 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Remarks:

SOIL

Sampling Point: UDP7

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					Clay Loam	Fine roots
6-12	10YR 3/2	100					Clay Loam	Fewer roots
12-20	10YR 3/2	100					Clay Loam	Rocks

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u>X</u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____

 (includes capillary fringe)
Wetland Hydrology Present? Yes _____ No X

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

Remarks: No wetland hydrology observed.



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>UDP8</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Swale</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u></u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u></u>	Long: <u></u>
Soil Map Unit Name: <u>Cryaquolls and Cryaquents, flood plains</u>	NWI classification: <u>None</u>	Datum: <u>WSG-84</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u></u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u></u>		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u>X</u> No <u></u>	Is the Sampled Area within a Wetland? Yes <u></u> No <u>X</u>
Hydric Soil Present? Yes <u></u> No <u>X</u>	
Wetland Hydrology Present? Yes <u></u> No <u>X</u>	
Remarks: Within narrow swale vegetated with shrubs and trees. Vegetation is classified as wetland due to dominant facultative species. Lack of hydric soils and wetland hydrology indicates upland conditions.	

VEGETATION - Use scientific names of plants.

<table><tr><td>Tree Stratum (Plot size: <u>30-ft</u>)</td><td>Absolute % Cover</td><td>Dominant Species?</td><td>Indicator Status</td></tr><tr><td>1. <u>Pinus contorta</u></td><td><u>25</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>2. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>3. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>4. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td></td><td><u>25</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Sapling/Shrub Stratum (Plot size: <u>15-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Salix boothii</u></td><td><u>40</u></td><td><u>Yes</u></td><td><u>FACW</u></td></tr><tr><td>2. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>3. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>4. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>5. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td></td><td><u>40</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Herb Stratum (Plot size: <u>5-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u>Poa pratensis</u></td><td><u>40</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr><tr><td>2. <u>Solidago canadensis</u></td><td><u>35</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>3. <u>Dasiphora fruticosa</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FAC</u></td></tr><tr><td>4. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>5. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>6. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>7. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>8. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>9. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>10. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>11. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td></td><td><u>85</u></td><td colspan="2">= Total Cover</td></tr><tr><td>Woody Vine Stratum (Plot size: <u>30-ft</u>)</td><td></td><td></td><td></td></tr><tr><td>1. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td>2. <u></u></td><td><u></u></td><td><u></u></td><td><u></u></td></tr><tr><td></td><td><u>0</u></td><td colspan="2">= Total Cover</td></tr><tr><td>% Bare Ground in Herb Stratum <u>15</u></td><td></td><td></td><td></td></tr></table>	Tree Stratum (Plot size: <u>30-ft</u>)	Absolute % Cover	Dominant Species?	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Hydrophytic Vegetation Present? Yes <u>X</u> No <u></u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>75</u>	x 3 = <u>225</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>150</u> (A)	<u>445</u> (B)
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Remarks: <u>Upland</u>

SOIL

Sampling Point: UDP8

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/2	100					Silt Loam	Fine roots
2-16	10YR 3/2	100					Silt Loam	Granular structure
16-20	10YR 3/2	100					Clay Loam	Compaction increase

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 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)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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 <u> X </u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u> X </u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

PHOTO(S)

Sampling Point: UDP8



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>WDP1</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Stream bank</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.685611</u>	Long: <u>-111.248158</u>
Soil Map Unit Name: <u>Cryaquolls and Cryaquents, flood plains</u>	Datum: <u>WSG-84</u>	NWI classification: <u>PSSC</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Wetland point, taken at stream bank. Paired with UDP1.	

VEGETATION - Use scientific names of plants.

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Remarks:

SOIL

Sampling Point: WDP1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					Muck Lm Clay	Saturated at four inches. Mucky loam
5-14	10YR 3/2	100					Silt Loam	
14-22		100					Fine Sndy Lm	Gley 1, 2.5/N. Gravel at 22"

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4)	☒ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ 1 cm Muck (A9) (LRR D, G)	☒ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18)	☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)
☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G)	

Indicators for Problematic Hydric Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Meets F1 and F2 due to texture and color.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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): 8
Saturation Present?	Yes ☒ No ☐	Depth (inches): 4

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: 3 ft from creek



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: _____	State: <u>MT</u>	Sampling Point: <u>WDP2</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Stream bank</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.683163</u>	Long: <u>-111.247768</u>
Soil Map Unit Name: <u>Cryaquolls and Cryaquents, flood plains</u>	Datum: <u>WSG-84</u>	NWI classification: <u>PSSC</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No _____ (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No _____		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Stream bank, paired with UDP3.	

VEGETATION - Use scientific names of plants.

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Remarks:

SOIL

Sampling Point: WDP2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 3/2	100					Silt Loam	Saturated at four inches. Mucky loam
8-12	10YR 3/2	100					Silt Loam	Fewer roots
12-20	10YR 6/3	95	10YR 5/6	5	C	M	Fine Sndy Lm	Redo to reflect depletions, approx 65% and

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4)	☒ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ 1 cm Muck (A9) (LRR D, G)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18)	☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)
☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G)	

Indicators for Problematic Hydric Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Upper 8" meet mucky mineral loam hydric soil indicator requirements. Greasy-feeling texture indicative of high organic matter content.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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): 8
Saturation Present?	Yes ☒ No ☐	Depth (inches): 4

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: 3 ft from creek



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: <u>Eagle's Grove at Yellowstone, LLC</u>	State: <u>MT</u>	Sampling Point: <u>WDP3</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Stream bank</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.68561825</u>	Long: <u>-111.2481575666667</u>
Soil Map Unit Name: <u>Mollic Cryoboralfs, mountain slopes</u>	NWI classification: <u>PSSC</u>	Datum: <u>WSG-84</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Stream bank, paired with UDP4.	

VEGETATION - Use scientific names of plants.

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Remarks:

SOIL

Sampling Point: WDP3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					Silt Loam	Saturated at four inches. Mucky loam
6-12	10YR 3/2	100					Silt Loam	Fewer roots
12-20	10YR 6/3	95	10YR 5/6	5		M	Fine Sndy Lm	Redo to reflect depletions, approx 65% and

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☒ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐ 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)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Upper 6" of profile is mucky mineral loam--very greasy feeling. Meets F1 requirements for hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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): <u>8</u>
Saturation Present?	Yes ☒ No ☐	Depth (inches): <u>4</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: 3 ft from creek; saturated at 6"; water table at 9".

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: _____	State: <u>MT</u>	Sampling Point: <u>WDP4</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Edge of pond</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.684678</u>	Long: <u>-111.24888</u>
Soil Map Unit Name: _____	Datum: <u>WSG-84</u>	NWI classification: _____

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

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

Are Vegetation No, Soil No, or Hydrology No 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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Edge of pond, paired with UDP6. Dense grasses, nearby shrubs.	

VEGETATION - Use scientific names of plants.

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Remarks:

SOIL

Sampling Point: WDP4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					Muck	Decomposed organic matter
4-7	10YR 3/1	100					Coarse Sand	
7-21	10YR 3/1	90	10YR 5/6	10	C	M	Silty Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4)	☒ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ 1 cm Muck (A9) (LRR D, G)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18)	☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)
☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G)	

Indicators for Problematic Hydric Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Meets F1 hydric soil requirements. Sand layer is likely from a previous flood.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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): <u>2</u>
Water Table Present?	Yes ☒ No ☐	Depth (inches): <u>2</u>
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐	Depth (inches): <u>0</u>

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Edge of pond



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-03; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Eagle's Landing</u>	City/County: <u>Gallatin County</u>	Sampling Date: <u>06/18/2025</u>
Applicant/Owner: _____	State: <u>MT</u>	Sampling Point: <u>WDP5</u>
Investigator(s): <u>Faith Doty, Christine Pearcy</u>	Section, Township, Range: <u>S21 T13S R4E</u>	
Landform (hillslope, terrace, etc): <u>Braided stream</u>	Local relief (concave, convex, none): <u>none</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>LRR E, MLRA 49</u>	Lat: <u>44.68468602730483</u>	Long: <u>-111.2488818389912</u>
Soil Map Unit Name: _____	Datum: <u>WSG-84</u>	NWI classification: _____

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

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

Are Vegetation No, Soil No, or Hydrology No 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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Braided stream; paired with UDP7.	

VEGETATION - Use scientific names of plants.

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1.	<u>Carex nebrascensis</u>	40	Yes	OBL																																																																																																																																																																																				
2.	<u>Eleocharis radicans</u>	25	Yes	OBL																																																																																																																																																																																				
3.	<u>Equisetum arvense</u>	20	Yes	FAC																																																																																																																																																																																				
4.	<u>Carex sp.</u>	15	No	NI																																																																																																																																																																																				
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11.																																																																																																																																																																																								
		100	= Total Cover																																																																																																																																																																																					
Woody Vine Stratum	(Plot size: <u>30-ft</u>)																																																																																																																																																																																							
1.																																																																																																																																																																																								
2.																																																																																																																																																																																								
		0	= Total Cover																																																																																																																																																																																					
% Bare Ground in Herb Stratum		<u>0</u>																																																																																																																																																																																						
Total % Cover of:		Multiply by:																																																																																																																																																																																						
OBL species	<u>65</u>	x 1 =	<u>65</u>																																																																																																																																																																																					
FACW species	<u>35</u>	x 2 =	<u>70</u>																																																																																																																																																																																					
FAC species	<u>20</u>	x 3 =	<u>60</u>																																																																																																																																																																																					
FACU species	<u>0</u>	x 4 =	<u>0</u>																																																																																																																																																																																					
UPL species	<u>15</u>	x 5 =	<u>75</u>																																																																																																																																																																																					
Column Totals:	<u>135</u> (A)		<u>270</u> (B)																																																																																																																																																																																					

Remarks:

SOIL

Sampling Point: WDP5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					Muck	1 decomposed organic matter
4-6	10YR 3/1	100					Coarse Sand	
6-21	10YR 3/1	90	10YR 5/6	10	C	M	Silty Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4)	☒ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ 1 cm Muck (A9) (LRR D, G)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18)	☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)
☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G)	

Indicators for Problematic Hydric Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Upper 4" meets F1 requirements. Greasy-feeling mucky texture.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two 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): <u>4</u>
Water Table Present?	Yes ☒ No ☐	Depth (inches): <u>6</u>
Saturation Present?	Yes ☒ No ☐	Depth (inches): <u>0</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

PHOTO(S)

Sampling Point: WDP5

