

May 28, 2025

Lucia Olivera, Division Administrator
Federal Highway Administration
585 Shepard Way
Helena, MT 59601-9785

Subject: US 93 N – Post Creek Hill Re-Evaluated Final Supplemental Environmental Impact
Statement (for the Post Creek Hill segment only)
Project No. NH 5-2(159)37
Control No. 8008000

Dear Ms. Olivera:

The US 93 corridor from Evaro to Polson was evaluated for environmental impacts in the 1996 *U.S. Highway 93-Evaro to Polson-Missoula and Lake Counties, Montana: FEIS* with the Record of Decision (ROD) signed by your agency on August 12, 1996. The ROD, however, deferred making a decision on the lane configurations, mitigation measures and a Section 4(f) determination until agreement was reached by Federal Highway Administration (FHWA) and Montana Department of Transportation (MDT), along with the Confederated Salish and Kootenai Tribes (CSKT) as a cooperating agency. Representatives from MDT, FHWA and CSKT then negotiated and signed a *Memorandum of Agreement – US 93 Evaro to Polson* (referred to as the US 93 Corridor MOA) on December 20, 2000. The US 93 Corridor MOA excluded a section between the Dublin Gulch/Red Horn Road intersection (Reference Post (RP) 37.1) and just north of the Baptiste/Spring Creek Road intersection (RP 48.7) which is referred to as the US 93 Ninepipe/Ronan project corridor. A *Supplemental Environmental Impact Statement (SEIS) for the US 93 Ninepipe/Ronan section* was signed by your agency on February 14, 2008 and the ROD was signed by your agency on May 21, 2008.

The purpose of this letter is to request FHWA concurrence that the following proposed design changes, changed conditions and updated environmental information do not result in significant changes that would require preparation of an additional SEIS. The request for FHWA action pertains only to the US 93 N – Post Creek Hill improvements (RP 36.8 to 40.4).

Re-evaluation of the approved SEIS is required for FHWA action. Pursuant to 23 CFR 771.129(b), this re-evaluation is intended to a) identify and analyze changes that have occurred as a result of design and b) consider any new information available regarding the project and the study area, including changes in the design and scope, new or modified laws and regulations, or change within the affected environment. Due to project timing and complexity, only the US 93 N – Post Creek Hill segment (RP 36.8 to 40.4) of the US 93 Ninepipe/Ronan corridor is addressed in this document. The purpose and need for the entire US 93 Ninepipe/Ronan corridor, including the US 93 N – Post Creek Hill project (RP 36.8 to 40.4), has not changed.

UPDATED PROJECT INFORMATION

The US 93 Ninepipe/Ronan corridor will be constructed in multiple phases based upon available funding. A project location map is included as Figure 1 with project segments described below:

- The proposed **US 93 – N Post Creek Hill** project (UPN 8008000) begins approximately 10.2 miles south of Ronan, near the Red Horn Road/Dublin Gulch Road intersection (RP 36.8). The project extends north on US 93 just past the Gunlock Road/Olsen Road intersection (RP 40.4) for a length of 3.6 miles. The Post Creek Hill project corridor is in Lake County, beginning in Sections 1 and 2 and ending in Sections 25 and 26, Township 19 North, Range 20 West. Construction is tentatively planned to begin in 2026.
- The remaining segment, generally referred to as the **Ninepipe Segment**, is between RP 40.4 and 44.6. Based on project delivery and available funding, development of this segment will progress through multiple projects.
 - RP 40.4 to 40.8 – Eagle Pass Trail – South: this portion of the Ninepipe segment is currently unfunded with the construction date to be determined.
 - RP 40.8 to 44.5 – south of Eagle Pass Trail to Brook Lane: These projects include SF 179 Eagle Pass Trail Safety – HSIP STWD(762), UPN 9614001; US-93 Wildlife Overpass – SSS 5-2(204)41, UPN 10567000; US-93 North Ninepipe – SSS 5-2(202)41, UPN 10568000. A progressive design-build team has been selected for these projects and construction is tentatively planned to begin in 2027.
- The proposed US 93 **Ronan-Urban** project (UPN 1744013) begins approximately 1.4 miles south of Ronan, near Brooke Lane (RP 44.6). The proposed project extends north on US 93 to north of the Baptiste Road/Spring Creek Road intersection (RP 48.7) for a length of 4.1 miles. The Ronan-Urban project is located in Lake County, on the section line between Sections 1 and 2, Sections 11 and 12, and Sections 13 and 14, Township 20 North, Range 21 West and on the section line between Sections 24 and 25 and in Section 36 of Township 21 North, Range 20 West.

The **Ronan-Urban** project was split into the following segments for construction:

- Ronan-North, NH 5-2 (172) 47, UPN 1744019: Construction of this project began in November 2022 and was completed in November 2024, aside from design changes at US 93, Old US 93 and 3rd Avenue.
- US 93-Ronan (Urban) NH 5-2 (173) 45, UPN 1744020
- There is potential for the project to be split into a third segment, Ronan-South. No further information is available at this time.

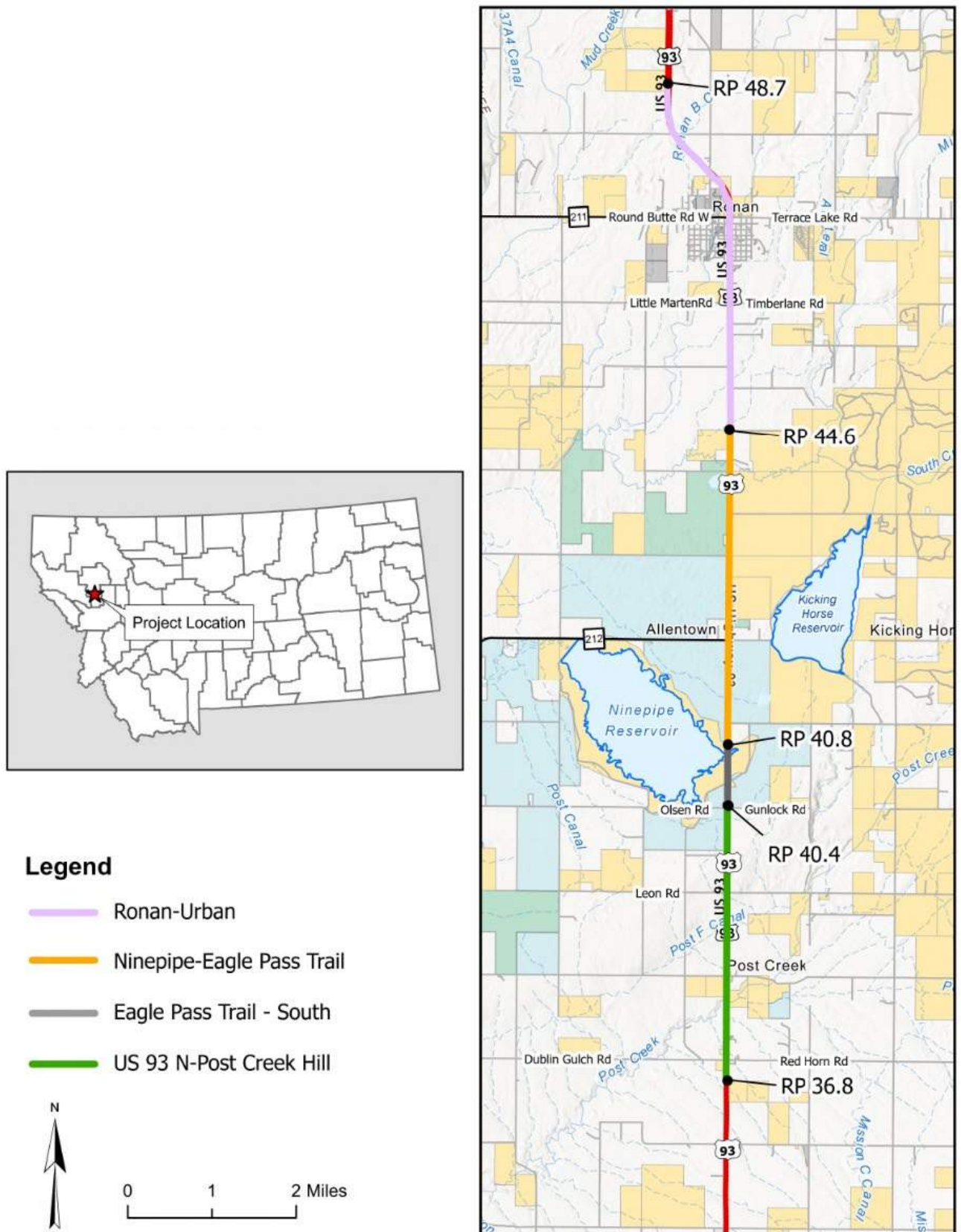


Figure 1. US 93 Ninepipe/Ronan Corridor Segments

Updated Design Year: Due to the passage of time, MDT has changed the **project design year** to 2040. Daily traffic projections have been revised for the Post Creek Hill segment as shown in Table 1.

Table 1. Updated Post Creek Hill Traffic Volumes

Land Use	RP	Daily Traffic Volumes by Year (vehicles per day) (vpd)		
		2024 (estimate)	2025 (projected)	2040 (projected)
Rural	RP 36.8 to 40.4	8,390	8,470	10,340

Threatened Species Update: A revised Biological Assessment (BA) for the US 93 Evaro to Polson highway corridor was prepared in October 2017 to address changes in regulatory actions from the original BA, prepared in 2005. During formal consultation with the US Fish and Wildlife Service (USFWS), updates were made to the BA to address species listing changes. The USFWS completed the Biological Opinion (BO) in November 2020 and determined the following:

- **Likely to adversely affect:** bull trout and grizzly bear.
- **No effect:** bull trout critical habitat, Canada lynx, water howelia, Spalding's campion, meltwater lednian stonefly, yellow-bill cuckoo.
- **Not likely to jeopardize the continued existence of:** North American wolverine and whitebark pine.

Since the completion of the original Post Creek Hill Biological Resources Report (BRR) and 2017 revised BA, the North American wolverine has been listed as threatened, the monarch butterfly has been listed as proposed threatened, and the Suckley's cuckoo bumblebee has been listed as proposed endangered. Additionally, the USFWS list has been better defined to include project areas rather than county-wide species lists. As a result, the water howlia, Spalding's campion, and meltwater lednian stonefly are no longer considered potential species within the project area.

To reflect these changes, an update to the Post Creek Hill BRR was prepared by Shane Talley with MDT on October 11, 2024 (**Attachment 1**). This updated BRR includes the following determinations:

- Wolverine: **No Effect.**
- Monarch butterfly: **Will not jeopardize the continued existence** of the monarch butterfly.

An additional update to the Post Creek Hill BRR was prepared by Morrison-Maierle on May 28, 2025 (**Attachment 1**). This updated BRR includes the following determination:

- Monarch butterfly: Status changed from candidate to proposed threatened; **will not jeopardize the continued existence** of the monarch butterfly.
- Suckley's cuckoo bumble bee: **Will not jeopardize the continued existence** of the Suckley's cuckoo bumble bee.

In addition, the May 28, 2025, BRR Update includes the identification of a bald eagle nest approximately 0.3 miles west of the Olson/Gunlock Road intersection. Timing restrictions for the protection of nesting eagles will be included as a special provision in the contract documents.

Wetland Delineation Update: Since the time of the 2008 SEIS, there have been multiple re-verifications of the wetlands and waterways within the Post Creek project corridor, in addition to expansion of investigation limits in certain areas. A full re-delineation of the Post Creek project corridor was completed by Morrison-Maierle environmental scientists in August and September 2024 to ensure existing conditions are used for calculating impacts as the project reaches final design. The following tables provide a summary of surface waters, irrigation canals, and wetlands within the investigation area.

Table 2. Surface Water Bodies Located in the Post Creek Project Corridor

Waterbody	Approximate Location (RP)	Linear Feet in Investigation Corridor	Crossing Type
Ashley Creek	37.4 to 37.8	1,307	Culvert
Post Creek	37.8	4,088	Bridge
Unnamed Tributary to Post Creek 2	37.8 to 38.1	2,012	Culvert
Unnamed Tributary to Post Creek 3	37.8 to 38.1	1,755	Culvert

As noted in the 2008 SEIS, Unnamed Tributary to Post Creek 1 was degraded with a high degree of siltation. At the time of the 2024 wetland delineation, Unnamed Tributary to Post Creek 1 no longer exhibits characteristics of a waterway and is characterized as a wetland feature due to its fully vegetated bottom and lack of a defined bed and bank. Therefore, it is no longer listed as a surface water within the project corridor.

Table 3. Irrigation Canals Located in the Post Creek Project Corridor

System	Approximate Location (RP)	Relation to US 93	Description
Post F Canal	38.6	Crossing	8'S x 4'R RCB (147' long)
Unnamed Irrigation Ditch 1	39.8	Crossing	24" CSP Irrigation (98' long)
Unnamed Irrigation Ditch 2	39.8	Crossing	24" CSP Irrigation (126' long)
Post G Canal	39.9	Crossing	8'S x 4'R RCB (146' long)

Table 4. Approximate Wetland Area by Wetland Type and Total Area in the Post Creek Project Corridor

Wetland Type	Wetland Area (acres)
Palustrine Emergent (PEM)	67.7
Palustrine Scrub-Shrub (PSS)	7.8
Palustrine Forested (PFO)	9.5
Palustrine Aquatic Bed (PAB)	2.1

Wetland Type	Wetland Area (acres)
Palustrine Unconsolidated Bed (PUB)	1.2
TOTAL	88.3

For more details, the Aquatic Resource Technical Memo is provided in **Attachment 2**. Updated Wetland Determination Data Forms and MDT Montana Wetland Assessment Method forms are included as attachments to the report.

Updated Floodplain Map: Since the completion of the 2008 SEIS, the Federal Emergency Management Agency (FEMA) has released an updated Flood Insurance Rate Map (FIRM) for the project area. The updated FIRM panel (30047C0988C) was revised on February 6, 2013, and can be found in **Attachment 3**. This updated FIRM panel maintained the previous Post Creek and Ashley Creek floodplain Zone A boundary as identified in the 2008 SEIS.

Floodplain mapping for Post Creek at the project location is limited to the highway right-of-way because the adjacent lands are owned by the United States in Trust for CSKT. CSKT does not participate in the National Flood Insurance Program (NFIP). Floodplain mapping for Ashley Creek is included east of US 93 on privately owned lands south of the tribal lands through which Post Creek flows. Floodplain mapping for the Ashley Creek flooding source likely would be shown for a larger area if not for the adjacent tribal parcels. A Lake County floodplain permit will be acquired for work in proximity to the regulatory floodplain.

Cultural Resources Update:

A cultural resource survey for the project area was conducted in 2015 to update the original 1992 survey. Two historic properties were determined eligible for the National Register of Historic Places: The Post F Canal of the Flathead Irrigation Project (SKP-LA-0418) and the Weber Residence (SKP-LA-0230/24LA0156). The proposed project was determined to have No Effect on either property. Tribal Historic Preservation Office (THPO) concurrence of No Effect was received on May 2, 2016. MDT received documentation of updated project concurrence of the No Effect determination on May 19, 2025, from CSKT THPO. Correspondence between MDT and THPO is provided in **Attachment 4**. No additional cultural resource surveys are required at this time. CSKT Preservation will be notified of proposed construction timelines and have the opportunity to monitor on site during construction.

Stream Mitigation and Restoration: The Final SEIS mitigation measures stated that onsite restoration and enhancement would be explored at Ashley Creek and unnamed tributaries to Post Creek 1, 2, and 3 during final design. A stream mitigation study conducted in 2020 included riparian restoration along Post Creek at and upstream of the new bridge, restoration at Ashley Creek west of US 93, and relocation and consolidation of the unnamed tributary east of US 93.

Stream mitigation discussions halted for several years and were reinitiated in early 2025. Representatives for MDT and CSKT have been involved in stream mitigation meetings and the mitigation and restoration design for these features is ongoing. The following is a summary of proposed restoration and mitigation work options discussed to date:

Post Creek: Some restoration of Post Creek would occur as a function of the increased span of the new US 93 bridge. The existing road prism, bridge abutments, and riprap will be removed to the extent possible. The existing hydraulic training berms upstream of the bridge will be removed to allow natural system restoration of wetlands and more floodplain access for the stream. These changes will allow natural fluvial processes including channel migration to occur. Some additional restoration or realignment of Post Creek may occur and will be coordinated with CSKT environmental departments. The proposed wider bridge opening and removal of training berms would create a net benefit to the Post Creek corridor by introducing stream and riparian restoration and floodplain reconnection. Additional options for stream enhancement along Post Creek to count toward stream mitigation credits are being explored.

Ashley Creek: A new hydraulic structure would be constructed at Ashley Creek's intersection with Highway 93 at RP 37.6. A new channel would be constructed west of the highway to provide dispersed surface flow to Post Creek. The extent of realignment and detailed design of Ashley Creek mitigation has not been finalized, and discussions are ongoing.

Unnamed Tributaries to Post Creek: Two unnamed tributaries will be impacted by the widened roadway and require realignment. Unnamed Tributary to Post Creek 3 will be realigned outside the highway fill slopes from near its intersection with West Post Creek Road to approximately RP 37.9 where flows will be directed through a ditch block and CMP culvert under Highway 93. The outlet would be placed at an intersection with Unnamed Tributary to Post Creek 2 and existing wetlands.

As stated, design is ongoing for the mitigation and restoration elements at Post Creek, Ashley Creek, and the unnamed tributaries. The intent of the design will be to mitigate stream channel loss as a result of the Post Creek Hill project while meeting expectations and needs of CSKT and other agencies involved.

Section 4(f) Evaluation Update

The 2008 SEIS determined the preferred alternative would have unavoidable impacts to Section 4(f) properties. Pursuant to Section 6009 of Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), FHWA determined the project would result in minor or 'de minimis' impacts on Section 4(f) resources. Ongoing discussions between MDT, CSKT, and FWP were held to discuss potential impacts to Section 4(f) properties. These meetings are documented in Section 4(f) De minimis Determination letters provided in **Attachment 5**.

There will be impacts to two CSKT Kerr Mitigation properties and three FWP WMA Section 4(f) properties by the proposed improvements. The alignment and grade design construction limits currently encroach onto these properties. Impacts to Section 4(f) properties have been minimized by steepening in-slopes to 4:1 recoverable rather than 6:1.

Letters requesting concurrence with the Department's *de minimis* determination were sent on March 15, 2019, to both representatives of CSKT and the Montana Department of Fish, Wildlife & Parks respectively. Signed concurrence of *de minimis* impacts was received for all five impacted properties.

The CSKT Section 4(f) *De minimis* Determination letter was signed on March 26, 2019. The letter stated the following:

- Acquisition of approximately 1.17 acres of Kerr Mitigation Land on parcels 123 and 127.

Design changes resulted in a new acquisition total of 0.93 acres of parcel 123 and 127.

The FWP Section 4(f) *De minimis* Determination letter was signed on April 11, 2019. The letter stated the following:

- Acquisition of up to approximately 6.54 acres of the Ninepipe WMA for highway ROW.
 - This includes estimated ROW needed to complete both the Post Creek Hill segment and the Ninepipe Segment. The Post Creek Hill segment alone will require approximately 1.07 acres of Ninepipe WMA acquisition on parcels 146, 147, and 152.

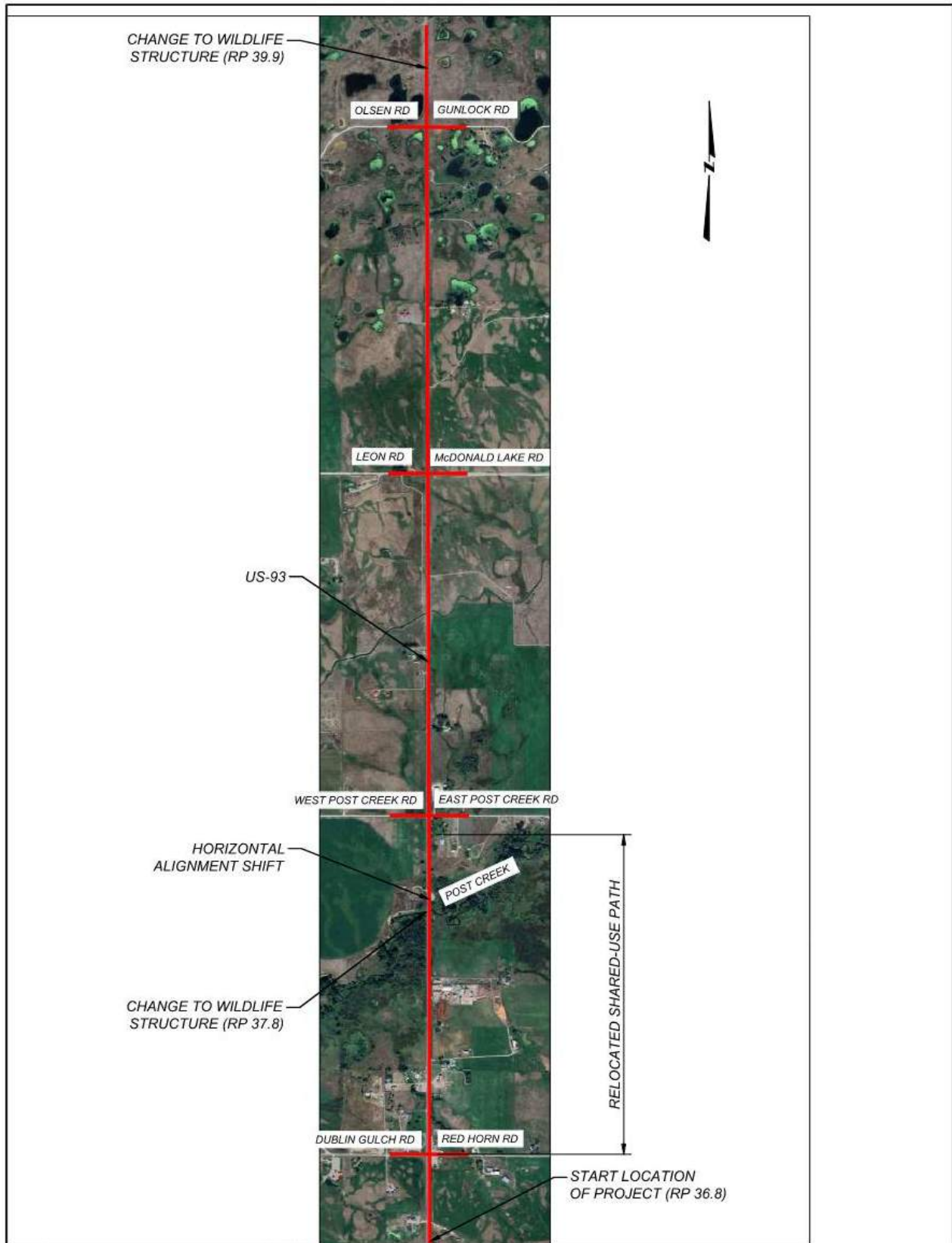
Design changes have resulted in a new acquisition total of 0.31 acres of parcels 147 and 152. No acquisition will be required on parcel 146.


Therefore, acquisition of 4(f) property has been reduced since the 2008 SEIS. Reduction in 4(f) property acquisition can be attributed to the relocation of the shared-use path to the east side of the highway and the refinement of the overall project design.

No Section 4(f) land owned by USFWS will be acquired as part of the Post Creek Hill project. Signed De Minimis 4(f) letters from CSKT and FWP are provided in **Attachment 5**.

CHANGED CONDITIONS AND RE-EVALUATION

Design changes and environmental conditions that are the subject of this re-evaluation are described below. Evaluation of potential impacts to resource areas is provided in this section. Careful consideration was given to meeting the intent of the SEIS/ROD, while proposing these changes. Figure 2, below, shows the locations of the design changes described in the following pages.



 MONTANA Department of Transportation	PROJECT NAME	US 93 POST CREEK HILL	Figure 2 PROJECT CHANGES MAP
	COUNTY	LAKE COUNTY	
	PROJECT ID	NH 5-2(159)37	
	UPN	8008000	
EXHIBITS			

Design Change 1: Start Location of Project

The SEIS described the start of the US 93 Ninepipe/Ronan project at RP 37.1, at the Dublin Gulch Road/Red Horn Road intersection. The project start has been shifted to approximately 1,700 feet south of the Dublin Gulch Road/Red Horn Road intersection at RP 36.8. This change was implemented to tie into previously completed road construction to the south.

Design Change 2: Horizontal Alignment Shift at Post Creek

The centerline alignment at Post Creek bridge has shifted to the east of the SEIS centerline to keep the centerline on the Present Travelled Way (PTW). Between Sta 1+07.35 to approximately 58+09.59, the new roadway is centered on the existing PTW. The remainder will align in accordance with *Preferred Alternative Rural 3* as specified in the SEIS. The alignment change resulted from a CSKT request to minimize impacts to the forested area and wetlands on the west side of the highway.

Design Change 3: Relocating Shared-use Path

The 2008 SEIS identified that the project would provide a separated, shared-use path from the north terminus of the Ninepipe/Ronan segment to Buchanan Street in Ronan (RP 48.7 to 46.9). The separated shared-use path was extended throughout the entire Ninepipe/Ronan corridor after substantial public comment was received on the SEIS (Figure 3.2-6, page 3-37 of the SEIS).

The Final SEIS described the shared-use path specifically as an addition to the Preferred Alternative Rural 3 since it was chosen as the preferred alternative. Within the Post Creek Hill corridor, this design placed the shared-use path on the west side of Highway 93 from the start of the project to just south of McDonald Lake Road. South of the McDonald Lake Road intersection with Highway 93, the shared-use path went under the highway to the east side of the road through the remainder of the Post Creek Hill project corridor.

Since the Final SEIS, the shared-use path design has changed to follow the east side of Highway 93 through the entirety of the project corridor. A feasibility study was conducted to evaluate the shared-use path location options in the Post Creek Hill project corridor. Keeping the shared-use path on the east side of the highway would eliminate the need for an underpass in an area with seasonally high groundwater levels. Additionally, the highway vertical grade would not be impacted to allow for room for an underpass. More information can be found in the Shared Use Path Location Tech Memo dated July 3, 2024.

Design Change 3 complies with the 2008 SEIS direction to improve non-motorized travel in the corridor. The bicycle and pedestrian quality-of-service estimated in the 2008 SEIS (Table 5.6-2, page 5-38) would remain at level C.

Design Change 4: Changes to Wildlife Structures

The SEIS described the following wildlife structures:

- One 10'x12' culvert wildlife crossing structure immediately south of the proposed Post Creek bridge at Sta 48+75 (*Post Creek Option 2*).
- One 12'x22" wildlife crossing structure north of the Olsen Rd/Gunlock Rd intersection with Highway 93 at Sta 126+00 (*Ninepipe Reservoir Option 5*).

The 10'x12' culvert option south of Post Creek will be replaced with a new 14'x6' hydraulic structure for Ashley Creek at the existing east side Ashley Creek location ~Sta 44+50. The original intent for this culvert was to create a dry wildlife crossing, but due to high groundwater concerns and construction limits this intent was eliminated from the design.

The single 12'x22' wildlife crossing structure north of the Olsen Rd/Gunlock Rd intersection has been eliminated from the design. The eliminated crossing structure will be replaced with a series of small culverts and guide fencing that would directly benefit painted turtles. Three turtle crossing structures would be installed: two north of Gunlock Road and one south of Gunlock Road, along with associated guide fencing. Each turtle crossing will have a natural bottom substrate to encourage usage. A Turtle Crossing Technical Memorandum was completed in March 2017 with conceptual level design and location of the turtle crossings. See the memorandum in **Attachment 6** for more details.

PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

To evaluate potential cumulative effects, research was conducted to identify other known or programed projects in the vicinity of the project area.

- UPN 1744000, US 93 Ronan (Urban), RP 44.6 to 48.7, Reconstruction is expected to occur in 2028 or later.
- Ninepipe Segment projects between RP 40.8 and 44.5 are tentatively planned to begin construction in 2027, with substantial completion in 2028.
- The Flathead Reservation Transportation Improvement Program (TIP) did not have any upcoming projects planned that would tie into US 93 within the Post Creek Hill project corridor.

The Ronan (Urban), Ninepipe, and Post Creek Hill segments were all evaluated in the original SEIS. This re-evaluation of the SEIS does not change the cumulative impacts analysis provided in the SEIS, as impacts are not significantly different. Cumulative impacts from these projects are largely expected to be beneficial, as the projects are meant to increase traveler safety and wildlife passage.

These identified projects would each undergo a separate re-evaluation, as necessary, to identify any additional cumulative impacts.

SUMMARY OF IMPACTS, MITIGATION & SIGNIFICANCE

Table 5 summarizes the changed impacts and proposed mitigation for the Post Creek Hill segment as currently designed compared with the 2008 SEIS/ROD. The table also provides MDT's, FHWA's, and CSKT's determination of whether the proposed changes are "significant" in terms of NEPA and MEPA compliance. Significance determinations were made based on the criteria specified in 40 CFR 1508.27 and ARM 18.2.238.

Table 5. Summary of Changed Potential Impacts and Proposed Mitigation for the Post Creek Hill Segment

RESOURCE	CHANGE IN POTENTIAL DIRECT AND INDIRECT IMPACTS COMPARED TO SEIS	CHANGE IN PROPOSED MITIGATION COMPARED TO SEIS	SIGNIFICANCE DETERMINATION
A. TRAFFIC OPERATIONS & SAFETY	<p>Design Change 1: Addition of short term impacts during construction to two private approaches at RP 36.9.</p> <p>Design Change 2, 3, and 4: No change in impact.</p> <p>Cumulative Impacts: The proposed project, when combined with other road and shared-use path projects that are planned, would cumulatively improve safety for the traveling public and mobility for non-motorized users.</p>	No mitigation changes are proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The proposed project changes will improve traffic operations and safety.
B. LAND USE	<p>Design Change 1: There will be a minor change in land use at the start of the project from agricultural field to road right-of-way.</p> <p>Design Change 2: The shift in horizontal alignment at Post Creek will reduce impacts to the forested wetlands and floodplain on the west side of the creek. Overall, land use changes will be similar but shifted more to the east side of the highway.</p> <p>Design Change 3: Change in use. Land on the east side of the highway will be utilized for a shared use path throughout the entirety of the project corridor.</p> <p>Design Change 4: Change in proposed use. The proposed wildlife crossing near Ashley Creek will be changed to a hydraulic crossing for the creek rather than a dry wildlife passage. Wildlife passage will be provided at the Post Creek bridge and result in minor overall proposed land use changes.</p> <p>Cumulative Impacts: No cumulative impact changes anticipated due to the design changes, as impacts are consistent with the SEIS and ROD.</p>	No mitigation changes proposed.	The minor change in potential impacts on land use from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The land use changes will benefit the community and are considered minor in nature.
C. PRIME AND UNIQUE FARMLAND	<p>Design Changes 1 and 3: Minor increase in impacts to Farmland of Local Importance by shifting the project start approximately 1,700 feet south. Relocation of the shared use path to the east side of the highway results in similar impacts to farmland that were shifted to the east side of the road.</p> <p>Design Change 2 and 4: No change in impacts.</p>	No mitigation changes proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The increase in impact to a farmland of local importance is minor and would have a negligible effect on the

RESOURCE	CHANGE IN POTENTIAL DIRECT AND INDIRECT IMPACTS COMPARED TO SEIS	CHANGE IN PROPOSED MITIGATION COMPARED TO SEIS	SIGNIFICANCE DETERMINATION
	<p>Design Changes 3 and 4: Minor changes in impacts to Farmland of Local importance.</p> <p>A total of 18.2 acres of prime or unique farmland will be converted to non-farm use through acquisition for the proposed project. The SEIS described total farmland conversion for the Post Creek Segment corridor as 23.6 acres. Therefore, impacts to prime or unique farmland has been reduced.</p> <p>The Farmland Conversion Impact Rating Form (CPA-106) completed for the SEIS (Appendix G) was reviewed. The total acres to be converted would decrease by 5.4 acres. Therefore, the percentage of farmland in the county to be converted would be reduced from 0.015 to 0.006. In addition, the total corridor assessment points would remain the same at 84 points, the relative value of farmland would remain at 17 points and the total points remains at 101 out of a possible 260 points.</p> <p>Cumulative Impacts: Cumulative impacts to farmlands as a result of future roadway construction projects within the project area are consistent with those identified in the 2008 SEIS.</p>		overall amount of farmable land in the project area.
D. SOCIAL	<p>All Design Changes: No change in impacts.</p> <p>No cumulative impact changes anticipated.</p>	No mitigation changes proposed.	Not Significant. No change in impacts.
E. ECONOMICS	<p>All Design Changes: No change in impacts.</p> <p>No cumulative impact changes anticipated.</p>	No mitigation changes proposed.	Not Significant. No change in impacts.
F. PEDESTRIANS AND BICYCLISTS	<p>Design Changes 1, 2, and 4: No change in impacts.</p> <p>Design Change 3: Maintain corridor connectivity. Relocation of the separated shared use path to stay on the east side of the highway will eliminate the underpasses proposed in the SEIS. Overall, there are no changes in impacts to this resource.</p> <p>Cumulative Impacts: Future projects may expand the opportunities available for non-motorized travel, resulting in a beneficial cumulative impact.</p>	No mitigation changes proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The beneficial impacts of the proposed project changes on pedestrian/bicycle connectivity and safety are consistent with the findings of the SEIS and ROD.

RESOURCE	CHANGE IN POTENTIAL DIRECT AND INDIRECT IMPACTS COMPARED TO SEIS	CHANGE IN PROPOSED MITIGATION COMPARED TO SEIS	SIGNIFICANCE DETERMINATION
G. AIR QUALITY	All Design Changes: No change in impacts. No cumulative impact changes anticipated.	No mitigation changes proposed.	Not Significant. No change in impacts.
H. NOISE	All Design Changes: No change in impacts. No cumulative impact changes anticipated.	No mitigation changes proposed.	Not Significant. No change in impacts.
I. WATER QUALITY	Design Changes 1 through 4: No change in impact. Cumulative Impacts: Cumulative impacts to water quality as the result of future roadway construction projects within the watershed are anticipated to be negligible. Future construction activities would increase the overall amount of impervious surface within the area, resulting in increased runoff; however, the increase in pollutant loading is anticipated to be negligible in the context of the setting.	No mitigation changes proposed.	Not Significant. No change in impacts.
J. WETLANDS	Design Change 1: Increase in wetland impact. Shifting the project start south of the SEIS start will result in an additional 0.35 acres of permanent wetland impacts. Design Changes 2 and 3: These design changes will result in a similar area of wetland impacts since wetlands occur on both sides of the highway. The horizontal shift at Post Creek will reduce impacts to forested wetlands on the west side of the highway, but impact acreage will shift to the emergent wetlands on the east side of Post Creek. Shifting the location of the shared use path will result in shifting emergent wetland impacts from the west side of the highway to the east side. Design Change 4: Decrease in wetland impact because the chosen structures are smaller and require less grade changes. The culvert will allow surface flows from Ashley Creek and groundwater recharge flows to continue to reach Post Creek and the adjacent wetlands. The addition of three turtle crossing structures will decrease wetland impacts due to using a smaller structure, and benefit wildlife. A new wetland delineation was completed for the proposed project in August and September 2024. The SEIS included a longer project area and is not useful for an accurate comparison of wetland acreages. However, the 2024 delineation did result in the delineation of additional wetland acreage due to changing landscapes from irrigation	No mitigation changes proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. Based on the updated wetland boundaries and revised preliminary construction limits, wetland impacts are anticipated to be less than the widest (most impactful) road footprint identified in the 2008 SEIS.

RESOURCE	CHANGE IN POTENTIAL DIRECT AND INDIRECT IMPACTS COMPARED TO SEIS	CHANGE IN PROPOSED MITIGATION COMPARED TO SEIS	SIGNIFICANCE DETERMINATION
	<p>influenced wetlands. Wetland impacts anticipated in the SEIS, including the Ronan-Urban portion of the project were 15.5 acres. The Post Creek Hill project is now anticipated to permanently impact 10.84 acres of wetlands. Final wetland impacts will be determined during final design.</p> <p>No cumulative impact changes anticipated.</p>		
K. FLOODPLAINS AND STREAMS	<p>Design Change 1 and 3: No change in impacts.</p> <p>Design Change 2: Results in less impacts to woody riparian habitat along the west side of Post Creek.</p> <p>Design Change 4: Beneficial impact to Ashley Creek. Replacing the wildlife crossing structure with a hydraulic structure, paired with potential restoration of Ashley Creek, will benefit the Ashley Creek and Post Creek systems.</p> <p>No cumulative impact changes anticipated.</p>	No mitigation changes are currently proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The impacts of the proposed project changes would benefit stream quality and are consistent with the findings of the SEIS and ROD.
L. FISH AND WILDLIFE	<p>Design Change 1 and 3: No change in impacts.</p> <p>Design Change 2: The horizontal alignment shift at Post Creek will minimize impacts to the forested wetlands on the west side of the highway, benefitting wildlife that use those forested wetlands.</p> <p>Design Change 4: The change from an underpass wildlife crossing structure south Post Creek to a hydraulic structure for Ashley Creek will not result in changes in impacts to wildlife or fish. The Post Creek bridge will serve as the wildlife crossing in this area, and Ashley Creek does not support a fishery. The change from wildlife crossing north of Olsen Rd/Gunlock Rd will benefit painted turtles in this area by providing them safe passage.</p> <p>No cumulative impact changes anticipated.</p>	No mitigation changes proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The impacts of the proposed project changes would have no impact or benefit wildlife and are consistent with the findings of the SEIS and ROD.
M. THREATENED AND ENDANGERED SPECIES	<p>All Design Changes: The project changes will not change existing effects determinations outlined in the 2020 USFWS BO and BRR updates.</p> <p>No cumulative impact changes anticipated.</p>	No mitigation changes proposed.	Not Significant. No change in impacts.

RESOURCE	CHANGE IN POTENTIAL DIRECT AND INDIRECT IMPACTS COMPARED TO SEIS	CHANGE IN PROPOSED MITIGATION COMPARED TO SEIS	SIGNIFICANCE DETERMINATION
N. CULTURAL RESOURCES	All Design Changes: The project will have No Effect on cultural resources. The project will perpetuate the Post F Canal crossing. No cumulative impact changes anticipated.	No mitigation changes proposed.	Not Significant. No change in impacts.
O. PARKS AND RECREATION	All Design Changes: No change in impacts. No cumulative impact changes anticipated.	No mitigation changes proposed.	Not Significant. No change in impacts.
P. HAZARDOUS MATERIALS	All Design Changes: No change in impacts. No cumulative impact changes anticipated.	No mitigation changes proposed.	Not Significant. No change in impacts.
Q. VISUAL	All Design Changes: No change in impacts. No cumulative impact changes anticipated.	No mitigation changes proposed.	Not Significant. No change in impacts.
R. RIGHT OF WAY AND RELOCATIONS	Design Change 1: Shifting the start of the project south results in an additional 0.86 acres of acquisition (two parcels). Design Change 2: Results in a reduction of acquisition by 2.80 acres. Design Change 3: Results in a reduction of acquisition by 2.30 acres. Design Change 4: No change in impacts. Indirect and Cumulative Impacts: Overall, design changes will result in a reduction of right-of-way acquisitions by 4.24 acres. No additional residential or business displacements will occur with the design changes. No additional cumulative impacts will result from these design changes.	No mitigation changes proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The relocations and increase in right-of-way acquisition are consistent with the findings of the SEIS and ROD.
S. GEOLOGY AND SOILS	Design Changes 1 and 4: Design changes will result in a minor change in excavation and fill quantities for the project. Design Changes 2 and 3: No change in impacts. No cumulative impact changes anticipated.	No mitigation changes proposed.	The change in potential impacts from the findings of the SEIS/ROD is not significant as defined in NEPA and MEPA. The changes in fill and excavation quantities are consistent with the findings of the SEIS and ROD.

PERMITS

There are no additional permits or authorizations to add to the ones identified in the SEIS.

PUBLIC AND AGENCY INVOLVEMENT

The US 93 corridor has a number of long-term committees developed as part of the early process are still active and serve as one method of public outreach. Big Sky Public Relations is subcontracted to manage public involvement through project design and construction. There have been several public outreach opportunities including public newspaper notices, public forums, and landowner meetings between 2014 and present day. Recent events are summarized below.

MDT has presented US 93 Post Creek Hill project updates to the CSKT Tribal Council multiple times throughout 2024. Local representatives, including the Lake County Commissioner's office, City of Ronan staff, and more, have been included in team meetings. The week of March 10, 2025, a series of stakeholder meetings were held with project and design team members with area landowners, officials, and a member of the state legislature. The public has expressed concerns about construction impacts to surrounding roadways. In response, the project team is committed to continued collaboration with Lake County and residents to mitigate any foreseen challenges. A public informational meeting was held on Thursday, May 1 to further inform the public on design and construction progress. Stakeholders at the May 1 meeting were excited about the upcoming safety enhancements. Additional public meetings will be coordinated closer to construction.


Discussions from meetings have been incorporated into the project design elements. Continued personal contact with stakeholders and area landowners is expected to continue during the Design Phase. Personal contact with all landowners will also be offered during the right-of-way and active construction phases. Any design changes as a result of continued stakeholder meetings, discussions, and right-of-way negotiations are expected to be minor and not result in a change in results of this SEIS re-evaluation.

CONCLUSION

The SEIS/ROD for the US Highway 93 Ninepipe/Ronan Improvement Project has been re-evaluated as required by 23 CFR 771.129(b) with respect to the proposed US 93 N – Post Creek Hill (UPN 8008000) project.

Based upon the re-evaluation, MDT determined that the US 93 N – Post Creek Hill project is not substantially different or changed from the original SEIS/ROD. The design changes and environmental updates described in this re-evaluation would not affect the ability of the Preferred Alternative to meet the project's stated purpose as described in the SEIS and ROD. MDT has determined that the impacts of these changes are not individually or cumulatively significant or significantly different from those described in the SEIS and ROD. Therefore, MDT has determined that the proposed design changes would have no effect on the ultimate decision documented in the ROD and that approving these design changes would be consistent with 23 CFR 771 for the proposed US 93 N – Post Creek Hill (UPN 8008000) portion of the US Highway 93 Ninepipe/Ronan Improvement Project.

CONCURRENCE:




Tom Martin, P.E.
Bureau Chief-Environmental Services
Montana Department of Transportation

Date May 28, 2025

Federal Highway Administration

Date 6/11/2025



Confederated Salish and Kootenai Tribes

Date 6-3-25

Electronic copies:

Bob Vosen,	Missoula District Administrator
Vacant, P.E.,	Engineering Construction Contracting Bureau Chief
Kelly Williams,	MDT Consultant Design Engineer
Mark Studt	MDT Consultant Project Engineer
Beth Kappes	MDT Alternative Contracting Engineer
Jason Gilliam,	MDT Right-of-Way Bureau Chief
Amber Jensen,	MDT Missoula Right-of-Way
Lisa Hurley,	MDT Fiscal Programming Section Supervisor
Miki Lloyd,	MDT Contract Plans Section Supervisor
Tom Martin,	MDT Environmental Services Bureau Chief
Tom Gocksch,	MDT Environmental Services Bureau, Section Supervisor
John Heinley,	MDT Missoula District Project Development Engineer

List of Attachments

- 1) Post Creek Hill BRR
 - a) BRR Update October 11, 2024
 - b) BRR Update May 28, 2025
- 2) Aquatic Resource Technical Memo
- 3) FEMA FIRM Panel
- 4) THPO Correspondence
- 5) Section 4(f) De Minimis Letters
 - a) CSKT Signed Letter
 - b) FWP Signed Letter
- 6) Turtle Crossing Technical Memorandum

ATTACHMENT 1 – Post Creek Hill BRR

- a) BRR Update October 11, 2024
- b) BRR Update May 28, 2025

From: [Scott Fanning](#)
To: [Breanne Cline](#); [Traxler, Mark](#)
Subject: Fw: 8008000 US93 N - Post Creek Hill --- BRR Update for Geotech Investigation eDoc Re-Eval
Date: Friday, October 11, 2024 4:32:07 PM
Attachments: [8008 Post Ck MTNHP SOC 241011.pdf](#)
[C2 signature mmi-logomark-51x48-pad-right-6_4f1fab1c-b713-4e6d-ba6e-1f4146f10e61.png](#)

FYI, see below

 **Scott Fanning**
Transportation Group Supervisor, Morrison-Maierle
[+14064953416](#) direct | [+14067813141](#) mobile

A 100% Employee-Owned Company

From: Hinshaw, Ellen <ehinshaw@mt.gov>
Sent: Friday, October 11, 2024 2:25 PM
To: Scott Fanning <sfanning@m-m.net>; Michael.George <Michael.George@kiewit.com>
Cc: Studt, Mark <mstudt@mt.gov>; Kappes, Bethany <bkappes@mt.gov>; Heinley, John <jheinley@mt.gov>; Talley, Shane <stalley@mt.gov>
Subject: FW: 8008000 US93 N - Post Creek Hill --- BRR Update for Geotech Investigation eDoc Re-Eval

This message originated from an **External Source.** Please use proper judgment and caution when opening attachments, clicking links, or responding to this message.

All,

Please see below from Shane on the BRR.

Ellen

From: Talley, Shane <stalley@mt.gov>
Sent: Friday, October 11, 2024 2:19 PM
To: Studt, Mark <mstudt@mt.gov>; Hinshaw, Ellen <ehinshaw@mt.gov>; Heinley, John <jheinley@mt.gov>
Subject: 8008000 US93 N - Post Creek Hill --- BRR Update for Geotech Investigation eDoc Re-Eval

Please forward this on to the appropriate staff and team members. This would normally be handled by the consultant team, but I have provided this update due to the short timeline required at this point.

John,

Please let this email serve as an update to the Biological Resources Report (BRR) for the subject project from March 2015. This update replaces any previous BRR updates to the date of this email. Only sections of the original BRR that require updates required for the re-evaluation of the Environmental Document for the current geotechnical investigations are addressed here, all other sections of the 2015 BRR remain valid. This information supersedes any contradictory information contained the Executive Summary.

The overall project scope, description, and extents have not changed. Delineation of wetlands was performed during the late-summer and fall of 2024. At this time, a detailed report is not available. An updated MT Species of Concern list was queried from the MTNHP on 10/11/24 and is attached to this email. There is no change in anticipated impacts of the proposed project.

The USFWS IPaC database was queried on October 11, 2024 with an action area including a 0.5-mile radius surrounding the project limits. The report listed Canada lynx, grizzly bear, North American wolverine, Yellow-billed cuckoo, bull trout, and monarch butterfly as potentially present in the action area. This updates the Flathead County list used in the 2015 BRR. Only species provided in the IPaC list will be assessed in this update. Grizzly bear, bull trout, Canada lynx, and Yellow-billed cuckoo full effects analyses were provided in the corridor-wide BA in the US Highway 93 Evaro to Polson FEIS and SEIS. Those analyses and determinations remain valid.

Since the completion of the original BRR and SEIS, North American wolverine has been listed as threatened. The project area occurs at a lower elevation and does not contain suitable habitat elements preferred by wolverines in Montana. Additionally, the project area is in an area of high human activity and development that would likely dissuade use of the area by wolverine. Wolverine may pass through the project area enroute to more suitable habitats in the higher elevation mountain ranges surrounding the valley, but their occurrence in the project area would likely be rare and transient in nature. The project will not affect any suitable wolverine habitat elements necessary for survival. The project will have **no effect** on North American wolverine.

Since the completion of the original BRR and SEIS, monarch butterfly has been listed as a candidate. Monarch butterfly is considered a candidate species throughout its range, wherever found, which includes southern Canada, the entire continental U.S. and Central and South America. Adult butterflies have occupied most habitat types across Montana but are rarely found above treeline. Suitable larval food species (*Asclepiadaceae*) have been reported within the project area and there is likely presence of adult and larval butterflies in the area. Species presence would more likely be limited to adults migrating through and/or feeding on some flower species at or near the project site during summer months. Monarch habitat and food species are prevalent surrounding the project site due to the riparian corridor, agricultural fields, natural grasslands, and residential landscaping surrounding the project area. Due to the isolated project limits, minimal expected ground disturbance, and limited scope of work, no impacts to monarch butterfly are anticipated. The project will **not jeopardize the continued existence** of monarch butterfly.

The MTNHP MapViewer database was queried on 10/11/2024 for eagle nest locations. No Bald or Golden eagle nest locations are documented within 0.5 mile of the project area.

If trees and shrubs are removed with this project, removal will occur outside nesting season dates of April 15 to August 15 to comply with the Migratory Bird Treaty Act. Only the vegetation clearing required to complete the proposed work will be performed at this time. The minimal amount of vegetation clearing outside the migratory bird nesting season retains ample other nesting areas to remain undisturbed.

All work shall be conducted in compliance with the applicable standard specifications in the most recent version of the 2020 MDT Standard Specifications for Road and Bridge Construction,

specifically including but not limited to 208.03.1 Water Pollution Control, 208.03.2 Aquatic Resource Protection, 208.03.3 Regulations and Permitting, and 208.03.4.E Work in Bear Habitat.

Thank you,
Shane Talley

Shane Talley

Missoula District Biologist
Environmental Services Bureau
Montana Department of Transportation
2701 Prospect Ave
Helena, Montana
(406) 444-7258
stalley@mt.gov

DATE: May 28, 2025
TO: Shane Talley, Missoula District Biologist
FROM: Breanne Cline, Environmental Scientist
RE: 8008000 US93 N – Post Creek Hill
BRR Update

Dear Shane,

This memo is meant to serve as an update to the Biological Resources Report (BRR) for the US93 N – Post Creek Hill (8008000) project dated October 11, 2024, prepared by Shane Talley, MDT Missoula District Biologist. Only the sections of the original and updated BRR documents that require updates are addressed in this memo. All other sections remain valid.

The US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database was queried on March 14, 2025, for an action area covering a 0.5-mile radius surrounding the project corridor. The report listed Canada lynx (threatened), grizzly bear (threatened), North American wolverine (threatened), Yellow-billed Cuckoo (threatened), bull trout (threatened), monarch butterfly (proposed threatened), and the Suckley's cuckoo bumble bee (proposed endangered) as potentially present in the action area. This updates the species list provided in October 2024 BRR. Grizzly bear, bull trout, Canada lynx, and Yellow-billed Cuckoo full effects analyses were provided in the corridor-wide Biological Assessment in the US Highway 93 Evaro to Polson Final Environmental Impact Statement and Supplemental Environmental Impact Statement. The October 2024 BRR provided effects analysis for the North American wolverine and the monarch butterfly. Those analyses and determinations remain valid.

Monarch Butterfly

The listing status of the monarch butterfly was elevated from candidate to proposed threatened on December 12, 2024. Additionally, critical habitat for the species was proposed in several areas of California. No critical habitat is designated in the project area. The species description and assessment provided on October 11, 2024, BRR update remains valid. Monarch habitat and food species are prevalent surrounding the project site due to the riparian corridor, agricultural fields, natural grasslands, and residential landscaping surrounding the project area. Due to the availability of adequate habitat outside of the construction zone and the migratory nature of the monarch butterfly, no impacts to this species are anticipated. The project will **not jeopardize the continued existence** of monarch butterfly. If the species becomes listed as Threatened or Endangered prior to construction, the proposed project will have no effect on monarch butterfly based on the information provided in this report.

Suckley's Cuckoo Bumble Bee

On December 17, 2024, the USFWS published a proposed rule in the Federal Register listing the Suckley's cuckoo bumble bee as endangered under the Endangered Species Act. This species' range includes most of western U.S. and Canada, including the Cascade Mountains, Rocky Mountains, and northwest Great Plains down to New Mexico and Arizona. This species occurs in a large array of habitat types, including prairies, grasslands, meadows, urban and agricultural areas, and woodlands. Threats to the Suckley's cuckoo bumblebee include host species decline, pathogens, pesticides, habitat fragmentation and conversion, and climate change (89 FR 102074). Suckley's cuckoo bumble bee is an obligate social parasite (it depends on social hosts for survival and raising young). Confirmed host species include western bumble bee (*Bombus occidentalis*) and Nevada bumble bee (*B. nevadensis*), with other potential hosts in subgenus

8008000 US93 N – Post Creek Hill
BRR Update

Bombus throughout its range. Host bumble bee nests are often located in abandoned underground holes, such as rodent burrows, in a wide array of habitat types. Females overwinter underground in areas separate from nesting habitat, likely using mulch or other decomposing vegetation (89 FR 102074).

There is potential for host species habitat to be present in the agricultural fields and meadows adjacent to the project area. However, much of the area sees at least a moderate degree of disturbance from grazing, haying, and roadside maintenance. Host species habitat may be more suitable outside of the project corridor and in areas of less ground disturbance. Due to the availability of suitable habitat nearby and the generalist habitat requirements of this species, the proposed project is **not likely to jeopardize the continued existence** of Suckley's cuckoo bumble bee. If the species becomes listed as Threatened or Endangered prior to construction, the proposed project will have no effect on Suckley's cuckoo bumble bee based on the information provided in this report.

Bald and Golden Eagles

A Bald Eagle nest territory has been located approximately 0.3 mile west of the Olson/Gunlock Road intersection. Timing restrictions for the protection of nesting eagles will be expected for the following or similar activities; blasting, staging, storage, gravel crushing, hot plant, or borrow sources within 0.5-mile of the approximate nest location from February 1 to August 15, inside or outside the right-of-way. A special provision will be developed for inclusion in the contract documents.

No other changes to the original and updated BRR are required at this time. Should other changes warrant another update to the BRR, an additional BRR update memo will be provided.

Sincerely,



Breanne Cline, Environmental Scientist
Morrison-Maierle

References

USFWS. 2025. Information for Planning and Consultation (IPaC) system. U.S. Fish and Wildlife Service. March 14, 2025. <https://ipac.ecosphere.fws.gov/>.

USFWS. 2025. ECOS Environmental Conservation Online System. Suckley's cuckoo bumble bee. ECOS Environmental Conservation Online System. <https://ecos.fws.gov/ecp/species/10885#rangeInfo>

USFWS. 2024. Endangered and Threatened Wildlife and Plants; Endangered Species Status for Suckley's Cuckoo Bumble Bee. 50 CFR 17. 89 FR 102074. December 17, 2024.

USFWS 2024. Endangered and Threatened Wildlife and Plants; Threatened Species Status with Section 4(d) Rule for Monarch Butterfly and Designation of Critical Habitat. 50 CFR 17. 89 FR 100662. December 12, 2024.

ATTACHMENT 2 – Aquatic Resource Technical Memo

Montana Department of Transportation
Aquatic Resource Technical Memo
2024 Re-Delineation

Firm Name: Morrison-Maierle **Date:** 5/22/2025
Prepared By: Breanne Cline
Position Title of Preparer: Environmental Scientist

Project (Name, Number, UPN): US 93 N – Post Creek Hill, NH 5-2(159)37, 8008000

Watershed: Lower Clark Fork #3

Project Description: The project is a bridge construction and roadway improvement project in the vicinity of Ronan, Montana. The Post Creek Hill project corridor is in Lake County, south of Ronan along US Highway 93 beginning in Sections 1 and 2 and ending in Sections 25 and 26, Township 19 North, Range 20 West. The project limits extend from Reference Post (RP) 36.8 on the south to RP 40.4 on the north. The RPs roughly correlate with the Gunlock Road/Olsen Road crossing on the north end and the Red Horn Road/Dublin Gulch Road crossing on the south end. The scope of construction activities for the Post Creek Hill project is expected to include:

- a new 500-foot long, two lane bridge structure over Post Creek
- a 1.65-mile northbound passing lane from West/East Post Creek Road (RP 38.2) to the top of Post Creek Hill (RP 40.0)
- restoration of Post Creek
- a new, separated, shared-use path
- a new hydraulic structure for Ashley Creek realignment and restoration at approximately RP 37.6
- three turtle crossings and associated turtle walls within the Ninepipe WMA just north of Gunlock Road
- wildlife fencing at Post Creek
- four irrigation crossing structures
- curvilinear horizontal roadway alignment roughly following the existing roadway,
- a two-way left turn lane extending from Dublin Gulch Road / Red Horn Road north 0.4 miles (RP 37.1-RP 37.5)
- miscellaneous work, such as roadway ditch modifications to improve drainage, subgrade improvements, and removal of existing bridge and irrigation crossing structures

Most of the land adjacent to the project corridor is tribal or privately owned. Land use in and adjacent to the project corridor includes irrigated agriculture fields, livestock management and grazing, commercial and rural residential use, and open space.

Project Location:

County: Lake

Route/Highway: US 93

From RP: 36.8 to RP: 40.4

Nearest Town: Ronan

Wetlands

Methods: Wetland delineations of the Post Creek Hill project area were previously completed between 2014 and 2017. Due to the age of the delineations, and the complexity of this wetland environment, a new wetland delineation of the entire Post Creek Hill project area was completed by Morrison-Maierle environmental scientists on August 7 – 8 and September 16 – 18, 2024. The project area consists of an approximately 200-foot-wide buffer extending on each side of the roadway centerline for a length of 3.75 miles. Additional survey areas were included to the east of US 93 near McDonald Lake Road as well as to the east and west at the Post Creek crossing. Total wetland delineation project area is approximately 270 acres (Attachment 1, Figure 1).

Wetland surveyors followed the delineation procedures described in the USACE 1987 Wetland Delineation Manual (Environmental Laboratory 1987) along with the Western Mountains Valleys and Coasts Regional Supplement (USACE 2010). Wetland boundaries and sample plots were delineated with a handheld global positioning system (GPS) device with sub-meter accuracy. Data was collected according to USACE guidance and the MDT Wetland and Stream Delineation Process (MDT 2020).

Vegetation, hydrology, and soils data were recorded on US Army Corps of Engineers (USACE) Wetland Determination Data Forms (Attachment 3). Additionally, the 2008 MDT Montana Wetland Assessment Method (MWAM) was applied to delineated wetlands (Attachment 3).

Environmental scientists reviewed the US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), USGS topographic maps, aerial imagery, and previous wetland delineation data collected within the project area.

Wetlands Discussion: The wetland investigation resulted in the delineation of 21 wetland complexes, totaling 88.34 acres. Wetlands within the corridor consist of areas of floodplain located adjacent to Post Creek, irrigation associated wetlands and channels, and glacial potholes wetlands. The delineated wetlands are complexes of palustrine forested, scrub-shrub, emergent, and aquatic bed wetland vegetation types. The wetland areas were classified as Category II to IV wetlands according to the MDT Montana Wetland Assessment Method. Table 1 provides a summary of the delineated wetland characteristics. Delineated wetlands and associated data points are shown on Figures 3.1 through 3.11.

Table 1. Wetland Characteristics

Wetland ID#	Lat.	Long.	MWAM Category	Water Regime	Cowardin Class/ Modifier	HGM Class*	Dominant Vegetation	Hydrologic Feature
WL-1-24	47.380819	-114.096392	IV	SI	N/A	Slope	Willows and reed canary	Irrigation
WL-2A-24	47.382976	-114.096177	IV	SI	N/A	Slope	Meadow foxtail, Nebraska sedge, mountain timothy	Irrigation
WL-2B-24	47.383568	-114.096619	IV	SI	N/A	Slope	Cattails and Nebraska sedge	Roadside ditch
WL-3-24	47.383343	-114.097186	IV	SI	N/A	Slope	Cattail, Nebraska sedge, spike rush	Irrigation
WL-4A-24	47.386399	-114.096382	III	PP	N/A	Riverine	Lesser pondweed, and cattail	Post Creek
WL-4B-24	47.385962	-114.096303	III	PP	N/A	Riverine	Cottonwood, willows, and cattail	Post Creek
WL-4C-24	47.387054	-114.097193	III	PP	N/A	Riverine	Lesser pondweed	Post Creek
WL-4D-24	47.387269	-114.097477	III	PP	N/A	Riverine	Lesser pondweed	Post Creek
WL-4E-24	47.386871	-114.097381	III	PP	N/A	Riverine	Lesser pondweed and cattails	Post Creek
WL-5A-24	47.393797	-114.096369	II	PP	N/A	Riverine	Cattails and Nebraska sedge	Post Creek
WL-5B-24	47.389930	-114.096181	II	PP	N/A	Riverine	Eurasian watermilfoil and lesser pondweed	Post Creek
WL-5C-24	47.395266	-114.095505	II	PP	N/A	Riverine	Fringed willowherb, Nebraska sedge, cattail	Post Creek
WL-6A-24	47.390960	-114.098195	II	PP	N/A	Riverine	Dock-leaf smartweed, Baltic rush, reed canary grass	Post Creek
WL-6B-24	47.391820	-114.098769	II	PP	N/A	Riverine	Nebraska sedge, cattail, reed canarygrass	Post Creek
WL-6C-24	47.393437	-114.097941	II	PP	N/A	Riverine	Eastern cottonwood, white poplar, reed canarygrass	Post Creek

Aquatic Resource Findings Report

Wetland ID#	Lat.	Long.	MWAM Category	Water Regime	Cowardin Class/ Modifier	HGM Class*	Dominant Vegetation	Hydrologic Feature
WL-7-24	47.399198	-114.097156	IV	SI	N/A	Riverine	Cattail, Nebraska sedge, reed canarygrass	Roadside ditch
WL-8A-24	47.396979	-114.096480	III	SI	N/A	Riverine	Nebraska sedge, rice cut-grass, wild mint	Ashley Creek
WL-8B-24	47.398619	-114.096346	III	SI	N/A	Riverine	Cattail and reed canarygrass	Ashley Creek
WL-8C-24	47.399312	-114.096145	III	SI	N/A	Riverine	Cattails, Asian forget-me-not, dock-leaf Smartweed	Ashley Creek
WL-8D-24	47.399410	-114.096579	III	TE	N/A	Depressional	Baltic Rush	Isolated depression
WL-9A-24	47.405396	-114.096336	III	SI	N/A	Slope	Nebraska sedge	Irrigation
WL-9B-24	47.402700	-114.096255	III	SI	N/A	Riverine	Peach-leaf willow, Nebraska sedge, fringed willowherb	Irrigation
WL-10A-24	47.407693	-114.095889	III	SI	N/A	Riverine	Nebraska sedge	Post F Canal
WL-10B-24	47.407673	-114.097479	III	SI	N/A	Riverine	Nebraska sedge and common teasel	Post F Canal
WL-11A-24	47.411265	-114.096133	III	SI	N/A	Riverine	Nebraska sedge, Kentucky bluegrass, Baltic rush, cattails	Irrigation
WL-11B-24	47.413111	-114.097190	III	SI	N/A	Riverine	Cattails and common teasel	Irrigation
WL-11C-24	47.416176	-114.097308	III	SI	N/A	Riverine	Cattails, Kentucky bluegrass, Baltic rush	Irrigation
WL-11D-24	47.414645	-114.097666	III	SI	Impounded	Depressional	Lesser pondweed	Glacial pothole
WL-12A-24	47.415761	-114.096555	III	SI	N/A	Riverine	Cattails and Nebraska sedge	Irrigation
WL-12B-24	47.419508	-114.096404	III	SI	N/A	Slope	Common spikerush, Nebraska sedge, Kentucky bluegrass, cattails	Irrigation

Aquatic Resource Findings Report

Wetland ID#	Lat.	Long.	MWAM Category	Water Regime	Cowardin Class/ Modifier	HGM Class*	Dominant Vegetation	Hydrologic Feature
WL-13A-24	47.420304	-114.097005	III	SI	N/A	Slope	Cattails and Baltic rush	Irrigation / roadside ditch
WL-13B-24	47.420940	-114.096630	III	SI	N/A	Slope	Cattails and curly dock	Irrigation / roadside ditch
WL-13C-24	47.421171	-114.097040	III	SI	N/A	Slope	Cattails and Baltic rush	Irrigation / roadside ditch
WL-14A-24	47.423296	-114.096300	III	SI	N/A	Slope	Cattails and Baltic rush	Irrigation / roadside ditch
WL-14B-24	47.423413	-114.096102	III	PP	N/A	Depressional	Lesser pondweed	Glacial Pothole
WL-14C-24	47.424351	-114.096288	III	SI	N/A	Riverine	Eastern Cottonwood and slender wheatgrass	Irrigation
WL-14D-24	47.424520	-114.096328	III	SI	N/A	Riverine	Cattails and reed canarygrass	Irrigation
WL-15-24	47.424051	-114.097430	III	SI	N/A	Slope	Cattails, Baltic rush, reed canarygrass	Glacial pothole
WL-16A-24	47.424953	-114.096364	III	SI	N/A	Slope	Cattails, Baltic rush, reed canarygrass	Irrigation / roadside ditch
WL-16B-24	47.425623	-114.097503	III	SI	N/A	Slope	Cattails, Baltic rush, reed canarygrass	Irrigation / roadside ditch
WL-16C-24	47.425599	-114.097196	III	PP	N/A	Depressional	Cattails, lesser pondweed	Glacial pothole
WL-16D-24	47.426948	-114.096487	III	SI	N/A	Slope	Baltic rush, reed canarygrass, common spikerush	Irrigation / roadside ditch
WL-16E-24	47.427224	-114.096114	III	PP	N/A	Depressional	Lesser pondweed	Glacial pothole

Aquatic Resource Findings Report

Wetland ID#	Lat.	Long.	MWAM Category	Water Regime	Cowardin Class/ Modifier	HGM Class*	Dominant Vegetation	Hydrologic Feature
WL-16F-24	47.427923	-114.096239	III	SI	N/A	Depressional	Cattails, Baltic rush, reed canarygrass	Glacial pothole
WL-17A-24	47.428672	-114.097159	II	PP	N/A	Depressional	Cattails, Baltic rush, reed canarygrass	Glacial pothole
WL-17B-24	47.428985	-114.097443	II	PP	N/A	Depressional	Unconsolidated bottom-no veg	Glacial pothole
WL-18-24	47.431031	-114.096706	II	TE	N/A	Riverine	Cattails, common spikerush, Kentucky bluegrass	Roadside ditch
WL-19A-24	47.428279	-114.096223	II	PP	N/A	Depressional	Reed canarygrass and common spikerush	Glacial pothole
WL-19B-24	47.429046	-114.096049	II	PP	N/A	Depressional	Cattails, Baltic rush, reed canarygrass	Glacial pothole
WL-19C-24	47.430798	-114.096201	II	PP	N/A	Depressional	Cattails and reed canarygrass	Glacial pothole
WL-19D-24	47.430827	-114.096068	II	PP	N/A	Depressional	Lesser pondweed	Glacial pothole
WL-19E-24	47.432546	-114.096216	II	PP	N/A	Depressional	Cattails	Roadside ditch
WL-19F-24	47.432382	-114.096086	II	PP	N/A	Depressional	Cattails, lesser pondweed, reed canary grass	Glacial pothole
WL-20-24	47.432746	47.432746	II	PP	N/A	Depressional	Cattails and reed canarygrass	Glacial pothole
WL-21A-24	47.433547	-114.097564	II	PP	N/A	Depressional	Reed canarygrass and red goosefoot	Roadside ditch
WL-21B-24	47.433940	-114.097462	II	PP	N/A	Depressional	Unconsolidated bottom-no veg	Glacial pothole

*The dominant HGM class is listed. Many of the wetlands are a combination of various HGM classes. Refer to the MWAM forms for more information.

Note: Lat., Long. = the approximate center point for the wetland (WGS1984.)

WL-1-24, WL-2-24, WL-3-24 (AA-1)

Wetlands WL-1-24, WL-2A/B-24, and WL-3-24 were evaluated for Assessment Area (AA)-1. These wetlands are located to the west and east of Highway 93 from approximately RP 36.8 (the project start) and extend to the intersection of Dublin Gulch/Red Horn Road at RP 37.1 (Attachment 1, Figure 3.1 & 3.2). They consist of roadside swales, irrigation channels, and slope wetlands sourced by irrigation waters.

According to the Cowardin classification system these wetlands consist of palustrine emergent (PEM) vegetation type. Based on the HGM classification system (Smith et al. 1995) these were classified as riverine and slope wetlands.

These wetlands are dominated by herbaceous species, including Nebraska sedge (*Carex nebrascensis*), common spikerush (*Eleocharis palustris*), Kentucky bluegrass (*Poa pratensis*), common timothy (*Phleum pratense*), field mint (*Mentha arvensis*), and meadow foxtail (*Alopecurus pratensis*). Roadside ditch areas were often dominated by cattail (*Typha latifolia*).

Wetland hydrology primary indicators included surface water (A1), high water table (A2), saturation (A3), and algal mat (B4). Secondary indicators included geomorphic position (D2) and FAC-neutral test (D5). The hydric soil indicator at these wetlands primarily included depleted matrix (F3) with a few data points containing loamy mucky mineral (F1) and depleted below dark surface (A11).

The Category IV functional rating for these wetlands was based on the mostly low to moderate functions and values rankings for AA-1.

WL-4 -24 (AA-2)

Wetland WL-4/A/B/C/D-24 was evaluated for AA-2 and is associated with an unnamed tributary of Post Creek (does not exhibit an ordinary high-water mark) that flows towards the northwest and drains under the roadway via a culvert near RP 37.25 as shown on Figure 3.2 in Attachment 1. WL-4-24 is located on both sides of Highway 93.

According to the Cowardin classification system, WL-4A and 4E are PEM wetlands. WL-4B and 4C are palustrine forested (PFO) wetlands, and WL-4D is considered a palustrine aquatic bed (PAB).

WL-4 PEM wetlands were dominated by cattail, smartweed (*Polygonum lapathifolium*), and common duckweed (*Lemna minor*). WL-4 PFO wetlands were dominated by willow (*Salix amygdaloides*), balsam poplar (*Poplar balsamifera*), softstem bulrush (*Schoenoplectus tabernaemontani*), and cattail. The PAB was dominated by common duckweed with cattail and Nebraska sedge near the edges.

Wetland hydrology primary indicators included surface water (A1), high water table (A2), saturation (A3), and drift deposits (B3). Secondary indicators included geomorphic position (D2) and FAC-neutral test (D5). The hydric soil indicator at these wetlands primarily included depleted matrix (F3) and loamy mucky mineral (F1).

The Category III functional rating for this wetland was based on the small size of the delineated wetland (1.55 acres) and low to moderate functions and values rankings for habitat in AA-2.

WL-5-24, WL-6-24 (AA-3)

WL-5A/B/C-24 and WL-6A/B/C-24 were evaluated for AA-3. They are located east and west of Highway 93 respectively and extend approximately from RP 37.4 to RP 37.9 (Attachment 1, Figures 3.3, 3.4, and 3.5).

These wetlands surround Post Creek, Ashley Creek, and unnamed tributaries to Post Creek. This area consists of roadside ditches as well as a diverse wetland complex with areas of upland mosaic. According to the Cowardin classification system, WL-5A-24 and WL-6A-24 are PEM wetlands. WL-5B-24 is classified as a PAB wetland. Wetlands 5C-24 and 6B-24 are palustrine scrub-shrub (PSS), and WL-6C-24 is a PFO wetland. Based on the HGM classification system (Smith et al. 1995) these were classified as riverine, depressional, and slope wetlands.

The PEM wetlands are dominated by herbaceous species including Nebraska sedge, reed canary grass (*Phalaris arundinacea*), and Eurasian watermilfoil (*Myriophyllum spicatum*). Roadside ditch areas were primarily dominated by cattail.

PSS wetlands were dominated by Greene's mountain-ash (*Sorbus scopulina*), bog birch (*Betula pumila*), and green alder (*Alnus viridis*) with a heavy herbaceous understory dominated by Nebraska sedge.

The PFO wetland areas were dominated by eastern cottonwood (*Populus deltoides*) and white poplar (*Populus alba*) with reed canary grass understory.

Primary indicators of wetland hydrology included surface water (A1), high water table (A2), saturation (A3), water-stained leaves (B9), and hydrogen sulfide odor (C1). Secondary indicators consisted of geomorphic position (D2) and the FAC-neutral test (D5). Hydric soil indicators within these wetlands were predominantly represented by a depleted matrix (F3) or histosol (A1). Additionally, two data points displayed mucky mineral (F1) or redox dark surface (F8).

The Category II functional rating for these wetlands resulted from the mostly moderate to high functions and values rankings for AA-3.

WL-7-24 (AA-4)

WL-7-24 was evaluated for AA-4. This wetland is located on the west side of Highway 93 and stretches approximately from RP 37.9 to RP 38.6 (Attachment 1, Figures 3.5, 3.6, and 3.7). This wetland consists of a riverine feature surrounding Unnamed Tributary to Post Creek 1 on the south end near Post Creek. It is heavily influenced by irrigation water and serves as roadside ditch wetlands as it extends to the north.

WL-7-24 has a Cowardin classification of PEM. Based on the HGM classification system (Smith et al. 1995) these wetlands are classified as riverine. The dominate vegetation collected at these data points included cattail, Nebraska sedge, and common spikerush.

Wetland hydrology primary indicators include surface water (A1), saturation (A3), and hydrogen sulfide odor (C1). Hydric soil indicators at these data points include hydrogen sulfide (A4), loamy mucky mineral (F1), and depleted matrix (F3).

The functional rating for these wetlands was a Category III because of the mostly low to moderate rankings for the AA-4.

WL-8-24, WL-9-24 (AA-5)

Wetlands WL-8A/B/C/D-24 and WL-9A/B were evaluated for AA-5. They are located east of Highway 93 from approximately RP 37.8 to RP 38.6 (Attachment 1, Figures 3.5, 3.6, and 3.7). WL-8 is primarily related to riparian zones connected to Unnamed Tributary to Post Creek 2. WL-8D-24 appears to be an isolated depressional wetland.

According to the Cowardin classification system these wetland sample points are predominantly PEMs. WL-8B-24 and WL-9B-24 are classified as PFOs. Based on the HGM classification system (Smith et al. 1995) these are riverine, slope, and depressional wetlands.

Nebraska sedge, cattail, and alpine forget-me-not (*Myosotis asiatica*) dominated the PEM wetlands in AA-5. Baltic rush (*Juncus balticus*) dominated W-8D-24, the isolated depressional wetland. The PFO wetlands in this AA were dominated by peachleaf willow (*Salix amygdaloides*) with an herbaceous understory.

Wetland hydrology primary indicators included surface water (A1), high water table (A2), saturation (A3), sediment deposits (B2), oxidized rhizospheres in living roots (C3), surface soil cracks (B6), inundation visible on aerial imagery (B7), and water-stained leaves (B9). Secondary wetland hydrology indicators found were geomorphic position (D2) and FAC-neutral test (D5). Hydric soil indicators found in AA-5 included depleted below dark surface (A11), depleted matrix (F3), and loamy gleyed matrix (F2). WL-9B exhibited the loamy mucky mineral (F1) indicator.

The functional rating for these wetlands was a Category III because of the mostly low to moderate rankings within AA-5.

WL-10-24, WL-11-24 (AA-6)

WL-10A/B-24 and WL-11 A/B/C/D-24 were evaluated for AA-6. These wetlands begin where Post F Canal crosses Highway 93 just before RP 38.7. The wetlands on the east side of the road extend to the intersection of McDonald Lake Road near RP 39.0 and extend to RP 39.5 on the west side of the road (Attachment 1, Figures 3.7, 3.8, and 3.9).

The Cowardin classification for these wetlands is PEM, with the exception of WL-11D-24 which is classified as a PAB. According to the HGM classification system (Smith et al. 1995) these wetlands are riverine, slope, and depressional wetlands.

The wetlands in AA-6 are dominated by Nebraska sedge, common teasel (*Dipsacus fullonum*), Baltic rush, cattails, and Kentucky bluegrass.

Wetland hydrology primary indicators observed at AA-6 are surface water (A1), high water table (A2), saturation (A3), algal mat or crust (B4), water-stained leaves (B9), and oxidized rhizospheres on living roots (C3). Secondary indicators include geomorphic position (D2) and FAC-neutral test (D5).

Hydric soil indicators for these wetlands are depleted below dark surface (A11), thick dark surface (A12), depleted matrix (F3), and redox dark surface (F6).

The functional rating for these two wetlands was a Category III because of the mostly low to moderate rankings for the AA-6.

WL-12-24, WL-13-24 (AA-7)

WL-12A/B-24 and WL-13A/B/C were evaluated for AA-7. WL-13A/C-24 are on the west side of Highway 93. These wetlands occur on both sides of Highway 93 and extend from approximately 39.1 to RP 39.7 (Attachment 1, Figures 3.8 and 3.9).

All wetlands in AA-7 have a Cowardin classification of PEM. According to the HGM classification system (Smith et al. 1995) these are depressional, riverine, and slope wetlands.

Dominant vegetation at WL-12A/B-24 consist of cattails, Nebraska sedge, Kentucky bluegrass, and meadow foxtail. WL-13A/B/C-24 was dominated by cattails, curly dock, Baltic rush, and common spike-rush.

Wetland hydrology primary indicators observed at AA-7 were sediment deposits (B2) and algal mat or crust (B4). Secondary Indicators included geomorphic position (D2), FAC-neutral test (D5), and raised ant mounds (D6). The hydric soil indicators at these wetlands included depleted below dark surface (A11), thick dark surface (A12), and redox dark surface (F6).

The functional rating for these wetlands was a Category III and was considered mostly low to moderate rankings for the AA-7.

WL-14-24, WL-15-24, WL-16-24 (AA-8)

WL-14A/B/C/D-24, WL-15-24, and WL-16A/B/C/D/E/F-24 were all evaluated for AA-8. These wetland areas begin near RP 39.7 and extend to approximately RP 40.0 on both sides of Highway 93 (Attachment 1, Figure 3.10). Two unnamed irrigation ditches and the Post G Canal run through these wetland areas. This northern end of the project

extents exhibits the characteristic glacial pothole wetlands of the Ninepipe area to the north.

According to Cowardin classification system many wetlands in AA-8 are PEMs or PABs. WL-14C-24 is classified as PFO. According to the HGM classification system (Smith et al. 1995) these are riverine, depressional, and sloped wetlands.

Dominant vegetation in PEM wetlands includes Kentucky bluegrass, Baltic rush, eastern cottonwood (*Populus deltoides*), cattails, and reed canarygrass. The PABs were dominated by common duckweed with cattails and reed canary grass at the edges where they transitioned to PEM or upland. The PFO wetland was dominated by eastern cottonwood with little herbaceous understory vegetation.

Primary indicators of wetland hydrology at these wetlands are surface water (A1), saturation (A3), drift deposits (B3), algal mat or crust (B4), inundation visible on aerial imagery (B7), water-stained leaves (B9), and oxidized rhizospheres on living roots (C3). Secondary indicators include geomorphic position (D2) and FAC-neutral test (D5).

Hydric soil indicators within AA-8 include depleted below dark surface (A11), loamy mucky mineral (F1), and redox dark surface (F6).

The functional rating for these wetlands was a Category III because this AA consisted of a mix of low, moderate, and high rankings.

WL-17-24, WL-18-24, WL-19-24, WL-20-24, WL-21-24 (AA-9)

WL-17A/B-24, WL-18-24, WL-19A/B/C/D/E/F-24, WL-20A-24, and WL-21A/B-24 were evaluated for AA-9. They are located both east and west of Highway 93 from approximately RP 40.0 to the project boundary just north of RP 40.4 (Attachment 1, Figures 3.10 and 3.11).

These wetlands are primarily glacial pothole wetlands with some roadside ditch features. Most of the wetlands in this AA have a range of Cowardin classifications since these glacial pothole features transition from a deeper water PUB or PAB to a PEM as they become shallower and extend toward upland areas. According to the HGM classification system (Smith et al. 1995) these are primarily depressional wetlands with a small percentage of slope wetlands.

Dominant vegetation in AA-9 are cattails, Baltic rush, reed canary grass, Kentucky bluegrass, and common spikerush. The PAB areas consist of common duckweed on the surface of the water.

Wetland hydrology primary indicators at these wetlands are algal mat or crust (B4), inundation visible on aerial imagery (B7), oxidized rhizospheres in living roots (C3), surface soil cracks (B6), and water-stained leaves (B9). The secondary indicators observed within in AA-9 are geomorphic position (D2) and FAC-neutral test (D5). Hydric

soil indicators at these wetlands include depleted below dark surface (A11) and redox dark surface (F6).

The functional rating for these wetlands was a Category II due to their mostly moderate to high rankings for the AA-9.

Summary: The following provides a summary of each wetland delineated in the study area and their associated MWAM assessment area and functional rating.

Table 2. Wetland Delineation Summary Table

Wetland #	Start RP	Latitude	Longitude	Delineated Acres	MWAM Assessment Area (AA)	Actual MWAM Functional Points	Drainage
WL-1-24	36.8	47.380819	-114.096392	0.98	AA - 1	2.9	Post Creek
WL-2A-24	37	47.382976	-114.096177	2.42			Post Creek
WL-2B-24	37	47.383568	-114.096619	0.10			Post Creek
WL-3-24	36.9	47.383343	-114.097186	3.21			Post Creek
WL-4A-24	37.2	47.386399	-114.096382	0.50	AA - 2	6.3	Post Creek
WL-4B-24	37.2	47.385962	-114.096303	0.36			Post Creek
WL-4C-24	37.3	47.387054	-114.097193	0.28			Post Creek
WL-4D-24	37.3	47.387269	-114.097477	0.12			Post Creek
WL-4E-24	37.2	47.386871	-114.097381	0.29			Post Creek
WL-5A-24	37.7	47.393797	-114.096369	9.32	AA - 3	8.3	Post Creek
WL-5B-24	37.5	47.389930	-114.096181	0.23			Post Creek
WL-5C-24	37.9	47.395266	-114.095505	2.68			Post Creek
WL-6A-24	37.5	47.390960	-114.098195	19.90			Post Creek
WL-6B-24	37.6	47.391820	-114.098769	5.07			Post Creek
WL-6C-24	37.7	47.393437	-114.097941	8.17			Post Creek
WL-7-24	38.4	47.399198	-114.097156	1.97	AA - 4	4.2	Post Creek
WL-8A-24	38	47.396979	-114.096480	0.36	AA - 5	5.0	Post Creek
WL-8B-24	38	47.398619	-114.096346	0.44			Post Creek
WL-8C-24	38.1	47.399312	-114.096145	0.63			Post Creek
WL-8D-24	38.1	47.399410	-114.096579	0.08			Post Creek
WL-9A-24	38.5	47.405396	-114.096336	3.85			Post Creek

Aquatic Resource Findings Report

Wetland #	Start RP	Latitude	Longitude	Delineated Acres	MWAM Assessment Area (AA)	Actual MWAM Functional Points	Drainage
WL-9B-24	38.3	47.402700	-114.096255	0.10			Post Creek
WL-10A-24	38.7	47.407693	-114.095889	0.27	AA – 6	3.4	Post Creek
WL-10B-24	38.8	47.407673	-114.097479	1.59			Post Creek
WL-11A-24	38.8	47.411265	-114.096133	4.22			Post Creek
WL-11B-24	39	47.413111	-114.097190	0.44			Post Creek
WL-11C-24	39.2	47.416176	-114.097308	4.23			Post Creek
WL-11D-24	39.1	47.414645	-114.097666	0.02			Post Creek
WL-12A-24	39.2	47.415761	-114.096555	0.71	AA – 7	3.3	Post Creek
WL-12B-24	39.4	47.419508	-114.096404	2.00			Post Creek
WL-13A-24	39.5	47.420304	-114.097005	0.08			Post Creek
WL-13B-24	39.6	47.420940	-114.096630	0.28			Post Creek
WL-13C-24	39.6	47.421171	-114.097040	0.33			Post Creek
WL-14A-24	39.7	47.423296	-114.096300	1.58	AA – 8	5.5	Post Creek
WL-14B-24	39.7	47.423413	-114.096102	0.14			Post Creek
WL-14C-24	39.8	47.424351	-114.096288	0.17			Post Creek
WL-14D-24	39.8	47.424520	-114.096328	0.19			Post Creek
WL-15-24	39.7	47.424051	-114.097430	0.52			Post Creek
WL-16A-24	39.8	47.424953	-114.096364	0.58			Post Creek
WL-16B-24	39.9	47.425623	-114.097503	2.15			Post Creek
WL-16C-24	39.9	47.425599	-114.097196	0.64			Post Creek
WL-16D-24	40	47.426948	-114.096487	1.31			Post Creek
WL-16E-24	40	47.427224	-114.096114	0.18			Post Creek
WL-16F-24	40	47.427923	-114.096239	0.26			Post Creek
WL-17A-24	40.1	47.428672	-114.097159	0.52	AA – 9	6.1	Post Creek
WL-17B-24	40.1	47.428985	-114.097443	1.21			Post Creek

Aquatic Resource Findings Report

Wetland #	Start RP	Latitude	Longitude	Delineated Acres	MWAM Assessment Area (AA)	Actual MWAM Functional Points	Drainage
WL-18-24	40.2	47.431031	-114.096706	0.14	AA – 9	6.1	Post Creek
WL-19A-24	40	47.428279	-114.096223	0.09			Post Creek
WL-19B-24	40.1	47.429046	-114.096049	0.01			Post Creek
WL-19C-24	40.2	47.430798	-114.096201	0.10			Post Creek
WL-19D-24	40.2	47.430827	-114.096068	0.05			Post Creek
WL-19E-24	40.3	47.432546	-114.096216	1.35			Post Creek
WL-19F-24	40.3	47.432382	-114.096086	0.73			Post Creek
WL-20-24	40.3	47.432746	47.432746	0.21			Post Creek
WL-21A-24	40.4	47.433547	-114.097564	0.97			Post Creek
WL-21B-24	40.4	47.433940	-114.097462	0.03			Post Creek

Streams

Methods: On-site identification of the ordinary high-water mark (OHWM) was completed according to U.S. Army Corps of Engineers (USACE) guidance (Mersel and Lichvar 2005). The OHWM was delineated with a handheld global positioning system (GPS) device with sub-meter accuracy. Data was collected according to USACE guidance and the MDT Wetland and Stream Delineation Process (MDT 2020). The study area was the same as described in the wetland delineation methods section above. Site surveys were completed on August 7 – 8 and September 16 – 18, 2024 by Morrison-Maierle environmental scientists.

The Montana Stream Mitigation Procedure (MTSMP) was completed for natural streams within the project corridor. The MTSMP was not completed for irrigation canals and ditches since they are man-made features.

Streams Discussion: The field investigation resulted in the delineation of eight waterways totaling 11,392 linear feet (3.4 acres). These mapped waterways consisted of Post Creek, Ashley Creek, two unnamed tributaries to Post Creek, Post F Canal, two unnamed irrigation ditches, and Post G Canal.

***Note:** The Supplemental Environmental Impact Statement (SEIS) for the US 93 Ninepipe/Ronan section signed in February 2008 contained a detailed description of waterways delineated in the project corridor. Unnamed Tributary to Post Creek 1 in the 2008 document was noted between RP 37.2 and 37.3. The 2024 field investigation delineated this area as wetland complex WL-4-24. There is no defined channel through this area due to heavy sedimentation. Therefore, this report and associated maps do not notate an Unnamed Tributary to Post Creek 1. To keep naming consistent with previous documentation, Unnamed Tributary to Post Creek 2 and Unnamed Tributary to Post Creek 3 remain named the same.*

Table 3 provides a summary of the delineated waterways within the project area.

Table 3. Waterway Characteristics with OHWM Completed

Stream	RP	Lat.	Long.	Stream Type*	Stream Status*	Existing Condition*
WW-1-24 Post Creek	37.8	47.395025	-114.096823	Perennial	All Others – not a high resource value	Somewhat Impaired
WW-2-24 Ashley Creek	37.6	47.391922	-114.096620°	Perennial	All Others – not a high resource value	Impaired
WW-3-24 Unnamed Tributary to Post Creek 2	37.9	47.396790	-114.096522	Perennial	All Others – not a high resource value	Impaired
WW-4-24 Unnamed Tributary to Post Creek 3	37.9	47.396823	-114.097153	Perennial	All Others – not a high resource value	Impaired
WW-5-24 Post F Canal	38.7	47.407827	-114.096668	Intermittent	N/A	N/A
WW-6-24 Unnamed Irrigation Ditch 1	39.8	47.424443	-114.096296	Intermittent	N/A	N/A
WW-7-24 Unnamed Irrigation Ditch 2	39.8	47.424639	-114.096631	Intermittent	N/A	N/A
WW-8-24 Post G Canal	39.9	47.426539	-114.096754	Intermittent	N/A	N/A

*The MTSMP was not completed for irrigation canals and ditches.

Note: Unnamed Tributary 1 is not referenced in this table. See the Streams Discussion section on page 16 for further explanation.

Stream Descriptions:

Post Creek (WW-1-24)

Post Creek crosses Highway 93 at approximately RP 37.8 (Attachment 1, Figures 3.4-3.5). According to the MTSMP (USACE 2013), Post Creek is described as a perennial, fourth order, tertiary water, and a somewhat impaired stream. Post Creek is bordered by wetland complexes throughout the project corridor.

Montana Stream Mitigation Procedure Factors (USACE 2013):

Stream Type: **Perennial**; perennial streams have a defined channel or channels that flow all year except perhaps during periods of prolonged drought or human diversion or dewatering.

Strahler Stream Order: **Fourth Order**; streams formed by the combining of another stream of equal or greater magnitude than a second order. Post Creek originates in the Mission Mountains and many smaller tributaries flow into this stream before reaching the project area.

Stream Status: **Not of High Resource Value** - a stream that is not covered under the Wild and Scenic Rivers Act, does not maintain outstanding Fisheries Resource Values as reported by MFISH, is not located within a federally- or state-protected area (i.e., national park, state or local park, etc.), is not designated as critical habitat or a core area for any fish species, and is not a first or second order perennial tributary flowing directly into a Primary Water (identified by factors listed above). Post Creek does not meet the criteria for a Primary Water and is a typical fourth order stream flowing into a non-Primary Water (the Flathead River, USACE 2013).

Existing Condition: **Somewhat Impaired**; a loss of system stability and resilience characterized by loss of one or more integrity functions. Recovery is likely to occur naturally once sources of impairment are removed. Due to the presence of bridges, riprap, a dike, and evidence of significant stream bank mass wasting, it was determined that Post Creek is somewhat impaired. According to MTSMP (USACE 2013), there are at least two reasons Post Creek is considered impaired: 1) there are in-stream manmade structures occurring within 0.5 mile upstream or downstream of the proposed project, and 2) riprap is present at the road crossing and 3) past channelization is evident in the stream reach below the bridge and a remnant dike is present immediately upstream of the bridge.

Ashley Creek (WW-2-24)

Ashley Creek enters the project corridor at approximately RP 37.6 and travels north to RP 37.8 where it enters Post Creek (Attachment 1, Figures 3.4-3.5). According to MTSMP (USACE 2013), Ashley Creek is described as a perennial, third order, tertiary water, and an impaired stream. Ashley Creek has been channelized through the project corridor around the Hunt's Timber parcel. The stream is routed north through a culvert

under a private driveway toward Post Creek. The entirety of the creek within the project corridor flows through a highly vegetated and sediment laden ditch with adjacent wetlands.

Stream Type: **Perennial**; perennial streams have a defined channel that flows all year except perhaps during periods of prolonged drought or human diversion. The groundwater remains above the level of the streambed and may be the only source of water for the stream when there is no precipitation or surface runoff.

Strahler Stream Order: **Third Order**; streams formed by the combining of two second order streams. Two second order streams flow into Ashley Creek upstream of the project area.

Stream Status: **Not of High Resource Value**; a stream that is not covered under the Wild and Scenic Rivers Act, does not fully support all MDEQ beneficial uses, does not maintain outstanding Fisheries Resource Values as reported by MFISH, is not located within a federally- or state-protected area (i.e., national park, state or local park, etc.). Ashley Creek does not meet the criteria for a Primary Water, is not designated as critical habitat or a core area for any fish species and is not a first or second order perennial tributary flowing directly into a Primary Water (identified by factors listed above).

Existing Condition: **Impaired**; a high loss of system stability and resilience characterized by loss of one or more integrity functions. Recovery is unlikely to occur naturally. Due to the presence of culverts, channelization and road encroachments along much of the stream bank, it is determined that Ashley Creek is impaired. According to MTSMP (USACE 2013), there three reasons why Ashley Creek is considered impaired: 1) channelization is evident and present at many locations throughout the project corridor 2) there is evidence of human-induced sedimentation, and 3) there are in-stream manmade structures occurring within 0.1 mile upstream or downstream of the proposed project.

Unnamed Tributary to Post Creek 2 (WW-3-2014)

According to MTSMP (USACE 2013), Unnamed Tributary to Post Creek 2 is described as a perennial, first-order, tertiary water, and an impaired stream. This feature is heavily influenced by irrigation return flows and road drainage, but natural groundwater has been identified as a contributing source by the Confederated Salish and Kootenai Tribes (CSKT) (Morrison-Maierle, 2020). This stream displays little to no natural stream characteristics and do not provide aquatic resource value as confirmed by CSKT natural resources staff (Morrison-Maierle, 2020). The feature enters the east side of the project corridor at approximately RP 38.1 and flows south through the Post Creek wetland complex and to its convergence with Post Creek (Attachment 1, Figure 3.5).

Stream Type: **Perennial**; perennial streams have a defined channel that flows all year except perhaps during periods of prolonged drought or human diversion. The

groundwater remains above the level of the streambed and may be the only source of water for the stream when there is no precipitation or irrigation surface runoff.

Comparative Stream Order: **First Order**; streams that are above the junction of another first order stream, no other streams flow into this stream.

Stream Status: **Not of High Resource Value**; a stream that is not covered under the Wild and Scenic Rivers Act, does not fully support all MDEQ beneficial uses, does not maintain outstanding Fisheries Resource Values as reported by MFISH, is not located within a federally- or state-protected area (i.e., national park, state or local park, etc.). Unnamed Tributary to Post Creek 2 does not meet the criteria for a Primary Water, is not designated as critical habitat or a core area for any fish species and is not a first or second order perennial tributary flowing directly into a Primary Water (identified by factors listed above).

Existing Condition: **Impaired**; a high loss of system stability and resilience characterized by loss of one or more integrity functions. Recovery is unlikely to occur naturally. Due to the presence of culverts, channelization and road encroachments along a portion of the stream bank, it was determined that Unnamed Tributary to Post Creek 2 is impaired. According to MTSMP (USACE 2013), there are at least two reasons why Unnamed Tributary to Post Creek 2 is considered impaired: 1) there are in-stream manmade structures (East Post Creek Road culvert) occurring within 0.1 mile upstream of the proposed project, and 2) channelization is evident and present at many locations throughout the project corridor.

Unnamed Tributary to Post Creek 3 (WW-4-2014)

According to MTSMP (USACE 2013), Unnamed Tributary to Post Creek 3 is described as a perennial, second-order, tertiary water, and an impaired stream. This feature is heavily influenced by irrigation return flows and road drainage, but groundwater has been identified as a contributing source by CSKT. This stream displays little to no natural stream characteristics and does not provide aquatic resource value as confirmed by CSKT natural resources staff (Morrison-Maierle, 2020). The feature enters the west side of the project corridor at approximately RP 38.1 and flows south adjacent to Highway 93 to its convergence with Post Creek (Attachment 1, Figures 3.5).

Stream Type: **Perennial**; perennial streams have a defined channel that flows all year except perhaps during periods of prolonged drought or human diversion. The groundwater remains above the level of the streambed and may be the only source of water for the stream when there is no precipitation or irrigation surface runoff.

Comparative Stream Order: **Second Order**; streams that are formed by the junction of two first order streams.

Stream Status: **Not of High Resource Value**; a stream that is not covered under the Wild and Scenic Rivers Act, does not fully support all MDEQ beneficial uses, does not

maintain outstanding Fisheries Resource Values as reported by MFISH, is not located within a federally- or state-protected area (i.e., national park, state or local park, etc.). Unnamed Tributary to Post Creek 3 does not meet the criteria for a Primary Water, is not designated as critical habitat or a core area for any fish species and is not a first or second order perennial tributary flowing directly into a Primary Water (identified by factors listed above).

Existing Condition: **Impaired**; a high loss of system stability and resilience characterized by loss of one or more integrity functions. Recovery is unlikely to occur naturally. Due to the presence of culverts, channelization and road encroachments along a portion of the stream bank, it was determined that Unnamed Tributary to Post Creek 3 is impaired. According to MTSMP (USACE 2013), there are at least two reasons why Unnamed Tributary to Post Creek 3 is considered impaired: 1) there are in-stream manmade structures (West Post Creek Road culvert and private driveway culvert) occurring within 0.1 mile upstream of the proposed project, and 2) channelization is evident and present at many locations throughout the project corridor.

Irrigation Canal Descriptions:

Table 4 provides a description of irrigation features that were identified within the project corridor.

Table 4. Irrigation Features within the Project Corridor

Feature ID	RP	Lat.	Long.
WW-5-24 Post F Canal	38.7	47.407827	-114.096668
WW-6-24 Unnamed Irrigation Ditch 1	39.8	47.424443	-114.096296
WW-7-24 Unnamed Irrigation Ditch 2	39.8	47.424639	-114.096631
WW-8-24 Post G Canal	39.9	47.426539	-114.096754

The MTSMP was not completed for irrigation features delineated within the project corridor, as these are man-made features. The following provides a brief description of each irrigation feature.

Post F Canal (WW-5-24)

The Post F Canal is part of the Flathead Indian Irrigation Project, and crosses the project corridor, under Highway 93, through a culvert between RP 38.6 and RP 38.7 (Appendix A, Figure 3.7). The feature consists of a man-made irrigation canal with a bed and bank, and fringe of herbaceous wetland vegetation along banks edge. Post F Canal originates from Post Creek and flows into Hillside Reservoir. The outlet of the reservoir flows into Hillside Ditch which ultimately terminates into Mission Creek, a tributary of the Flathead River. The waterway has limited flood-prone area with steep

entrenched banks. A small area along the edge of these features was mapped as emergent wetlands (WL-10A-24).

Unnamed Irrigation Ditch 1 (WW-6-24)

The feature delineated as WW-6-24 appears to be a private irrigation ditch excavated from a private stock pond to the east of the project corridor (Appendix A, Figure 3.10). The excavated portion of the ditch ends at the property boundary where it goes under a private driveway through a culvert. The area on the south side of the private driveway is delineated as a wetland (WL-14A-24).

Unnamed Irrigation Ditch 2 (WW-7-24)

Unnamed Irrigation Ditch 2 (WW-7-24) also appears to be a private irrigation ditch and is receiving water from the Post G Canal on this private property parcel (Appendix A, Figure 3.10). The ditch flows west under Highway 93 at approximately RP 39.8 where it terminates in a field approximately 800 feet west of the highway.

Post G Canal (WW-8-24)

The Post G Canal is part of the Flathead Indian Irrigation Project, and crosses the project corridor, under Highway 93, through a culvert at approximately RP 39.9 (Appendix A, Figure 3.10). The feature consists of a man-made irrigation canal with a bed and bank, and fringe of herbaceous wetland vegetation along banks edge. The wetlands associated with this canal are delineated as WL-16B-24 and WL-16D-24. Post G Canal originates from Kicking Horse Reservoir and terminates into Ninepipe Reservoir. This canal is in close proximity to the Ninepipe Reservoir and the Ninepipe National Wildlife Refuge glacial pothole wetland complex.

Summary of Delineated Features:

Feature ID	Feature Type	Delineated Acres*	Linear Feet
Wetlands			
WL-1-24	PEM	0.98	--
WL-2A-24	PEM	2.42	--
WL-2B-24	PEM	0.10	--
WL-3-24	PEM	3.21	--
WL-4A-24	PEM	0.50	--
WL-4B-24	PFO	0.36	--
WL-4C-24	PFO	0.28	--
WL-4D-24	PAB	0.12	--
WL-4E-24	PEM	0.29	--
WL-5A-24	PEM	9.32	--
WL-5B-24	PAB	0.23	--
WL-5C-24	PSS	2.68	--
WL-6A-24	PEM	19.90	--
WL-6B-24	PSS	5.07	--
WL-6C-24	PFO	8.17	--
WL-7-24	PEM	1.97	--
WL-8A-24	PEM	0.36	--

Feature ID	Feature Type	Delineated Acres*	Linear Feet
WL-8B-24	PFO	0.44	--
WL-8C-24	PEM	0.63	--
WL-8D-24	PEM	0.08	--
WL-9A-24	PEM	3.85	--
WL-9B-24	PFO	0.10	--
WL-10A-24	PEM	0.27	--
WL-10B-24	PEM	1.59	--
WL-11A-24	PEM	4.22	--
WL-11B-24	PEM	0.44	--
WL-11C-24	PEM	4.23	--
WL-11D-24	PAB	0.02	--
WL-12A-24	PEM	0.71	--
WL-12B-24	PEM	2.00	--
WL-13A-24	PEM	0.08	--
WL-13B-24	PEM	0.28	--
WL-13C-24	PEM	0.33	--
WL-14A-24	PEM	1.58	--
WL-14B-24	PAB	0.14	--
WL-14C-24	PFO	0.17	--
WL-14D-24	PEM	0.19	--
WL-15-24	PEM	0.52	--
WL-16A-24	PEM	0.58	--
WL-16B-24	PEM	2.15	--
WL-16C-24	PAB	0.64	--
WL-16D-24	PEM	1.31	--
WL-16E-24	PAB	0.18	--
WL-16F-24	PEM	0.26	--
WL-17A-24	PEM	0.52	--
WL-17B-24	PUB	1.21	--
WL-18-24	PEM	0.14	--
WL-19A-24	PEM	0.09	--
WL-19B-24	PEM	0.01	--
WL-19C-24	PEM	0.10	--
WL-19D-24	PAB	0.05	--
WL-19E-24	PEM	1.35	--
WL-19F-24	PAB	0.73	--
WL-20-24	PEM	0.21	--
WL-21A-24	PEM	0.97	--
WL-21B-24	PAB	0.03	--
TOTAL WETLANDS		88.34	--
Waterways			
WW-1-24 Post Creek	Perennial	2.68	4,088
WW-2-24 Ashley Creek	Perennial	0.06	1,307
WW-3-24 Unnamed Tributary to Post Creek 2	Perennial	0.09	2,012

Feature ID	Feature Type	Delineated Acres*	Linear Feet
WW-4-24 Unnamed Tributary to Post Creek 3	Perennial	0.08	1,755
TOTAL WATERWAYS		2.91	9,162
Irrigation Features			
WW-5-24 Post F Canal	Intermittent	0.27	937
WW-6-24 Unnamed Irrigation Ditch 1	Intermittent	0.04	174
WW-7-24 Unnamed Irrigation Ditch 2	Intermittent	0.03	528
WW-8-24 Post G Canal	Intermittent	0.10	591
TOTAL IRRIGATION FEATURES		0.44	2,230

**Totals are shown to the hundredth but are calculated using acreages to the thousandth to avoid rounding errors.*

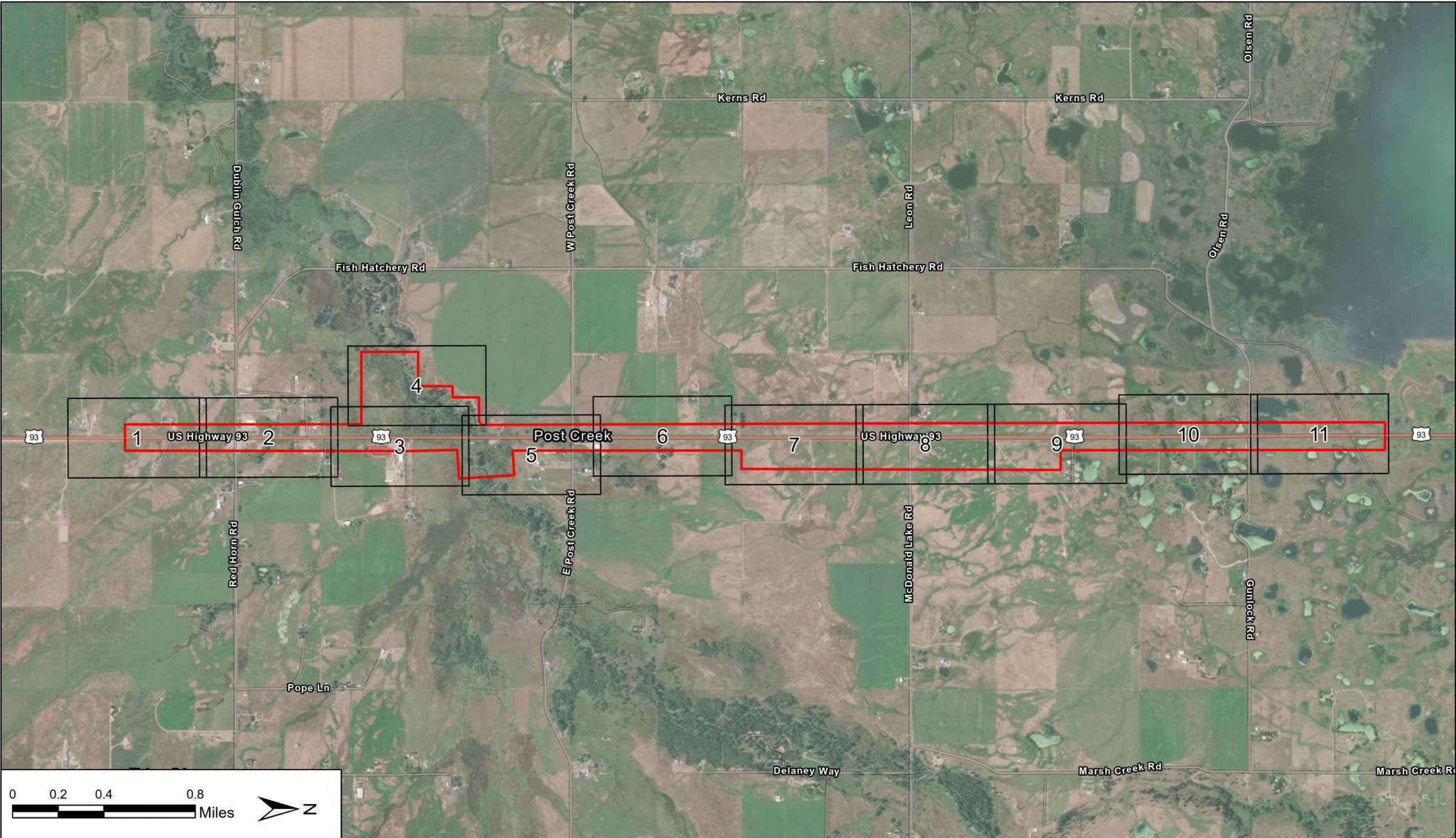
References

- Berglund, J., and R. McEldowney. 2008. MDT Montana Wetland Assessment Method. Prepared for: Montana Department of Transportation. Post, Buckley, Schuh & Jerningan. Helena, Montana.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. USDI Fish and Wildlife Service. Washington, D.C.
- Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, MS.
- Mersel, M. K., & Lichvar, R. W. 2005. A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States, ERDC/CRREL TR-14-13. Hanover, NH: U.S. Army Corps of Engineers, Engineer Research and Development Center, Wetlands Regulatory Assistance Program.
- Montana Department of Transportation (MDT). 2020. MDT Wetland and Stream Delineation Process. Available at: <https://www.mdt.mt.gov/business/contracting/docs/env/WetlandStreamDelineationProcess-FINAL.pdf>
- Montana Department of Transportation (MDT) 2021. Wetland Mitigation Program. <https://mdt.mt.gov/publications/datastats/wetlands.shtml>
- Morrison-Maierle. 2020. US 93 N – Post Creek Hill – Conceptual Stream Mitigation Design Report (Activity 125). March 2020.
- U.S. Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Western Mountains Valleys and Coasts (Version 2.0). U.S. Army Engineer Research and Development Center, Environmental Laboratory. Vicksburg, MS.
- U.S. Army Corps of Engineers (USACE). 2013. Montana Stream Mitigation Procedure (MTSMP). February 2013. U.S. Army of Corps of Engineers, Omaha District.

US 93 N – Post Creek Hill
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NH 5-2(159)37

Aquatic Resource Findings Report

ATTACHMENT 1 – WETLAND DELINEATION FIGURES



 Wetland Delineation Boundary
 Mapsheet Index

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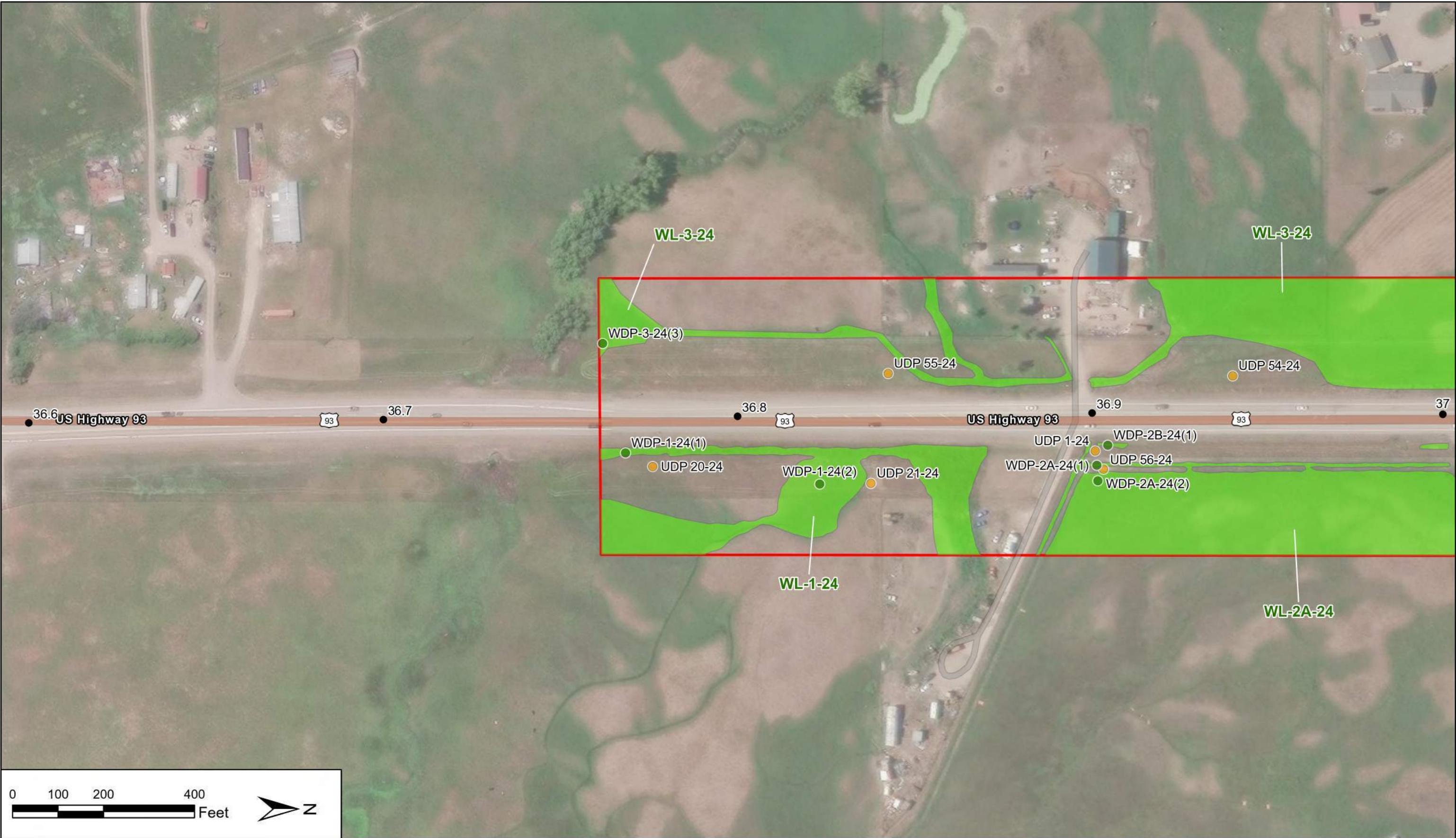
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WETLAND DELINEATION - INDEX MAP

Figure 1

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- Wetland Delineation Boundary
- Reference Post (RP)
- Upland Data Point
- Wetland Data Point
- PEM



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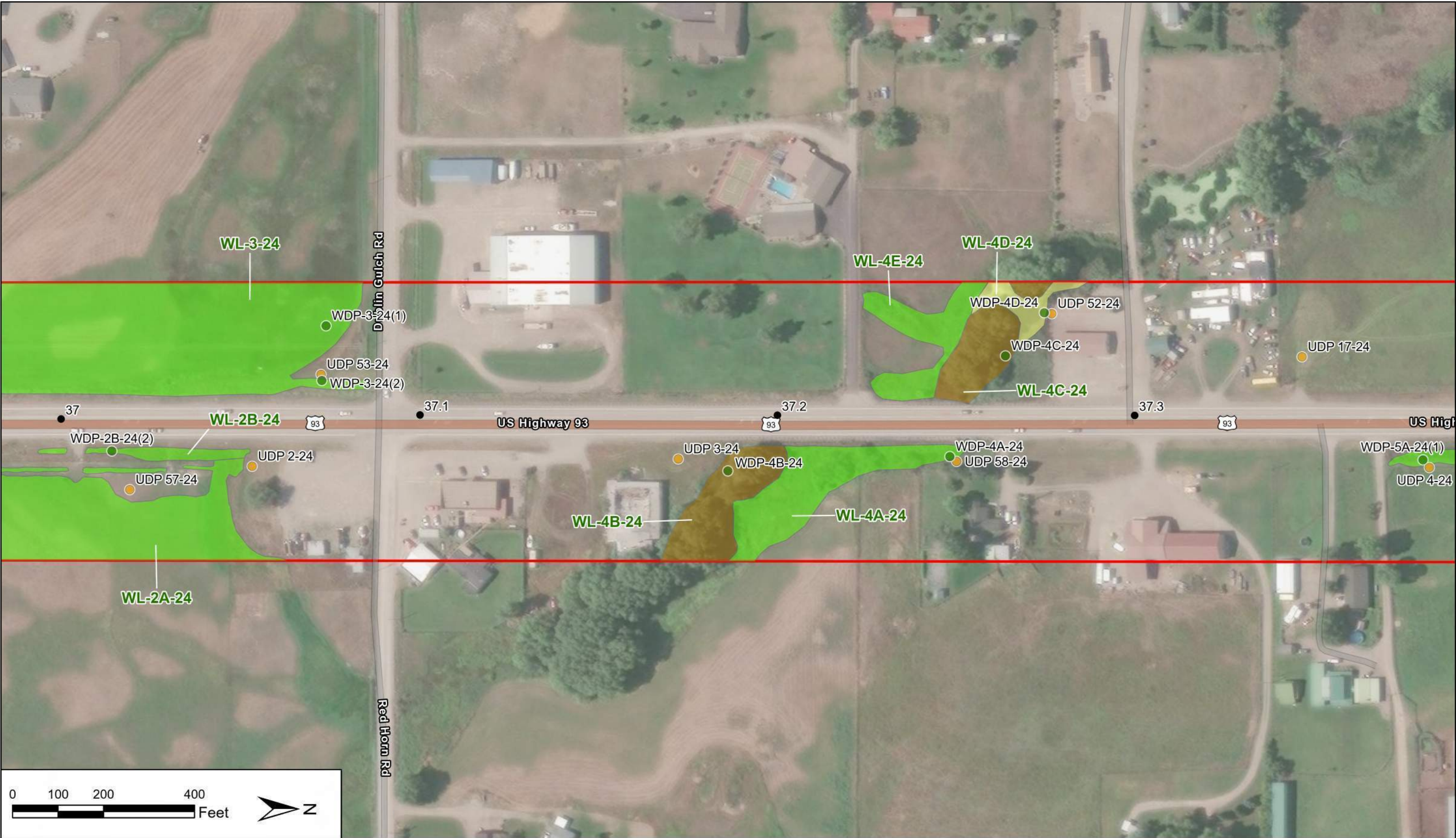
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WETLAND DELINEATION MAP

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Figure 3.1



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| Wetland Delineation Boundary | ● Wetland Data Point |
| ● Reference Post (RP) | PAB |
| ● Upland Data Point | PEM |

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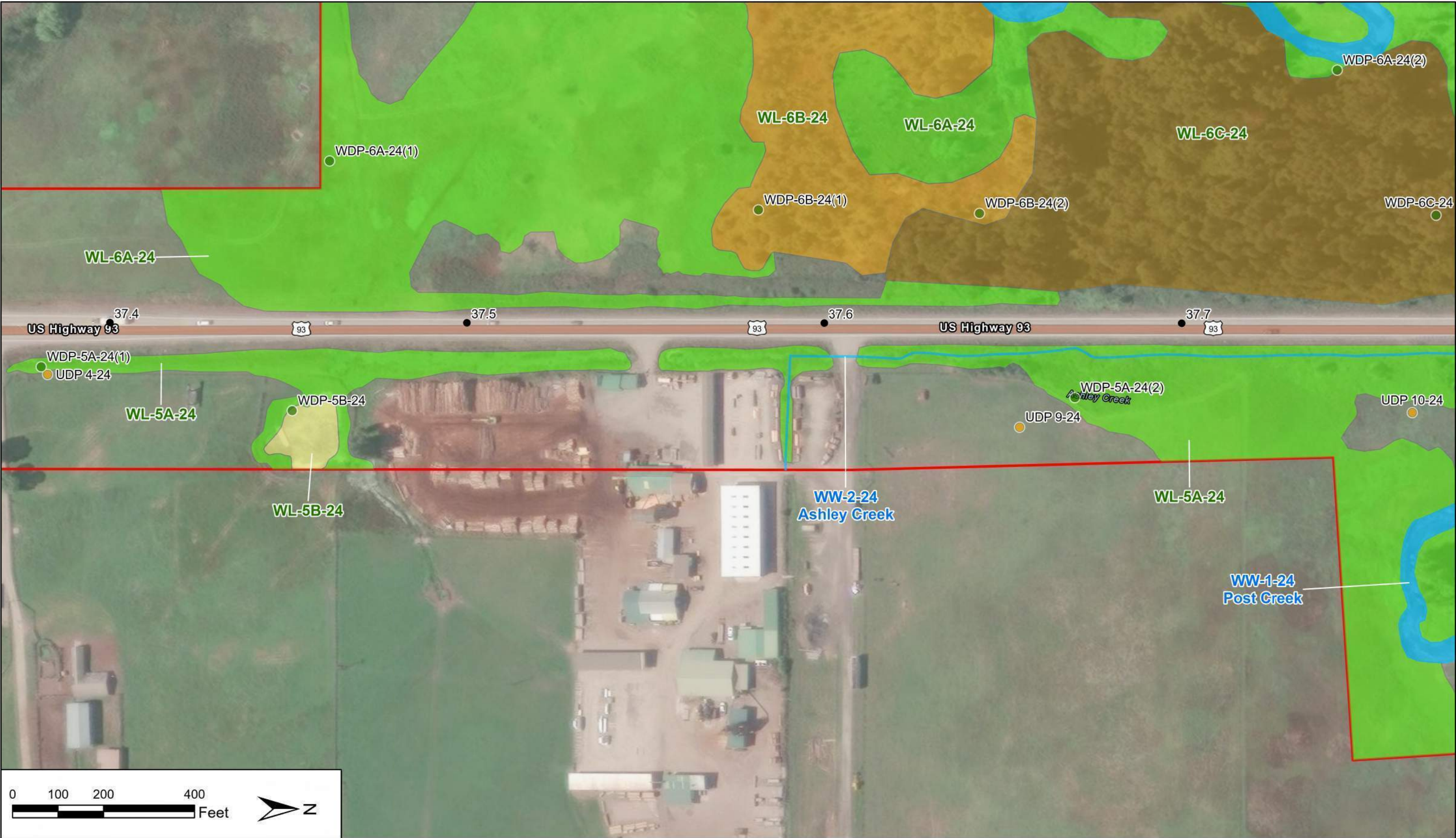
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WETLAND DELINEATION MAP

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Figure 3.2

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- Wetland Delineation Boundary
- Reference Post (RP)
- Upland Data Point
- Wetland Data Point
- PAB
- PEM

- PFO
- PSS
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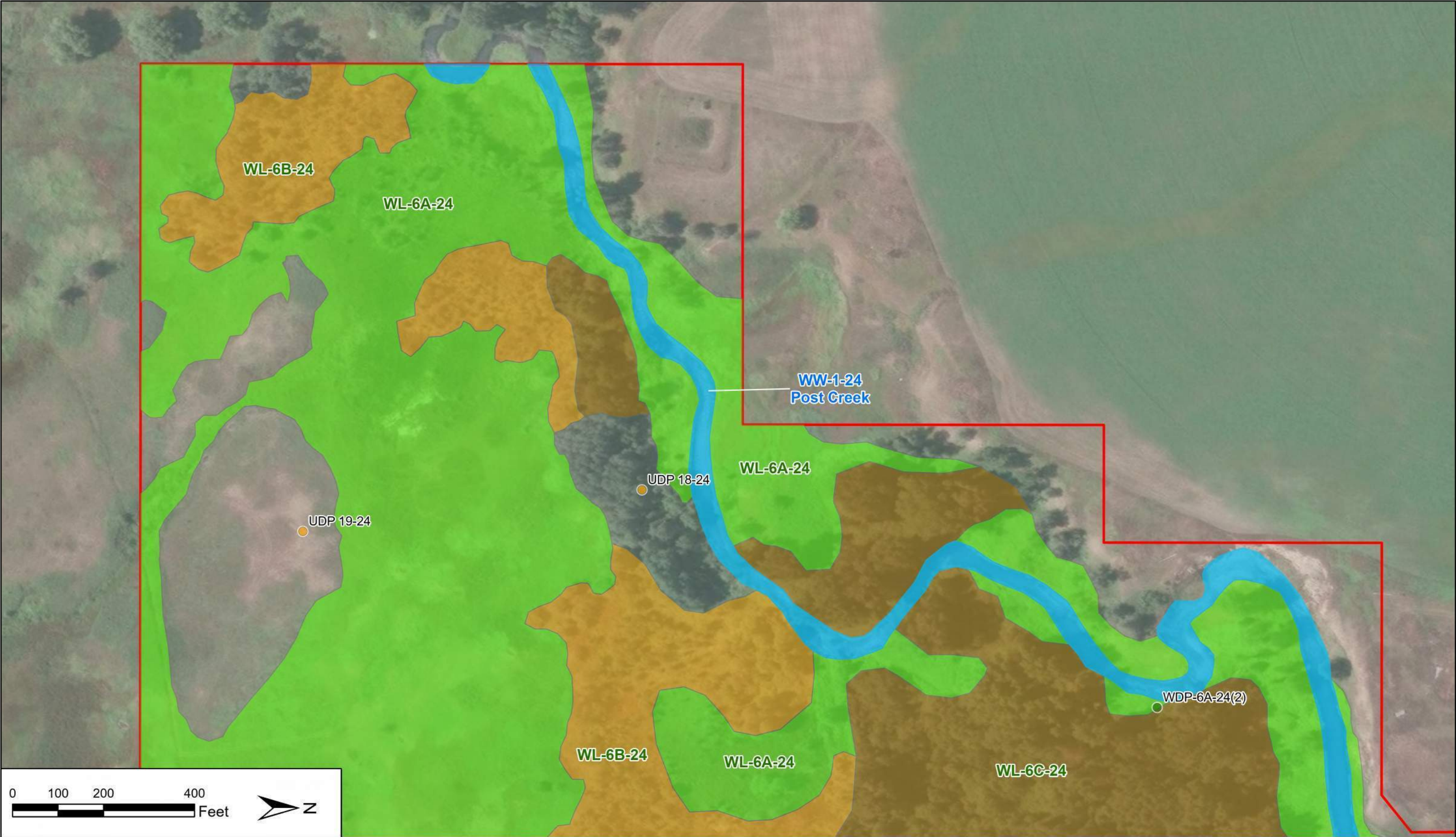
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WETLAND DELINEATION MAP

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Figure 3.3



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| Upland Data Point | PFO |

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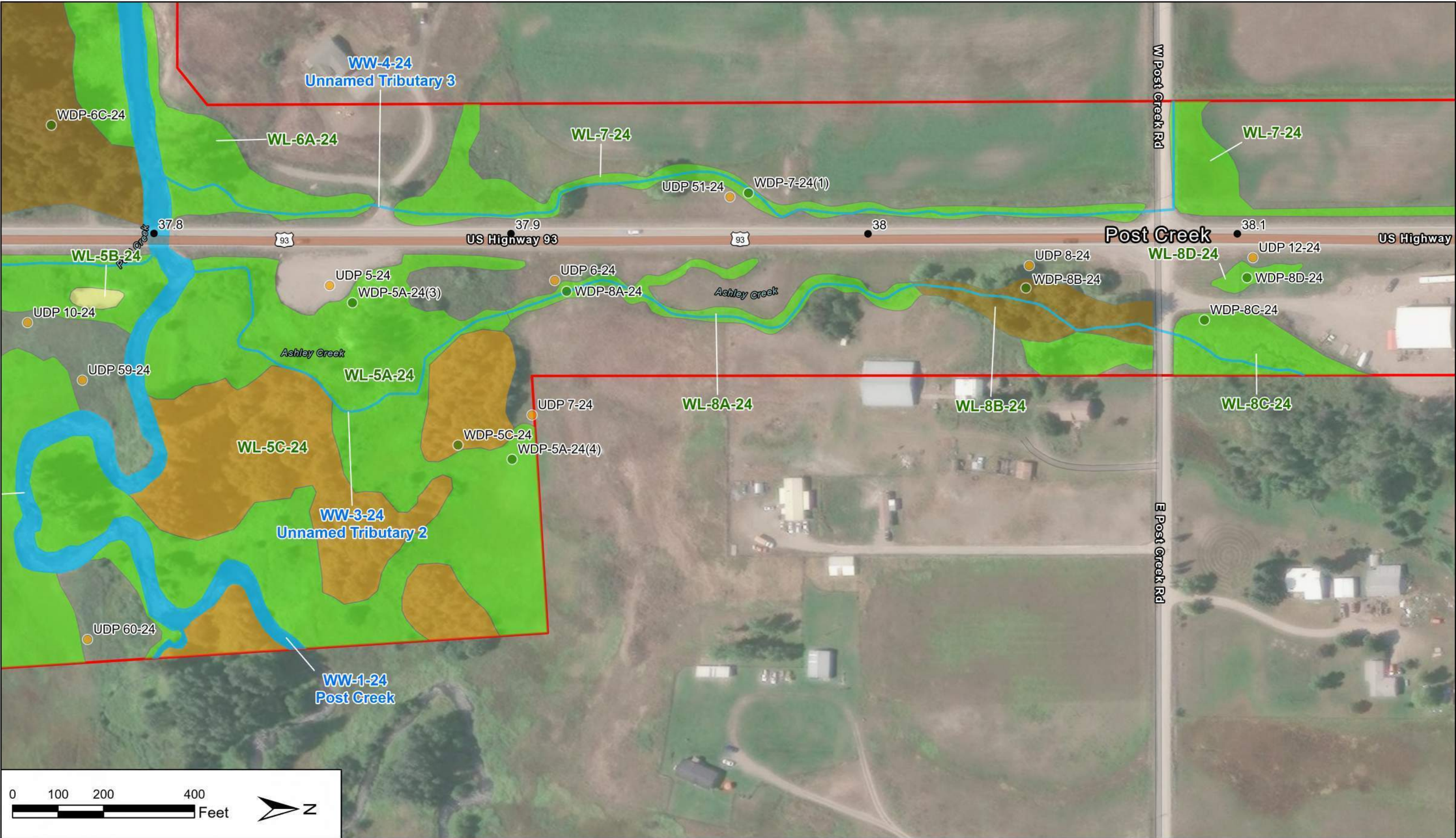
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WETLAND DELINEATION MAP

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Figure 3.4



- Wetland Delineation Boundary
- Reference Post (RP)
- Upland Data Point
- Wetland Data Point
- PAB
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- PSS
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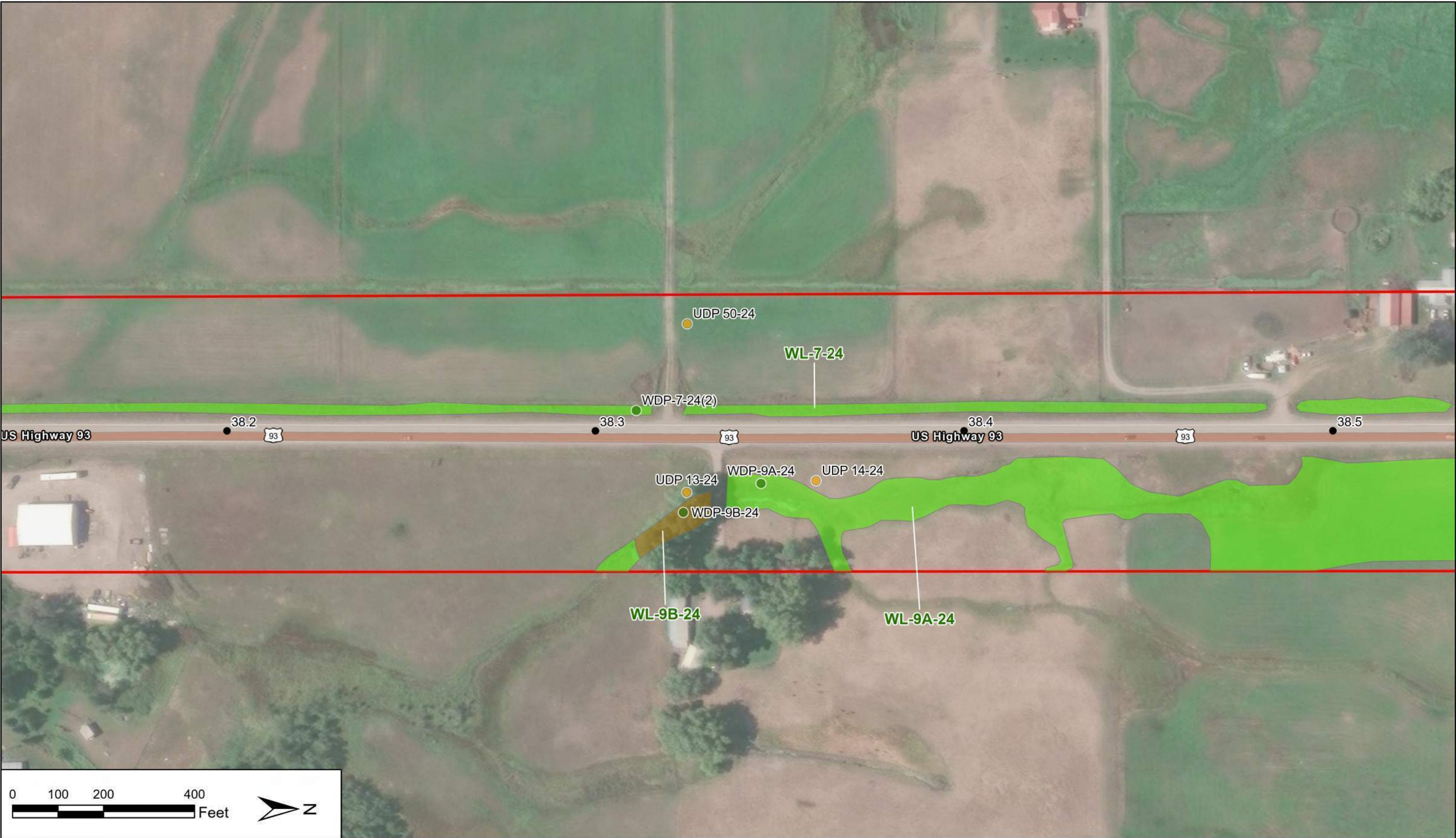
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WETLAND DELINEATION MAP	

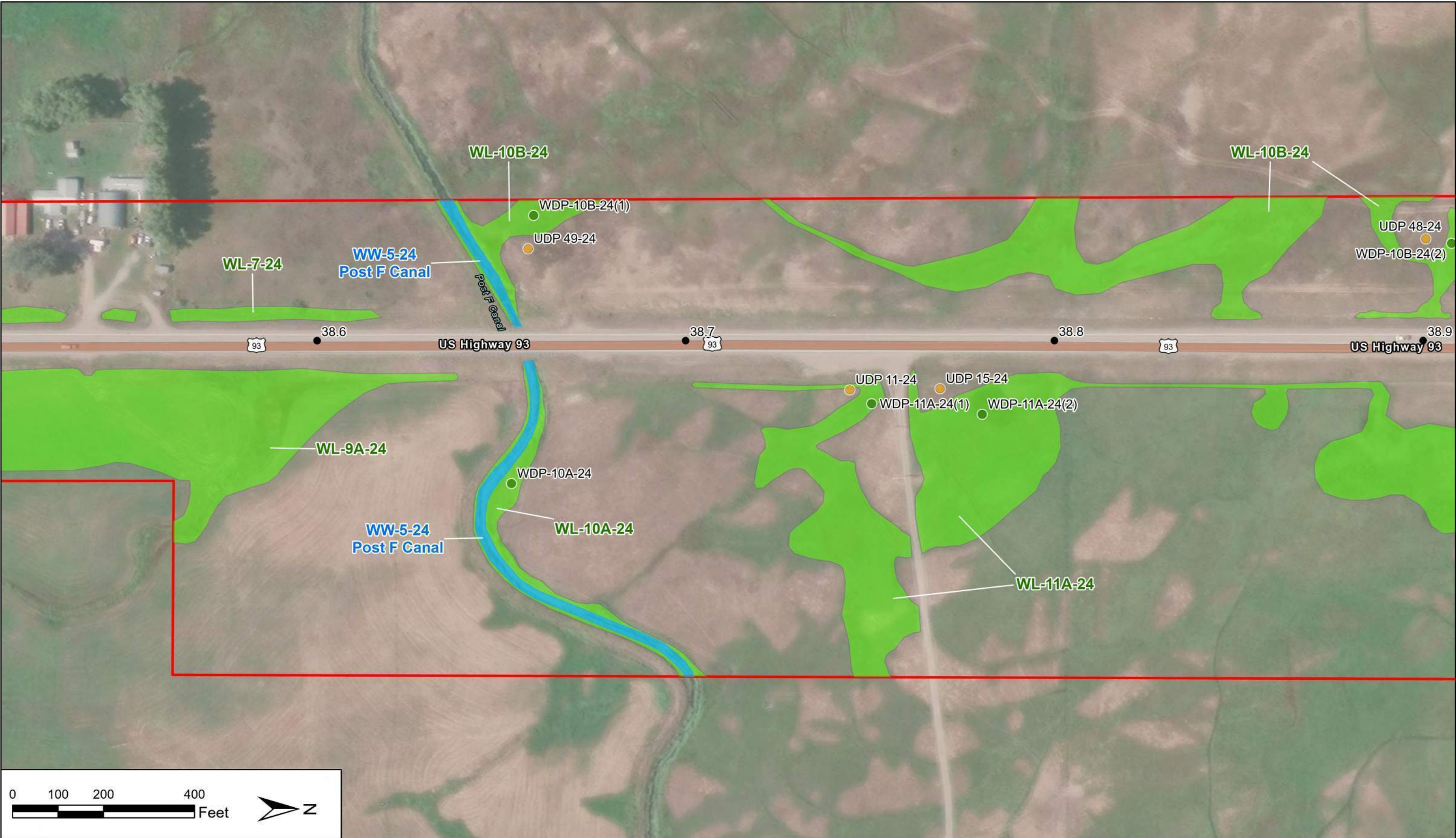
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Figure 3.5



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| ● Upland Data Point | PFO |

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	WETLAND DELINEATION MAP			Figure 3.6

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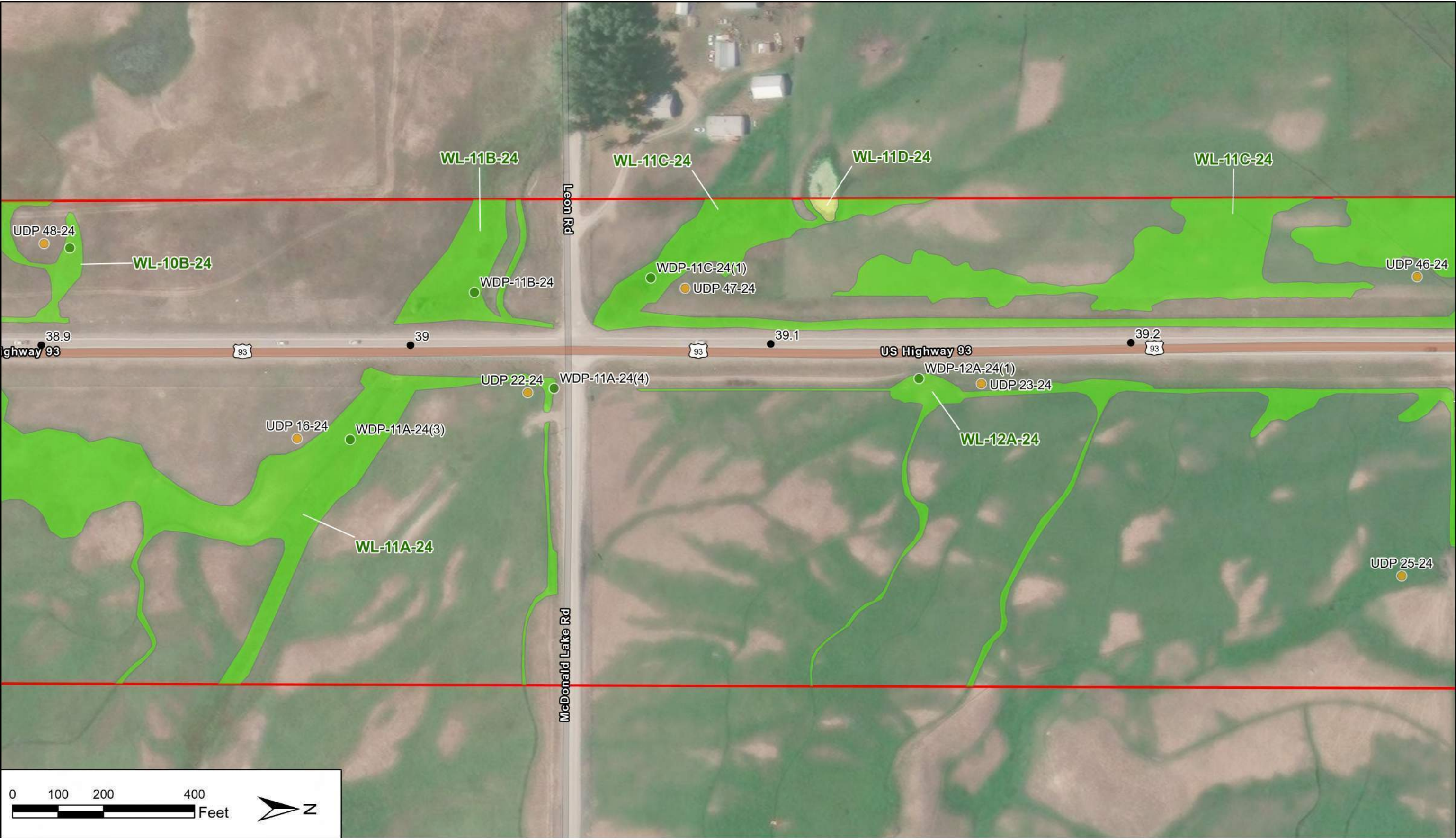
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WETLAND DELINEATION MAP

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Figure 3.7

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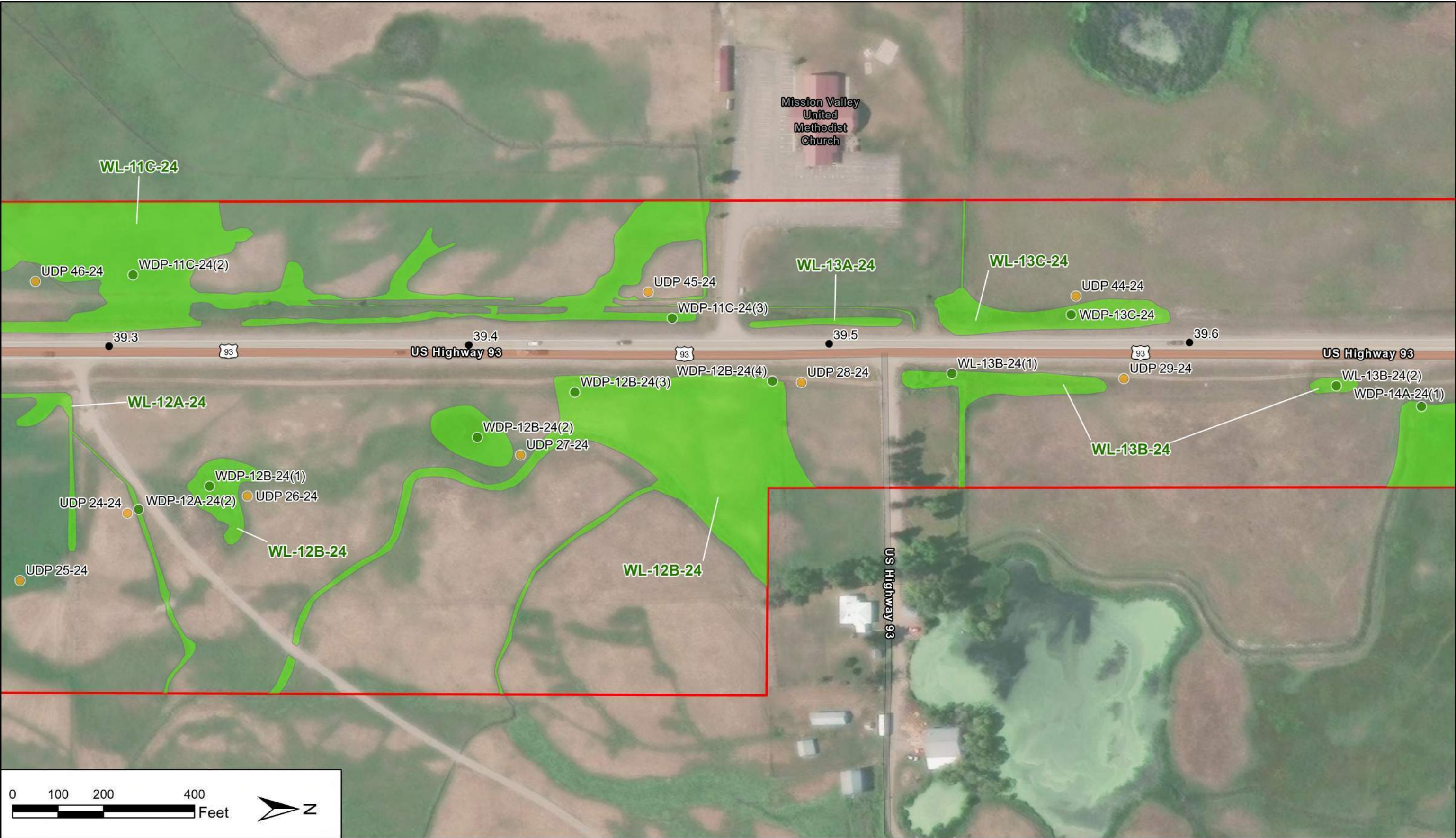
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WETLAND DELINEATION MAP

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Figure 3.8

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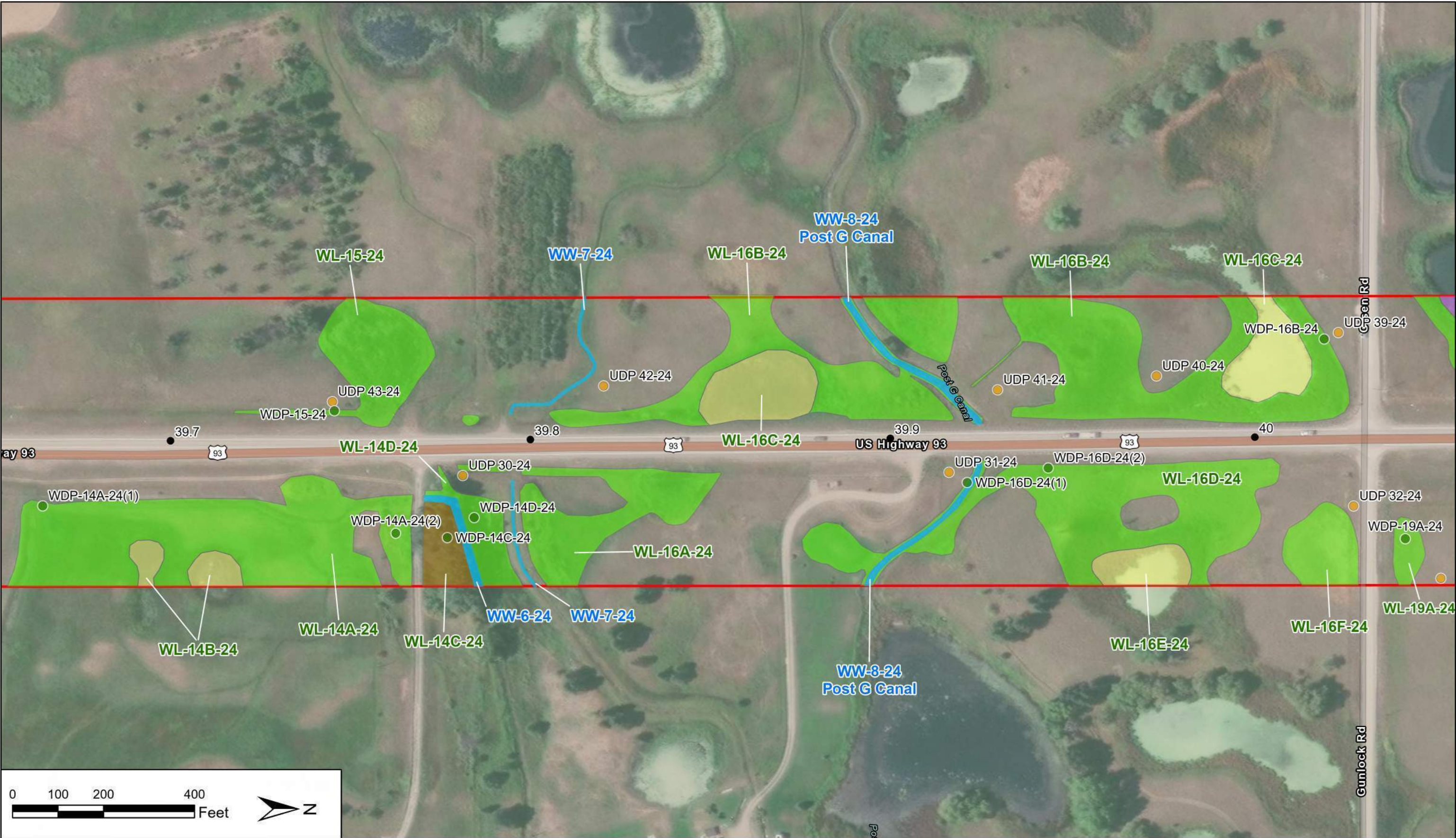
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Figure 3.9



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| ● Upland Data Point | PEM |

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| PFO |
| PUB |
| R2 |



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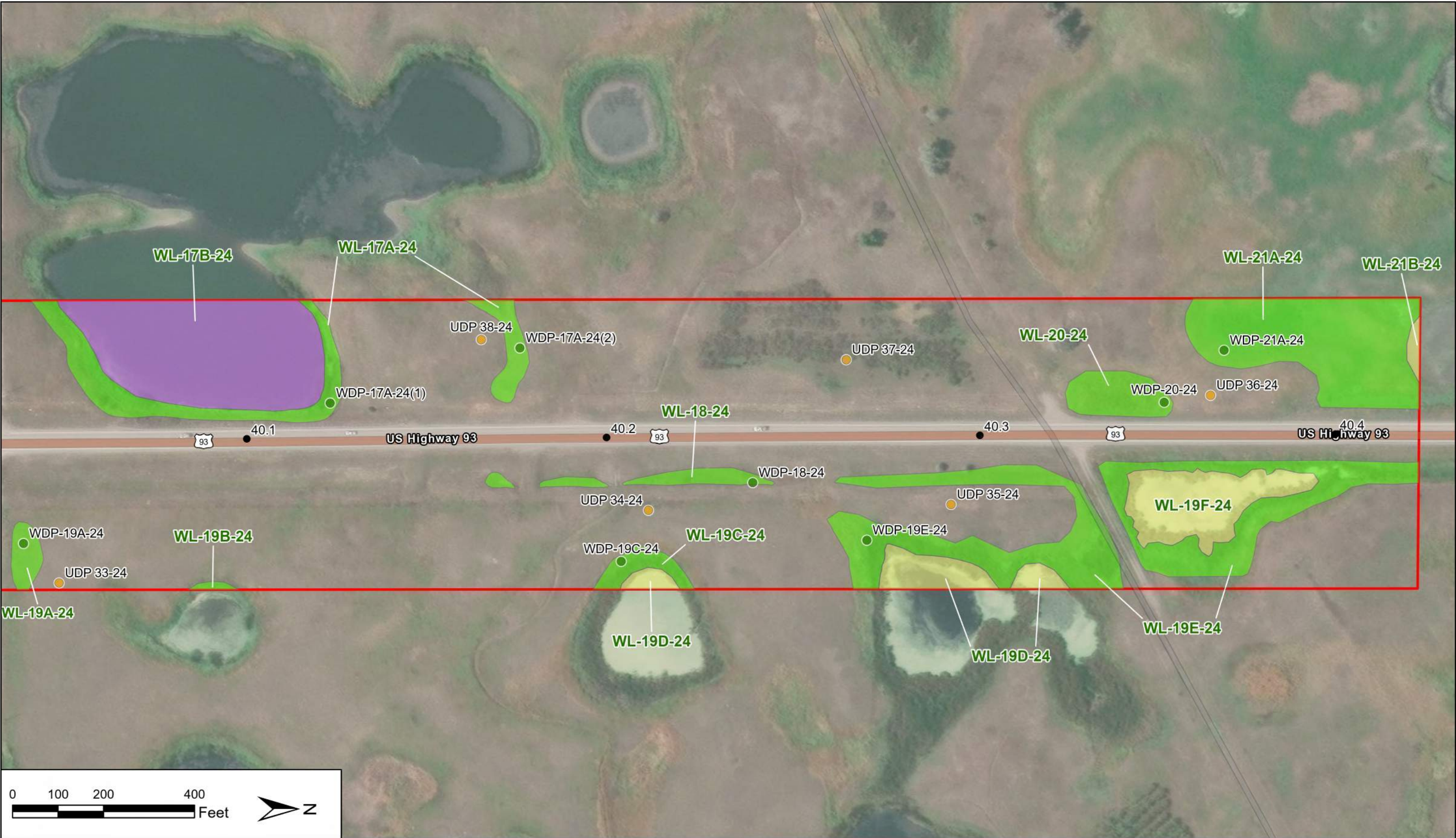
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WETLAND DELINEATION MAP

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Figure 3.10



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DRAWN BY: BNC
CHK'D BY: CAP
APPR. BY: SE
DATE: 1/16/2025

US 93 N - POST CREEK HILL NH 5-2(159)37, 8008000	
WETLAND DELINEATION MAP	

PROJECT NO. 0275.140
Figure 3.11

US 93 N – Post Creek Hill
UPN 8008000
NH 5-2(159)37

Aquatic Resource Findings Report

ATTACHMENT 2 – PHOTOGRAPHS



Photo 1: View of Wetland (WL) 1-24, facing north.



Photo 2: View of WL-2A-24, an irrigated field palustrine emergent (PEM) wetland.



Photo 3: View of the PEM irrigation ditch portion of WDP 2A-24 (1).



Photo 4: View of WL-2B-24, a PEM roadside ditch.



Photo 5: View of WL-3-24, an irrigation influenced PEM field, facing west.



Photo 6: View of the upland herbaceous community adjacent to WL-3-24.



Photo 7: View of the roadside upland herbaceous community adjacent to WL-4B-24.



Photo 8: View of WL-4A-24, a PEM wetland, facing south.



Photo 9: View of WL-4B-24, a palustrine forested (PFO) wetland.



Photo 10: View of WL-5A-25 and Ashley Creek, facing north.



Photo 11: View of the palustrine aquatic bed (PAB) excavated stock pond at WL-5B-24.



Photo 12: View of upland field adjacent to WL-5A-24, east of Highway 93 and Ashley Creek.



Photo 13: View of the WL-5A-24 wetland complex adjacent to Post Creek.



Photo 14: View of WL-5A-24, a PEM wetland, where it intersects with WL-5B-24, a palustrine scrub-shrub (PSS) wetland.



Photo 15: View of WL-6A-24, facing east.



Photo 16: View of WL-6B-24, a PSS wetland, facing south toward WL-6A-24.



Photo 17: View of WL-6C-24, a PFO wetland within the Post Creek wetland complex.



Photo 18: View from UDP 18, an upland island within the Post Creek wetland complex.



Photo 19: View of Post Creek on the east side of Highway 93, facing east.



Photo 20: View of the Post Creek wetland complex from an upland hillside north of Post Creek, on the west side of Highway 93.



Photo 21: View of Unnamed Tributary to Post Creek 3 and WL-7-24, facing south.



Photo 22: View of Unnamed Tributary to Post Creek 2 and WL-8A-24, facing south.



Photo 23: View of the upland herbaceous community at UDP 7-24.



Photo 24: View of the PFO community at WL-8B-24.



Photo 25: View of WL-8C-24, a PEM wetland, facing north.



Photo 26: View of WL-8D-24, an isolated roadside PEM.



Photo 27: View of WL-9A-24, a PEM wetland, facing east.



Photo 28: View of WL-9B-24, a PFO wetland.



Photo 29: View of WL-10A-24, a PEM fringe wetland to the Post F Canal, facing west.



Photo 30: View of the Post F Canal on the west side of Highway 93, with fringe PEM wetland WL-10B-24.



Photo 31: View of the upland herbaceous community along the east side of Highway 93 at UDP 11-24.



Photo 32: View of WL-11A-24



Photo 33: Overview of WL-11B-24, facing west.



Photo 34: View of WL-11C-24, facing west.



Photo 35: View of the upland herbaceous road right-of-way near UDP 23 and WL-12A-24.



Photo 36: View of WL-12A-24.



Photo 37: View of WL-12B-24, an irrigation influenced field PEM wetland..



Photo 38: View of WL-13C-24, which is representative of both WL-13A and WL-13B.



Photo 39: View of the upland herbaceous field near RP 39.6 on the west side of Highway 93, facing south.



Photo 40: View of WL-14A (a PEM) and 14B (PAB), facing east.



Photo 41: View of WL-14C-24, a PFO wetland.



Photo 42: View of WL-14D-24, facing east.



Photo 43: View of Unnamed Irrigation Ditch 1, facing east. This ditch is bordered by PEM wetland on the left side and PFO wetland on the right side of the photo.



Photo 44: View of Unnamed Irrigation Ditch 2, facing east.



Photo 45: Overview of WL-16A-24, facing east.



Photo 46: View of WL-16B and 16C, wetlands adjacent to the west side of Highway 93, facing north.



Photo 47: View of the WL-16 complex on the east side of Highway 93 near RP 40.



Photo 48: View of the Post G Canal near RP 39.9.



Photo 49: View of the upland community at UDP 42-24, south of WL-16B.



Photo 50: View of WL-17A and 17-B, a glacial pothole PEM and PUB feature, facing west.



Photo 51: View of the upland herbaceous community near WL-17, facing east.



Photo 52: View of WL-18-24, a PEM roadside ditch wetland.



Photo 53: Representative view of WL-19 glacial pothole wetland features.



Photo 54: Representative view of WL-19 glacial pothole wetland features.



Photo 55: View of northeast end of the project corridor, on the east side of Highway 93 facing north.



Photo 56: View of the northwest end of the project corridor, on the west side of Highway 93 facing north toward WL-21.



Photo 57: View of WL-20-24, facing south.

US 93 N – Post Creek Hill
UPN 8008000
NH 5-2(159)37

Aquatic Resource Findings Report

ATTACHMENT 3 – USACE WETLAND DELINEATION FORMS

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 1-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S25 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.381949		Long: -114.096604	
				Datum: NAD93	
Soil Map Unit Name: Ronan silty clay loam, 0 to 2 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 5 x 3 = 15 FACU species 7 x 4 = 28 UPL species 88 x 5 = 440 Column Totals: 100 (A) 483 (B) Prevalence Index = B/A = 4.83
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Bromus inermis		80	Yes	UPL	
2. Centaurea stoebe		8	No	UPL	
3. Cirsium arvense		5	No	FAC	
4. Lactuca serriola		5	No	FACU	
5. Sisymbrium altissimum		2	No	FACU	
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			Hydrophytic Vegetation Present? Yes No X
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 1-24

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 4/3	100					Loamy/Clayey	roots present
5-10	10YR 4/3	100					Loamy/Clayey	
10-16	10YR 5/2	100					Loamy/Clayey	20% gravel, compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
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Remarks:
Mixed soils from road right of way.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 2-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S25 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.384147		Long: -114.096540	
		Datum: NAD93			
Soil Map Unit Name: Ronan silty clay loam, 0 to 2 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 60 x 3 = 180 FACU species 15 x 4 = 60 UPL species 25 x 5 = 125 Column Totals: 100 (A) 365 (B) Prevalence Index = B/A = 3.65
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		60	Yes	FAC	
2. Bromus inermis		25	Yes	UPL	
3. Lactuca serriola		15	No	FACU	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 2-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text"/>		
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text"/>		
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text"/>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 3-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.385885		Long: -114.096584	
				Datum: NAD93	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 0 x 3 = 0 FACU species 20 x 4 = 80 UPL species 60 x 5 = 300 Column Totals: 80 (A) 380 (B) Prevalence Index = B/A = 4.75
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Bromus inermis		60	Yes	UPL	
2. Lactuca serriola		15	No	FACU	
3. Salsola tragus		5	No	FACU	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		80 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					Hydrophytic Vegetation Present? Yes No X
Remarks:					

SOIL

Sampling Point: UDP 3-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/2	100					Loamy/Clayey	roots present
3-16	10YR 3/2	100					Loamy/Clayey	compacted
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.							² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators for Problematic Hydric Soils³:	
___ Histosol (A1)			___ Sandy Gleyed Matrix (S4)				___ 2 cm Muck (A10) (LRR A, E)	
___ Histic Epipedon (A2)			___ Sandy Redox (S5)				___ Iron-Manganese Masses (F12) (LRR D)	
___ Black Histic (A3)			___ Stripped Matrix (S6)				___ Red Parent Material (F21)	
___ Hydrogen Sulfide (A4)			___ Loamy Mucky Mineral (F1) (except MLRA 1)				___ Very Shallow Dark Surface (F22)	
___ 1 cm Muck (A9) (LRR D, G)			___ Loamy Gleyed Matrix (F2)				___ Other (Explain in Remarks)	
___ Depleted Below Dark Surface (A11)			___ Depleted Matrix (F3)					
___ Thick Dark Surface (A12)			___ Redox Dark Surface (F6)				³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
___ Sandy Mucky Mineral (S1)			___ Depleted Dark Surface (F7)					
___ 2.5 cm Mucky Peat or Peat (S2) (LRR G)			___ Redox Depressions (F8)					
Restrictive Layer (if observed):								
Type: _____						Hydric Soil Present? Yes ____ No <u>X</u>		
Depth (inches): _____								
Remarks: 								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 4-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.388948		Long: -114.096533	
				Datum: NAD93	
Soil Map Unit Name: Colake silt loam, drained, 0 to 1 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 55 x 3 = 165 FACU species 0 x 4 = 0 UPL species 30 x 5 = 150 Column Totals: 85 (A) 315 (B) Prevalence Index = B/A = 3.71
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. <i>Thinopyrum intermedium</i>		30	Yes	UPL	
2. <i>Poa pratensis</i>		30	Yes	FAC	
3. <i>Calystegia sepium</i>		10	No	FAC	
4. <i>Cirsium arvense</i>		5	No	FAC	
5. <i>Solanum dulcamara</i>		5	No	FAC	
6. <i>Dipsacus fullonum</i>		5	No	FAC	
7.					
8.					
9.					
10.					
11.					
		85 =Total Cover			Hydrophytic Vegetation Present? Yes No X
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 4-24

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 2/2	100					Loamy/Clayey	roots present
4-10	10YR 2/2	100					Loamy/Clayey	
10-16	10YR 3/2	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 5-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.388948		Long: -114.096533	
				Datum: NAD93	
Soil Map Unit Name: Colake silt loam, drained, 0 to 1 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 55 x 3 = 165		
5.			FACU species 0 x 4 = 0		
			UPL species 30 x 5 = 150		
=Total Cover			Column Totals: 85 (A) 315 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 3.71		
1. Thinopyrum intermedium 30 Yes UPL			Hydrophytic Vegetation Indicators:		
2. Poa pratensis 30 Yes FAC			1 - Rapid Test for Hydrophytic Vegetation		
3. Calystegia sepium 10 No FAC			2 - Dominance Test is >50%		
4. Cirsium arvense 5 No FAC			3 - Prevalence Index is ≤3.0 ¹		
5. Solanum dulcamara 5 No FAC			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6. Dipsacus fullonum 5 No FAC			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.					
10.					
11.					
85 =Total Cover			Hydrophytic Vegetation Present? Yes No X		
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 5-24

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 2/2	100					Loamy/Clayey	roots present
4-10	10YR 2/2	100					Loamy/Clayey	
10-16	10YR 3/2	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 6-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.396664		Long: -114.096557	
Datum: NAD93					
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 60 x 3 = 180 FACU species 5 x 4 = 20 UPL species 40 x 5 = 200 Column Totals: 105 (A) 400 (B) Prevalence Index = B/A = 3.81
1. Symphoricarpos albus		5	Yes	FACU	
2.					
3.					
4.					
5.					
		5 =Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Bromus inermis		30	Yes	UPL	
2. Dipsacus fullonum		25	Yes	FAC	
3. Poa pratensis		20	Yes	FAC	
4. Cirsium arvense		10	No	FAC	
5. Centaurea stoebe		10	No	UPL	
6. Rumex crispus		5	No	FAC	
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 6-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 7-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.396571		Long: -114.095747 Datum: NAD93	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 30 x 3 = 90		
5.			FACU species 0 x 4 = 0		
=Total Cover			UPL species 70 x 5 = 350		
Herb Stratum (Plot size: 30')			Column Totals: 100 (A) 440 (B)		
1. Bromus inermis 70 Yes UPL			Prevalence Index = B/A = 4.40		
2. Dipsacus fullonum 30 Yes FAC					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
100 =Total Cover			Hydrophytic Vegetation Indicators:		
Woody Vine Stratum (Plot size: 30')			1 - Rapid Test for Hydrophytic Vegetation		
1.			2 - Dominance Test is >50%		
2.			3 - Prevalence Index is ≤3.0 ¹		
=Total Cover			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
% Bare Ground in Herb Stratum			5 - Wetland Non-Vascular Plants ¹		
			Problematic Hydrophytic Vegetation ¹ (Explain)		
Remarks:			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
			Hydrophytic Vegetation Present? Yes No X		

SOIL

Sampling Point: UDP 7-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 8-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.398599		Long: -114.096647	
				Datum: NAD93	
Soil Map Unit Name: Bolack silt loam, 0 to 2 percent slopes				NW1 classification: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 40 x 3 = 120		
5.			FACU species 15 x 4 = 60		
			UPL species 45 x 5 = 225		
=Total Cover			Column Totals: 100 (A) 405 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 4.05		
1. Poa pratensis 40 Yes FAC			Hydrophytic Vegetation Indicators:		
2. Bromus inermis 30 Yes UPL			1 - Rapid Test for Hydrophytic Vegetation		
3. Arctium minus 15 No UPL			2 - Dominance Test is >50%		
4. Cynoglossum officinale 15 No FACU			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes No X		
10.					
11.					
100 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 8-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 9-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.392912		Long: -114.096216 Datum: NAD93	
Soil Map Unit Name: Bolack silt loam, 0 to 2 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 40 x 3 = 120 FACU species 30 x 4 = 120 UPL species 30 x 5 = 150 Column Totals: 100 (A) 390 (B) Prevalence Index = B/A = 3.90
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		40	Yes	FAC	
2. Thinopyrum intermedium		30	Yes	UPL	
3. Taraxacum officinale		15	No	FACU	
4. Dactylis glomerata		15	No	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 9-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)			
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 10-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.394514		Long: -114.096303	
				Datum: NAD93	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes				NW1 classification: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)
1.					
2.					
3.					
4.					
			=Total Cover		
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 45 x 3 = 135 FACU species 60 x 4 = 240 UPL species 0 x 5 = 0 Column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3.57
1. Rosa woodsii		15	Yes	FACU	
2.					
3.					
4.					
5.					
		15	=Total Cover		
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Dipsacus fullonum		30	Yes	FAC	
2. Sisymbrium altissimum		25	Yes	FACU	
3. Erigeron strigosus		20	Yes	FACU	
4. Cirsium arvense		15	No	FAC	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		90	=Total Cover		
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
			=Total Cover		
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 10-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)			
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-7-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 11-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S13 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.409135		Long: -114.096543	
		Datum: NAD93			
Soil Map Unit Name: Post silty clay loam, 4 to 8 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 10 x 3 = 30 FACU species 15 x 4 = 60 UPL species 75 x 5 = 375 Column Totals: 100 (A) 465 (B) Prevalence Index = B/A = 4.65
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. <i>Thinopyrum intermedium</i>		40	Yes	UPL	
2. <i>Plantago patagonica</i>		20	Yes	UPL	
3. <i>Taraxacum officinale</i>		15	No	FACU	
4. <i>Bromus inermis</i>		15	No	UPL	
5. <i>Elymus trachycaulus</i>		10	No	FAC	
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					Hydrophytic Vegetation Present? Yes No X

SOIL

Sampling Point: UDP 11-24

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		
0-3	10YR 3/2	100					Loamy/Clayey	roots present
3-5	10YR 4/2	100					Loamy/Clayey	no redox
5-16	10YR 4/2	100					Loamy/Clayey	25% gravel/rock, compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-8-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 12-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S13 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.399509		Long: -114.096694	
				Datum: NAD93	
Soil Map Unit Name: Bolack silt loam, 0 to 2 percent slopes				NW1 classification: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 10 x 2 = 20 FAC species 15 x 3 = 45 FACU species 25 x 4 = 100 UPL species 50 x 5 = 250 Column Totals: 100 (A) 415 (B) Prevalence Index = B/A = 4.15
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Bromus inermis		50	Yes	UPL	
2. Lactuca serriola		25	Yes	FACU	
3. Phleum pratense		15	No	FAC	
4. Persicaria lapathifolia		10	No	FACW	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 12-24

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					Loamy/Clayey	roots present
2-5	10YR 3/2	100					Loamy/Clayey	20% gravel, compact
5-16	10YR 3/2	100					Loamy/Clayey	higher compaction

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Post Creek Hill - US 93

City/County: Lake

Sampling Date: 8-8-2024

Applicant/Owner: MDT

State: MT

Sampling Point: UDP 13-24

Investigator(s): B.Cline, F.Doty

Section, Township, Range: S13 T19N R20W

Landform (hillside, terrace, etc.): field

Local relief (concave, convex, none): convex

Slope (%): 0-5

Subregion (LRR/MLRA): LRR E, MLRA 44A

Lat: 47.402824

Long: -114.096468

Datum: NAD93

Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes

NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1.																					
2.																					
3.																					
4.																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>30'</u>)				Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>3.00</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>100</u>	x 3 = <u>300</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>100</u> (A)	<u>300</u> (B)																				
Prevalence Index = B/A = <u>3.00</u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
=Total Cover																					
Herb Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Poa pratensis</u>		<u>50</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Cirsium arvense</u>		<u>35</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Dipsacus fullonum</u>		<u>15</u>	<u>No</u>	<u>FAC</u>																	
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
<u>100</u> =Total Cover																					
Woody Vine Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1.																					
2.																					
=Total Cover																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

ENG FORM 6116-9, FEB 2024

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: UDP 13-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

ENG FORM 6116-9, FEB 2024 Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: UDP 14-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-8-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 15-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S13 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.409503		Long: -114.096550 Datum: NAD93	
Soil Map Unit Name: Post silty clay loam, 4 to 8 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 50 x 3 = 150 FACU species 0 x 4 = 0 UPL species 50 x 5 = 250 Column Totals: 100 (A) 400 (B) Prevalence Index = B/A = 4.00
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Plantago patagonica		25	Yes	UPL	
2. Elymus trachycaulus		20	Yes	FAC	
3. Bromus tectorum		20	Yes	UPL	
4. Poa pratensis		20	Yes	FAC	
5. Alopecurus pratensis		10	No	FAC	
6. Bromus inermis		5	No	UPL	
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			Hydrophytic Vegetation Present? Yes No X
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 15-24

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					Loamy/Clayey	roots present
2-10	10YR 3/3	100					Loamy/Clayey	increased compaction
10-16	10YR 3/3	100					Loamy/Clayey	very compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-8-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 16-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S13 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.412507		Long: -114.096371	
				Datum: NAD93	
Soil Map Unit Name: Irvine silty clay, 8 to 15 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 50 x 3 = 150 FACU species 0 x 4 = 0 UPL species 45 x 5 = 225 Column Totals: 95 (A) 375 (B) Prevalence Index = B/A = 3.95
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Plantago patagonica		25	Yes	UPL	
2. Elymus trachycaulus		20	Yes	FAC	
3. Bromus tectorum		20	Yes	UPL	
4. Poa pratensis		20	Yes	FAC	
5. Alopecurus pratensis		10	No	FAC	
6.					
7.					
8.					
9.					
10.					
11.					
		95 =Total Cover			Hydrophytic Vegetation Present? Yes No X
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 16-24

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					Loamy/Clayey	roots present
4-16	10YR 3/3	100					Loamy/Clayey	compacted

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.)			Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)		
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)		
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)		
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)		
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)			

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>8-8-2024</u>																																
Section, Township, Range: <u>S23 T19N R20W</u>		Sampling Point: <u>UDP 17-24</u>																																
Landform (hillside, terrace, etc.): <u>field</u>	Local relief (concave, convex, none): <u>convex</u>	Slope (%): <u>0-5</u>																																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.388441</u>	Long: <u>-114.097137</u>																																
Datum: <u>NAD93</u>																																		
Soil Map Unit Name: <u>Colake silt loam, drained, 0 to 1 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																																
Remarks:																																		
VEGETATION – Use scientific names of plants.																																		
Tree Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ =Total Cover		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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
Sapling/Shrub Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover																																		
Herb Stratum (Plot size: <u>30'</u>) 1. <u>Poa pratensis</u> 35 Yes FAC 2. <u>Juncus balticus</u> 20 Yes FACW 3. <u>Lactuca serriola</u> 15 No FACU 4. <u>Cirsium arvense</u> 15 No FAC 5. <u>Hieracium caespitosum</u> 10 No UPL 6. <u>Verbascum thapsus</u> 5 No FACU 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 100 =Total Cover		Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <td colspan="2">Total % Cover of:</td> <td colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td><u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> </tr> <tr> <td>FACW species</td> <td><u>20</u></td> <td>x 2 =</td> <td><u>40</u></td> </tr> <tr> <td>FAC species</td> <td><u>50</u></td> <td>x 3 =</td> <td><u>150</u></td> </tr> <tr> <td>FACU species</td> <td><u>20</u></td> <td>x 4 =</td> <td><u>80</u></td> </tr> <tr> <td>UPL species</td> <td><u>10</u></td> <td>x 5 =</td> <td><u>50</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>100</u> (A)</td> <td></td> <td><u>320</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2"><u>3.20</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>20</u>	x 2 =	<u>40</u>	FAC species	<u>50</u>	x 3 =	<u>150</u>	FACU species	<u>20</u>	x 4 =	<u>80</u>	UPL species	<u>10</u>	x 5 =	<u>50</u>	Column Totals:	<u>100</u> (A)		<u>320</u> (B)	Prevalence Index = B/A =		<u>3.20</u>	
Total % Cover of:			Multiply by:																															
OBL species	<u>0</u>	x 1 =	<u>0</u>																															
FACW species	<u>20</u>	x 2 =	<u>40</u>																															
FAC species	<u>50</u>	x 3 =	<u>150</u>																															
FACU species	<u>20</u>	x 4 =	<u>80</u>																															
UPL species	<u>10</u>	x 5 =	<u>50</u>																															
Column Totals:	<u>100</u> (A)		<u>320</u> (B)																															
Prevalence Index = B/A =		<u>3.20</u>																																
Woody Vine Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ =Total Cover % Bare Ground in Herb Stratum <u> </u>		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
Remarks:		Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																

SOIL

Sampling Point: UDP 17-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)			
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-8-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 18-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian forest		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.392108		Long: -114.099675	
				Datum: NAD93	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: PSS1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1. Populus tremuloides 45 Yes FACU			Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2. Juniperus scopulorum 15 Yes UPL			Total Number of Dominant Species Across All Strata: 6 (B)		
3. 60 =Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)		
4. Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1. Symphoricarpos albus 25 Yes FACU			Total % Cover of: Multiply by:		
2. Sorbus scopulina 10 Yes FACU			OBL species 0 x 1 = 0		
3. 35 =Total Cover			FACW species 10 x 2 = 20		
4. Herb Stratum (Plot size: 30')			FAC species 25 x 3 = 75		
1. Poa pratensis 20 Yes FAC			FACU species 85 x 4 = 340		
2. Phalaris arundinacea 10 Yes FACW			UPL species 15 x 5 = 75		
3. Equisetum arvense 5 No FAC			Column Totals: 135 (A) 510 (B)		
4. Taraxacum officinale 5 No FACU			Prevalence Index = B/A = 3.78		
5. 40 =Total Cover			Hydrophytic Vegetation Indicators:		
6. 1 - Rapid Test for Hydrophytic Vegetation			2 - Dominance Test is >50%		
7. 3 - Prevalence Index is ≤3.0¹			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)		
8. 5 - Wetland Non-Vascular Plants¹			Problematic Hydrophytic Vegetation¹ (Explain)		
9. ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			Hydrophytic Vegetation Present? Yes No X		
10. 11. 40 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1. 2. =Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 18-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 8-8-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 19-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian field		Local relief (concave, convex, none): flat		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.390724		Long: -114.099426	
Datum: NAD93					
Soil Map Unit Name: Bohnly silt loam, 0 to 2 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 20 x 2 = 40 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 100 (A) 280 (B) Prevalence Index = B/A = 2.80
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Alopecurus pratensis		60	Yes	FAC	
2. Juncus balticus		20	Yes	FACW	
3. Dipsacus fullonum		15	No	FAC	
4. Cirsium arvense		5	No	FAC	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100	=Total Cover		Hydrophytic Vegetation Present? Yes X No
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 19-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text"/>		
Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text"/>		
Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text"/>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 20-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S25 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): flat		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.380138		Long: -114.096498	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 70 x 3 = 210 FACU species 20 x 4 = 80 UPL species 0 x 5 = 0 Column Totals: 90 (A) 290 (B) Prevalence Index = B/A = 3.22
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		60	Yes	FAC	
2. Taraxacum officinale		10	No	FACU	
3. Barbarea vulgaris		10	No	FAC	
4. Lactuca serriola		10	No	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		90 =Total Cover			Hydrophytic Vegetation Present? Yes X No
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 20-24

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 3/1	100					Loamy/Clayey	roots present; 20% gravels
6-16	10YR 3/2	100					Loamy/Clayey	20% gravels
16-18	10YR 7/1	50					Loamy/Clayey	50% 7.5YR 5/3

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.)			Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)		
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)		
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)		
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)		
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)			

Restrictive Layer (if observed): Type: _____ Depth (inches): _____		Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: Depleted matrix below threshold for hydric soil indicators		

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: Water table present at 16" - below threshold for hydrology indicator.				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 21-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S25 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): flat		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.381030		Long: -114.096396	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 15 x 3 = 45 FACU species 30 x 4 = 120 UPL species 55 x 5 = 275 Column Totals: 100 (A) 440 (B) Prevalence Index = B/A = 4.40
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. <i>Thinopyrum intermedium</i>		40	Yes	UPL	
2. <i>Lactuca serriola</i>		30	Yes	FACU	
3. <i>Lepidium campestre</i>		15	No	UPL	
4. <i>Alopecurus pratensis</i>		15	No	FAC	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			Hydrophytic Vegetation Present? Yes No X
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 21-24

Profile Description: (Describe to the depth needed to document 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					Loamy/Clayey	roots present
4-16	10YR 3/2	100					Loamy/Clayey	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.							² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)				<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)	
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)				<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)	
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)				<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)				<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)				<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)				³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if observed):								
Type: _____						Hydric Soil Present? Yes _____ No <u>X</u>		
Depth (inches): _____								
Remarks:								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)			
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 22-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S13 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): flat		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.413448		Long: -114.096541	
				Datum: NAD83	
Soil Map Unit Name: Irvine silty clay, 8 to 15 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 100 x 3 = 300 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 100 (A) 300 (B) Prevalence Index = B/A = 3.00
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		70	Yes	FAC	
2. Alopecurus pratensis		30	Yes	FAC	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					Hydrophytic Vegetation Present? Yes X No
Remarks:					

SOIL

Sampling Point: UDP 22-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 23-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.415304		Long: -114.096608 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 45 x 3 = 135		
5.			FACU species 0 x 4 = 0		
=Total Cover			UPL species 55 x 5 = 275		
			Column Totals: 100 (A) 410 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 4.10		
1. Poa pratensis 40 Yes FAC			Hydrophytic Vegetation Indicators:		
2. Asclepias speciosa 5 No FAC			1 - Rapid Test for Hydrophytic Vegetation		
3. Elymus hispidus 55 Yes UPL			2 - Dominance Test is >50%		
4.			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes No X		
10.					
11.					
100 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 23-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 24-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.417455		Long: -114.095857	
				Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 ro 4 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydic Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 100 x 3 = 300 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 100 (A) 300 (B) Prevalence Index = B/A = 3.00
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		30	Yes	FAC	
2. Alopecurus pratensis		15	No	FAC	
3. Cirsium arvense		5	No	FAC	
4. Sporobolus airoides		50	Yes	FAC	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			Hydrophytic Vegetation Present? Yes X No
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 24-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>9-16-2024</u>																
Section, Township, Range: <u>S12 T19N R20W</u>		Sampling Point: <u>UDP 25-24</u>																
Landform (hillside, terrace, etc.): <u>natural draw</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.417017</u>	Long: <u>-114.095857</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Post silty clay loam, 2 ro 4 percent slopes</u>		NWI classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																
Remarks:																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ =Total Cover		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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
Sapling/Shrub Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover																		
Herb Stratum (Plot size: <u>30'</u>) 1. <u>Poa pratensis</u> 65 Yes FAC 2. <u>Alopecurus pratensis</u> 35 Yes FAC 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 100 =Total Cover		Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>3.00</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>100</u>	x 3 = <u>300</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>300</u> (B)																	
Prevalence Index = B/A = <u>3.00</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ =Total Cover % Bare Ground in Herb Stratum <u> </u>		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Remarks:		Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																

SOIL

Sampling Point: UDP 25-24

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					Loamy/Clayey	roots present
5-16	10YR 2/1	100					Loamy/Clayey	10% 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.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)
	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
	<input type="checkbox"/> Red Parent Material (F21)
	<input type="checkbox"/> Very Shallow Dark Surface (F22)
	<input type="checkbox"/> Other (Explain in Remarks)

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: point is within a natural draw	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 26-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.417943		Long: -114.095960 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 ro 4 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 100 x 3 = 300		
5.			FACU species 0 x 4 = 0		
=Total Cover			UPL species 0 x 5 = 0		
Herb Stratum (Plot size: 30')			Column Totals: 100 (A) 300 (B)		
1. Poa pratensis 65 Yes FAC			Prevalence Index = B/A = 3.00		
2. Alopecurus pratensis 35 Yes FAC					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
100 =Total Cover			Hydrophytic Vegetation Indicators:		
Woody Vine Stratum (Plot size: 30')			1 - Rapid Test for Hydrophytic Vegetation		
1.			X 2 - Dominance Test is >50%		
2.			3 - Prevalence Index is ≤3.0 ¹		
=Total Cover			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
% Bare Ground in Herb Stratum			5 - Wetland Non-Vascular Plants ¹		
			Problematic Hydrophytic Vegetation ¹ (Explain)		
Remarks:			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
			Hydrophytic Vegetation Present? Yes X No		

SOIL

Sampling Point: UDP 26-24

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		
0-3	10YR 3/1	100					Loamy/Clayey	roots present
3-16	10YR 3/1	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Post Creek Hill - US 93

City/County: Lake

Sampling Date: 9-16-2024

Applicant/Owner: MDT

State: MT

Sampling Point: UDP 27-24

Investigator(s): B.Cline, F.Doty

Section, Township, Range: S12 T19N R20W

Landform (hillside, terrace, etc.): field

Local relief (concave, convex, none): convex

Slope (%): 5-10

Subregion (LRR/MLRA): LRR E, MLRA 44A

Lat: 47.432930

Long: -114.097152

Datum: NAD83

Soil Map Unit Name: Post silty clay loam, 2 ro 4 percent slopes

NWI classification: PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <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>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
1.																					
2.																					
3.																					
4.																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>30'</u>)				Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>55</u></td> <td>x 3 = <u>165</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>330</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.67</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>55</u>	x 3 = <u>165</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>90</u> (A)	<u>330</u> (B)	Prevalence Index = B/A = <u>3.67</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>55</u>	x 3 = <u>165</u>																				
FACU species <u>10</u>	x 4 = <u>40</u>																				
UPL species <u>25</u>	x 5 = <u>125</u>																				
Column Totals: <u>90</u> (A)	<u>330</u> (B)																				
Prevalence Index = B/A = <u>3.67</u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
=Total Cover																					
Herb Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>5</u> - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.																					
2.																					
3.	<u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>																	
4.	<u>Plantago patagonica</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																	
5.	<u>Trifolium pratense</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
6.	<u>Alopecurus pratensis</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
7.																					
8.																					
9.																					
10.																					
11.																					
<u>90</u> =Total Cover																					
Woody Vine Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1.																					
2.																					
=Total Cover																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

ENG FORM 6116-9, FEB 2024

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: UDP 27-24

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		
0-3	10YR 3/2	100					Loamy/Clayey	roots present
3-5	10YR 3/2	100					Loamy/Clayey	
5-16	10YR 3/2	100					Loamy/Clayey	40% 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.)			Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)			

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 28-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.433173		Long: -114.097465 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A =
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Elymus hispidus		35	Yes		
2.					
3. Lactuca serriola		15	Yes	FACU	
4. Bromus inermis		25	Yes	UPL	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		75	=Total Cover		
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 28-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/>		
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/>		
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

SOIL

Sampling Point: UDP 29-24

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					Loamy/Clayey	Roots present
4-16	10YR 4/3	100					Loamy/Clayey	10% 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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 30-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.424442		Long: -114.096682	
				Datum: NAD83	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 45 x 3 = 135 FACU species 30 x 4 = 120 UPL species 0 x 5 = 0 Column Totals: 75 (A) 255 (B) Prevalence Index = B/A = 3.40
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		30	Yes	FAC	
2. Plantago lanceolata		25	Yes	FACU	
3. Elymus trachycaulus		15	Yes	FAC	
4. Lactuca serriola		5	No	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		75 =Total Cover			Hydrophytic Vegetation Present? Yes X No
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 30-24

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					Loamy/Clayey	roots present
2-6	10YR 3/2	100					Loamy/Clayey	10% rocks
6-16	10YR 4/3	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 31-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.426417		Long: -114.096688 Datum: NAD83	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 15 x 3 = 45		
5.			FACU species 0 x 4 = 0		
=Total Cover			UPL species 70 x 5 = 350		
			Column Totals: 85 (A) 395 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 4.65		
1. Bromus inermis 35 Yes UPL			Hydrophytic Vegetation Indicators:		
2. Thinopyrum intermedium 25 Yes UPL			1 - Rapid Test for Hydrophytic Vegetation		
3. Elymus trachycaulus 15 No FAC			2 - Dominance Test is >50%		
4. Centaurea stoebe 10 No UPL			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes No X		
10.					
11.					
85 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 31-24

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					Loamy/Clayey	roots present
4-16	10YR 3/2	100					Loamy/Clayey	20% gravel; compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 32-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S12 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.428072		Long: -114.096499	
				Datum: NAD93	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 55 x 3 = 165 FACU species 40 x 4 = 160 UPL species 0 x 5 = 0 Column Totals: 95 (A) 325 (B) Prevalence Index = B/A = 3.42
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Elymus trachycaulus		50	Yes	FAC	
2. Cirsium arvense		5	No	FAC	
3. Elymus lanceolatus		40	Yes	FACU	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		95 =Total Cover			Hydrophytic Vegetation Present? Yes No X
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 32-24

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						Loamy/Clayey	roots present
5-16	10YR 4/4						Loamy/Clayey	compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-16-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 33-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S1 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.428428		Long: -114.096063	
				Datum: NAD83	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 1 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 85 x 3 = 255		
5.			FACU species 0 x 4 = 0		
			UPL species 0 x 5 = 0		
=Total Cover			Column Totals: 85 (A) 255 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 3.00		
1. Dipsacus fullonum 10 No FAC			Hydrophytic Vegetation Indicators:		
2. Elymus trachycaulus 75 Yes FAC			1 - Rapid Test for Hydrophytic Vegetation		
3.			X 2 - Dominance Test is >50%		
4.			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes X No		
10.					
11.					
85 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 33-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 34-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S1 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.430830		Long: -114.096501	
				Datum: NAD83	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 40 x 3 = 120		
5.			FACU species 8 x 4 = 32		
			UPL species 50 x 5 = 250		
=Total Cover			Column Totals: 98 (A) 402 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 4.10		
1. Cirsium arvense 5 No FAC			Hydrophytic Vegetation Indicators:		
2. Elymus trachycaulus 35 Yes FAC			1 - Rapid Test for Hydrophytic Vegetation		
3. Bromus inermis 40 Yes UPL			2 - Dominance Test is >50%		
4. Plantago patagonica 10 No UPL			3 - Prevalence Index is ≤3.0 ¹		
5. Capsella bursa-pastoris 8 No FACU			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes No X		
10.					
11.					
98 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 34-24

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 3/3						Loamy/Clayey	roots present
4-8	10YR 3/3						Loamy/Clayey	
8-16	10YR 5/3						Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S1 T19N R20W</u>																
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>convex</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Slope (%): <u>0-5</u>																
Lat: <u>47.432063</u>		Long: <u>-114.096536</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Post silty clay loam, 2 to 4 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																
Remarks:																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ =Total Cover		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
Sapling/Shrub Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover																		
Herb Stratum (Plot size: <u>30'</u>) 1. <u>Cirsium arvense</u> 5 No FAC 2. <u>Elymus trachycaulus</u> 30 Yes FAC 3. <u>Bromus inermis</u> 40 Yes UPL 4. <u>Plantago patagonica</u> 10 No UPL 5. <u>Capsella bursa-pastoris</u> 10 No FACU 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 95 =Total Cover		Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: right;">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>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>395</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.16</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>95</u> (A)	<u>395</u> (B)	Prevalence Index = B/A = <u>4.16</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>35</u>	x 3 = <u>105</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>50</u>	x 5 = <u>250</u>																	
Column Totals: <u>95</u> (A)	<u>395</u> (B)																	
Prevalence Index = B/A = <u>4.16</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ =Total Cover % Bare Ground in Herb Stratum <u> </u>		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Remarks:		Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																

SOIL

Sampling Point: UDP 35-24

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 3/3						Loamy/Clayey	roots present
4-8	10YR 3/3						Loamy/Clayey	
8-16	10YR 5/3						Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 36-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S2 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.431636		Long: -114.097408 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 85 x 3 = 255 FACU species 5 x 4 = 20 UPL species 0 x 5 = 0 Column Totals: 90 (A) 275 (B) Prevalence Index = B/A = 3.06
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Cirsium arvense		15	No	FAC	
2. Phalaris arundinacea		70	Yes	FAC	
3. Verbascum thapsus		5	No	FACU	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		90	=Total Cover		Hydrophytic Vegetation Present? Yes X No
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 36-24

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					Loamy/Clayey	roots present
4-8	10YR 3/2	100					Loamy/Clayey	
8-16	10YR 4/2	100					Loamy/Clayey	no redox

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.)			Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)			

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____		Hydric Soil Present? Yes _____ No <u>X</u>
Remarks: _____		

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: _____				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 37-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S2 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.431630		Long: -114.097394	
				Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1. Prunus virginiana 40 Yes FACU			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 45 x 3 = 135		
5.			FACU species 40 x 4 = 160		
			UPL species 0 x 5 = 0		
40 =Total Cover			Column Totals: 85 (A) 295 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 3.47		
1. Cirsium arvense 5 No FAC			Hydrophytic Vegetation Indicators:		
2. Dipsacus fullonum 40 Yes FAC			1 - Rapid Test for Hydrophytic Vegetation		
3.			2 - Dominance Test is >50%		
4.			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes No X		
10.					
11.					
45 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 37-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 38-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S2 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.430142		Long: -114.097515 Datum: NAD83	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 95 x 3 = 285 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 95 (A) 285 (B) Prevalence Index = B/A = 3.00
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Bromus inermis		75	Yes	FAC	
2. Thinopyrum intermedium		20	Yes	FAC	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		95 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 38-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 39-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S11 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.428010		Long: -114.097542 Datum: NAD83	
Soil Map Unit Name: Post-Ronan-Water complex, 2 to 8 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 90 x 3 = 270		
5.			FACU species 0 x 4 = 0		
=Total Cover			UPL species 0 x 5 = 0		
			Column Totals: 90 (A) 270 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 3.00		
1. Bromus inermis 50 Yes FAC			Hydrophytic Vegetation Indicators:		
2. Cirsium arvense 10 No FAC			1 - Rapid Test for Hydrophytic Vegetation		
3. Elymus trachycaulus 20 Yes FAC			X 2 - Dominance Test is >50%		
4. Dipsacus fullonum 10 No FAC			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.					
10.					
11.					
90 =Total Cover			Hydrophytic Vegetation Present? Yes X No		
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 39-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: UDP 40-24

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					Loamy/Clayey	roots present
4-7	10YR 3/2	100					Loamy/Clayey	
7-16	10YR 4/2	100					Loamy/Clayey	no redox

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
---	---

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																																									
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-17-2024</u>																																									
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>UDP 41-24</u>																																									
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S11 T19N R20W</u>																																											
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>convex</u>		Slope (%): <u>0-5</u>																																									
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.426615</u>		Long: <u>-114.097185</u> Datum: <u>NAD83</u>																																									
Soil Map Unit Name: <u>Post-Ronan-Water complex, 2 to 8 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																																													
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>			Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																																										
Remarks:																																													
VEGETATION – Use scientific names of plants.																																													
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																								
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																									
		=Total Cover																																											
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Total % Cover of:</td> <td style="width: 10%;"></td> <td style="width: 10%;">Multiply by:</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>OBL species</td> <td><u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FACW species</td> <td><u>0</u></td> <td>x 2 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FAC species</td> <td><u>90</u></td> <td>x 3 =</td> <td><u>270</u></td> <td></td> </tr> <tr> <td>FACU species</td> <td><u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>Column Totals:</td> <td><u>90</u> (A)</td> <td></td> <td><u>270</u> (B)</td> <td></td> </tr> <tr> <td colspan="3">Prevalence Index = B/A =</td> <td><u>3.00</u></td> <td></td> </tr> </table>	Total % Cover of:		Multiply by:			OBL species	<u>0</u>	x 1 =	<u>0</u>		FACW species	<u>0</u>	x 2 =	<u>0</u>		FAC species	<u>90</u>	x 3 =	<u>270</u>		FACU species	<u>0</u>	x 4 =	<u>0</u>		UPL species	<u>0</u>	x 5 =	<u>0</u>		Column Totals:	<u>90</u> (A)		<u>270</u> (B)		Prevalence Index = B/A =			<u>3.00</u>	
Total % Cover of:		Multiply by:																																											
OBL species	<u>0</u>	x 1 =	<u>0</u>																																										
FACW species	<u>0</u>	x 2 =	<u>0</u>																																										
FAC species	<u>90</u>	x 3 =	<u>270</u>																																										
FACU species	<u>0</u>	x 4 =	<u>0</u>																																										
UPL species	<u>0</u>	x 5 =	<u>0</u>																																										
Column Totals:	<u>90</u> (A)		<u>270</u> (B)																																										
Prevalence Index = B/A =			<u>3.00</u>																																										
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																									
		=Total Cover																																											
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																								
1. <u>Bromus inermis</u>		<u>50</u>	<u>Yes</u>	<u>FAC</u>																																									
2. <u>Cirsium arvense</u>		<u>10</u>	<u>No</u>	<u>FAC</u>																																									
3. <u>Elymus trachycaulus</u>		<u>20</u>	<u>Yes</u>	<u>FAC</u>																																									
4. <u>Dipsacus fullonum</u>		<u>10</u>	<u>No</u>	<u>FAC</u>																																									
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																									
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>90</u>	=Total Cover																																										
Woody Vine Stratum (Plot size: <u>30'</u>)																																													
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																									
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																									
		=Total Cover																																											
% Bare Ground in Herb Stratum <u> </u>																																													
Remarks:																																													

SOIL

Sampling Point: UDP 41-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: UDP 42-24

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					Loamy/Clayey	roots present
4-6	10YR 3/2	100					Loamy/Clayey	20% gravel
6-16	7.5YR 4/4	98	2.5Y 6/8	2	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-17-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>UDP 43-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S11 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>convex</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.423909</u>		Long: <u>-114.097127</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Post-Ronan-Water complex, 2 to 8 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>			Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																	
		=Total Cover																			
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>270</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.18</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u> (A)	<u>270</u> (B)	Prevalence Index = B/A = <u>3.18</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
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1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
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4. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
		=Total Cover																			
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Bromus inermis</u>		<u>40</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Elymus trachycaulus</u>		<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Dipsacus fullonum</u>		<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Hypericum perforatum</u>		<u>15</u>	<u>No</u>	<u>FACU</u>																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>85</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
		=Total Cover																			
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: UDP 43-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/3	100					Loamy/Clayey	roots present
4-7	10YR 3/3	100					Loamy/Clayey	
7-16	10YR 5/3	100					Loamy/Clayey	compacted

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)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☒ 2.5 cm Mucky Peat or Peat (S2) (**LRR G**) ☐ Redox Depressions (F8)

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 observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ____ No <u>X</u>
---	--

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-17-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>UDP 44-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S11 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>roadside field</u>		Local relief (concave, convex, none): <u>convex</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.421321</u>		Long: <u>-114.097164</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Post silt loam, 0 to 2 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>			Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																	
		=Total Cover																			
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>3.00</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>100</u>	x 3 = <u>300</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>100</u> (A)	<u>300</u> (B)																				
Prevalence Index = B/A = <u>3.00</u>																					
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																	
		=Total Cover																			
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Bromus inermis</u>		<u>65</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Cirsium arvense</u>		<u>15</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Elymus trachycaulus</u>		<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>100</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
		=Total Cover																			
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: UDP 44-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):			
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):			
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

SOIL

Sampling Point: UDP 45-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-17-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>UDP 46-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S11 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>convex</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.417073</u>		Long: <u>-114.097239</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Post silty clay loam, 2 to 4 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>			Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>300</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.16</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>300</u> (B)	Prevalence Index = B/A = <u>3.16</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>80</u>	x 3 = <u>240</u>																				
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Column Totals: <u>95</u> (A)	<u>300</u> (B)																				
Prevalence Index = B/A = <u>3.16</u>																					
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2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
5. <u> </u>																					
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Bromus inermis</u>		<u>35</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Plantago patagonica</u>		<u>15</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Poa pratensis</u>		<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Trifolium pratense</u>		<u>15</u>	<u>No</u>	<u>FACU</u>																	
5. <u> </u>																					
6. <u> </u>																					
7. <u> </u>																					
8. <u> </u>																					
9. <u> </u>																					
10. <u> </u>																					
11. <u> </u>																					
		<u>95</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>																					
2. <u> </u>																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: UDP 46-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-24	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 47-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S11 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.414089		Long: -114.097169 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 4 to 8 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 23 x 3 = 69 FACU species 5 x 4 = 20 UPL species 60 x 5 = 300 Column Totals: 88 (A) 389 (B) Prevalence Index = B/A = 4.42
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Plantago patagonica		30	Yes	UPL	
2. Bromus inermis		30	Yes	UPL	
3. Elymus trachycaulus		15	No	FAC	
4. Cirsium arvense		8	No	FAC	
5. Lactuca serriola		5	No	FACU	
6.					
7.					
8.					
9.					
10.					
11.					
		88 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 47-24

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		
0-7	10YR 3/2	100					Loamy/Clayey	roots present
7-16	10YR 4/2	100					Loamy/Clayey	no redox; compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 48-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S14 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.411491		Long: -114.097426 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 4 to 8 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 35 x 3 = 105 FACU species 8 x 4 = 32 UPL species 25 x 5 = 125 Column Totals: 68 (A) 262 (B) Prevalence Index = B/A = 3.85
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Plantago patagonica		25	Yes	UPL	
2. Cirsium arvense		25	Yes	FAC	
3. Dipsacus fullonum		10	No	FAC	
4. Sisymbrium altissimum		8	No	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		68 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					Hydrophytic Vegetation Present? Yes No X

ENG FORM 6116-9, FEB 2024

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: UDP 48-24

Profile Description: (Describe to the depth needed to document the absence of indicators.)								
Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/3	100					Loamy/Clayey	roots present; 30% rock
4-16	10YR 3/3	100					Loamy/Clayey	compacted
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)				<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)	
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)				<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)	
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)				<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)				<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)				<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)				³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if observed):								
Type: _____ Depth (inches): _____						Hydric Soil Present? Yes _____ No <u> X </u>		
Remarks:								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 49-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S14 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 5-10	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.407823		Long: -114.097392	
				Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes				NW1 classification: none	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 15 x 3 = 45 FACU species 15 x 4 = 60 UPL species 25 x 5 = 125 Column Totals: 55 (A) 230 (B) Prevalence Index = B/A = 4.18
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Plantago patagonica		25	Yes	UPL	
2. Sisymbrium altissimum		15	Yes	FACU	
3. Cirsium arvense		15	Yes	FAC	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		55 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					Hydrophytic Vegetation Present? Yes No X
Remarks:					

SOIL

Sampling Point: UDP 49-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S14 T19N R20W</u>																
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>convex</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Slope (%): <u>0-5</u>																
Lat: <u>47.402826</u>		Long: <u>-114.097483</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Bolack silt loam, 0 to 2 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																
Remarks:																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ =Total Cover		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
Sapling/Shrub Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover																		
Herb Stratum (Plot size: <u>30'</u>) 1. <u>Poa pratensis</u> 65 Yes FAC 2. <u>Trifolium pratense</u> 15 No FACU 3. <u>Plantago major</u> 10 No FAC 4. <u>Lactuca serriola</u> 5 No FACU 5. <u>Barbarea vulgaris</u> 5 No FAC 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 100 =Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>320</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.20</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>320</u> (B)	Prevalence Index = B/A = <u>3.20</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>80</u>	x 3 = <u>240</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>320</u> (B)																	
Prevalence Index = B/A = <u>3.20</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ =Total Cover % Bare Ground in Herb Stratum <u> </u>		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Remarks:		Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																

SOIL

Sampling Point: UDP 50-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/2	100					Loamy/Clayey	roots present
6-16	10YR 3/2	100					Loamy/Clayey	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)				<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)	
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)				<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)	
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)				<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)				<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)				<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)				³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if observed):								
Type: _____						Hydric Soil Present? Yes _____ No <u>X</u>		
Depth (inches): _____								
Remarks: _____								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)			
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 51-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.397378		Long: -114.097060 Datum: NAD93	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)		
2.			Total Number of Dominant Species Across All Strata: 1 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 0 x 1 = 0		
3.			FACW species 0 x 2 = 0		
4.			FAC species 0 x 3 = 0		
5.			FACU species 10 x 4 = 40		
=Total Cover			UPL species 80 x 5 = 400		
			Column Totals: 90 (A) 440 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 4.89		
1. Bromus inermis 60 Yes UPL			Hydrophytic Vegetation Indicators:		
2. Erigeron caespitosus 5 No UPL			1 - Rapid Test for Hydrophytic Vegetation		
3. Plantago patagonica 15 No UPL			2 - Dominance Test is >50%		
4. Lactuca serriola 10 No FACU			3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes No X		
10.					
11.					
90 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 51-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 52-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.387408		Long: -114.097459	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
			=Total Cover		
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 25 x 3 = 75 FACU species 70 x 4 = 280 UPL species 8 x 5 = 40 Column Totals: 103 (A) 395 (B) Prevalence Index = B/A = 3.83
1. Rosa woodsii		5	No	FACU	
2. Symphoricarpos albus		50	Yes	FACU	
3. Prunus virginiana		5	No	FACU	
4.					
5.					
		60	=Total Cover		
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Linaria vulgaris		8	No	UPL	
2. Dipsacus fullonum		10	Yes	FAC	
3. Cirsium arvense		15	Yes	FAC	
4. Taraxacum officinale		10	Yes	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		43	=Total Cover		
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes No X
1.					
2.					
			=Total Cover		
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: UDP 52-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes _____ No <u>X</u>	
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)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: UDP 53-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S26 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): convex		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.384427		Long: -114.097094 Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X			Is the Sampled Area within a Wetland? Yes No X		
Hydric Soil Present? Yes No X					
Wetland Hydrology Present? Yes No X					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 45 x 3 = 135 FACU species 5 x 4 = 20 UPL species 50 x 5 = 250 Column Totals: 100 (A) 405 (B) Prevalence Index = B/A = 4.05
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Bromus inermis		50	Yes	UPL	
2. Poa pratensis		40	Yes	FAC	
3. Dipsacus fullonum		5	No	FAC	
4. Sisymbrium altissimum		5	No	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					Hydrophytic Vegetation Present? Yes No X
Remarks:					

SOIL

Sampling Point: UDP 53-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

SOIL

Sampling Point: UDP 54-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

SOIL

Sampling Point: UDP 55-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>9-18-2024</u>																
Section, Township, Range: <u>S25 T19N R20W</u>		Sampling Point: <u>UDP 56-24</u>																
Landform (hillside, terrace, etc.): <u>field</u>	Local relief (concave, convex, none): <u>convex</u>	Slope (%): <u>0-5</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.381967</u>	Long: <u>-114.096463</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Ronan silty clay loam, 0 to 2 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																
Remarks:																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> <div style="text-align: right;">=Total Cover</div>		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
Sapling/Shrub Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <div style="text-align: right;">=Total Cover</div>																		
Herb Stratum (Plot size: <u>30'</u>) 1. <u>Poa pratensis</u> 40 Yes FAC 2. <u>Plantago patagonica</u> 25 Yes UPL 3. <u>Sisymbrium altissimum</u> 15 No FACU 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u> <div style="text-align: right;">80 =Total Cover</div>		Prevalence Index worksheet: <table style="width: 100%; font-size: small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>80</u> (A)</td> <td><u>305</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.81</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>80</u> (A)	<u>305</u> (B)	Prevalence Index = B/A = <u>3.81</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>25</u>	x 5 = <u>125</u>																	
Column Totals: <u>80</u> (A)	<u>305</u> (B)																	
Prevalence Index = B/A = <u>3.81</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> <div style="text-align: right;">=Total Cover</div>		Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
% Bare Ground in Herb Stratum <u> </u> Remarks:																		

SOIL

Sampling Point: UDP 56-24

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 4/3	100					Loamy/Clayey	Roots present
5-10	10YR 4/3	100					Loamy/Clayey	
10-16	10YR 5/2						Loamy/Clayey	20% gravel, compacted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S25 T19N R20W</u>																
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>convex</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Slope (%): <u>0-5</u>																
Lat: <u>47.383648</u>		Long: <u>-114.096400</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Ronan silty clay loam, 2 to 4 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																
Remarks: Irrigated field - hydric soil present but no hydrophytic vegetation or hydrology.																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>)		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u>																		
Absolute % Cover <u> </u> Dominant Species? <u> </u> Indicator Status <u> </u> =Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)																		
1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u>																		
Absolute % Cover <u> </u> Dominant Species? <u> </u> Indicator Status <u> </u> =Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>395</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.95</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>100</u> (A)	<u>395</u> (B)	Prevalence Index = B/A = <u>3.95</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>35</u>	x 3 = <u>105</u>																	
FACU species <u>35</u>	x 4 = <u>140</u>																	
UPL species <u>30</u>	x 5 = <u>150</u>																	
Column Totals: <u>100</u> (A)	<u>395</u> (B)																	
Prevalence Index = B/A = <u>3.95</u>																		
Herb Stratum (Plot size: <u>30'</u>)																		
1. <u>Poa pratensis</u> 15 No FAC 2. <u>Trifolium pratense</u> 20 Yes FACU 3. <u>Plantago patagonica</u> 30 Yes UPL 4. <u>Elymus trachycaulus</u> 20 Yes FAC 5. <u>Dianthus armeria</u> 15 No FACU 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u>																		
Absolute % Cover <u>100</u> Dominant Species? <u> </u> Indicator Status <u> </u> =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																		
1. <u> </u> 2. <u> </u>																		
Absolute % Cover <u> </u> Dominant Species? <u> </u> Indicator Status <u> </u> =Total Cover																		
% Bare Ground in Herb Stratum <u> </u>		Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																		
Remarks:																		

SOIL

Sampling Point: UDP 57-24

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 3/3	100					Loamy/Clayey	Roots present
2-5	7.5YR 4/2	100					Loamy/Clayey	no redox
5-16	7.5YR 4/2	96	7.5YR 4/6	4	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

SOIL

Sampling Point: UDP 58-24

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	2.5Y 3/2	100					Loamy/Clayey	Roots present
5-16	2.5Y 3/2	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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 <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: UDP 59-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																									
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-18-2024</u>																									
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>UDP 60-24</u>																									
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S24 T19N R20W</u>																											
Landform (hillside, terrace, etc.): <u>riparian</u>		Local relief (concave, convex, none): <u>convex</u>		Slope (%): <u>0-5</u>																									
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.394752</u>		Long: <u>-114.094382</u> Datum: <u>NAD83</u>																									
Soil Map Unit Name: <u>Lamoose loam, 0 to 2 percent slope</u>		NW1 classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																													
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>			Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>																										
Remarks: Significant topo and vegetation change in this area - almost looks like a historic berm																													
VEGETATION – Use scientific names of plants.																													
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)																								
1. <u> </u>		<u> </u>	<u> </u>	<u> </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> </u> =Total Cover																											
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species</td> <td><u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species</td> <td><u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species</td> <td><u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species</td> <td><u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>120</u> (A)</td> <td><u>355</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.96</u></td> <td></td> </tr> </table>	Total % Cover of:		Multiply by:	OBL species	<u>25</u>	x 1 = <u>25</u>	FACW species	<u>0</u>	x 2 = <u>0</u>	FAC species	<u>50</u>	x 3 = <u>150</u>	FACU species	<u>45</u>	x 4 = <u>180</u>	UPL species	<u>0</u>	x 5 = <u>0</u>	Column Totals:	<u>120</u> (A)	<u>355</u> (B)	Prevalence Index = B/A = <u>2.96</u>		
Total % Cover of:		Multiply by:																											
OBL species	<u>25</u>	x 1 = <u>25</u>																											
FACW species	<u>0</u>	x 2 = <u>0</u>																											
FAC species	<u>50</u>	x 3 = <u>150</u>																											
FACU species	<u>45</u>	x 4 = <u>180</u>																											
UPL species	<u>0</u>	x 5 = <u>0</u>																											
Column Totals:	<u>120</u> (A)	<u>355</u> (B)																											
Prevalence Index = B/A = <u>2.96</u>																													
1. <u><i>Symphoricarpos albus</i></u>		<u>20</u>	<u>Yes</u>	<u>FACU</u>																									
2. <u><i>Rosa woodsii</i></u>		<u>15</u>	<u>Yes</u>	<u>FACU</u>																									
3. <u><i>Rubus idaeus</i></u>		<u>10</u>	<u>Yes</u>	<u>FACU</u>																									
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
		<u>45</u> =Total Cover																											
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																								
1. <u><i>Carex nebrascensis</i></u>		<u>20</u>	<u>Yes</u>	<u>OBL</u>																									
2. <u><i>Verbena hastata</i></u>		<u>10</u>	<u>No</u>	<u>FAC</u>																									
3. <u><i>Sium suave</i></u>		<u>5</u>	<u>No</u>	<u>OBL</u>																									
4. <u><i>Cirsium arvense</i></u>		<u>40</u>	<u>Yes</u>	<u>FAC</u>																									
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>75</u> =Total Cover																											
Woody Vine Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																								
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
		<u> </u> =Total Cover																											
% Bare Ground in Herb Stratum <u> </u>																													
Remarks:																													

SOIL

Sampling Point: UDP 60-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-1-24(1)

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 4/1	100					Loamy/Clayey	roots present; 20% gravels
8-16	10YR 7/1	50					Loamy/Clayey	no redox, 50% 7.5YR 5/3

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:
soils are roadside fill material

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 3 Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 4 Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 0 (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-16-24</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-1-24(2)</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S13 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>Agricultural field</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.380819</u>		Long: <u>-114.096392</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Ronan silty clay loam, 2 to 4 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>40</u></td> <td>x 1 = <u>40</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>55</u></td> <td>x 3 = <u>165</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>205</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.16</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>40</u>	x 1 = <u>40</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>55</u>	x 3 = <u>165</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>205</u> (B)	Prevalence Index = B/A = <u>2.16</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>40</u>	x 1 = <u>40</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>55</u>	x 3 = <u>165</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>95</u> (A)	<u>205</u> (B)																				
Prevalence Index = B/A = <u>2.16</u>																					
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
5. <u> </u>																					
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Poa pratensis</u>		40	Yes	FAC																	
2. <u>Carex nebrascensis</u>		40	Yes	OBL																	
3. <u>Alopecurus pratensis</u>		15	No	FAC																	
4. <u> </u>																					
5. <u> </u>																					
6. <u> </u>																					
7. <u> </u>																					
8. <u> </u>																					
9. <u> </u>																					
10. <u> </u>																					
11. <u> </u>																					
		95	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>																					
2. <u> </u>																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-1-24(2)

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		
0-3	10YR 4/1	100					Loamy/Clayey	organic matter with roots
3-6	10YR 4/1	100					Loamy/Clayey	roots present
6-16	7.5YR 5/3	100					Loamy/Clayey	40% 10YR 4/1

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u> 2 </u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u> 4 </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-2A-24(1)

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 4/2	100					Loamy/Clayey	roots present
2-8	10YR 4/2	87	10YR 5/6	13	C	M	Loamy/Clayey	Prominent redox concentrations
8-18	10YR 6/2	60	10YR 6/6	5	C	M	Loamy/Clayey	35% 7.5YR 5/3

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u> 4 </u> Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Active irrigation season

SOIL

Sampling Point: WDP-2A-24(2)

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					Mucky Loam/Clay	roots present
2-4	10YR 4/2	100					Mucky Loam/Clay	
4-16	2.5Y 5/2	100					Loamy/Clayey	depleted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>4</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-7-2024</u>																																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-2B-24(1)</u>																																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S25 T19N R20W</u>																																			
Landform (hillside, terrace, etc.): <u>roadside ditch</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.382001</u>		Long: <u>-114.096639</u> Datum: <u>NAD83</u>																																	
Soil Map Unit Name: <u>Ronan silty clay loam, 0 to 2 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																																		
Remarks: <u>Roadside ditch functioning as a palustrine emergent wetland.</u>																																					
VEGETATION – Use scientific names of plants.																																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																	
		=Total Cover																																			
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Total % Cover of:</th> <th colspan="2" style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species</td> <td style="text-align: center;">20</td> <td>x 1 =</td> <td style="text-align: center;">20</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">0</td> <td>x 2 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">45</td> <td>x 3 =</td> <td style="text-align: center;">135</td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">0</td> <td>x 4 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">15</td> <td>x 5 =</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">80 (A)</td> <td></td> <td style="text-align: center;">230 (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2" style="text-align: center;">2.88</td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	20	x 1 =	20	FACW species	0	x 2 =	0	FAC species	45	x 3 =	135	FACU species	0	x 4 =	0	UPL species	15	x 5 =	75	Column Totals:	80 (A)		230 (B)	Prevalence Index = B/A =		2.88	
Total % Cover of:		Multiply by:																																			
OBL species	20	x 1 =	20																																		
FACW species	0	x 2 =	0																																		
FAC species	45	x 3 =	135																																		
FACU species	0	x 4 =	0																																		
UPL species	15	x 5 =	75																																		
Column Totals:	80 (A)		230 (B)																																		
Prevalence Index = B/A =		2.88																																			
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
		=Total Cover																																			
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1. <u>Poa pratensis</u>		45	Yes	FAC																																	
2. <u>Carex nebrascensis</u>		20	Yes	OBL																																	
3. <u>Bromus inermis</u>		15	No	UPL																																	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																	
		80	=Total Cover																																		
Woody Vine Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
		=Total Cover																																			
% Bare Ground in Herb Stratum <u> </u>																																					
Remarks:																																					

SOIL

Sampling Point: WDP-2B-24(1)

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 5/1	100					Loamy/Clayey	roots present
2-6	10YR 5/1	94	10YR 5/4	6	C	M	Loamy/Clayey	Distinct redox concentrations
6-15	10YR 4/2	80	10YR 5/4	20	C	M	Loamy/Clayey	Distinct redox concentrations
15-18	10YR 6/3	100						depleted

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: WDP-2B-24(2)

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					Loamy/Clayey	organic, roots present
5-11	10YR 5/1	100					Loamy/Clayey	30% gravels
11-16	10YR 5/4	100					Loamy/Clayey	70% gravel/rock

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:
Gravels likely present from road construction.

HYDROLOGY

Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 8 Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-3-24(1)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S26 19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.384448		Long: -114.097386	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 0 to 2 percent slopes				NW1 classification: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 90 x 1 = 90		
3.			FACW species 0 x 2 = 0		
4.			FAC species 0 x 3 = 0		
5.			FACU species 0 x 4 = 0		
			UPL species 0 x 5 = 0		
=Total Cover			Column Totals: 90 (A) 90 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 1.00		
1. Eleocharis palustris 40 Yes OBL			Hydrophytic Vegetation Indicators:		
2. Carex nebrascensis 50 Yes OBL			1 - Rapid Test for Hydrophytic Vegetation		
3.			X 2 - Dominance Test is >50%		
4.			X 3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.					
10.					
11.					
90 =Total Cover			Hydrophytic Vegetation Present? Yes X No		
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-3-24(1)

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					Loamy/Clayey	roots present
2-4	10YR 3/2	100					Loamy/Clayey	
4-16	10YR 4/1	98	10YR 5/6	2	C	PL	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-3-24(2)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S26 T19N R20W			
Landform (hillside, terrace, etc.): roadside ditch		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.384430		Long: 114.097057	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 0 to 2 percent slopes				NW1 classification: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 50 x 1 = 50 FACW species 10 x 2 = 20 FAC species 10 x 3 = 30 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 70 (A) 100 (B) Prevalence Index = B/A = 1.43
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Typha latifolia		20	Yes	OBL	
2. Carex nebrascensis		30	Yes	OBL	
3. Mentha arvensis		10	No	FACW	
4.					
5. Dipsacus fullonum		10	No	FAC	
6.					
7.					
8.					
9.					
10.					
11.					
		70 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-3-24(2)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="4"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-3-24(3)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S26 19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.379893		Long: -114.097234 Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2.			Total Number of Dominant Species Across All Strata: 2 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 70 x 1 = 70		
3.			FACW species 0 x 2 = 0		
4.			FAC species 10 x 3 = 30		
5.			FACU species 0 x 4 = 0		
=Total Cover			UPL species 0 x 5 = 0		
			Column Totals: 80 (A) 100 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 1.25		
1. Typha latifolia 25 Yes OBL			Hydrophytic Vegetation Indicators:		
2. Carex nebrascensis 30 Yes OBL			1 - Rapid Test for Hydrophytic Vegetation		
3. Barbarea vulgaris 10 No FAC			X 2 - Dominance Test is >50%		
4.			X 3 - Prevalence Index is ≤3.0 ¹		
5. Eleocharis palustris 15 No OBL			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.					
10.					
11.					
80 =Total Cover			Hydrophytic Vegetation Present? Yes X No		
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-3-24(3)

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	2.5Y 3/1	100						roots present
5-16	2.5Y 4/2	94	2.5Y 5/4	6	C	M	Loamy/Clayey	Distinct redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 9 Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: _____				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-4A-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.386994		Long: -114.096599	
				Datum: NAD93	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes				NW1 classification: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 55 x 1 = 55 FACW species 15 x 2 = 30 FAC species 0 x 3 = 0 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 70 (A) 85 (B) Prevalence Index = B/A = 1.21
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Lemna minor		30	Yes	OBL	
2. Typha latifolia		25	Yes	OBL	
3. Polygonum lapathifolium		15	Yes	FACW	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		70 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					Hydrophytic Vegetation Present? Yes X No
Remarks:					

SOIL

Sampling Point: WDP-4A-24

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 4/2	100					Loamy/Clayey	roots present
4-16	10YR 4/2	90	10YR 5/4	10	C	M	Loamy/Clayey	Distinct redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> 6 </u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> 0 </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>8-7-2024</u>																
Section, Township, Range: <u>S24 T19N R20W</u>		Sampling Point: <u>WDP-4B-24</u>																
Landform (hillside, terrace, etc.): <u>forested riparian</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.386087</u>	Long: <u>-114.096512</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Ronan silty clay loam, 2 to 4 percent slopes</u>		NWI classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																
Remarks: <u>Palustrine forested wetland</u>																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>)		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u>Populus balsamifera</u> Absolute % Cover: <u>15</u> Dominant Species?: <u>Yes</u> Indicator Status: <u>FAC</u>																		
2. <u>Salix amygdaloides</u> Absolute % Cover: <u>15</u> Dominant Species?: <u>Yes</u> Indicator Status: <u>FACW</u>																		
3. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
4. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
<u>30</u> =Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)																		
1. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
2. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
3. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
4. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
5. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
<u> </u> =Total Cover																		
Herb Stratum (Plot size: <u>30'</u>)		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>80</u></td> <td>x 1 = <u>80</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>175</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.46</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>80</u>	x 1 = <u>80</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>175</u> (B)	Prevalence Index = B/A = <u>1.46</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>80</u>	x 1 = <u>80</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>120</u> (A)	<u>175</u> (B)																	
Prevalence Index = B/A = <u>1.46</u>																		
1. <u>Typha latifolia</u> Absolute % Cover: <u>40</u> Dominant Species?: <u>Yes</u> Indicator Status: <u>OBL</u>																		
2. <u>Schoenoplectus tabernaemontani</u> Absolute % Cover: <u>30</u> Dominant Species?: <u>Yes</u> Indicator Status: <u>OBL</u>																		
3. <u>Persicaria lapathifolia</u> Absolute % Cover: <u>10</u> Dominant Species?: <u>No</u> Indicator Status: <u>FACW</u>																		
4. <u>Salvinia minima</u> Absolute % Cover: <u>10</u> Dominant Species?: <u>No</u> Indicator Status: <u>OBL</u>																		
5. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
6. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
7. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
8. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
9. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
10. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
11. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
<u>90</u> =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
2. <u> </u> Absolute % Cover: <u> </u> Dominant Species?: <u> </u> Indicator Status: <u> </u>																		
<u> </u> =Total Cover																		
% Bare Ground in Herb Stratum <u> </u>																		
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																		
Remarks:																		

SOIL

Sampling Point: WDP-4B-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except			<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)			4A, and 4B)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)			<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)			<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)			<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)			<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)			<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)			<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="8"/>	
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-4C-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.387187		Long: -114.097247	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1. Salix amygdaloides		65	Yes	FACW	
2.					
3.					
4.					
		65 =Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 35 x 1 = 35 FACW species 65 x 2 = 130 FAC species 0 x 3 = 0 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 100 (A) 165 (B) Prevalence Index = B/A = 1.65
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.					
6.					
7.					
8.					
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1. Lemna minor		35	Yes	OBL	
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		35 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-4C-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="12"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text" value=""/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="0"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-4D-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.387378		Long: -114.097465	
				Datum: NAD83	
Soil Map Unit Name: Ronan silty clay loam, 2 to 4 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')			Dominance Test worksheet:		
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)		
2.			Total Number of Dominant Species Across All Strata: 1 (B)		
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')			Prevalence Index worksheet:		
1.			Total % Cover of: Multiply by:		
2.			OBL species 55 x 1 = 55		
3.			FACW species 0 x 2 = 0		
4.			FAC species 0 x 3 = 0		
5.			FACU species 0 x 4 = 0		
			UPL species 0 x 5 = 0		
=Total Cover			Column Totals: 55 (A) 55 (B)		
Herb Stratum (Plot size: 30')			Prevalence Index = B/A = 1.00		
1. Typha latifolia 10 No OBL			Hydrophytic Vegetation Indicators:		
2. Lemna minor 35 Yes OBL			1 - Rapid Test for Hydrophytic Vegetation		
3. Carex nebrascensis 10 No OBL			X 2 - Dominance Test is >50%		
4.			X 3 - Prevalence Index is ≤3.0 ¹		
5.			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6.			5 - Wetland Non-Vascular Plants ¹		
7.			Problematic Hydrophytic Vegetation ¹ (Explain)		
8.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
9.			Hydrophytic Vegetation Present? Yes X No		
10.					
11.					
55 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-4D-24

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 4/1	97	10YR 5/6	3	C	PL/M	Mucky Loam/Clay	Prominent redox concentrations
8-16	10YR 4/1	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 24 Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: _____	

SOIL

Sampling Point: WDP-5A-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)		<input type="checkbox"/> Water-Stained Leaves (B9) (except		<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> High Water Table (A2)		MLRA 1, 2, 4A, and 4B)		4A, and 4B)	
<input checked="" type="checkbox"/> Saturation (A3)		<input type="checkbox"/> Salt Crust (B11)		<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)		<input type="checkbox"/> Aquatic Invertebrates (B13)		<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)		<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)		<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)		<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)		<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:			Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text" value="2"/>			
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text" value="0"/>			
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text" value="0"/>			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-7-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-5A-24(2)</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S24 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>roadside</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.393131</u>		Long: <u>-114.096380</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Lamoose loam, 0 to 2 percent slopes</u>		NWI classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>80</u> (A)</td> <td><u>165</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.06</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>80</u> (A)	<u>165</u> (B)	Prevalence Index = B/A = <u>2.06</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>20</u>	x 1 = <u>20</u>																				
FACW species <u>35</u>	x 2 = <u>70</u>																				
FAC species <u>25</u>	x 3 = <u>75</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>80</u> (A)	<u>165</u> (B)																				
Prevalence Index = B/A = <u>2.06</u>																					
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
5. <u> </u>																					
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u><i>Typha latifolia</i></u>		<u>20</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u><i>Juncus balticus</i></u>		<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u><i>Dipsacus fullonum</i></u>		<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u><i>Impatiens aurella</i></u>		<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. <u><i>Rumex crispus</i></u>		<u>10</u>	<u>No</u>	<u>FAC</u>																	
6. <u><i>Mentha arvensis</i></u>		<u>5</u>	<u>No</u>	<u>FACW</u>																	
7. <u> </u>																					
8. <u> </u>																					
9. <u> </u>																					
10. <u> </u>																					
11. <u> </u>																					
		<u>80</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>																					
2. <u> </u>																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-5A-24(2)

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 2/1	100					Loamy/Clayey	roots present
4-10	10YR 2/1	60	5YR 4/4	5	C	PL	Loamy/Clayey	35% 10YR 5/1
10-18	10YR 6/1	58	5YR 4/6	2	C	M	Loamy/Clayey	30% 10YR 2/1

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): 0 Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): 0 Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): 0 (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: _____

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>8-7-2024</u>																
Section, Township, Range: <u>S24 T19N R20W</u>		Sampling Point: <u>WDP-5A-24(3)</u>																
Landform (hillside, terrace, etc.): <u>wetland complex</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.395831</u>	Long: <u>-114.096410</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Lamoose loam, 0 to 2 percent slopes</u>		NWI classification: <u>PUBHx</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																
Remarks:																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>)		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</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>100.0%</u> (A/B)																
1. <u>Populus balsamifera</u> Absolute % Cover <u>5</u> Dominant Species? <u>Yes</u> Indicator Status <u>FAC</u>																		
2. <u> </u> <u> </u> <u> </u>																		
3. <u> </u> <u> </u> <u> </u>																		
4. <u> </u> <u> </u> <u> </u>																		
<u>5 = Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)																		
1. <u>Alnus viridis</u> <u>8</u> <u>Yes</u> <u>FACW</u>																		
2. <u>Populus balsamifera</u> <u>5</u> <u>Yes</u> <u>FAC</u>																		
3. <u> </u> <u> </u> <u> </u>																		
4. <u> </u> <u> </u> <u> </u>																		
5. <u> </u> <u> </u> <u> </u>																		
<u>13 = Total Cover</u>																		
Herb Stratum (Plot size: <u>30'</u>)		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>13</u></td> <td>x 2 = <u>26</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>88</u> (A)</td> <td><u>161</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.83</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>13</u>	x 2 = <u>26</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>88</u> (A)	<u>161</u> (B)	Prevalence Index = B/A = <u>1.83</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>45</u>	x 1 = <u>45</u>																	
FACW species <u>13</u>	x 2 = <u>26</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>88</u> (A)	<u>161</u> (B)																	
Prevalence Index = B/A = <u>1.83</u>																		
1. <u>Typha latifolia</u> <u>15</u> <u>Yes</u> <u>OBL</u>																		
2. <u>Mentha arvensis</u> <u>5</u> <u>No</u> <u>FACW</u>																		
3. <u>Carex nebrascensis</u> <u>15</u> <u>Yes</u> <u>OBL</u>																		
4. <u>Solanum dulcamara</u> <u>10</u> <u>No</u> <u>FAC</u>																		
5. <u>Rumex crispus</u> <u>5</u> <u>No</u> <u>FAC</u>																		
6. <u>Myosotis asiatica</u> <u>5</u> <u>No</u> <u>FAC</u>																		
7. <u>Lemna minor</u> <u>15</u> <u>Yes</u> <u>OBL</u>																		
8. <u> </u> <u> </u> <u> </u>																		
9. <u> </u> <u> </u> <u> </u>																		
10. <u> </u> <u> </u> <u> </u>																		
11. <u> </u> <u> </u> <u> </u>																		
<u>70 = Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)																		
1. <u> </u> <u> </u> <u> </u>																		
2. <u> </u> <u> </u> <u> </u>																		
<u> </u> = Total Cover																		
% Bare Ground in Herb Stratum <u> </u>																		
Remarks:																		

SOIL

Sampling Point: WDP-5A-24(3)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)		<input type="checkbox"/> Water-Stained Leaves (B9) (except		<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> High Water Table (A2)		MLRA 1, 2, 4A, and 4B)		4A, and 4B)	
<input checked="" type="checkbox"/> Saturation (A3)		<input type="checkbox"/> Salt Crust (B11)		<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)		<input type="checkbox"/> Aquatic Invertebrates (B13)		<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)		<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)		<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)		<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)		<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="6"/>	
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:					

SOIL

Sampling Point: WDP-5A-24(4)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text" value="0"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text" value="0"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text" value="0"/> (includes capillary fringe)			
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-7-2024</u>																																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-5B-24</u>																																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S24 T19N R20W</u>																																			
Landform (hillside, terrace, etc.): <u>pothole</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.389923</u>		Long: <u>-114.096339</u> Datum: <u>NAD83</u>																																	
Soil Map Unit Name: <u>Bolack silt loam, 0 to 2 percent slopes</u>		NW1 classification: <u>PUBHx</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																																		
Remarks: <u>Stock pond with aquatic vegetation.</u>																																					
VEGETATION – Use scientific names of plants.																																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
1. <u> </u>		<u> </u>	<u> </u>	<u> </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> </u>	<u> </u>	<u> </u>																																	
		<u> </u>	<u> </u>	<u> </u>																																	
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		<u> </u>	<u> </u>	<u> </u>																																	
		<u> </u>	<u> </u>	<u> </u>																																	
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Total % Cover of:</th> <th colspan="2" style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species</td> <td><u>50</u></td> <td>x 1 =</td> <td><u>50</u></td> </tr> <tr> <td>FACW species</td> <td><u>0</u></td> <td>x 2 =</td> <td><u>0</u></td> </tr> <tr> <td>FAC species</td> <td><u>0</u></td> <td>x 3 =</td> <td><u>0</u></td> </tr> <tr> <td>FACU species</td> <td><u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>50</u> (A)</td> <td></td> <td><u>50</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2"><u>1.00</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>50</u>	x 1 =	<u>50</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>50</u> (A)		<u>50</u> (B)	Prevalence Index = B/A =		<u>1.00</u>	
Total % Cover of:		Multiply by:																																			
OBL species	<u>50</u>	x 1 =	<u>50</u>																																		
FACW species	<u>0</u>	x 2 =	<u>0</u>																																		
FAC species	<u>0</u>	x 3 =	<u>0</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>50</u> (A)		<u>50</u> (B)																																		
Prevalence Index = B/A =		<u>1.00</u>																																			
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
3. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
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5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
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		<u> </u>	<u> </u>	<u> </u>																																	
		<u> </u>	<u> </u>	<u> </u>																																	
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1. <u>Myriophyllum spicatum</u>		<u>30</u>	<u>Yes</u>	<u>OBL</u>																																	
2. <u>Lemna minor</u>		<u>20</u>	<u>Yes</u>	<u>OBL</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>																																	
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>50</u>	<u>=Total Cover</u>																																		
Woody Vine Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
		<u> </u>	<u>=Total Cover</u>																																		
% Bare Ground in Herb Stratum <u> </u>																																					
Remarks:																																					

SOIL

Sampling Point: WDP-5B-24

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 4/2	100					Loamy/Clayey	
6-16	10YR 4/2	95	10YR 5/4	5	C	M	Loamy/Clayey	Distinct redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 12 Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 0 Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Stock pond - unknown depth	

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-5C-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S24 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.396270		Long: -114.095566	
				Datum: NAD83	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')				Dominance Test worksheet:	
1.				Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)	
2.				Total Number of Dominant Species Across All Strata: 4 (B)	
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')				Prevalence Index worksheet:	
1. Alnus viridis 30 Yes FACW				Total % Cover of: Multiply by:	
2.				OBL species 40 x 1 = 40	
3.				FACW species 60 x 2 = 120	
4.				FAC species 0 x 3 = 0	
5.				FACU species 0 x 4 = 0	
				UPL species 5 x 5 = 25	
30 =Total Cover				Column Totals: 105 (A) 185 (B)	
Herb Stratum (Plot size: 30')				Prevalence Index = B/A = 1.76	
1. Epilobium ciliatum 20 Yes FACW				Hydrophytic Vegetation Indicators:	
2. Carex nebrascensis 25 Yes OBL				1 - Rapid Test for Hydrophytic Vegetation	
3. Alnus viridis 10 No FACW				X 2 - Dominance Test is >50%	
4.				X 3 - Prevalence Index is ≤3.0 ¹	
5. Typha latifolia 15 Yes OBL				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. Verbena stricta 5 No UPL				5 - Wetland Non-Vascular Plants ¹	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
9.				Hydrophytic Vegetation Present? Yes X No	
10.					
11.					
75 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-5C-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="2"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text" value=""/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="0"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-6A-24(1)

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 2/2	100					Mucky Loam/Clay	Mucky mineral with roots
4-6	10YR 2/2	100					Loamy/Clayey	silt loam with roots
6-18	10YR 2/2	100					Loamy/Clayey	silt loam with roots

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 12 Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 12 (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-6A-24(2)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.394208		Long: -114.098366	
				Datum: NAD93	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)
1.					
2.					
3.					
4.					
			=Total Cover		
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 60 x 2 = 120 FAC species 40 x 3 = 120 FACU species 15 x 4 = 60 UPL species 0 x 5 = 0 Column Totals: 115 (A) 300 (B) Prevalence Index = B/A = 2.61
1. Symphoricarpos albus		15	Yes	FACU	
2.					
3.					
4.					
5.					
		15	=Total Cover		
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Cirsium arvense		40	Yes	FAC	
2. Phalaris arundinacea		60	Yes	FACW	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		100	=Total Cover		
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1.					
2.					
			=Total Cover		
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-6A-24(2)

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		
0-7	10YR 3/2						Loamy/Clayey	Roots present
7-16	10YR 3/2	94	2.5Y 7/4	6	C	PL	Loamy/Clayey	65% gravels

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>
Applicant/Owner: <u>MDT</u>	State: <u>MT</u>	Sampling Date: <u>8-8-2024</u>
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Point: <u>WDP-6B-24(1)</u>
Section, Township, Range: <u>S23 T19N R20W</u>		
Landform (hillside, terrace, etc.): <u>riparian</u>	Local relief (concave, convex, none): <u>Concave</u>	Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.391847</u>	Long: <u>-114.097524</u>
Datum: <u>NAD83</u>		
Soil Map Unit Name: <u>Borohemists, 0 to 1 percent slopes</u>	NW1 classification: <u>PSS1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sorbus scopulina</u>		15	Yes	FACU
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
		15	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>30'</u>)			
1. <u>Sorbus scopulina</u>		15	Yes	
2. <u>Betula pumila</u>		15	Yes	
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
		30	=Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)			
1. <u>Lysichiton americanus</u>		10	No	OBL
2. <u>Solanum nigrum</u>		8	No	FACU
3. <u>Carex nebrascensis</u>		35	Yes	OBL
4. <u>Polygonum lapathifolium</u>		15	Yes	FACW
5. <u> </u>				
6. <u> </u>		5	No	
7. <u>Equisetum arvense</u>		5	No	FAC
8. <u>Cirsium arvense</u>		5	No	FAC
9. <u>Solidago altissima</u>		10	No	FACU
10. <u>Mentha arvensis</u>		5	No	FACW
11. <u> </u>				
		98	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)			
1. <u> </u>				
2. <u> </u>				
			=Total Cover	
% Bare Ground in Herb Stratum <u> </u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 5 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u> </u>	x 1 = <u> </u>
FACW species <u> </u>	x 2 = <u> </u>
FAC species <u> </u>	x 3 = <u> </u>
FACU species <u> </u>	x 4 = <u> </u>
UPL species <u> </u>	x 5 = <u> </u>
Column Totals: <u> </u> (A)	<u> </u> (B)
Prevalence Index = B/A = <u> </u>	

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤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 X No

Remarks:

SOIL

Sampling Point: WDP-6B-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input checked="" type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="2"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="8"/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Depth (inches): <input type="text" value="0"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-6B-24(2)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): roadside		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.392749		Long: -114.097503	
				Datum: NAD93	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: PSS1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)
1.					
2.					
3.					
4.					
			=Total Cover		
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 25 x 1 = 25 FACW species 50 x 2 = 100 FAC species 22 x 3 = 66 FACU species 15 x 4 = 60 UPL species 0 x 5 = 0 Column Totals: 112 (A) 251 (B) Prevalence Index = B/A = 2.24
1. Populus tremuloides		10	Yes	FACU	
2. Alnus viridis		20	Yes	FACW	
3.					
4.					
5.					
		30	=Total Cover		
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Typha latifolia		15	Yes	OBL	
2. Epilobium ciliatum		15	Yes	FACW	
3. Phalaris arundinacea		15	Yes	FACW	
4.					
5. Carex nebrascensis		10	No	OBL	
6. Geum macrophyllum		5	No	FAC	
7. Cirsium arvense		5	No	FAC	
8. Solanum nigrum		5	No	FACU	
9. Dipsacus fullonum		12	No	FAC	
10.					
11.					
		82	=Total Cover		
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1.					
2.					
			=Total Cover		
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-6B-24(2)

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 2/1	100					Muck	
2-6	10YR 2/2	95	7.5YR 4/6	5	C	PL	Loamy/Clayey	Prominent redox concentrations
6-16	10YR 2/2	95	7.5YR 4/6	5	C	PL	Loamy/Clayey	10% 2.5Y 5/1

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.)			Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)			

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

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> 1 </u> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> 0 </u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-18-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-6C-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S23 T19N R20W			
Landform (hillside, terrace, etc.): riparian		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.394611		Long: -114.097492	
				Datum: NAD83	
Soil Map Unit Name: Lamoose loam, 0 to 2 percent slopes		NW1 classification: PSS1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed? Are "Normal Circumstances" present? Yes <input type="checkbox"/> No <input type="checkbox"/>					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Remarks: This area is a mosaic of PFO and small upland areas due to its hummocky landscape					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)
1. Populus deltoides		30	Yes	FAC	
2. Populus alba		15	Yes	UPL	
3.					
4.					
		45 =Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 60 x 2 = 120 FAC species 40 x 3 = 120 FACU species 0 x 4 = 0 UPL species 25 x 5 = 125 Column Totals: 125 (A) 365 (B) Prevalence Index = B/A = 2.92
1. Populus deltoides		10	Yes	FAC	
2. Populus alba		10	Yes	UPL	
3.					
4.					
		20 =Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Phalaris arundinacea		60	Yes	FACW	
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		60 =Total Cover			Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-6C-24

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	95	10YR 4/6	5	C	M	Loamy/Clayey	roots present
6-18	10YR 3/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: _____				

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>9-17-2024</u>																
Section, Township, Range: <u>S23 T19N R20W</u>		Sampling Point: <u>WDP-7-24(1)</u>																
Landform (hillside, terrace, etc.): <u>riparian</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.397453</u>	Long: <u>-114.097084</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Lamoose loam, 0 to 2 percent slopes</u>		NWI classification: <u>R3UBFx</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u> </u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																
Remarks:																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ =Total Cover		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
Sapling/Shrub Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover																		
Herb Stratum (Plot size: <u>30'</u>) 1. <u>Typha latifolia</u> 20 Yes OBL 2. <u>Lemna minor</u> 15 Yes OBL 3. <u>Carex nebrascensis</u> 25 Yes OBL 4. _____ 5. <u>Epilobium ciliatum</u> 10 No FACW 6. <u>Eleocharis palustris</u> 15 Yes OBL 7. <u>Rumex crispus</u> 5 No FAC 8. <u>Solanum nigrum</u> 8 No FACU 9. _____ 10. _____ 11. _____ 98 =Total Cover		Prevalence Index worksheet: <table style="width:100%; font-size: x-small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>75</u></td> <td>x 1 = <u>75</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>8</u></td> <td>x 4 = <u>32</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>142</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.45</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>75</u>	x 1 = <u>75</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>8</u>	x 4 = <u>32</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>98</u> (A)	<u>142</u> (B)	Prevalence Index = B/A = <u>1.45</u>	
Total % Cover of:	Multiply by:																	
OBL species <u>75</u>	x 1 = <u>75</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>8</u>	x 4 = <u>32</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>98</u> (A)	<u>142</u> (B)																	
Prevalence Index = B/A = <u>1.45</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>) 1. _____ 2. _____ =Total Cover % Bare Ground in Herb Stratum <u> </u>		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Remarks:		Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																

SOIL

Sampling Point: WDP-7-24(1)

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		
0-3	2.5YR 3/1	100					Mucky Loam/Clay	roots present
3-9	10YR 4/1	100					Loamy/Clayey	
9-18	2.5Y 6/1	60	10YR 5/8	40	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: _____				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-7-24(2)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S14 T19N R20W			
Landform (hillside, terrace, etc.): roadside ditch		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.402618		Long: -114.096961	
Datum: NAD83					
Soil Map Unit Name: Post silt loam, 0 to 2 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No		Is the Sampled Area within a Wetland? Yes X No			
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum (Plot size: 30')					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 60 x 1 = 60 FACW species 20 x 2 = 40 FAC species 10 x 3 = 30 FACU species 5 x 4 = 20 UPL species 0 x 5 = 0 Column Totals: 95 (A) 150 (B) Prevalence Index = B/A = 1.58
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum (Plot size: 30')					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Typha latifolia		25	Yes	OBL	
2. Potentilla rivalis		10	No	FACW	
3. Epilobium ciliatum		10	No	FACW	
4.					
5. Eleocharis palustris		20	Yes	OBL	
6. Lemna minor		15	Yes	OBL	
7. Lactuca serriola		5	No	FACU	
8. Cirsium arvense		10	No	FAC	
9.					
10.					
11.					
		95 =Total Cover			
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-7-24(2)

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	2.5YR 3/1	100					Mucky Loam/Clay	roots present
5-8	2.5Y 4/1	100					Loamy/Clayey	roots present
8-16	2.5Y 5/1	100					Loamy/Clayey	

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> 4 </u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> 0 </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____	
Remarks: _____	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-7-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-8A-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S24 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>riparian</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.396712</u>		Long: <u>-114.096492</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Lamoose loam, 0 to 2 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>23</u></td> <td>x 2 = <u>46</u></td> </tr> <tr> <td>FAC species <u>18</u></td> <td>x 3 = <u>54</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>86</u> (A)</td> <td><u>145</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.69</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>23</u>	x 2 = <u>46</u>	FAC species <u>18</u>	x 3 = <u>54</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>86</u> (A)	<u>145</u> (B)	Prevalence Index = B/A = <u>1.69</u>	
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5. <u> </u>																					
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Carex nebrascensis</u>		<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Mentha arvensis</u>		<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Leersia oryzoides</u>		<u>15</u>	<u>Yes</u>	<u>OBL</u>																	
4. <u>Equisetum arvense</u>		<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Rumex crispus</u>		<u>8</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Salix alba</u>		<u>8</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Mimulus guttatus</u>		<u>5</u>	<u>No</u>	<u>OBL</u>																	
8. <u> </u>																					
9. <u> </u>																					
10. <u> </u>																					
11. <u> </u>																					
		<u>86</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>																					
2. <u> </u>																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-8A-24

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		
0-3	10YR 4/1	100					Loamy/Clayey	roots present
3-12	10YR 4/1	95	7.5YR 4/6	5	C	PL/M	Loamy/Clayey	Prominent redox concentrations
12-18	10YR 5/1	100					Loamy/Clayey	no redox

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u> 2 </u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): <u> 0 </u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u> 0 </u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>
Applicant/Owner: <u>MDT</u>	State: <u>MT</u>	Sampling Date: <u>9-18-2024</u>
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S24 T19N R20W</u>
Landform (hillside, terrace, etc.): <u>riparian</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.398579</u>	Long: <u>-114.096499</u> Datum: <u>NAD83</u>
Soil Map Unit Name: <u>Bolack silt loam, 0 to 2 percent slopes</u>		NWI classification: <u>PSS1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u> </u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u>Salix amygdaloides</u>	<u>30</u>	<u>Yes</u>	<u>FACW</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>30</u>	<u>=Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>245</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.04</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>245</u> (B)	Prevalence Index = B/A = <u>2.04</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>30</u>	x 1 = <u>30</u>																			
FACW species <u>65</u>	x 2 = <u>130</u>																			
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1. <u>Salix amygdaloides</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
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3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
	<u>15</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Typha latifolia</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Phalaris arundinacea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Rumex crispus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Lactuca serriola</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Cirsium arvense</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </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>																	
	<u>75</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
	<u> </u>	<u>=Total Cover</u>																		
% Bare Ground in Herb Stratum <u> </u>																				
Remarks:																				

SOIL

Sampling Point: WDP-8B-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	4A, and 4B)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations:			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>4</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>0</u>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>0</u>
(includes capillary fringe)			
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-8-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-8C-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S13 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>riparian</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.399305</u>		Long: <u>-114.096306</u> Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Bolack silt loam, 0 to 2 percent slopes</u>		NWI classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u> </u> No <u> </u>																					
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SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.																					
Hydrophytic Vegetation Present? 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>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
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Total % Cover of:	Multiply by:																				
OBL species <u>35</u>	x 1 = <u>35</u>																				
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Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Typha latifolia</u>		<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Myosotis asiatica</u>		<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Persicaria lapathifolia</u>		<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Impatiens aurella</u>		<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Epilobium ciliatum</u>		<u>10</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Leersia oryzoides</u>		<u>10</u>	<u>No</u>	<u>OBL</u>																	
7. <u>Rumex crispus</u>		<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Solanum dulcamara</u>		<u>5</u>	<u>No</u>	<u>FAC</u>																	
9. <u> </u>																					
10. <u> </u>																					
11. <u> </u>																					
		<u>100</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>																					
2. <u> </u>																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-8C-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)		<input type="checkbox"/> Water-Stained Leaves (B9) (except		<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> High Water Table (A2)		MLRA 1, 2, 4A, and 4B)		4A, and 4B)	
<input checked="" type="checkbox"/> Saturation (A3)		<input type="checkbox"/> Salt Crust (B11)		<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)		<input type="checkbox"/> Aquatic Invertebrates (B13)		<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)		<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)		<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)		<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)		<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="24"/>	
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-8-24</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-8D-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S13 T19 R20W</u>																			
Landform (hillside, terrace, etc.): <u>isolated wetland</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.399485</u>		Long: <u>-114.096573</u>																	
Datum: <u>NAD83</u>																					
Soil Map Unit Name: <u>Bolack silt loam, 0-2 percent slopes</u>		NW1 classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> </u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>x</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>		<u> </u>	<u> </u>	<u> </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> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>18</u></td> <td>x 1 = <u>18</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>193</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.97</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>18</u>	x 1 = <u>18</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>98</u> (A)	<u>193</u> (B)	Prevalence Index = B/A = <u>1.97</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>18</u>	x 1 = <u>18</u>																				
FACW species <u>65</u>	x 2 = <u>130</u>																				
FAC species <u>15</u>	x 3 = <u>45</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>98</u> (A)	<u>193</u> (B)																				
Prevalence Index = B/A = <u>1.97</u>																					
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
<u>Herb Stratum</u> (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Juncus balticus</u>		<u>65</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Poa pratensis</u>		<u>15</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Leersia oryzoides</u>		<u>10</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Typha latifolia</u>		<u>8</u>	<u>No</u>	<u>OBL</u>																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>		<u> </u>	<u> </u>	<u> </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> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u>98</u>	<u>=Total Cover</u>																		
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)																					
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
		<u> </u>	<u> </u>	<u> </u>																	
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-8D-24

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)	%	Type¹	Loc²		
0-4	10YR 2/2	100					Loamy/Clayey	roots present
4-9	10YR 2/2	100					Loamy/Clayey	
9-16	10YR 5/1	60					Loamy/Clayey	40% 10YR 2/2

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) ☒ X Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☒ 2.5 cm Mucky Peat or Peat (S2) (**LRR G**) ☐ Redox Depressions (F8)

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 observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

SOIL

Sampling Point: WDP-9A-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)		<input type="checkbox"/> Water-Stained Leaves (B9) (except		<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> High Water Table (A2)		MLRA 1, 2, 4A, and 4B)		4A, and 4B)	
<input checked="" type="checkbox"/> Saturation (A3)		<input type="checkbox"/> Salt Crust (B11)		<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)		<input type="checkbox"/> Aquatic Invertebrates (B13)		<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)		<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Algal Mat or Crust (B4)		<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Surface Soil Cracks (B6)		<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)		<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="2"/>	
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>	
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>
Applicant/Owner: <u>MDT</u>	State: <u>MT</u>	Sampling Date: <u>8-8-2024</u>
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Point: <u>WDP-9B-24</u>
Section, Township, Range: <u>S13 T19N R20W</u>		
Landform (hillside, terrace, etc.): <u>riparian</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.402803</u>	Long: <u>-114.096334</u>
Datum: <u>NAD83</u>		
Soil Map Unit Name: <u>Post silty clay loam, 2 to 4 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</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>100.0%</u> (A/B)																								
1. <u>Salix amygdaloides</u>	45	Yes	FACW																									
2. <u> </u>																												
3. <u> </u>																												
4. <u> </u>																												
5. <u> </u>																												
6. <u> </u>																												
7. <u> </u>																												
8. <u> </u>																												
9. <u> </u>																												
		45 =Total Cover																										
Sapling/Shrub Stratum (Plot size: <u>30'</u>)				Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <td style="width: 40%;">Total % Cover of:</td> <td style="width: 10%;">Multiply by:</td> <td></td> </tr> <tr> <td>OBL species</td> <td>25</td> <td>x 1 = 25</td> </tr> <tr> <td>FACW species</td> <td>80</td> <td>x 2 = 160</td> </tr> <tr> <td>FAC species</td> <td>0</td> <td>x 3 = 0</td> </tr> <tr> <td>FACU species</td> <td>0</td> <td>x 4 = 0</td> </tr> <tr> <td>UPL species</td> <td>0</td> <td>x 5 = 0</td> </tr> <tr> <td>Column Totals:</td> <td>105 (A)</td> <td>185 (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td>1.76</td> </tr> </table>	Total % Cover of:	Multiply by:		OBL species	25	x 1 = 25	FACW species	80	x 2 = 160	FAC species	0	x 3 = 0	FACU species	0	x 4 = 0	UPL species	0	x 5 = 0	Column Totals:	105 (A)	185 (B)	Prevalence Index = B/A =		1.76
Total % Cover of:	Multiply by:																											
OBL species	25	x 1 = 25																										
FACW species	80	x 2 = 160																										
FAC species	0	x 3 = 0																										
FACU species	0	x 4 = 0																										
UPL species	0	x 5 = 0																										
Column Totals:	105 (A)	185 (B)																										
Prevalence Index = B/A =		1.76																										
1. <u>Salix amygdaloides</u>	10	Yes	FACW																									
2. <u> </u>																												
3. <u> </u>																												
4. <u> </u>																												
5. <u> </u>																												
6. <u> </u>																												
7. <u> </u>																												
8. <u> </u>																												
9. <u> </u>																												
		10 =Total Cover																										
Herb Stratum (Plot size: <u>30'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																								
1. <u>Carex nebrascensis</u>	15	Yes	OBL																									
2. <u>Epilobium ciliatum</u>	15	Yes	FACW																									
3. <u>Mentha arvensis</u>	10	Yes	FACW																									
4. <u>Typha latifolia</u>	10	Yes	OBL																									
5. <u> </u>																												
6. <u> </u>																												
7. <u> </u>																												
8. <u> </u>																												
9. <u> </u>																												
		50 =Total Cover																										
Woody Vine Stratum (Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																								
1. <u> </u>																												
2. <u> </u>																												
		=Total Cover																										
% Bare Ground in Herb Stratum <u> </u>																												
Remarks:																												

SOIL

Sampling Point: WDP-9B-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2			
<input checked="" type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)			<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<input type="checkbox"/> 0	
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="checkbox"/> 4	
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	<input type="checkbox"/> 0	
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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SOIL

Sampling Point: WDP-10A-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)					
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>		
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>		
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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SOIL

Sampling Point: WDP-10B-24(1)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 2/2							roots present
5-12	10YR 2/2	97	10YR 3/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
12-16	10YR 4/3	95	10YR 5/8	5	C	M	Loamy/Clayey	Prominent redox concentrations

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)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G**) ☐ Redox Depressions (F8)

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 observed):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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SOIL

Sampling Point: WDP-10B-24(2)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)			
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																									
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>8-7-2024</u>																									
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-11A-24(1)</u>																									
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S13 T19N R20W</u>																											
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																									
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.409218</u>		Long: <u>-114.096446</u> Datum: <u>NAD83</u>																									
Soil Map Unit Name: <u>Post silty clay loam, 4 to 8 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																													
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																										
Remarks:																													
VEGETATION – Use scientific names of plants.																													
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																								
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																									
		=Total Cover																											
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species</td> <td style="text-align: center;"><u>50</u></td> <td>x 1 = <u>50</u></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;"><u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;"><u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;"><u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;"><u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;"><u>100</u> (A)</td> <td style="text-align: center;"><u>200</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td style="text-align: center;"><u>2.00</u></td> </tr> </table>	Total % Cover of:		Multiply by:	OBL species	<u>50</u>	x 1 = <u>50</u>	FACW species	<u>0</u>	x 2 = <u>0</u>	FAC species	<u>50</u>	x 3 = <u>150</u>	FACU species	<u>0</u>	x 4 = <u>0</u>	UPL species	<u>0</u>	x 5 = <u>0</u>	Column Totals:	<u>100</u> (A)	<u>200</u> (B)	Prevalence Index = B/A =		<u>2.00</u>
Total % Cover of:		Multiply by:																											
OBL species	<u>50</u>	x 1 = <u>50</u>																											
FACW species	<u>0</u>	x 2 = <u>0</u>																											
FAC species	<u>50</u>	x 3 = <u>150</u>																											
FACU species	<u>0</u>	x 4 = <u>0</u>																											
UPL species	<u>0</u>	x 5 = <u>0</u>																											
Column Totals:	<u>100</u> (A)	<u>200</u> (B)																											
Prevalence Index = B/A =		<u>2.00</u>																											
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																									
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
		=Total Cover																											
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																								
1. <u>Poa pratensis</u>		40	Yes	FAC																									
2. <u>Carex nebrascensis</u>		50	Yes	OBL																									
3. <u>Rumex crispus</u>		10	No	FAC																									
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>																									
		100	=Total Cover																										
Woody Vine Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																								
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																									
		=Total Cover																											
% Bare Ground in Herb Stratum <u> </u>																													
Remarks:																													

SOIL

Sampling Point: WDP-11A-24(1)

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		
0-1	10YR 2/2	100					Loamy/Clayey	organic with roots present
1-4	10YR 3/2	100					Sandy	sand with gravels-saturation
4-18	10YR 4/1	100					Loamy/Clayey	none

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): 0 Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): 0 Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 4 (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: WDP-11A-24(2)

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		
0-3	10YR 3/2	100					Loamy/Clayey	thick and dense roots present
3-10	10YR 4/1	95	5YR 4/6	5	D	M	Loamy/Clayey	
10-16	10YR 5/1	100						

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: WDP-11A-24(3)

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		
0-3	10YR 3/2	100					Loamy/Clayey	thick and dense roots present
3-10	10YR 4/1	95	5YR 4/6	5	D	M	Loamy/Clayey	
10-16	10YR 5/1	100						

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)		<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>
Applicant/Owner: <u>MDT</u>	State: <u>MT</u>	Sampling Date: <u>9-16-24</u>
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Point: <u>WDP-11A-24(4)</u>
Section, Township, Range: <u>S13 T19N R20W</u>		
Landform (hillside, terrace, etc.): <u>Swale</u>	Local relief (concave, convex, none): <u>Concave</u>	Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.413555</u>	Long: <u>-114.096567</u>
Datum: <u>NAD83</u>		
Soil Map Unit Name: <u>Post silty clay loam, 4 to 8 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
1.																																					
2.																																					
3.																																					
4.																																					
=Total Cover																																					
Sapling/Shrub Stratum	(Plot size: <u>30'</u>)				Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <th colspan="2">Total % Cover of:</th> <th colspan="2">Multiply by:</th> </tr> <tr> <td>OBL species</td> <td><u>60</u></td> <td>x 1 =</td> <td><u>60</u></td> </tr> <tr> <td>FACW species</td> <td><u>10</u></td> <td>x 2 =</td> <td><u>20</u></td> </tr> <tr> <td>FAC species</td> <td><u>20</u></td> <td>x 3 =</td> <td><u>60</u></td> </tr> <tr> <td>FACU species</td> <td><u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>90</u> (A)</td> <td></td> <td><u>140</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2"><u>1.56</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>60</u>	x 1 =	<u>60</u>	FACW species	<u>10</u>	x 2 =	<u>20</u>	FAC species	<u>20</u>	x 3 =	<u>60</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>90</u> (A)		<u>140</u> (B)	Prevalence Index = B/A =		<u>1.56</u>	
Total % Cover of:		Multiply by:																																			
OBL species	<u>60</u>	x 1 =	<u>60</u>																																		
FACW species	<u>10</u>	x 2 =	<u>20</u>																																		
FAC species	<u>20</u>	x 3 =	<u>60</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>90</u> (A)		<u>140</u> (B)																																		
Prevalence Index = B/A =		<u>1.56</u>																																			
1.																																					
2.																																					
3.																																					
4.																																					
5.																																					
=Total Cover																																					
Herb Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Typha latifolia</u>	<u>60</u>	<u>Yes</u>	<u>OBL</u>																																	
2.	<u>Solanum dulcamara</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																																	
3.	<u>Mentha arvensis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																																	
4.																																					
5.																																					
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
11.																																					
<u>90</u> =Total Cover																																					
Woody Vine Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1.																																					
2.																																					
=Total Cover																																					
% Bare Ground in Herb Stratum <u> </u>																																					
Remarks:																																					

SOIL

Sampling Point: WDP-11A-24(4)

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		
0-3	10YR 3/1	90	10YR 4/4	10	C	PL	Loamy/Clayey	roots present
3-12	10YR 4/1	100					Loamy/Clayey	20% gravels
12-18	10YR 3/3	60					Loamy/Clayey	40% 10YR 4/1

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 0 (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-11B-24	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S14 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.413231		Long: -114.097145 Datum: NAD83	
Soil Map Unit Name: Irvine silty clay loam, 8 to 15 percent slopes		NW1 classification: none			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) Total Number of Dominant Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 55 x 1 = 55 FACW species 15 x 2 = 30 FAC species 30 x 3 = 90 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 100 (A) 175 (B) Prevalence Index = B/A = 1.75
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Typha latifolia		25	Yes	OBL	
2. Dipsacus fullonum		20	Yes	FAC	
3. Mentha arvensis		15	Yes	FACW	
4.					
5. Rumex crispus		10	No	FAC	
6. Eleocharis palustris		15	Yes	OBL	
7. Carex nebrascensis		15	Yes	OBL	
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-11B-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-11C-24(1)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S11 T19N R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.413956		Long: -114.097245 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes		NW1 classification: PEM1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) Total Number of Dominant Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 55 x 1 = 55 FACW species 15 x 2 = 30 FAC species 30 x 3 = 90 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 100 (A) 175 (B) Prevalence Index = B/A = 1.75
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Typha latifolia		25	Yes	OBL	
2. Dipsacus fullonum		20	Yes	FAC	
3. Mentha arvensis		15	Yes	FACW	
4.					
5. Rumex crispus		10	No	FAC	
6. Eleocharis palustris		15	Yes	OBL	
7. Carex nebrascensis		15	Yes	OBL	
8.					
9.					
10.					
11.					
		100 =Total Cover			
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-11C-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2		
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): <input type="text"/>
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-11C-24(2)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S11 T19 R20W			
Landform (hillside, terrace, etc.): field		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.417477		Long: -114.097292 Datum: NAD83	
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes		NW1 classification: None			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No			Is the Sampled Area within a Wetland? Yes X No		
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1.					
2.					
3.					
4.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 30 x 2 = 60 FAC species 65 x 3 = 195 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 95 (A) 255 (B) Prevalence Index = B/A = 2.68
Sapling/Shrub Stratum (Plot size: 30')					
1.					
2.					
3.					
4.					
5.					
		=Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: 30')					
1. Poa pratensis		40	Yes	FAC	
2. Rumex crispus		10	No	FAC	
3. Juncus balticus		30	Yes	FACW	
4.					
5. Trifolium repens		15	No	FAC	
6.					
7.					
8.					
9.					
10.					
11.					
		95	=Total Cover		
Woody Vine Stratum (Plot size: 30')					Hydrophytic Vegetation Present? Yes X No
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-11C-24(2)

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					Loamy/Clayey	Roots present
8-16	7.5YR 5/2	98	7.5YR 5/6	2	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: _____				

U.S. Army Corps of Engineers				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)	
WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region					
See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R					
Project/Site: Post Creek Hill - US 93		City/County: Lake		Sampling Date: 9-17-2024	
Applicant/Owner: MDT		State: MT		Sampling Point: WDP-11C-24(3)	
Investigator(s): B.Cline, F.Doty		Section, Township, Range: S11 T19 R20W			
Landform (hillside, terrace, etc.): roadside ditch		Local relief (concave, convex, none): concave		Slope (%): 0-5	
Subregion (LRR/MLRA): LRR E, MLRA 44A		Lat: 47.419675		Long: -114.097031	
		Datum: NAD83			
Soil Map Unit Name: Post silty clay loam, 2 to 4 percent slopes				NW1 classification: None	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No				Is the Sampled Area within a Wetland? Yes X No	
Hydric Soil Present? Yes X No					
Wetland Hydrology Present? Yes X No					
Remarks:					
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: 30')				Dominance Test worksheet:	
1.				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)	
2.				Total Number of Dominant Species Across All Strata: 2 (B)	
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4.					
=Total Cover					
Sapling/Shrub Stratum (Plot size: 30')				Prevalence Index worksheet:	
1.				Total % Cover of: Multiply by:	
2.				OBL species 50 x 1 = 50	
3.				FACW species 10 x 2 = 20	
4.				FAC species 20 x 3 = 60	
5.				FACU species 0 x 4 = 0	
				UPL species 0 x 5 = 0	
=Total Cover				Column Totals: 80 (A) 130 (B)	
Herb Stratum (Plot size: 30')				Prevalence Index = B/A = 1.63	
1. Epilobium ciliatum 10 No FACW				Hydrophytic Vegetation Indicators:	
2. Typha latifolia 35 Yes OBL				1 - Rapid Test for Hydrophytic Vegetation	
3. Poa pratensis 20 Yes FAC				X 2 - Dominance Test is >50%	
4. Carex nebrascensis 15 No OBL				X 3 - Prevalence Index is ≤3.0 ¹	
5.				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6.				5 - Wetland Non-Vascular Plants ¹	
7.				Problematic Hydrophytic Vegetation ¹ (Explain)	
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
9.				Hydrophytic Vegetation Present? Yes X No	
10.					
11.					
80 =Total Cover					
Woody Vine Stratum (Plot size: 30')					
1.					
2.					
=Total Cover					
% Bare Ground in Herb Stratum					
Remarks:					

SOIL

Sampling Point: WDP-11C-24(3)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> 4A, and 4B)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)			
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-16-24</u>
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>	Sampling Point: <u>WDP-12A-24(1)</u>	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S12 T19N R20W</u>		
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>Concave</u>		Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.415043</u>	Long: <u>-114.096626</u>	Datum: <u>NAD83</u>
Soil Map Unit Name: <u>Post silty clay loam, 4 to 8 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>				
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>	
Remarks:				
VEGETATION – Use scientific names of plants.				
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1. _____		_____	_____	_____
2. _____		_____	_____	_____
3. _____		_____	_____	_____
4. _____		_____	_____	_____
		=Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)				
1. _____		_____	_____	_____
2. _____		_____	_____	_____
3. _____		_____	_____	_____
4. _____		_____	_____	_____
5. _____		_____	_____	_____
		=Total Cover		
Herb Stratum (Plot size: <u>30'</u>)				
1. <u>Typha latifolia</u>		<u>60</u>	<u>Yes</u>	<u>OBL</u>
2. <u>Hypericum perforatum</u>		<u>15</u>	<u>No</u>	<u>FACU</u>
3. <u>Solanum dulcamara</u>		<u>10</u>	<u>No</u>	<u>FAC</u>
4. _____		_____	_____	_____
5. _____		_____	_____	_____
6. _____		_____	_____	_____
7. _____		_____	_____	_____
8. _____		_____	_____	_____
9. _____		_____	_____	_____
10. _____		_____	_____	_____
11. _____		_____	_____	_____
		<u>85</u>	=Total Cover	
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____		_____	_____	_____
2. _____		_____	_____	_____
		=Total Cover		
% Bare Ground in Herb Stratum _____				
Remarks:				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	<u>60</u>	x 1 = <u>60</u>
FACW species	<u>0</u>	x 2 = <u>0</u>
FAC species	<u>10</u>	x 3 = <u>30</u>
FACU species	<u>15</u>	x 4 = <u>60</u>
UPL species	<u>0</u>	x 5 = <u>0</u>
Column Totals:	<u>85</u> (A)	<u>150</u> (B)
Prevalence Index = B/A = <u>1.76</u>		

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤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 X No

SOIL

Sampling Point: WDP-12A-24(1)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 2/2	100					Loamy/Clayey	roots present
5-12	10YR 2/2	100					Loamy/Clayey	
12-18	10YR 4/1	100					Loamy/Clayey	

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.)

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

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 observed):

 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	4A, and 4B)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)			
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

SOIL

Sampling Point: WDP-12A-24(2)

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	98	10YR 4/4	2	C	PL	Loamy/Clayey	roots present
5-12	10YR 3/2	90	10YR 4/4	10	C	PL	Loamy/Clayey	Distinct redox concentrations
12-18	7.5YR 5/2	90	7.5YR 4/4	10	C	PL	Loamy/Clayey	Distinct redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

SOIL

Sampling Point: WDP-12B-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
		<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-16-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-12B-24(2)</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S12 T19N R20W</u>																			
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.418882</u>	Long: <u>-114.096314</u>	Datum: <u>NAD93</u>																	
Soil Map Unit Name: <u>Post silty clay loam, 2 to 4 percent slopes</u>		NWI classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. _____		_____	_____	_____																	
2. _____		_____	_____	_____																	
3. _____		_____	_____	_____																	
4. _____		_____	_____	_____																	
		_____	_____	_____																	
		=Total Cover																			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>80</u></td> <td>x 1 = <u>80</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>110</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.22</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>80</u>	x 1 = <u>80</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>110</u> (B)	Prevalence Index = B/A = <u>1.22</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>80</u>	x 1 = <u>80</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>10</u>	x 3 = <u>30</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>90</u> (A)	<u>110</u> (B)																				
Prevalence Index = B/A = <u>1.22</u>																					
1. _____																					
2. _____																					
3. _____																					
4. _____																					
5. _____																					

		=Total Cover																			
<u>Herb Stratum</u> (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Carex nebrascensis</u>		<u>70</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Eleocharis palustris</u>		<u>10</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Alopecurus pratensis</u>		<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. _____		_____	_____	_____																	
5. _____		_____	_____	_____																	
6. _____		_____	_____	_____																	
7. _____		_____	_____	_____																	
8. _____		_____	_____	_____																	
9. _____		_____	_____	_____																	
10. _____		_____	_____	_____																	
11. _____		_____	_____	_____																	
		_____	_____	_____																	
		=Total Cover																			
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)																					
1. _____		_____	_____	_____																	
2. _____		_____	_____	_____																	
		_____	_____	_____																	
		=Total Cover																			
% Bare Ground in Herb Stratum _____																					
Remarks:																					

SOIL

Sampling Point: WDP-12B-24(2)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
					<input type="checkbox"/> Shallow Aquitard (D3)
					<input type="checkbox"/> FAC-Neutral Test (D5)
					<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
					<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-16-2024</u>																																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-12B-24(1)</u>																																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S12 T19N R20W</u>																																			
Landform (hillside, terrace, etc.): <u>roadside ditch</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.419279</u>		Long: <u>-114.096585</u> Datum: <u>NAD83</u>																																	
Soil Map Unit Name: <u>Post silty clay loam, 2 to 4 percent slopes</u>		NW1 classification: <u>PEM1C</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																																		
Remarks: <u>roadside ditch connected to irrigation ditch</u>																																					
VEGETATION – Use scientific names of plants.																																					
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																	
		=Total Cover																																			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Total % Cover of:</th> <th colspan="2" style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species</td> <td style="text-align: center;">20</td> <td>x 1 =</td> <td style="text-align: center;">20</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">0</td> <td>x 2 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">70</td> <td>x 3 =</td> <td style="text-align: center;">210</td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">0</td> <td>x 4 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td>x 5 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">90 (A)</td> <td></td> <td style="text-align: center;">230 (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td colspan="2" style="text-align: center;"><u>2.56</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	20	x 1 =	20	FACW species	0	x 2 =	0	FAC species	70	x 3 =	210	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	90 (A)		230 (B)	Prevalence Index = B/A =		<u>2.56</u>	
Total % Cover of:		Multiply by:																																			
OBL species	20	x 1 =	20																																		
FACW species	0	x 2 =	0																																		
FAC species	70	x 3 =	210																																		
FACU species	0	x 4 =	0																																		
UPL species	0	x 5 =	0																																		
Column Totals:	90 (A)		230 (B)																																		
Prevalence Index = B/A =		<u>2.56</u>																																			
1. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
		=Total Cover																																			
<u>Herb Stratum</u> (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1. <u>Poa pratensis</u>		45	Yes	FAC																																	
2. <u>Alopecurus pratensis</u>		25	Yes	FAC																																	
3. <u>Typha latifolia</u>		20	Yes	OBL																																	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
6. <u> </u>		<u> </u>	<u> </u>	<u> </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>																																	
		90	=Total Cover																																		
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>																																	
		=Total Cover																																			
% Bare Ground in Herb Stratum <u> </u>																																					
Remarks:																																					

SOIL

Sampling Point: WDP-12B-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
		<input checked="" type="checkbox"/> Shallow Aquitard (D3)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:					

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-12B-24(4)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
		<input checked="" type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input checked="" type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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SOIL

Sampling Point: WDP-13C-24

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		
0-1	10YR 2/1	100					Loamy/Clayey	Organic Material
1-6	10YR 3/2	96	7.5YR 4/6	4	C	M	Loamy/Clayey	Roots present
6-18	7.5YR 4/2	78	7.5YR 5/6	22	C	PL/M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: _____

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>																
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>																
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Date: <u>9-16-2024</u>																
Section, Township, Range: <u>S12 T19N R20W</u>		Sampling Point: <u>WDP-14A-24(1)</u>																
Landform (hillside, terrace, etc.): <u>irrigation ditch</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>																
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.422729</u>	Long: <u>-114.096499</u>																
Datum: <u>NAD83</u>																		
Soil Map Unit Name: <u>Post silt loam, 0-2 percent slopes</u>	NW1 classification: <u>R3UBFx</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																
Remarks: <u>irrigation ditch with cattle compaction and disturbance</u>																		
VEGETATION – Use scientific names of plants.																		
Tree Stratum (Plot size: <u>30'</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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. _____ 2. _____ 3. _____ 4. _____ =Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)																		
1. _____ 2. _____ 3. _____ 4. _____ 5. _____ =Total Cover																		
Herb Stratum (Plot size: <u>30'</u>)																		
1. <u><i>Eleocharis palustris</i></u> 10 No OBL 2. <u><i>Polygonum lapathifolium</i></u> 10 No FACW 3. _____ 4. <u><i>Poa pratensis</i></u> 15 Yes FAC 5. <u><i>Juncus balticus</i></u> 20 Yes FACW 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 55 =Total Cover		Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species 10</td> <td>x 1 = 10</td> </tr> <tr> <td>FACW species 30</td> <td>x 2 = 60</td> </tr> <tr> <td>FAC species 15</td> <td>x 3 = 45</td> </tr> <tr> <td>FACU species 0</td> <td>x 4 = 0</td> </tr> <tr> <td>UPL species 0</td> <td>x 5 = 0</td> </tr> <tr> <td>Column Totals: 55 (A)</td> <td>115 (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.09</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species 10	x 1 = 10	FACW species 30	x 2 = 60	FAC species 15	x 3 = 45	FACU species 0	x 4 = 0	UPL species 0	x 5 = 0	Column Totals: 55 (A)	115 (B)	Prevalence Index = B/A = <u>2.09</u>	
Total % Cover of:	Multiply by:																	
OBL species 10	x 1 = 10																	
FACW species 30	x 2 = 60																	
FAC species 15	x 3 = 45																	
FACU species 0	x 4 = 0																	
UPL species 0	x 5 = 0																	
Column Totals: 55 (A)	115 (B)																	
Prevalence Index = B/A = <u>2.09</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____ 2. _____ =Total Cover																		
% Bare Ground in Herb Stratum <u> </u>																		
Remarks:																		
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																		

SOIL

Sampling Point: WDP-14A-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)				
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:			Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text" value="2"/>			
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text" value="0"/>			
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <input type="text" value="0"/>			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

SOIL

Sampling Point: WDP-14A-24(2)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	4A, and 4B)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations:			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="checkbox"/> Wetland Hydrology Present?
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-14C-24

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						Loamy/Clayey	roots present
5-8	10YR 3/2						Loamy/Clayey	
8-16	10YR 4/2	96	7.5YR 3/4	4	C	M	Loamy/Clayey	Distinct redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: WDP-14D-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except	MLRA 1, 2, 4A, and 4B)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)					
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:				Wetland Hydrology Present?	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>		
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-15-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
					<input type="checkbox"/> Shallow Aquitard (D3)
					<input type="checkbox"/> FAC-Neutral Test (D5)
					<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
					<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

SOIL

Sampling Point: WDP-16B-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
					<input type="checkbox"/> Shallow Aquitard (D3)
					<input type="checkbox"/> FAC-Neutral Test (D5)
					<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
					<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-16-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-16D-24(1)</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S12 T19 R20W</u>																			
Landform (hillside, terrace, etc.): <u>fringe wetland</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.426491</u>		Long: <u>-114.096627</u> Datum: <u>NAD93</u>																	
Soil Map Unit Name: <u>Post-Ronan-Water complex, 2 to 8 percent slopes</u>		NWI classification: <u>R3UBFx</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>60</u> (A)</td> <td><u>95</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.58</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>60</u> (A)	<u>95</u> (B)	Prevalence Index = B/A = <u>1.58</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>25</u>	x 1 = <u>25</u>																				
FACW species <u>35</u>	x 2 = <u>70</u>																				
FAC species <u>0</u>	x 3 = <u>0</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>60</u> (A)	<u>95</u> (B)																				
Prevalence Index = B/A = <u>1.58</u>																					
1. <u> </u>																					
2. <u> </u>																					
3. <u> </u>																					
4. <u> </u>																					
5. <u> </u>																					
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Juncus balticus</u>		25	Yes	FACW																	
2. <u>Typha latifolia</u>		10	No	OBL																	
3. <u>Eleocharis palustris</u>		15	Yes	OBL																	
4. <u>Epilobium ciliatum</u>		10	No	FACW																	
5. <u> </u>																					
6. <u> </u>																					
7. <u> </u>																					
8. <u> </u>																					
9. <u> </u>																					
10. <u> </u>																					
11. <u> </u>																					
		60	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. <u> </u>																					
2. <u> </u>																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-16D-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	4A, and 4B)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations:			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="3"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text" value=""/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>
(includes capillary fringe)			
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Sampling Point: WDP-16D-24(2)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
					<input checked="" type="checkbox"/> Shallow Aquitard (D3)
					<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
					<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
					<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

SOIL

Sampling Point: WDP-17A-24(1)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
					<input type="checkbox"/> Shallow Aquitard (D3)
					<input type="checkbox"/> FAC-Neutral Test (D5)
					<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
					<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>
Applicant/Owner: <u>MDT</u>	State: <u>MT</u>	Sampling Date: <u>9-17-2024</u>
Investigator(s): <u>B.Cline, F.Doty</u>		Sampling Point: <u>WDP-17A-24(2)</u>
Section, Township, Range: <u>S2 T19 R20W</u>		
Landform (hillside, terrace, etc.): <u>pothole</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.430306</u>	Long: <u>-114.097479</u>
Datum: <u>NAD93</u>		
Soil Map Unit Name: <u>Post-Ronan-Water complex, 2 to 8 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1.																					
2.																					
3.																					
4.																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>30'</u>)				Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </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>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>130</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.36</u></td> </tr> </table>	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>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>55</u> (A)	<u>130</u> (B)	Prevalence Index = B/A = <u>2.36</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>20</u>	x 3 = <u>60</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>55</u> (A)	<u>130</u> (B)																				
Prevalence Index = B/A = <u>2.36</u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
=Total Cover																					
Herb Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.	<u>Cirsium arvense</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
2.	<u>Dipsacus fullonum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
3.	<u>Phalaris arundinacea</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>																	
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
<u>55</u> =Total Cover																					
Woody Vine Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1.																					
2.																					
=Total Cover																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WDP-17A-24(2)

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)		<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)			
		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

SOIL

Sampling Point: WDP-18-24

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					Loamy/Clayey	roots present
4-7	10YR 3/2	100					Loamy/Clayey	silty loam
7-18	10YR 6/2	91	10YR 5/6	9	C	PL	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: WDP-19A-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
		<input checked="" type="checkbox"/> Shallow Aquitard (D3)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		
(includes capillary fringe)					
				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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SOIL

Sampling Point: WDP-19C-24

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					Loamy/Clayey	roots present
4-7	10YR 3/2	100					Loamy/Clayey	
7-18	10YR 6/2	91	10YR 5/6	9	C	PL	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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SOIL

Sampling Point: WDP-19E-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2			
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:				Wetland Hydrology Present?	
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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SOIL

Sampling Point: WDP-20-24

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Wetland Hydrology Indicators (continued)	
Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2			
<input type="checkbox"/> High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					
Field Observations:				Wetland Hydrology Present?	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>		
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<input type="text"/>		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R				OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)																	
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>		Sampling Date: <u>9-17-2024</u>																	
Applicant/Owner: <u>MDT</u>		State: <u>MT</u>		Sampling Point: <u>WDP-21A-24</u>																	
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S2 T19 R20W</u>																			
Landform (hillside, terrace, etc.): <u>field</u>		Local relief (concave, convex, none): <u>concave</u>		Slope (%): <u>0-5</u>																	
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>		Lat: <u>47.433173</u>	Long: <u>-114.097465</u>	Datum: <u>NAD83</u>																	
Soil Map Unit Name: <u>Post silty clay loam, 2 to 4 percent slopes</u>		NWI classification: <u>PEM1Ch</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>																					
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>			Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>																		
Remarks:																					
VEGETATION – Use scientific names of plants.																					
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. _____		_____	_____	_____																	
2. _____		_____	_____	_____																	
3. _____		_____	_____	_____																	
4. _____		_____	_____	_____																	
		=Total Cover																			
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>85</u></td> <td>x 2 = <u>170</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>180</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.89</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>85</u>	x 2 = <u>170</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>180</u> (B)	Prevalence Index = B/A = <u>1.89</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>10</u>	x 1 = <u>10</u>																				
FACW species <u>85</u>	x 2 = <u>170</u>																				
FAC species <u>0</u>	x 3 = <u>0</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>95</u> (A)	<u>180</u> (B)																				
Prevalence Index = B/A = <u>1.89</u>																					
1. _____		_____	_____	_____																	
2. _____		_____	_____	_____																	
3. _____		_____	_____	_____																	
4. _____		_____	_____	_____																	
		=Total Cover																			
Herb Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Chenopodium rubrum</u>		<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Phalaris arundinacea</u>		<u>60</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Rorippa palustris</u>		<u>10</u>	<u>No</u>	<u>OBL</u>																	
4. _____		_____	_____	_____																	
5. _____		_____	_____	_____																	
6. _____		_____	_____	_____																	
7. _____		_____	_____	_____																	
8. _____		_____	_____	_____																	
9. _____		_____	_____	_____																	
10. _____		_____	_____	_____																	
11. _____		_____	_____	_____																	
		<u>95</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																					
1. _____		_____	_____	_____																	
2. _____		_____	_____	_____																	
		=Total Cover																			
% Bare Ground in Herb Stratum _____																					
Remarks:																					

SOIL

Sampling Point: WDP-21A-24

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 2/1	100						Organic Matter
2-8	10YR 2/2	95	7.5YR 3/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
8-16	10YR 4/2	98	7.5YR 3/4	2	C	M	Loamy/Clayey	Distinct redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

ENG FORM 6116-9, FEB 2024

SOIL

Sampling Point: WL-13B-24(1)

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 2/1						Loamy/Clayey	roots present
8-16	10YR 4/2	93	10YR 5/8	7	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input checked="" type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R		OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: <u>Post Creek Hill - US 93</u>		City/County: <u>Lake</u>
Applicant/Owner: <u>MDT</u>	State: <u>MT</u>	Sampling Date: <u>9-16-2024</u>
Investigator(s): <u>B.Cline, F.Doty</u>		Section, Township, Range: <u>S12 T19N R20W</u>
Landform (hillside, terrace, etc.): <u>roadside ditch</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>0-5</u>
Subregion (LRR/MLRA): <u>LRR E, MLRA 44A</u>	Lat: <u>47.422376</u>	Long: <u>-114.096610</u>
Datum: <u>NAD83</u>		
Soil Map Unit Name: <u>Post silt loam, 0-2 percent slopes</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> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </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> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>		Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1.																					
2.																					
3.																					
4.																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>30'</u>)				Prevalence Index worksheet: <table style="width:100%; font-size: small;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>55</u></td> <td>x 1 = <u>55</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>135</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.59</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>55</u>	x 1 = <u>55</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u> (A)	<u>135</u> (B)	Prevalence Index = B/A = <u>1.59</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>55</u>	x 1 = <u>55</u>																				
FACW species <u>10</u>	x 2 = <u>20</u>																				
FAC species <u>20</u>	x 3 = <u>60</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>85</u> (A)	<u>135</u> (B)																				
Prevalence Index = B/A = <u>1.59</u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
=Total Cover																					
Herb Stratum	(Plot size: <u>30'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.	<u>Eleocharis palustris</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
2.	<u>Rumex crispus</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3.	<u>Typha latifolia</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
4.	<u>Carex nebrascensis</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
5.	<u>Juncus balticus</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
85 =Total Cover																					
Woody Vine Stratum	(Plot size: <u>30'</u>)																				
1.																					
2.																					
=Total Cover																					
% Bare Ground in Herb Stratum <u> </u>																					
Remarks:																					

SOIL

Sampling Point: WL-13B-24(2)

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 2/1						Loamy/Clayey	roots present
8-16	10YR 4/2	92	10YR 5/8	8	C	M	Loamy/Clayey	Prominent redox concentrations

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 2 cm Muck (A10) (LRR A, E)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D, G)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)	<input type="checkbox"/> Redox Depressions (F8)	

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input checked="" type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

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

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

Remarks:

US 93 N – Post Creek Hill
UPN 8008000
NH 5-2(159)37

Aquatic Resource Findings Report

ATTACHMENT 4 – MONTANA WETLAND ASSESSMENT METHOD FORMS

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-1
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-1,2,3-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 25; Township 19 N, Range 20 W, Section 26
Approximate Stationing or Roadposts: RP 36.8 to RP 37.1

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ **Wetland potentially affected by MDT project**
☐ **Mitigation wetlands; pre-construction**
☐ **Mitigation wetlands; post-construction**
☐ **Other** _____

8. **Wetland Size (acre):** _____ (visually estimated)
6.70 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** _____ (visually estimated)
 (see manual for determining AA) 6.70 (measured, e.g. GPS)

10. CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Slope	Emergent Wetland		Seasonal / Intermittent	70
Depressional	Emergent Wetland		Seasonal / Intermittent	15
Riverine	Emergent Wetland		Seasonal / Intermittent	15

Comments: AA consists of wetlands dominated by emergent vegetation type. Wetlands located along slopes, shallow roadside depressions/ditches and irrigation channels.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. GENERAL CONDITION OF AA

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	---	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	high disturbance

Comments (types of disturbance, intensity, season, etc.): Conditions within the AA include heavy grazing and hydrologic alterations.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), cheatgrass (Bromus tectorum) and yellow-flag iris (Iris pseudacorus).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA is located along the highway right of way and adjacent lands within roadside depression, irrigation channels and slopes. Surrounding use includes roadway, agricultural, commercial business, and residential dwellings.

13. STRUCTURAL DIVERSITY (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?	Modified Rating
≥3 (or 2 if one is forested) classes	---	NA	NA
2 (or 1 if forested) classes	---	NA	NA
1 class, but not a monoculture	mod	←NO	YES→
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA

Comments: AA dominated by emergent vegetation.

Wetland/Site #(s): AA-1: W-1,2,3-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☒ D ☐ S Bobolink, Townsend's big-eared bat
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	---
S2 and S3 Species Functional Point/Rating	---	---	---	---	.2L	---	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☒ **Minimal:** Based on any of the following [check].

- ☒ few or no wildlife observations during peak use periods
- ☐ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input type="checkbox"/> High								<input checked="" type="checkbox"/> Moderate								<input type="checkbox"/> Low			
	<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input checked="" type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Class Cover Distribution (all vegetated classes)	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Duration of Surface Water in ≥ 10% of AA																				
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	L	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input checked="" type="checkbox"/> Minimal	---	---	---	.1L

Comments:

Wetland/Site #(s): AA-1: W-1,2,3-24**14D. GENERAL FISH HABITAT** ☒ **NA** (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: _____

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = ____ or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** 0.1 = ____ or ☐ NO

iii. Final Score and Rating: _____ **Comments:** _____**14E. FLOOD ATTENUATION** ☒ **NA** (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

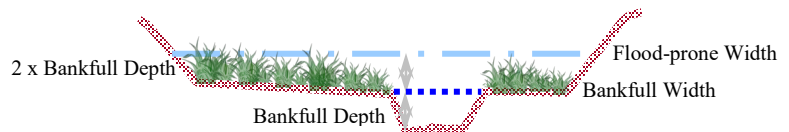
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

_____ / _____ = _____

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	---	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☐ NO **Comments:** _____

Wetland/Site #(s): AA-1: W-1,2,3-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input checked="" type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	----	----	----	----	----	----	----	.3L	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	----	----

Comments: Wetlands consist of mostly linear feature with limited water holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	.9H	----	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☒ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input type="checkbox"/> ≥ 65%	----	----	----
<input type="checkbox"/> 35-64%	----	----	----
<input type="checkbox"/> < 35%	----	----	----

Comments: _

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Ciii)		
	<input type="checkbox"/> E/H	<input type="checkbox"/> M	<input checked="" type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	----	L

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

See manual for further definitions of these terms:																		
A	<input checked="" type="checkbox"/> Vegetated Component >5 acres						<input type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input checked="" type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P																		
S/I					.5M													
T/E/A																		

Wetland/Site #(s): AA-1: W-1,2,3-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ____ ☒ NOiv. **Final Score and Rating:** .5M **Comments:** Area is periodically mowed within the right of way.**14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☐ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☐ Shallow water table and the site is saturated to the surface.
☐ Other: _____

ii. Recharge Indicators

- ☒ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other: _____

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input type="checkbox"/> Groundwater Discharge or Recharge	---	.7M	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: Permeable material in underlying substrate.**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	.2L	---

Comments: _____**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ YES, go to ii. ☐ NO, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: _____iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: _____**15. GENERAL SITE NOTES:** _____

Wetland/Site #(s): AA-1: W-1,2,3-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.20	1.00		
C. General Wildlife Habitat	low 0.10	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	NA	NA		
F. Short and Long Term Surface Water Storage	low 0.30	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	NA	NA		
I. Production Export / Food Chain Support	mod 0.50	1.00		
J. Groundwater Discharge / Recharge	mod 0.70	1.00		
K. Uniqueness	low 0.20	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	2.9	8	Total Functional Units	
Percent of Possible Score 36% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
☐ Score of 1 functional point for Uniqueness; **or**
☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
☐ Score of .9 functional point for Uniqueness; **or**
☐ Percent of possible score > 65% (round to nearest whole #).

☐ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☒ "Low" rating for Uniqueness; **and**
☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.

☐ I ☐ II ☐ III ☒ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-2
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-4-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 23 & 24; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 37.2

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ Wetland potentially affected by MDT project
☐ Mitigation wetlands; pre-construction
☐ Mitigation wetlands; post-construction
☐ Other

8. **Wetland Size (acre):** (visually estimated)
1.55 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 1.55 (measured, e.g. GPS)

10. CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Riverine	Emergent Wetland		Permanent / Perennial	50
Riverine	Aquatic Bed		Permanent / Perennial	9
Riverine	Forested Wetland		Permanent / Perennial	41

Comments: AA consists of forested and emergent wetlands associated with a natural drainage feature to Post Creek.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. GENERAL CONDITION OF AA

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	---	high disturbance
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): Conditions within the AA include heavy grazing and hydrologic alterations.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), oxeye daisy (Chrysanthemum leucanthemum), cheatgrass (Bromus tectorum) and yellow-flag iris (Iris pseudacorus).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA is located along the highway right of way and adjacent lands within intermittent drainage to Post Creek. Surrounding use includes roadway, agricultural, commercial business, and residential dwellings.

13. STRUCTURAL DIVERSITY (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?		Modified Rating
≥3 (or 2 if one is forested) classes	high	NA	NA	NA
2 (or 1 if forested) classes	---	NA	NA	NA
1 class, but not a monoculture	---	←NO	YES→	---
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA	NA

Comments: AA dominated by emergent and forested vegetation.

Wetland/Site #(s): AA-2: W-4-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☒ S Grizzly bear
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	.1L	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS

14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☒ D ☐ S Bobolink
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	.0L
S2 and S3 Species Functional Point/Rating	---	---	---	---	---	.1L	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS

14C. GENERAL WILDLIFE HABITAT RATING**i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☐ **Minimal:** Based on any of the following [check].

- ☐ few or no wildlife observations during peak use periods
- ☐ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☒ **Moderate:** Based on any of the following [check].

- ☒ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☒ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☒ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input checked="" type="checkbox"/> High								<input type="checkbox"/> Moderate								<input type="checkbox"/> Low			
Class Cover Distribution (all vegetated classes)	<input type="checkbox"/> Even				<input checked="" type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Duration of Surface Water in ≥ 10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input checked="" type="checkbox"/> Moderate	---	---	.5M	---
<input type="checkbox"/> Minimal	---	---	---	---

Comments:

Wetland/Site #(s): AA-2: W-4-24

14D. GENERAL FISH HABITAT ☒ NA (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: MFISH, MHNP, & MFWP.

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = ___ or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** 0.1 = ___ or ☐ NO

iii. Final Score and Rating: Comments: _____**14E. FLOOD ATTENUATION** ☐ NA (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

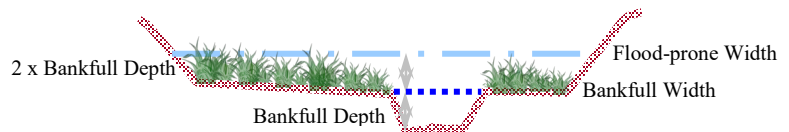
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{25}{10} = 2.5$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input checked="" type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	.8H	---	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☒ NO Comments: _____

Wetland/Site #(s): AA-2: W-4-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input type="checkbox"/> >5 acre feet			<input checked="" type="checkbox"/> 1.1 to 5 acre feet			<input type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	----	----	----	.8H	----	----	----	----	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	----	----

Comments: Wetlands consist of mostly linear feature with limited water holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	.9H	----	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☐ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input checked="" type="checkbox"/> Permanent / Perennial	<input type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input checked="" type="checkbox"/> ≥ 65%	1H	----	----
<input type="checkbox"/> 35-64%	----	----	----
<input type="checkbox"/> < 35%	----	----	----

Comments: .

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Cii)		
	<input type="checkbox"/> E/H	<input checked="" type="checkbox"/> M	<input type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	M	----

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

A	<input type="checkbox"/> Vegetated Component >5 acres						<input checked="" type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input checked="" type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	----	----	----	----	----	----	.7M	----	----	----	----	----	----	----	----	----
S/I	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-2: W-4-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ☒ NOiv. **Final Score and Rating:** .7M **Comments:** **14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☐ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☐ Shallow water table and the site is saturated to the surface.
☐ Other:

ii. Recharge Indicators

- ☒ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other:

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	1H	---	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: Permeable material in underlying substrate.**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	.4M	---	---	---	---

Comments: High structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ YES, go to ii. ☐ NO, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: **15. GENERAL SITE NOTES:**

Wetland/Site #(s): AA-2: W-4-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.10	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.10	1.00		
C. General Wildlife Habitat	mod 0.50	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	high 0.80	1.00		
F. Short and Long Term Surface Water Storage	high 0.80	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	high 1.00	1.00		
I. Production Export / Food Chain Support	mod 0.70	1.00		
J. Groundwater Discharge / Recharge	high 1.00	1.00		
K. Uniqueness	mod 0.40	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	6.3	10	Total Functional Units	
Percent of Possible Score 62% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
- ☐ Score of 1 functional point for Uniqueness; **or**
- ☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
- ☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
- ☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
- ☐ Score of .9 functional point for Uniqueness; **or**
- ☐ Percent of possible score > 65% (round to nearest whole #).

☒ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
- ☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
- ☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.
☐ I ☐ II ☒ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-3
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-5.6-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 23 & 24; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 37.4 to RP37.9

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ **Wetland potentially affected by MDT project**
☐ **Mitigation wetlands; pre-construction**
☐ **Mitigation wetlands; post-construction**
☐ **Other**

8. **Wetland Size (acre):** (visually estimated)
45.37 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 45.37 (measured, e.g. GPS)

10. CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Depressional	Aquatic Bed	Excavated	Permanent / Perennial	1
Riverine	Emergent Wetland		Permanent / Perennial	60
Riverine	Scrub-Shrub Wetland		Permanent / Perennial	17
Riverine	Forested Wetland		Permanent / Perennial	18
Slope	Emergent Wetland		Seasonal / Intermittent	4

Comments: AA consists of wetlands associated with Post Creek. Wetlands dominated by emergent, scrub-shrub, and forested vegetation types.
Wetlands located adjacent to the waterway and along sloped wetlands that drain toward the waterway. The outer fringes of the complex are sedge meadows.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. GENERAL CONDITION OF AA

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	moderate disturbance	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): AA is managed in natural state. Conditions outside of the AA includes disturbance from highway, agricultural, commercial business, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), and yellow-flag iris (Iris pseudacorus).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes large wetland complex associated with Post Creek drainage. AA managed in natural state as open space and wildlife habitat. Surrounding land use includes highway, agriculture, commercial business, and residential dwellings.

13. STRUCTURAL DIVERSITY (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?		Modified Rating
≥3 (or 2 if one is forested) classes	high	NA	NA	NA
2 (or 1 if forested) classes	---	NA	NA	NA
1 class, but not a monoculture	---	←NO	YES→	---
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA	NA

Comments: AA dominated by emergent, scrub-shrub, and forested vegetation types.

Wetland/Site #(s): AA-3: W-5.6-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☒ D ☐ S Grizzly bear
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	.3L	---	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☒ S Bobolink
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	---
S2 and S3 Species Functional Point/Rating	---	---	---	---	---	.1L	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☒ **Substantial:** Based on any of the following [check].

- ☒ observations of abundant wildlife #s or high species diversity (during any period)
- ☒ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☒ interview with local biologist with knowledge of the AA

☐ **Minimal:** Based on any of the following [check].

- ☐ few or no wildlife observations during peak use periods
- ☐ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input checked="" type="checkbox"/> High								<input type="checkbox"/> Moderate								<input type="checkbox"/> Low			
Class Cover Distribution (all vegetated classes)	<input type="checkbox"/> Even				<input checked="" type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Duration of Surface Water in ≥ 10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	H	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input checked="" type="checkbox"/> Substantial	---	.9H	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input type="checkbox"/> Minimal	---	---	---	---

Comments: CSKT Biologist

Wetland/Site #(s): AA-3: W-5.6-24

14D. GENERAL FISH HABITAT ☐ NA (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☒ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input checked="" type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input checked="" type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	.6M	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: MFISH, MHNP, & MFWP.

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = or ☒ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☒ YES, add to score in i or iia 0.1 = .1 or ☐ NO

iii. Final Score and Rating: .7M **Comments:** Rainbow fingerlings caught in Post Creek

14E. FLOOD ATTENUATION ☐ NA (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

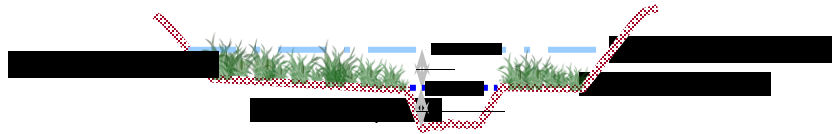
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{60}{25} = 2.4$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input checked="" type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	.8H	---	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☒ YES ☐ NO **Comments:** Wetlands adjacent to Post Creek

Wetland/Site #(s): AA-3: W-5.6-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input checked="" type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	1H	---	---	---	---	---	---	---	---
Wetlands in AA flood or pond < 5 out of 10 years	---	---	---	---	---	---	---	---	---

Comments: Wetlands consist of large area with water holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	.9H	---	---	---	---	---	---	---

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☐ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input checked="" type="checkbox"/> Permanent / Perennial	<input type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input checked="" type="checkbox"/> ≥ 65%	1H	---	---
<input type="checkbox"/> 35-64%	---	---	---
<input type="checkbox"/> < 35%	---	---	---

Comments: Wetland species with deep binding roots.

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Ciii)		
	<input checked="" type="checkbox"/> E/H	<input type="checkbox"/> M	<input type="checkbox"/> L
<input type="checkbox"/> E/H	---	---	---
<input checked="" type="checkbox"/> M	H	---	---
<input type="checkbox"/> L	---	---	---
<input type="checkbox"/> NA	---	---	---

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

A	<input checked="" type="checkbox"/> Vegetated Component >5 acres						<input type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	1H	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S/I	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
T/E/A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Wetland/Site #(s): AA-3: W-5.6-24

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.

Vegetated Upland Buffer: Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).

Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ____ ☒ NO

iv. **Final Score and Rating:** 1H **Comments:** ____**14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☐ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☒ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☒ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☒ Shallow water table and the site is saturated to the surface.
☐ Other: ____

ii. Recharge Indicators

- ☒ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other: ____

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	1H	---	---	---
<input type="checkbox"/> Insufficient Data/Information	---	---	---	---

Comments: Permeable material in underlying substrate.**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	.5M	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---

Comments: High structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☐ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☒ YES, go to ii. ☐ NO, check the NA box.

ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☒ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: ____

iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	.1M	---

Comments: Must obtain annual CSKT recreation/conservation permit to access.**15. GENERAL SITE NOTES:** ____

Wetland/Site #(s): AA-3: W-5.6-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.30	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.10	1.00		
C. General Wildlife Habitat	high 0.90	1.00		
D. General Fish Habitat	mod 0.70	1.00		
E. Flood Attenuation	high 0.80	1.00		
F. Short and Long Term Surface Water Storage	high 1.00	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	high 1.00	1.00		
I. Production Export / Food Chain Support	high 1.00	1.00		
J. Groundwater Discharge / Recharge	high 1.00	1.00		
K. Uniqueness	mod 0.50	1.00		
L. Recreation / Education Potential (bonus point)	mod 0.10			
Total Points	8.3	11	Total Functional Units	
Percent of Possible Score 75				
% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
- ☐ Score of 1 functional point for Uniqueness; **or**
- ☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
- ☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
- ☒ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
- ☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
- ☐ Score of .9 functional point for Uniqueness; **or**
- ☒ Percent of possible score > 65% (round to nearest whole #).

☐ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
- ☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
- ☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.
☐ I ☒ II ☐ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-4
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-7-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 14 & 23; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 37.9 to RP 38.6

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ Wetland potentially affected by MDT project
☐ Mitigation wetlands; pre-construction
☐ Mitigation wetlands; post-construction
☐ Other

8. **Wetland Size (acre):** (visually estimated)
2.03 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 2.03 (measured, e.g. GPS)

10. **CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA** (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Riverine	Emergent Wetland		Seasonal / Intermittent	100

Comments: AA consists of emergent wetlands associated with roadside swale and irrigation channels.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. **GENERAL CONDITION OF AA**

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	---	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	high disturbance

Comments (types of disturbance, intensity, season, etc.): Conditions in the AA includes disturbance from highway, agricultural, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), oxeye daisy (Chrysanthemum leucanthemum), and cheatgrass (Bromus tectorum).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes roadside wetlands associated with irrigation water returns. AA frequently mowed and grazed. Surrounding land use includes highway, agriculture, commercial business, and residential dwellings.

13. **STRUCTURAL DIVERSITY** (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?	Modified Rating
≥3 (or 2 if one is forested) classes	---	NA	NA
2 (or 1 if forested) classes	---	NA	NA
1 class, but not a monoculture	mod	←NO	YES→
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA

Comments: AA dominated by emergent vegetation type.

Wetland/Site #(s): AA-4: W-7-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☒ D ☐ S Bobolink
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	---
S2 and S3 Species Functional Point/Rating	.9H	---	---	---	.2L	---	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☒ **Minimal:** Based on any of the following [check].

- ☒ few or no wildlife observations during peak use periods
- ☒ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input type="checkbox"/> High								<input checked="" type="checkbox"/> Moderate								<input type="checkbox"/> Low			
	<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input checked="" type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Class Cover Distribution (all vegetated classes)	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Duration of Surface Water in ≥ 10% of AA																				
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	M	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input checked="" type="checkbox"/> Minimal	---	---	.2L	---

Comments:

Wetland/Site #(s): AA-4: W-7-24

14D. GENERAL FISH HABITAT ☒ NA (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: MFISH, MHNP, & MFWP.

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = ___ or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** a 0.1 = ___ or ☐ NO

iii. Final Score and Rating: ___ Comments: _____**14E. FLOOD ATTENUATION** ☐ NA (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

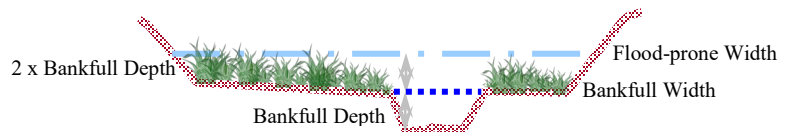
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{15}{5} = 3.0$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input checked="" type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	.5M	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☒ NO Comments: _____

Wetland/Site #(s): AA-4: W-7-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input checked="" type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	----	----	----	----	----	----	----	----	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	.2L	----

Comments: Wetlands consist of long linear roadside features with limited holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	----	.7M	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☐ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input checked="" type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input checked="" type="checkbox"/> ≥ 65%	----	.9H	----
<input type="checkbox"/> 35-64%	----	----	----
<input type="checkbox"/> < 35%	----	----	----

Comments: Wetland species with deep binding roots.

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Cii)		
	<input type="checkbox"/> E/H	<input checked="" type="checkbox"/> M	<input type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	M	----

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

A	<input type="checkbox"/> Vegetated Component >5 acres						<input checked="" type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input checked="" type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S/I	----	----	----	----	----	----	----	----	.6M	----	----	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-4: W-7-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ____ ☒ NOiv. **Final Score and Rating:** .6M **Comments:** ____**14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☐ The AA is a slope wetland.
☒ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☐ Shallow water table and the site is saturated to the surface.
☐ Other: ____

ii. Recharge Indicators

- ☒ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other: ____

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	---	.7M	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: Artesian well known at south end of the wetland / unnamed tributary to Post Creek 3. Wetlands receive irrigation runoff but the tributary is known to flow intermittently to perennially.**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	.2L	---

Comments: Low-moderate structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ YES, go to ii. ☐ NO, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: ____iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: ____**15. GENERAL SITE NOTES:** ____

Wetland/Site #(s): AA-4: W-7-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.20	1.00		
C. General Wildlife Habitat	low 0.20	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	mod 0.50	1.00		
F. Short and Long Term Surface Water Storage	low 0.20	1.00		
G. Sediment / Nutrient / Toxicant Removal	mod 0.70	1.00		
H. Sediment / Shoreline Stabilization	high 0.90	1.00		
I. Production Export / Food Chain Support	mod 0.60	1.00		
J. Groundwater Discharge / Recharge	mod 0.70	1.00		
K. Uniqueness	low 0.20	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	4.2	10	Total Functional Units	
Percent of Possible Score 42% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
☐ Score of 1 functional point for Uniqueness; **or**
☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
☐ Score of .9 functional point for Uniqueness; **or**
☐ Percent of possible score > 65% (round to nearest whole #).

☒ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.

☐ I ☐ II ☒ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-5
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-8.9-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 13 & 24; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 37.9 to RP 38.6

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ **Wetland potentially affected by MDT project**
☐ **Mitigation wetlands; pre-construction**
☐ **Mitigation wetlands; post-construction**
☐ **Other**

8. **Wetland Size (acre):** (visually estimated)
5.46 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 5.46 (measured, e.g. GPS)

10. CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Riverine	Emergent Wetland		Seasonal / Intermittent	20
Riverine	Forested Wetland		Seasonal / Intermittent	8
Slope	Emergent Wetland		Seasonal / Intermittent	68
Slope	Forested Wetland		Seasonal / Intermittent	2
Depressional	Emergent Wetland		Temporary / Ephemeral	2

Comments: AA consists of emergent and forested wetlands associated with roadside swale and irrigation channels.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. GENERAL CONDITION OF AA

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	moderate disturbance	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): Conditions in the AA includes disturbance from highway, agricultural, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes roadside wetlands associated with irrigation water returns. AA moderately grazed or mowed. Surrounding land use includes highway, agriculture, commercial business, and residential dwellings.

13. STRUCTURAL DIVERSITY (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?		Modified Rating
≥3 (or 2 if one is forested) classes	---	NA	NA	NA
2 (or 1 if forested) classes	mod	NA	NA	NA
1 class, but not a monoculture	---	←NO	YES→	---
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA	NA

Comments: AA dominated by emergent vegetation type with small forested wetland areas.

Wetland/Site #(s): AA-5: W-8,9-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species							
Functional Point/Rating	---	---	---	---	---	---	.0L
S2 and S3 Species							
Functional Point/Rating	---	---	---	---	---	---	.0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☒ **Minimal:** Based on any of the following [check].

- ☒ few or no wildlife observations during peak use periods
- ☒ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input type="checkbox"/> High								<input checked="" type="checkbox"/> Moderate								<input type="checkbox"/> Low			
	<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input checked="" type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Class Cover Distribution (all vegetated classes)	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Duration of Surface Water in ≥ 10% of AA																				
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	H	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input checked="" type="checkbox"/> Minimal	---	.4M	---	---

Comments:

Wetland/Site #(s): AA-5: W-8,9-24

14D. GENERAL FISH HABITAT ☒ NA (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: _____

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = ____ or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** 0.1 = ____ or ☐ NO

iii. Final Score and Rating: ____ **Comments:** _____**14E. FLOOD ATTENUATION** ☐ NA (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

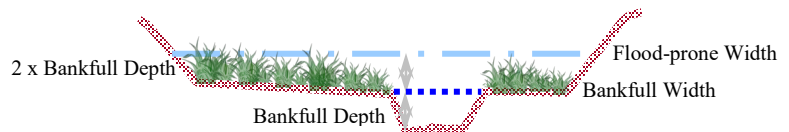
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{15}{5} = 3.0$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input checked="" type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	.5M	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☒ NO **Comments:** _____

Wetland/Site #(s): AA-5: W-8.9-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input type="checkbox"/> >5 acre feet			<input checked="" type="checkbox"/> 1.1 to 5 acre feet			<input type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	----	----	----	----	.6M	----	----	----	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	----	----

Comments: Wetlands consist of irrigation drainage transitioning from sheet flow to more channelized drainage connected to the Post Creek floodplain.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	.9H	----	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☐ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input checked="" type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input checked="" type="checkbox"/> ≥ 65%	----	.9H	----
<input type="checkbox"/> 35-64%	----	----	----
<input type="checkbox"/> < 35%	----	----	----

Comments: Wetland species with deep binding roots.

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Cii)		
	<input type="checkbox"/> E/H	<input checked="" type="checkbox"/> M	<input type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	M	----

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

A	<input checked="" type="checkbox"/> Vegetated Component >5 acres						<input type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input checked="" type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S/I	----	----	.7M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-5: W-8,9-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ☒ NOiv. **Final Score and Rating:** .7M **Comments:** **14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☒ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☒ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☐ Shallow water table and the site is saturated to the surface.
☐ Other:

ii. Recharge Indicators

- ☐ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other:

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	---	.7M	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: **14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	.3L	---
<input type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---

Comments: Low to moderate structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ YES, go to ii. ☐ NO, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: **15. GENERAL SITE NOTES:**

Wetland/Site #(s): AA-5: W-8,9-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.00	1.00		
C. General Wildlife Habitat	mod 0.40	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	mod 0.50	1.00		
F. Short and Long Term Surface Water Storage	mod 0.60	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	high 0.90	1.00		
I. Production Export / Food Chain Support	mod 0.70	1.00		
J. Groundwater Discharge / Recharge	mod 0.70	1.00		
K. Uniqueness	low 0.30	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	5.0	10	Total Functional Units	
Percent of Possible Score 50% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
- ☐ Score of 1 functional point for Uniqueness; **or**
- ☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
- ☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
- ☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
- ☐ Score of .9 functional point for Uniqueness; **or**
- ☐ Percent of possible score > 65% (round to nearest whole #).

☒ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
- ☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
- ☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.
☐ I ☐ II ☒ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-6
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-10,11-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 11, 12, 13 & 14; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 38.65 to RP 39.45

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ **Wetland potentially affected by MDT project**
☐ **Mitigation wetlands; pre-construction**
☐ **Mitigation wetlands; post-construction**
☐ **Other**

8. **Wetland Size (acre):** (visually estimated)
10.78 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 10.78 (measured, e.g. GPS)

10. **CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA** (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Riverine	Emergent Wetland		Seasonal / Intermittent	99
Depressional	Emergent Wetland	Impounded	Seasonal / Intermittent	1

Comments: AA consists of emergent wetlands associated with roadside swale, and meadow wetlands.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. **GENERAL CONDITION OF AA**

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	moderate disturbance	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): Conditions in the AA includes disturbance from highway, agricultural, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), oxeye daisy (Chrysanthemum leucanthemum), cheatgrass (Bromus tectorum).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes roadside and meadow wetlands associated with irrigation water. Surrounding land use includes highway, agriculture, commercial business, and residential dwellings.

13. **STRUCTURAL DIVERSITY** (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?		Modified Rating
≥3 (or 2 if one is forested) classes	---	NA	NA	NA
2 (or 1 if forested) classes	---	NA	NA	NA
1 class, but not a monoculture	mod	←NO	YES→	---
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA	NA

Comments: AA dominated by emergent vegetation type.

Wetland/Site #(s): AA-6: W-10,11-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	.0L
S2 and S3 Species Functional Point/Rating	---	---	---	---	---	---	.0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☒ **Minimal:** Based on any of the following [check].

- ☒ few or no wildlife observations during peak use periods
- ☒ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input type="checkbox"/> High								<input checked="" type="checkbox"/> Moderate								<input type="checkbox"/> Low			
	<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input checked="" type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Class Cover Distribution (all vegetated classes)	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Duration of Surface Water in ≥ 10% of AA																				
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	M	---	---	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input checked="" type="checkbox"/> Minimal	---	---	.2L	---

Comments:

Wetland/Site #(s): AA-6: W-10,11-24**14D. GENERAL FISH HABITAT** ☒ **NA** (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: _____

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = ____ or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** a 0.1 = ____ or ☐ NO

iii. Final Score and Rating: _____ **Comments:** _____**14E. FLOOD ATTENUATION** ☐ **NA** (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

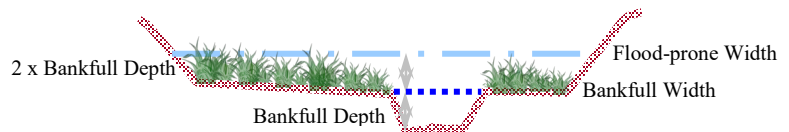
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{5}{2.5} = 2.5$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input checked="" type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	.5M	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☒ NO **Comments:** _____

Wetland/Site #(s): AA-6: W-10,11-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input checked="" type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	----	----	----	----	----	----	----	.3L	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	----	----

Comments: Wetlands are flooded annually via irrigation water and have limited holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	.9H	----	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☒ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input type="checkbox"/> ≥ 65%	----	----	----
<input type="checkbox"/> 35-64%	----	----	----
<input type="checkbox"/> < 35%	----	----	----

Comments: _____

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Cii)		
	<input type="checkbox"/> E/H	<input type="checkbox"/> M	<input checked="" type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	----	L

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

See manual for further definitions of these terms:																		
A	<input checked="" type="checkbox"/> Vegetated Component >5 acres						<input type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input checked="" type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S/I	----	----	----	----	.5M	----	----	----	----	----	----	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-6: W-10,11-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ☒ NOiv. **Final Score and Rating:** .5M **Comments:** **14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☒ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☐ Shallow water table and the site is saturated to the surface.
☐ Other:

ii. Recharge Indicators

- ☐ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other:

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	---	.7M	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: **14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	.3L	---
<input type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---

Comments: Low to moderate structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ YES, go to ii. ☐ NO, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: **15. GENERAL SITE NOTES:**

Wetland/Site #(s): AA-6: W-10,11-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.00	1.00		
C. General Wildlife Habitat	low 0.20	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	mod 0.50	1.00		
F. Short and Long Term Surface Water Storage	low 0.30	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	NA	NA		
I. Production Export / Food Chain Support	mod 0.50	1.00		
J. Groundwater Discharge / Recharge	mod 0.70	1.00		
K. Uniqueness	low 0.30	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	3.4	9	Total Functional Units	
Percent of Possible Score 38% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
☐ Score of 1 functional point for Uniqueness; **or**
☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
☐ Score of .9 functional point for Uniqueness; **or**
☐ Percent of possible score > 65% (round to nearest whole #).

☒ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.

☐ I ☐ II ☒ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-7
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-12,13-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 11 & 12; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 39.1 to RP 39.6

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ Wetland potentially affected by MDT project
☐ Mitigation wetlands; pre-construction
☐ Mitigation wetlands; post-construction
☐ Other

8. **Wetland Size (acre):** (visually estimated)
3.39 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 3.39 (measured, e.g. GPS)

10. **CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA** (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Riverine	Emergent Wetland		Seasonal / Intermittent	30
Slope	Emergent Wetland		Seasonal / Intermittent	70

Comments: AA consists of emergent wetlands associated with roadside swale, and meadow wetlands.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. **GENERAL CONDITION OF AA**

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	moderate disturbance	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): Conditions in the AA includes disturbance from highway, agricultural, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), oxeye daisy (Chrysanthemum leucanthemum), cheatgrass (Bromus tectorum).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes roadside and meadow wetlands associated with irrigation water. Surrounding land use includes highway, agriculture, commercial business, and residential dwellings.

13. **STRUCTURAL DIVERSITY** (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?	Modified Rating
≥3 (or 2 if one is forested) classes	---	NA	NA
2 (or 1 if forested) classes	---	NA	NA
1 class, but not a monoculture	mod	←NO	YES→
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA

Comments: AA dominated by emergent vegetation type.

Wetland/Site #(s): AA-7: W-12,13-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species							
Functional Point/Rating	---	---	---	---	---	---	.0L
S2 and S3 Species							
Functional Point/Rating	---	---	---	---	---	---	.0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☒ **Minimal:** Based on any of the following [check].

- ☒ few or no wildlife observations during peak use periods
- ☒ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input type="checkbox"/> High								<input checked="" type="checkbox"/> Moderate								<input type="checkbox"/> Low			
	<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input checked="" type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Class Cover Distribution (all vegetated classes)	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Duration of Surface Water in ≥ 10% of AA																				
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	M	---	---	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input checked="" type="checkbox"/> Minimal	---	---	.2L	---

Comments:

Wetland/Site #(s): AA-7:W-12,13-24**14D. GENERAL FISH HABITAT** ☒ **NA** (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: MFISH, MHNP, & MFWP.

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** a 0.1 = or ☐ NO

iii. Final Score and Rating: Comments: **14E. FLOOD ATTENUATION** ☐ **NA** (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

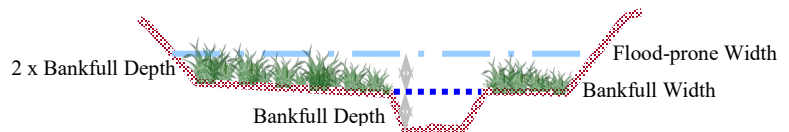
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{6}{2.5} = 2.4$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input checked="" type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	.5M	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☒ NO Comments:

Wetland/Site #(s): AA-7: W-12.13-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input checked="" type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	----	----	----	----	----	----	----	.3L	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	----	----

Comments: Wetlands consist of long linear roadside and irrigation slope features with limited holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	.9H	----	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☒ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input checked="" type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input type="checkbox"/> ≥ 65%	----	----	----
<input checked="" type="checkbox"/> 35-64%	----	.6M	----
<input type="checkbox"/> < 35%	----	----	----

Comments: Wetland species primarily herbaceous with moderate to high stability ratings.

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Cii)		
	<input type="checkbox"/> E/H	<input type="checkbox"/> M	<input checked="" type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	----	L

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

A	<input type="checkbox"/> Vegetated Component >5 acres						<input checked="" type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input checked="" type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S/I	----	----	----	----	----	----	----	----	----	----	.4M	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-7: W-12,13-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☐ YES, add 0.1 to score in ii = ☒ NOiv. **Final Score and Rating:** .4M **Comments:** _____**14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☒ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☐ Shallow water table and the site is saturated to the surface.
☐ Other: _____

ii. Recharge Indicators

- ☐ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other: _____

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input type="checkbox"/> P/P	<input checked="" type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	---	.7M	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: _____**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	.3L	---
<input type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---

Comments: Low to moderate structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ YES, go to ii. ☐ NO, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: _____iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: _____**15. GENERAL SITE NOTES:** _____

Wetland/Site #(s): AA-7: W-12,13-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.00	1.00		
C. General Wildlife Habitat	low 0.20	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	mod 0.50	1.00		
F. Short and Long Term Surface Water Storage	low 0.30	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	NA	NA		
I. Production Export / Food Chain Support	mod 0.40	1.00		
J. Groundwater Discharge / Recharge	mod 0.70	1.00		
K. Uniqueness	low 0.30	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	3.3	9	Total Functional Units	
Percent of Possible Score 37% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
- ☐ Score of 1 functional point for Uniqueness; **or**
- ☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
- ☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
- ☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
- ☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
- ☐ Score of .9 functional point for Uniqueness; **or**
- ☐ Percent of possible score > 65% (round to nearest whole #).

☒ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
- ☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
- ☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.
☐ I ☐ II ☒ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-8
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-14,15,16-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 11 & 12; Township N, Range E, Section
Approximate Stationing or Roadposts: RP 39.65 to RP 40.05

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ **Wetland potentially affected by MDT project**
☐ **Mitigation wetlands; pre-construction**
☐ **Mitigation wetlands; post-construction**
☐ **Other**

8. **Wetland Size (acre):** (visually estimated)
7.70 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 7.70 (measured, e.g. GPS)

10. CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Riverine	Emergent Wetland		Seasonal / Intermittent	20
Slope	Emergent Wetland		Seasonal / Intermittent	40
Riverine	Forested Wetland		Seasonal / Intermittent	2
Depressional	Aquatic Bed		Permanent / Perennial	13
Depressional	Emergent Wetland		Permanent / Perennial	25

Comments: AA consists of emergent wetlands associated with roadside swale, irrigated meadow wetlands, and prairie potholes.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. GENERAL CONDITION OF AA

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	moderate disturbance	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): Conditions in the AA includes disturbance from highway, agricultural, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), hounds tongue (Cynoglossum officinale), and yellow-flag iris (Iris pseudacorus).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes roadside, meadow wetlands associated with irrigation water, and prairie potholes. Surrounding land use includes highway, agriculture, commercial business, and residential dwellings.

13. STRUCTURAL DIVERSITY (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?	Modified Rating
≥3 (or 2 if one is forested) classes	high	NA	NA
2 (or 1 if forested) classes	---	NA	NA
1 class, but not a monoculture	---	←NO YES→	---
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA

Comments: AA dominated by emergent vegetation type with aquatic bed potholes and one small forested wetland.

Wetland/Site #(s): AA-8: W-14,15,16-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☒ D ☐ S Forster's tern, common tern
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	.0L
S2 and S3 Species Functional Point/Rating	.9H	---	---	---	.2L	---	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☐ **Substantial:** Based on any of the following [check].

- ☐ observations of abundant wildlife #s or high species diversity (during any period)
- ☐ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☐ **Minimal:** Based on any of the following [check].

- ☐ few or no wildlife observations during peak use periods
- ☐ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☒ **Moderate:** Based on any of the following [check].

- ☒ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☒ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☒ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input checked="" type="checkbox"/> High								<input type="checkbox"/> Moderate								<input type="checkbox"/> Low			
Class Cover Distribution (all vegetated classes)	<input type="checkbox"/> Even				<input checked="" type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Duration of Surface Water in ≥ 10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (see #12i)	---	---	---	---	H	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input type="checkbox"/> Substantial	---	---	---	---
<input checked="" type="checkbox"/> Moderate	---	.7M	---	---
<input type="checkbox"/> Minimal	---	---	---	---

Comments:

Wetland/Site #(s): AA-8: W-14,15,16-24**14D. GENERAL FISH HABITAT** ☒ **NA** (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☐ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: _____

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = ____ or ☐ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** a 0.1 = ____ or ☐ NO

iii. Final Score and Rating: _____ **Comments:** _____**14E. FLOOD ATTENUATION** ☐ **NA** (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

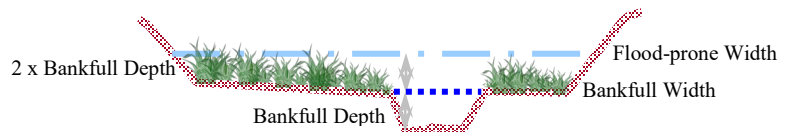
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

$$\frac{8}{3.5} = 2.2$$

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input checked="" type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input checked="" type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	.5M	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☒ NO **Comments:** _____

Wetland/Site #(s): AA-8: W-14,15,16-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input checked="" type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	1H	----	----	----	----	----	----	----	----
Wetlands in AA flood or pond < 5 out of 10 years	----	----	----	----	----	----	----	----	----

Comments: Wetlands consist of depressional features with increased holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input checked="" type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	----	----	----	----	----	----	----	----
AA contains unrestricted outlet	.9H	----	----	----	----	----	----	----

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding.

14H. SEDIMENT / SHORELINE STABILIZATION ☒ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input type="checkbox"/> ≥ 65%	----	----	----
<input type="checkbox"/> 35-64%	----	----	----
<input type="checkbox"/> < 35%	----	----	----

Comments: .

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Diii)	General Wildlife Habitat Rating (14Cii)		
	<input type="checkbox"/> E/H	<input checked="" type="checkbox"/> M	<input type="checkbox"/> L
<input type="checkbox"/> E/H	----	----	----
<input type="checkbox"/> M	----	----	----
<input type="checkbox"/> L	----	----	----
<input checked="" type="checkbox"/> NA	----	M	----

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

A	<input checked="" type="checkbox"/> Vegetated Component >5 acres						<input type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input checked="" type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	.8H	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S/I	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-8: W-14,15,16-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☒ **YES**, add 0.1 to score in ii = 0.80 ☐ **NO**iv. **Final Score and Rating:** .9H **Comments:** _____**14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☒ The AA is a slope wetland.
☒ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☒ Shallow water table and the site is saturated to the surface.
☐ Other: _____

ii. Recharge Indicators

- ☐ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other: _____

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	1H	---	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: _____**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	.3L	---
<input type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---

Comments: Low to moderate structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☒ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☐ **YES**, go to ii. ☐ **NO**, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☐ Consumptive Recreational ☐ Non-consumptive recreational
☐ Other: _____iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	---	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: _____**15. GENERAL SITE NOTES:** _____

Wetland/Site #(s): AA-8: W-14,15,16-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	low 0.20	1.00		
C. General Wildlife Habitat	mod 0.70	1.00		
D. General Fish Habitat	NA	NA		
E. Flood Attenuation	mod 0.50	1.00		
F. Short and Long Term Surface Water Storage	high 1.00	1.00		
G. Sediment / Nutrient / Toxicant Removal	high 0.90	1.00		
H. Sediment / Shoreline Stabilization	NA	NA		
I. Production Export / Food Chain Support	high 0.90	1.00		
J. Groundwater Discharge / Recharge	high 1.00	1.00		
K. Uniqueness	low 0.30	1.00		
L. Recreation / Education Potential (bonus point)	NA			
Total Points	5.5	9	Total Functional Units	
Percent of Possible Score 61% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
☐ Score of 1 functional point for Uniqueness; **or**
☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
☐ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
☐ Score of .9 functional point for Uniqueness; **or**
☐ Percent of possible score > 65% (round to nearest whole #).

☒ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.

☐ I ☐ II ☒ III ☐ IV

MDT MONTANA WETLAND ASSESSMENT FORM (revised March 2008)

1. **Project Name:** US 93 N - Post Creek Hill 2. **MDT Project #:** NH 5-2(159)37 3. **Control #:** AA-9
 3. **Evaluation Date:** 9/23/24 4. **Evaluator(s):** B.Cline 5. **Wetland/Site #(s):** W-17,18,19,20,21-24
 6. **Wetland Location(s):** Township 19 N, Range 20 W, Section 1 & 2; Township N, Range E, Section
Approximate Stationing or Roadposts:

Watershed: 4 - Flathead **County:** Lake

7. **Evaluating Agency:** MDT

Purpose of Evaluation:

- ☒ **Wetland potentially affected by MDT project**
☐ **Mitigation wetlands; pre-construction**
☐ **Mitigation wetlands; post-construction**
☐ **Other**

8. **Wetland Size (acre):** (visually estimated)
5.42 (measured, e.g. GPS)

9. **Assessment Area (AA) Size (acre):** (visually estimated)
 (see manual for determining AA) 5.42 (measured, e.g. GPS)

10. CLASSIFICATION OF WETLAND AND AQUATIC HABITATS IN AA (See manual for definitions.)

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% OF AA
Depressional	Emergent Wetland		Permanent / Perennial	60
Depressional	Aquatic Bed		Permanent / Perennial	15
Depressional	Unconsolidated Bottom		Permanent / Perennial	22
Riverine	Emergent Wetland		Temporary / Ephemeral	3

Comments: AA consists of emergent wetlands associated with prairie pothole features and roadside swales.

11. **ESTIMATED RELATIVE ABUNDANCE** (of similarly classified sites within the same Major Montana Watershed Basin; see manual.)
common

12. GENERAL CONDITION OF AA

i. **Disturbance:** Use matrix below to select the appropriate response; see manual for Montana listed noxious weed and aquatic nuisance vegetation species lists.

Conditions within AA	Predominant Conditions Adjacent to (within 500 feet of) AA		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is ≤15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is ≤15%.	---	---	---
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is ≤30%.	---	moderate disturbance	---
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is >30%.	---	---	---

Comments (types of disturbance, intensity, season, etc.): Conditions in the AA includes disturbance from highway, agricultural, and residential dwellings.

ii. **Prominent noxious, aquatic nuisance, and other exotic vegetation species:** Canada thistle (Cirsium arvense), spotted knapweed (Centaurea maculosa), and yellow-flag iris (Iris pseudacorus).

iii. **Provide brief descriptive summary of AA and surrounding land use/habitat:** AA includes roadside swales and prairie pothole wetlands and meadows. Property on both sides of Hwy 93 is managed as a wildlife refuge. Surrounding land use includes wildlife refuge, highway, and agriculture.

13. STRUCTURAL DIVERSITY (Based on number of "Cowardin" **vegetated** classes present [do not include unvegetated classes]; see #10 above.)

Existing # of "Cowardin" Vegetated Classes in AA	Initial Rating	Is current management preventing (passive) existence of additional vegetated classes?		Modified Rating
≥3 (or 2 if one is forested) classes	high	NA	NA	NA
2 (or 1 if forested) classes	---	NA	NA	NA
1 class, but not a monoculture	---	←NO	YES→	---
1 class, monoculture (1 species comprises ≥90% of total cover)	---	NA	NA	NA

Comments: AA dominated by emergent vegetation type with PAB and PUB potholes.

Wetland/Site #(s): AA-9: W-17,18,19,20,21-24

14A. HABITAT FOR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED PLANTS OR ANIMALS**i. AA is Documented (D) or Suspected (S) to contain:** Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☐ D ☐ S _____
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☒ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
Functional Point/Rating	---	---	---	---	---	---	0L

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14B. HABITAT FOR PLANTS OR ANIMALS RATED S1, S2, OR S3 BY THE MONTANA NATURAL HERITAGE PROGRAM**

Do not include species listed in 14A above.

i. AA is Documented (D) or Suspected (S) to contain: Check box based on definitions in manual.

Primary or critical habitat (**list species**) ☐ D ☐ S _____
 Secondary habitat (**list species**) ☒ D ☐ S Caspian tern
 Incidental habitat (**list species**) ☐ D ☐ S _____
 No usable habitat ☐ S

ii. Rating: Based on the strongest habitat chosen in 14A(i) above, select the corresponding functional point and rating.

Highest Habitat Level	Doc/Primary	Sus/Primary	Doc/Secondary	Sus/Secondary	Doc/Incidental	Sus/Incidental	None
S1 Species Functional Point/Rating	---	---	---	---	---	---	.0L
S2 and S3 Species Functional Point/Rating	---	---	.6M	---	---	---	---

Sources for documented use (e.g. observations, records): MNHP, MFWP, USFWS**14C. GENERAL WILDLIFE HABITAT RATING****i. Evidence of Overall Wildlife Use in the AA:** Check substantial, moderate, or low based on supporting evidence.☒ **Substantial:** Based on any of the following [check].

- ☒ observations of abundant wildlife #s or high species diversity (during any period)
- ☒ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ presence of extremely limiting habitat features not available in the surrounding area
- ☐ interview with local biologist with knowledge of the AA

☐ **Minimal:** Based on any of the following [check].

- ☐ few or no wildlife observations during peak use periods
- ☐ little to no wildlife sign
- ☐ sparse adjacent upland food sources
- ☐ interview with local biologist with knowledge of AA

☐ **Moderate:** Based on any of the following [check].

- ☐ observations of scattered wildlife groups or individuals or relatively few species during peak periods
- ☐ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
- ☐ adequate adjacent upland food sources
- ☐ interview with local biologist with knowledge of the AA

ii. Wildlife Habitat Features: Working from top to bottom, check appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent **vegetated** classes must be within 20% of each other in terms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see manual for further definitions of these terms].

Structural Diversity (see #13)	<input checked="" type="checkbox"/> High								<input type="checkbox"/> Moderate								<input type="checkbox"/> Low			
Class Cover Distribution (all vegetated classes)	<input checked="" type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even				<input type="checkbox"/> Uneven				<input type="checkbox"/> Even			
Duration of Surface Water in ≥ 10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
<input type="checkbox"/> Low Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (see #12i)	H	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<input type="checkbox"/> High Disturbance at AA (see #12i)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

iii. Rating: Use the conclusions from i and ii above and the matrix below to select the functional point and rating.

Evidence of Wildlife Use (i)	Wildlife Habitat Features Rating (ii)			
	<input type="checkbox"/> Exceptional	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Moderate	<input type="checkbox"/> Low
<input checked="" type="checkbox"/> Substantial	---	.9H	---	---
<input type="checkbox"/> Moderate	---	---	---	---
<input type="checkbox"/> Minimal	---	---	---	---

Comments:

Wetland/Site #(s): AA-9: W-17,18,19,20,21-24**14D. GENERAL FISH HABITAT** ☐ NA (proceed to 14E)

If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then check the NA box and proceed to 14E.

Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier].

Type of Fishery: ☐ Cold Water (CW) ☒ Warm Water (WW) Use the CW or WW guidelines in the manual to complete the matrix.

i. Habitat Quality and Known / Suspected Fish Species in AA: Use matrix to select the functional point and rating.

Duration of Surface Water in AA	<input checked="" type="checkbox"/> Permanent / Perennial						<input type="checkbox"/> Seasonal / Intermittent						<input type="checkbox"/> Temporary / Ephemeral					
Aquatic Hiding / Resting / Escape Cover	<input type="checkbox"/> Optimal		<input checked="" type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor		<input type="checkbox"/> Optimal		<input type="checkbox"/> Adequate		<input type="checkbox"/> Poor	
Thermal Cover: optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier II or Native Game fish species	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Tier III or Introduced Game fish	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
FWP Non-Game Tier IV or No fish species	---	---	---	.4M	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sources used for identifying fish spp. potentially found in AA: MFISH, MHNP, & MFWP.

ii. Modified Rating: NOTE: Modified score cannot exceed 1.0 or be less than 0.1.

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity, or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see **Appendix E**) occur in fish habitat? ☐ YES, reduce score in i by 0.1 = or ☒ NO

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area; specify in comments) for native fish or introduced game fish? ☐ YES, add to score in i or **ii** 0.1 = or ☒ NO

iii. Final Score and Rating: .4M Comments: **14E. FLOOD ATTENUATION** ☒ NA (proceed to 14F)

Applies only to wetlands that are subject to flooding via in-channel or overbank flow.

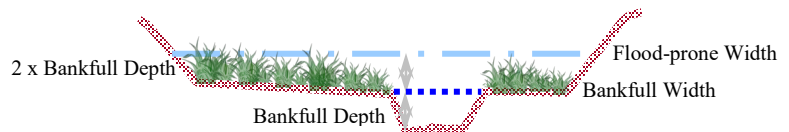
If wetlands in AA are not flooded from in-channel or overbank flow, check the NA box and proceed to 14F.

Entrenchment Ratio (ER) Estimation (see manual for additional guidance). Entrenchment ratio = (flood-prone width) / (bankfull width).

Flood-prone width = estimated horizontal projection of where 2 X maximum bankfull depth elevation intersects the floodplain on each side of the stream.

 / =

flood prone width / bankfull width = entrenchment ratio



Slightly Entrenched ER ≥ 2.2			Moderately Entrenched ER = 1.41 – 2.2		Entrenched ER = 1.0 – 1.4		
C stream type	D stream type	E stream type	B stream type		A stream type	F stream type	G stream type

i. Rating: Working from top to bottom, use the matrix below to select the functional point and rating.

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	<input type="checkbox"/> Slightly Entrenched C, D, E stream types			<input type="checkbox"/> Moderately Entrenched B stream type			<input type="checkbox"/> Entrenched A, F, G stream types		
Percent of Flooded Wetland Classified as Forested and/or Scrub/Shrub	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%	<input type="checkbox"/> 75%	<input type="checkbox"/> 25-75%	<input type="checkbox"/> <25%
AA contains no outlet or restricted outlet	---	---	---	---	---	---	---	---	---
AA contains unrestricted outlet	---	---	---	---	---	---	---	---	---

ii. Are ≥10 acres of wetland in the AA subject to flooding AND are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA? ☐ YES ☐ NO Comments:

Wetland/Site #(s): AA-9: W-17,18,19,20,21-24

14F. SHORT AND LONG TERM SURFACE WATER STORAGE ☐ NA (proceed to 14G)

Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow.
If no wetlands in the AA are subject to flooding or ponding, then check the NA box and proceed to 14G.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see manual for further definitions of these terms].

Estimated Maximum Acre Feet of Water Contained in Wetlands within the AA that are Subject to Periodic Flooding or Ponding	<input checked="" type="checkbox"/> >5 acre feet			<input type="checkbox"/> 1.1 to 5 acre feet			<input type="checkbox"/> ≤1 acre foot		
Duration of Surface Water at Wetlands within the AA	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E	<input type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T/E
Wetlands in AA flood or pond ≥ 5 out of 10 years	1H	---	---	---	---	---	---	---	---
Wetlands in AA flood or pond < 5 out of 10 years	---	---	---	---	---	---	---	---	---

Comments: Wetlands consist of depressional features with large holding capacity.

14G. SEDIMENT / NUTRIENT / TOXICANT / RETENTION AND REMOVAL ☐ NA (proceed to 14H)

Applies to wetland with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input.
If no wetlands in the AA are subject to such input, check the NA box and proceed to 14H.

- i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Sediment, Nutrient, and Toxicant Input Levels within AA	AA receives or surrounding land use has potential to deliver sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody is on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use has potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% Cover of Wetland Vegetation in AA	<input type="checkbox"/> ≥ 70%		<input checked="" type="checkbox"/> < 70%		<input type="checkbox"/> ≥ 70%		<input type="checkbox"/> < 70%	
Evidence of Flooding / Ponding in AA	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
AA contains no or restricted outlet	---	---	.7M	---	---	---	---	---
AA contains unrestricted outlet	---	---	---	---	---	---	---	---

Comments: Vegetation cover in the wetlands greater than 70% and site has evidence of annual flooding. Pothole depressional wetlands with little to no outlets.

14H. SEDIMENT / SHORELINE STABILIZATION☒ NA (proceed to 14I)

Applies only if AA occurs on or within the banks of a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action.
If 14H does not apply, check the NA box and proceed to 14I.

% Cover of Wetland Streambank or Shoreline by Species with Stability Ratings of ≥6 (see Appendix F).	Duration of Surface Water Adjacent to Rooted Vegetation		
	<input type="checkbox"/> Permanent / Perennial	<input type="checkbox"/> Seasonal / Intermittent	<input type="checkbox"/> Temporary / Ephemeral
<input type="checkbox"/> ≥ 65%	---	---	---
<input type="checkbox"/> 35-64%	---	---	---
<input type="checkbox"/> < 35%	---	---	---

Comments: _____

14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT

- i. **Level of Biological Activity:** Synthesis of wildlife and fish habitat rates (select).

General Fish Habitat Rating (14Di)	General Wildlife Habitat Rating (14Ciii)		
	<input checked="" type="checkbox"/> E/H	<input type="checkbox"/> M	<input type="checkbox"/> L
<input type="checkbox"/> E/H	---	---	---
<input checked="" type="checkbox"/> M	H	---	---
<input type="checkbox"/> L	---	---	---
<input type="checkbox"/> NA	---	---	---

- ii. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14Ii); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to the duration of surface water in the AA, where P/P, S/I, and T/E were previously defined, and A = "absent" [see manual for further definitions of these terms].

See manual for further definitions of these terms:																		
A	<input type="checkbox"/> Vegetated Component >5 acres						<input checked="" type="checkbox"/> Vegetated Component 1-5 acres						<input type="checkbox"/> Vegetated Component <1 acre					
B	<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input checked="" type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low		<input type="checkbox"/> High		<input type="checkbox"/> Moderate		<input type="checkbox"/> Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	----	----	----	----	----	----	.9H	----	----	----	----	----	----	----	----	----	----	----
S/I	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
T/E/A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Wetland/Site #(s): AA-9: W-17,18,19,20,21-24**14I. PRODUCTION EXPORT / FOOD CHAIN SUPPORT** (continued)iii. **Modified Rating:** Note: Modified score cannot exceed 1.0 or be less than 0.1.**Vegetated Upland Buffer:** Area with $\geq 30\%$ plant cover, $\leq 15\%$ noxious weed or ANVS cover, AND that is not subjected to periodic mechanical mowing or clearing (unless for weed control).Is there an average ≥ 50 -foot wide vegetated upland buffer around $\geq 75\%$ of the AA's perimeter? ☒ **YES**, add 0.1 to score in ii = 0.90 ☐ **NO**iv. **Final Score and Rating:** 1H **Comments:** _____**14J. GROUNDWATER DISCHARGE / RECHARGE**

Check the appropriate indicators in i and ii below.

i. Discharge Indicators

- ☐ The AA is a slope wetland.
☐ Springs or seeps are known or observed.
☐ Vegetation growing during dormant season/drought.
☐ Wetland occurs at the toe of a natural slope.
☐ Seeps are present at the wetland edge.
☐ AA permanently flooded during drought periods.
☐ Wetland contains an outlet, but no inlet.
☒ Shallow water table and the site is saturated to the surface.
☐ Other: _____

ii. Recharge Indicators

- ☐ Permeable substrate present without underlying impeding layer.
☐ Wetland contains inlet but no outlet.
☐ Stream is a known 'losing' stream. Discharge volume decreases.
☐ Other: _____

iii. **Rating:** Use the information from i and ii above and the table below to select the functional point and rating.

Criteria	Duration of Saturation at AA Wetlands <i>FROM GROUNDWATER DISCHARGE</i> or <i>WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM</i>			
	<input checked="" type="checkbox"/> P/P	<input type="checkbox"/> S/I	<input type="checkbox"/> T	<input type="checkbox"/> None
<input checked="" type="checkbox"/> Groundwater Discharge or Recharge	1H	---	---	---
<input type="checkbox"/> Insufficient Data/Information	---			

Comments: _____**14K. UNIQUENESS**i. **Rating:** Working from top to bottom, use the matrix below to select the functional point and rating.

Replacement Potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland OR plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types AND structural diversity (#13) is high OR contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types OR associations AND structural diversity (#13) is low-moderate		
Estimated Relative Abundance (#11)	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input type="checkbox"/> Common	<input type="checkbox"/> Abundant	<input type="checkbox"/> Rare	<input checked="" type="checkbox"/> Common	<input type="checkbox"/> Abundant
<input type="checkbox"/> Low Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---
<input checked="" type="checkbox"/> Moderate Disturbance at AA (#12i)	---	---	---	---	---	---	---	.3L	---
<input type="checkbox"/> High Disturbance at AA (#12i)	---	---	---	---	---	---	---	---	---

Comments: Low to moderate structural diversity.**14L. RECREATION / EDUCATION POTENTIAL**☐ NA (proceed to Overall Summary and Rating page)

Affords 'bonus' points if AA provides a recreational or educational opportunity.

i. **Is the AA a known or potential recreational or educational site?** ☒ **YES**, go to ii. ☐ **NO**, check the NA box.ii. **Check categories that apply to the AA:** ☐ Educational/Scientific Study ☒ Consumptive Recreational ☒ Non-consumptive recreational
☐ Other: _____iii. **Rating:** Use the matrix below to select the functional point and rating.

Known or Potential Recreational or Educational Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	.2H	---
Private ownership with general public access (no permission required)	---	---
Private or public ownership without general public access, or requiring permission for public access	---	---

Comments: _____**15. GENERAL SITE NOTES:** _____

Wetland/Site #(s): AA-9: W-17,18,19,20,21-24

Function & Value Variables	Rating – Actual Functional Points	Possible Functional Points	Functional Units: Actual Points x Estimated AA Acreage	Indicate the Four Most Prominent Functions with an Asterisk
A. Listed / Proposed T&E Species Habitat	low 0.00	1.00		
B. MT Natural Heritage Program Species Habitat	mod 0.60	1.00		
C. General Wildlife Habitat	high 0.90	1.00		
D. General Fish Habitat	mod 0.40	1.00		
E. Flood Attenuation	NA	NA		
F. Short and Long Term Surface Water Storage	high 1.00	1.00		
G. Sediment / Nutrient / Toxicant Removal	mod 0.70	1.00		
H. Sediment / Shoreline Stabilization	NA	NA		
I. Production Export / Food Chain Support	high 1.00	1.00		
J. Groundwater Discharge / Recharge	high 1.00	1.00		
K. Uniqueness	low 0.30	1.00		
L. Recreation / Education Potential (bonus point)	high 0.20			
Total Points	6.1	9	Total Functional Units	
Percent of Possible Score 68% (round to nearest whole number)				

Category I Wetland: (must satisfy **one** of the following criteria; otherwise go to Category II)

- ☐ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
☐ Score of 1 functional point for Uniqueness; **or**
☐ Score of 1 functional point for Flood Attenuation **and** answer to Question 14E.ii is "yes"; **or**
☐ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied **and** meets any **one** of the following criteria; otherwise go to Category IV)

- ☐ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
☒ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
☐ Score of .9 or 1 functional point for General Fish Habitat; **or**
☐ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
☐ Score of .9 functional point for Uniqueness; **or**
☒ Percent of possible score > 65% (round to nearest whole #).

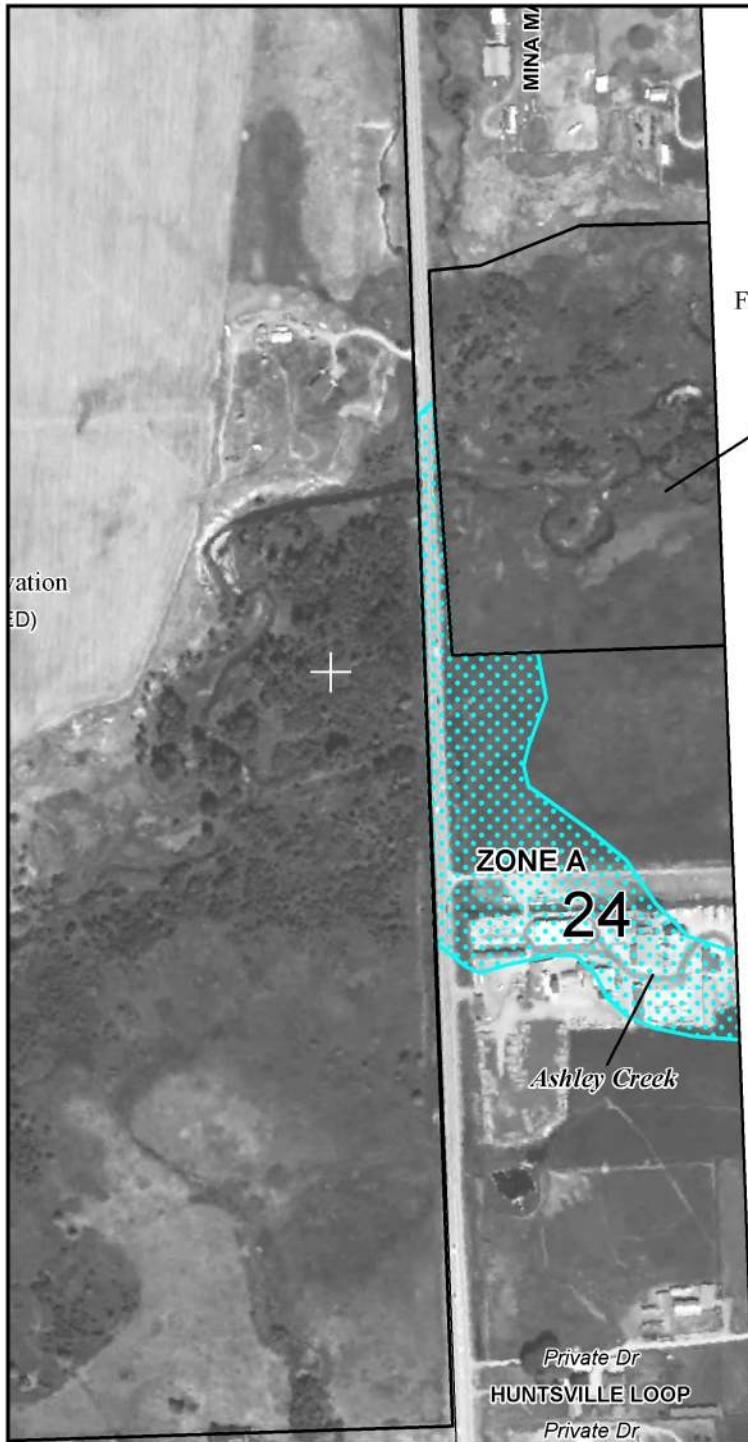
☐ **Category III Wetland:** (Criteria for Categories I, II, or IV not satisfied)**Category IV Wetland:** (Criteria for Categories I or II are not satisfied and all of the following criteria are met; if not go to Category III)

- ☐ "Low" rating for Uniqueness; **and**
☐ Vegetated wetland component < 1 acre (do not include upland vegetated buffer); **and**
☐ Percent of possible score < 35% (round to nearest whole #).

OVERALL ANALYSIS AREA (AA) RATING: Check the appropriate category based on the criteria outlined above.

☐ I ☒ II ☐ III ☐ IV

ATTACHMENT 3 – FEMA FIRM Panel



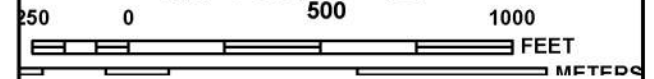
Flathead Indian Reservation
(AREA NOT INCLUDED)

JOINS PANEL 1000

359000 M



MAP SCALE 1" = 500'



NFP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0988C

FIRM

**FLOOD INSURANCE RATE MAP
LAKE COUNTY,
MONTANA
AND INCORPORATED AREAS**

PANEL 988 OF 1275

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LAKE COUNTY	300155	0988	C

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER
30047C0988C**

**MAP REVISED
FEBRUARY 6, 2013**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

ATTACHMENT 4 – THPO Correspondence



April 26, 2016

Kim Swaney
CSKT Preservation Department
PO Box 278
Pablo, MT 59855

Subject: NH 5-2(159)37
US 93 N – Post Creek Hill
UPN 8008

Dear Kim:

The MDT has programmed a project to reconstruct 3.3 miles of US 93 from Reference Post 37.0 (just south of the intersection of Dublin Gulch and Big Horn roads) to Reference Post 40.3. A cultural resource survey was conducted for the project area (it updated the original 1992 survey) in 2015. Two historic properties were determined eligible for the National Register of Historic Places: the Post F Canal of the Flathead Irrigation Project (SKP-LA-0418) and the Weber Residence (SKP-LA-0230/24LA0156). The report was submitted to your office on November 19, 2015.

Preliminary plans for the proposed US 93 N – Post Creek Hill project have been completed and copies of the plans at the two historic properties are attached. The highway centerline would be shifted to the west at the Post F Canal. The alignment of the canal would be tweaked somewhat to accommodate a new culvert under US 93. Other than the culvert, there would be no other rechanneling or alignment shifts on the canal. It would continue to function in its historic capacity and there would be no reduction of the flow of water or any impacts to irrigation-related structures. Based on that, we have determined that the proposed project would have **No Effect** to the Post F Canal of the Flathead Irrigation Project.

The Weber Residence is located in the southeast quadrant at the intersection of US 93 and Post Creek Road. The centerline would be shifted about 25' to the west of the existing centerline and away from the historic property. A bicycle/pedestrian path would be built close to the former alignment of the highway. The residence, moreover is separated from the highway by a slough. The preliminary plans indicate that there would be no encroachment on the historic property and the existing buildings would remain in their existing locations and the setting of the property would be mostly perpetuated (it appears that the wall of vegetation between the site and the highway would be undisturbed). Because of that we have determined the project would have **No Effect** on the Weber Residence.

NH 5-2(159)37
US 93 N – Post Creek Hill
Page 2

If you have any questions, please contact me at (406) 444-6258 or by e-mail at jaxline@mt.gov.

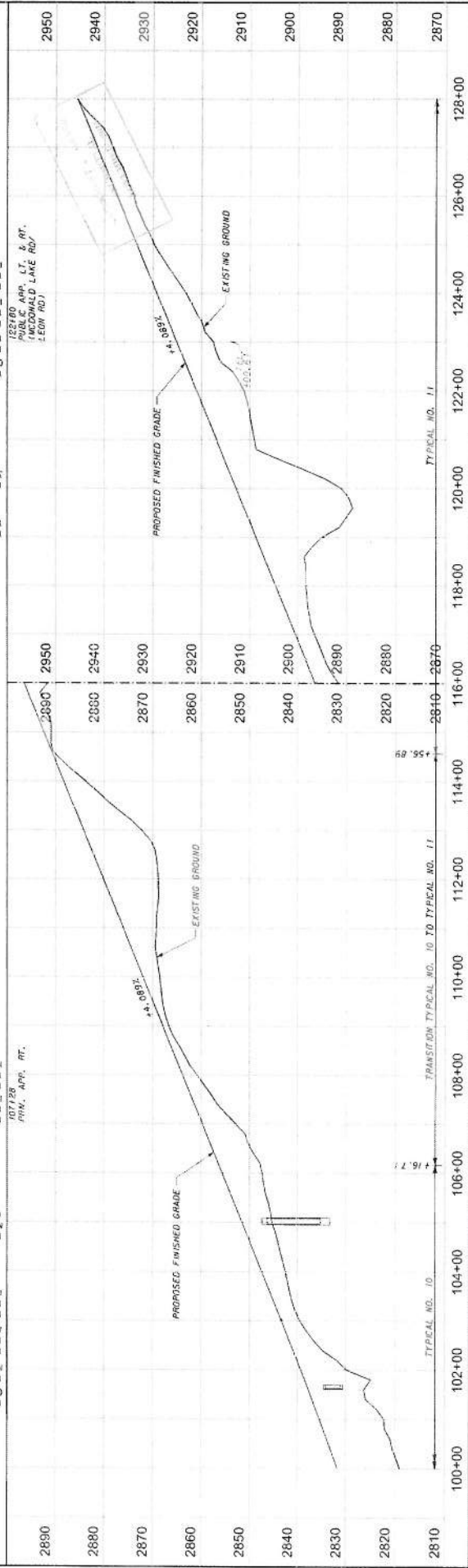
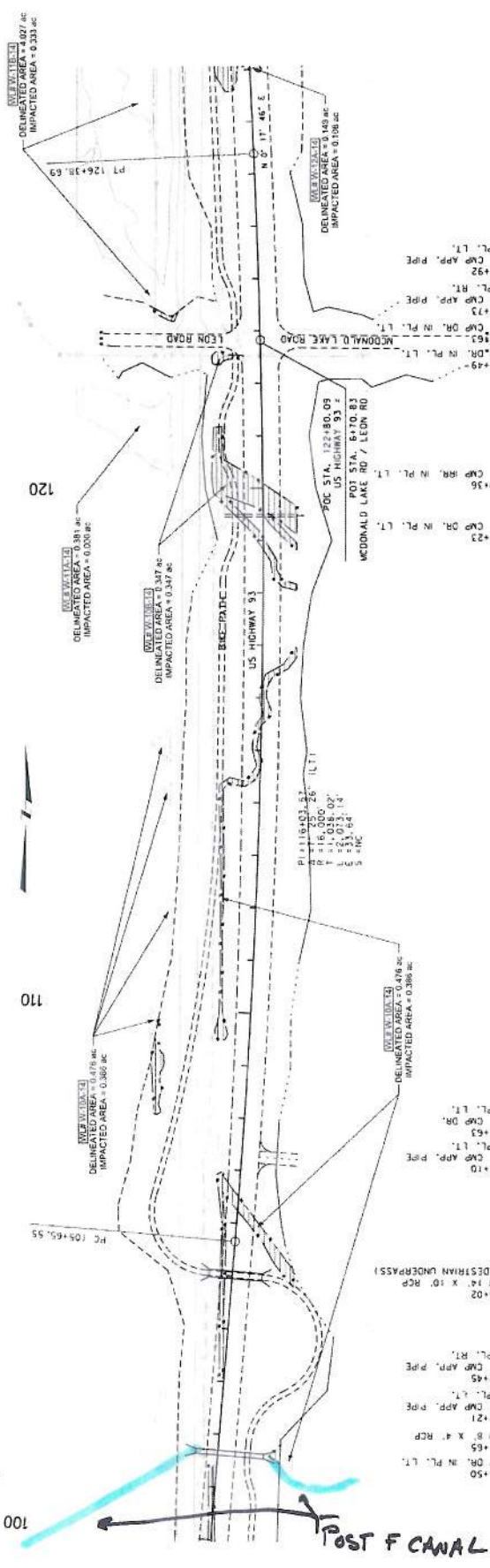


Jon Axline, Historian
Environmental Services

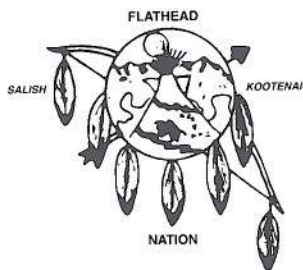
Attachments

Copy: Ed Toavs, P.E., Missoula District Administrator
Ryan Dahlke, P.E., Consultant Design
Bill Semmens, Resources Section Supervisor

UTILITY CROSSINGS
122+51.96 ON POWER X-ING CLEAR UNKNOWN
123+00.61 LG TEL. X-ING DEPTH UNKNOWN



1	MDTA	SOUTH ALEX. DEPARTMENT OF TRANSPORTATION	CALCULATED BY: [blank]	CHECKED BY: [blank]	DATE: [blank]	ROAD PLANS	LAKE COUNTY	PRELIMINARY ACR	US 93 N - POST CREEK HILL UPN 8008000 CSF - 0.99978538	NH 5-216037 SHEET 33
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A Confederation of the Salish,
Pend d' Oreille
and Kootenai Tribes

THE CONFEDERATED SALISH AND KOOTENAI TRIBES
OF THE FLATHEAD NATION

P.O. BOX 278
Pablo, Montana 59855
(406) 275-2700
FAX (406) 275-2806
www.cskt.org



A People of Vision

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TRIBAL COUNCIL MEMBERS:
Vernon S. Finley - Chairman
Len Twoteeth - Vice Chair
Troy Felsman - Secretary
Anita Matt - Treasurer
Ronald Trahan
Shelly R. Fyant
Leonard W. Gray
Carole Lankford
Dennis Clairmont
Patty Stevens

May 2, 2016

Jon Axline
Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, MT 59620-1001

Subject: NH5-2(159) 37
Us 93 n – Post Creek Hill
UPN 8008

Dear Jon

I have read the project plans and can see that there will be no effect to the Post F Canal of the Flathead Irrigation so I concur that there will be No Effect as the project progresses. I have also read the project plans for the Weber Residence, and I concur that there will be No Effects to the Weber Residence.

If I could be of further assistance please don't hesitate to call me at (406)675-2700 x 1082.

Sincerely,

Clarinda Burke
Acting THPO

Breanne Cline

From: Breanne Cline
Sent: Tuesday, May 20, 2025 8:03 AM
To: Breanne Cline
Subject: RE: CSKT Cultural Agreement, Post Creek Hill

From: Madeline Caye <madeline.caye@cskt.org>
Sent: Monday, May 19, 2025 5:06 PM
To: Evilsizer, Laura <levilsizer@mt.gov>
Cc: Kevin Askan <kevin.askan@cskt.org>
Subject: [EXTERNAL] MDOT- Post Creek Hill

Hello Laura,

It was good to talk with you on the phone today. You had asked about the Post Creek Hill Project along Hwy 93. Since there has already been an extensive amount of work done on this project from our office, and it has already been determined this project will have no effect on cultural resources. I have no concerns with the structures that may be 50 years old. I am in concurrence with the project moving forward. However, our office would like to be contacted by the construction company to coordinate if and when monitors are needed.

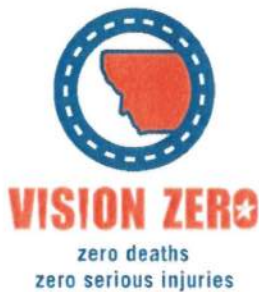
Thank you,

Madeline Caye

Acting THPO
CSKT Preservation
(406) 675-2700 ext. 1215
(406) 214-4787 ©
madeline.caye@cskt.org

ATTACHMENT 5 – Section 4(f) De Minimis Letters

- a) CSKT Signed Letter
- b) FWP Signed Letter



Montana Department of Transportation

2701 Prospect
PO Box 201001
Helena MT 59602-1001

Steve Bullock, Governor
Michael T. Tooley, Director

March 15, 2019

CSKT Tribal Council
Attn: Ronald Trahan, Chairman
P.O. Box 278
Pablo, MT 59855

Subject: US 93 N Post Creek Hill and Ninepipe Section
Section 4(f) *De minimis* Determination
Project Number: NH 5-2(159)37
Control Number: 8008000

Dear Chairman Trahan and Council Members:

This letter is intended as a follow up to ongoing discussions that have occurred between representatives of the Confederated Salish & Kootenai Tribes (CSKT), the Montana Department of Transportation (MDT), MDT's consultant, and the Federal Highway Administration (FHWA). MDT has been in periodic communication with the CSKT since our first meeting on this topic on March 29, 2017. Most recently we had a conference call discussing CSKT's owned and managed property on September 17, 2018, which clarified and confirmed CSKT's role as the "official with jurisdiction" of the Ninepipe Reservoir parcels being evaluated as part of the Section 4(f) process.

As you are aware, MDT is proposing to reconstruct US Highway 93 from reference post (RP) 36.8, just south of Redhorn Road, to RP 40.4, which is approximately 2000 feet north of Gunlock Road as part of the Post Creek Hill project (Control Number 8008000). Please refer to the attached Figure 1 for the Post Creek Hill project design limits.

The portion of US 93 from the northern end of the Post Creek Hill project to Brooke Lane (RP 44.5) that has not been reconstructed is referred to as the Ninepipe Section. This segment of US 93 is currently in the environmental analysis and planning stage and therefore is also being included with this Section 4(f) analysis.

Section 4(f) of USDOT Act of 1966

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits USDOT agencies (including FHWA) from using land from publicly owned parks, recreation areas, and wildlife and water fowl refuges, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. In 2005 existing Section 4(f) legislation was amended to simplify the Section 4(f) process and approval for projects that have *de minimis* impacts on lands subject to protection under Section 4(f). A *de minimis* determination may be made by FHWA when all three of the following criteria are satisfied:

- 1) The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into

March 15, 2019

CSKT Tribal Council
Attn: Ronald Trahan, Chairman
Page 2 of 4

the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);

- 2) The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource; and
- 3) The official(s) with jurisdiction over the property, after being informed of the public comments and MDT's/FHWA's intent to make the *de minimis* impact finding, concur in writing that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

In this case, team members from CSKT, MDT, and FHWA have had many discussions regarding the potential impacts to CSKT lands that are also Section 4(f) lands. Based on those discussions, we have preliminarily concluded that the potential impacts are *de minimis* in nature. With this letter, we are seeking written concurrence from the CSKT, as the officials with jurisdiction over the properties in question. The potential impacts are described below.

4(f) Permanent Impacts/Occupancy – CSKT Tribal Lands

Based on current project design it is anticipated that Right of Way (ROW) acquisition will be necessary on specific CSKT owned properties that are protected under Section 4(f). These properties are Kerr Mitigation lands and the Ninepipe Reservoir National Wildlife Refuge (NWR). Enclosed are two exhibits that illustrate the proposed permanent grading impacts and associated ROW acquisition that would result from the proposed project. Specific impacts are located on Kerr Mitigation lands (parcels 123, 127) and NWR lands (parcels 201 and 202). For your reference, 100 series parcels are adjacent to the Post Creek Hill project and 200 series parcels are located adjacent to the Ninepipe Section planning area. Exhibits 1a through 1d show the areas of grading impact associated with road improvements, the bicycle/pedestrian path, and the Post Creek bridge/wildlife undercrossing on the Kerr Mitigation Lower Post Creek Management Units PSC2 and PSC2F and NWR lands. Exhibits 2a through 2d show the anticipated ROW acquisition from these parcels. A summary of impacts to these lands are:

- Acquisition of approximately 1.17 acres of Kerr Mitigation Land on parcels 123 and 127, and
- 0.75 acres of NWR land on parcels 201 and 202 for a total ROW acquisition of 1.92 acres for new highway*.

Refer to Table 1 for a summary of these impacts by parcel.

These permanent impacts are considered minor and do not appear to materially affect the use and function of the CSKT Tribal Mitigation and Ninepipe Reservoir NWR Lands. ROW would be acquired at fair market value by MDT in order to complete this project. Other actions such as new fencing, revegetation, grading, and wetland fill within the acquired ROW would be mitigated

* Completion of the FHWA 4(f) process does not automatically obligate the property for ROW acquisition or constitute any specific ROW agreement. ROW acquisition will be formalized and completed after final design is complete and actual impacts and ROW requirements are determined. Actual ROW acquisition may be equal to or lower than this value.

March 15, 2019

CSKT Tribal Council
Attn: Ronald Trahan, Chairman
Page 3 of 4

in consultation with the CSKT by restoring vegetation, employing weed control methods, and replacing fencing as part of this project.

4(f) Temporary Occupancy – CSKT Tribal Lands

In addition to the above described permanent impacts, the following temporary impacts are also anticipated. Section 23 CFR 774.13(d) provides guidance on the conditions under which “temporary occupancies of land...are so minimal as to not constitute a “use” within the meaning of Section 4(f).” Those conditions are as follows:

- (1) Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
- (2) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
- (3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- (4) The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
- (5) There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

Temporary construction easements are anticipated for a detour bridge over Post Creek and equipment access during construction totaling approximately 1.79 acres on Parcel 127. There may also be minor temporary occupancies associated with placement or adjustment of approaches and culverts. As construction plans and negotiations with property owners are finalized, additional Section 4(f) properties may be similarly temporarily impacted.

In this case, team members from CSKT, MDT, and FHWA have had many discussions regarding the potential temporary impacts to CSKT lands that are also Section 4(f) lands. Based on those discussions, we have preliminarily concluded that the potential temporary impacts meet criteria 1 through 4 above and therefore would not constitute a “use” under Section 4(f). With this letter, we are seeking written concurrence from the CSKT, as the officials with jurisdiction over the properties in question. CSKT signature will satisfy condition 5 above.

Determination of a De Minimis Impact to a Section 4(f) Property

Public notice was given via ads in Ronan Valley Journal on January 16, 2019 and Char-koosta on January 17, 2019. Additionally, the public notice news release was issued on January 9 and 22, 2019. The public notice comment period was open from January 9, 2019, through February 20, 2019. Eleven comments were received from the public during this period. Seven of these letters were related to traffic and safety concerns associated with the Post Creek Hill Project, one letter concerned ownership of the NWR lands, one commenter wanted to know the total amount of ROW being acquired and project limits, one letter was from an adjacent business owner requesting information on the design and highway access planning, and one letter contained a list of three questions and one offer for sale of land but no specific comments. With the exception of the comment regarding ownership of the NWR lands, none of the written public

March 15, 2019

CSKT Tribal Council
Attn: Ronald Trahan, Chairman
Page 4 of 4

comment received contained comments or statements relevant to the Section 4(f) process and therefore do not provide any substantive new information that would alter MDT's evaluation of the impacts to these Section 4(f) parcels. These letters and emails are available to the CSKT upon request.

Request for Concurrence

We are respectfully requesting your concurrence that the proposed use of Section 4(f) resources will not adversely affect the viability of the CSKT Tribal Mitigation and Ninepipe Reservoir NWR Lands and your agreement with the proposed *de minimis* determination.

We would appreciate your prompt response since CSKT's concurrence is needed before we can complete the Final Section 4(f) Evaluation and the environmental document for this project. If you need additional information concerning the proposed project in the meantime, please contact me at 523-5842. Thank you for your continued cooperation and assistance.

Susan Kilcrease


Missoula District Project Development Engineer
MDT Environmental Services Bureau

Date: March 15, 2019

Concur:  for:
Ronald Trahan, Chairman, CSKT Tribal Council

Date: 3-21-19

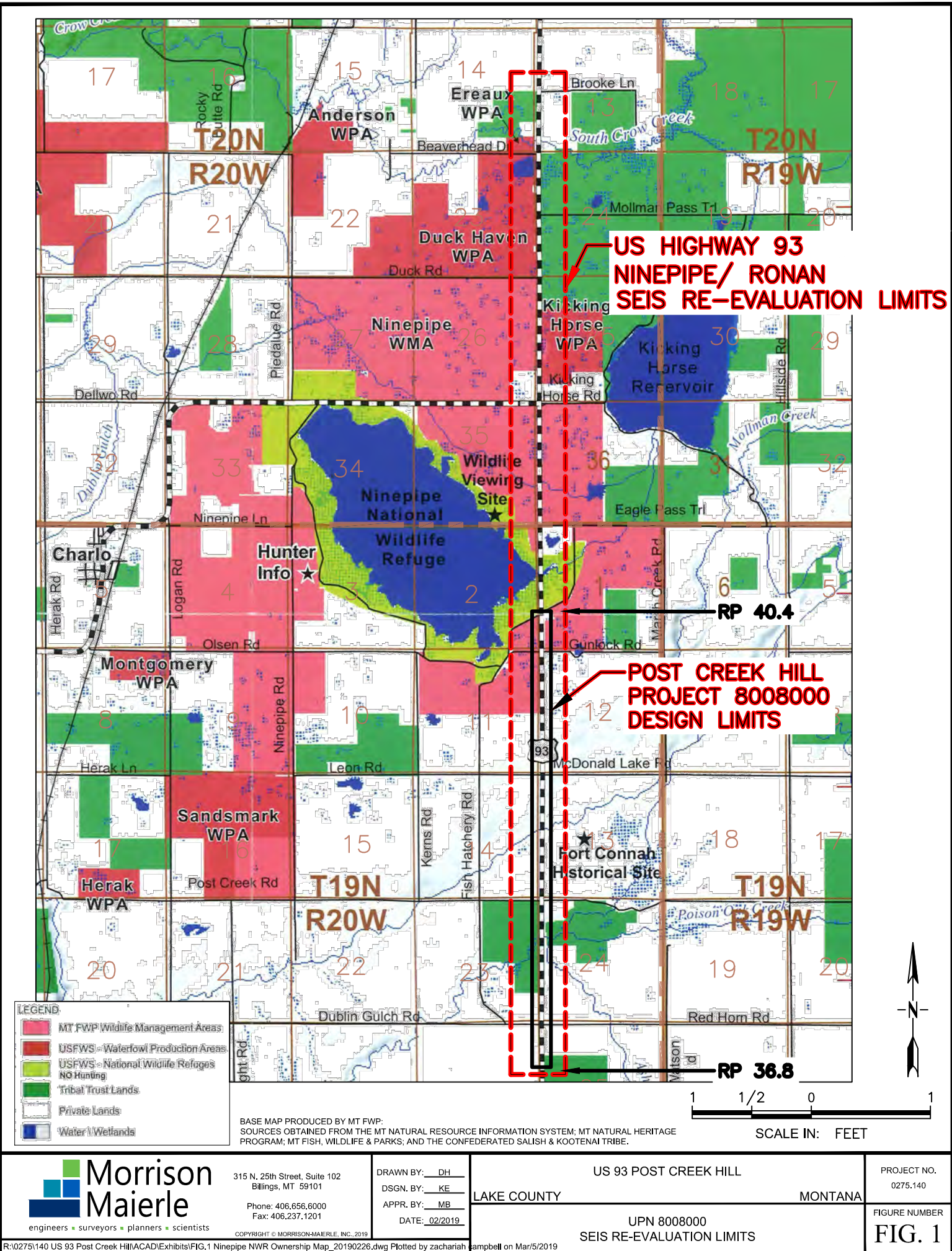
Heidy Bruner, P.E.


FHWA Environmental Engineer and Tribal Liaison

Date: 3/26/19

Enclosures: Figure 1. FSEIS Re-evaluation Limits
Exhibits 1a through 1d. Grading Impacts to CSKT Parcels
Exhibits 2a through 2d. ROW Impacts to CSKT Parcels
Table 1. Post Creek Hill and Ninepipe Section 4(f) Summary of Impacts

copies: Miki Lloyd, P.E. MDT, Consultant Design Bureau Project Manager (w/encl.)
Susan Kilcrease, Missoula District Project Development Engineer (w/encl.)
Mark Brooke, P.E., Morrison-Maierle, Consulting Environmental Engineer (w/encl.)



Parcel 123



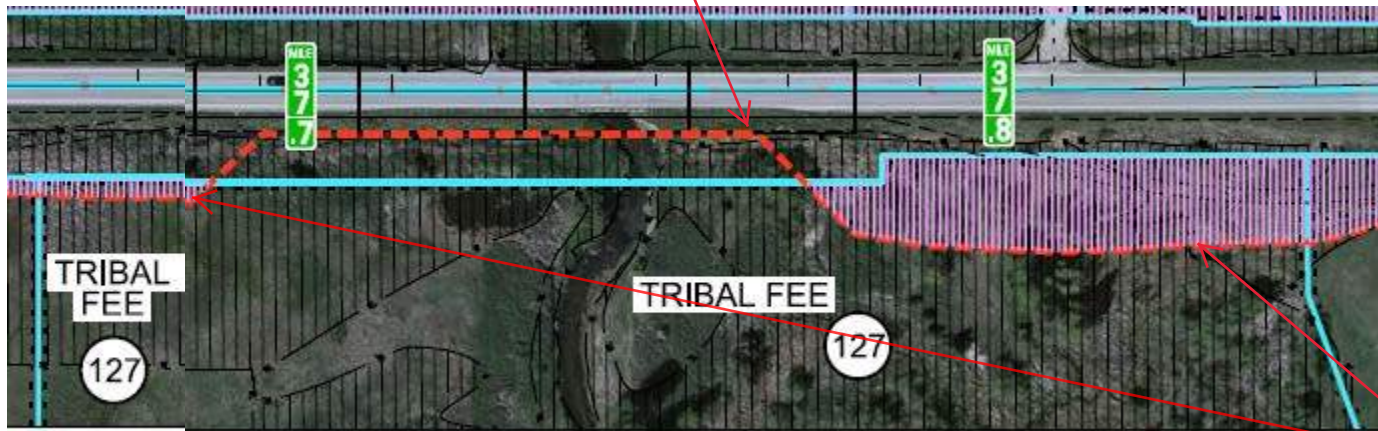
Exhibit 1a. Grading Impacts

Kerr Mitigation Lower Post Creek Management Unit PSC2

Section 23, Township 19 N, Range 20 W

Parcel 127

dashed red line is the additional grading limits resulting from 10' bicycle/pedestrian path



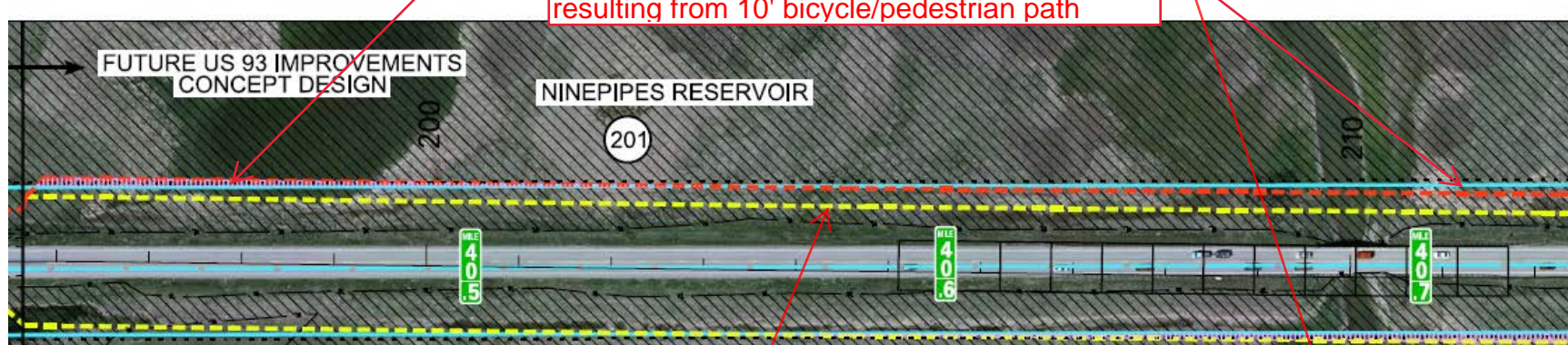
Grading impact on parcel 127

Exhibit 1b. Grading Impacts Kerr Mitigation Lower Post Creek Management Unit PSC2F Section 24, Township 19 N, Range 20 W

Parcel 201

Minor grading
impact on parcel
201

dashed red line is the additional grading limits
resulting from 10' bicycle/pedestrian path



dashed yellow line
is the grading limits
for roadway only



Exhibit 1c. Grading Impacts Ninepipe Reservoir Section 2, Township 19 N, Range 20 W

Parcel 202

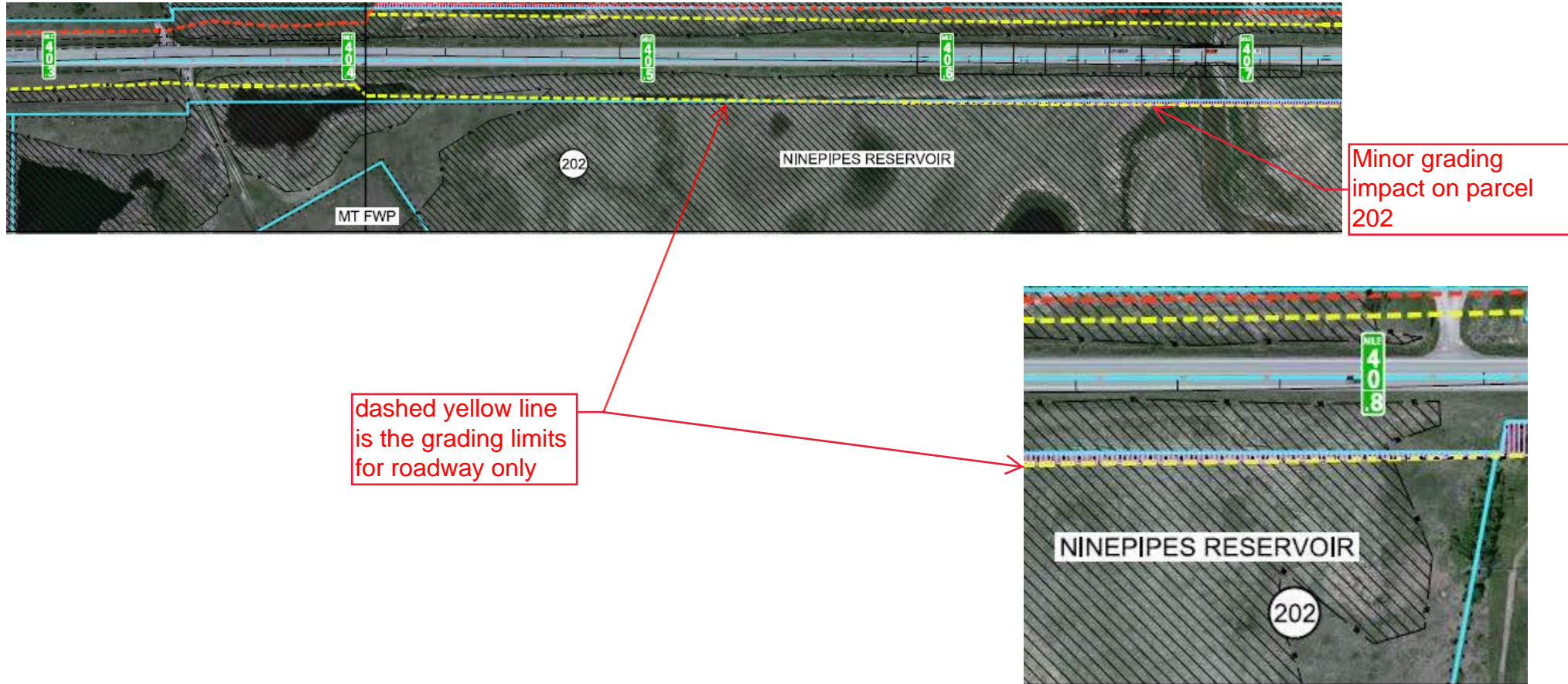


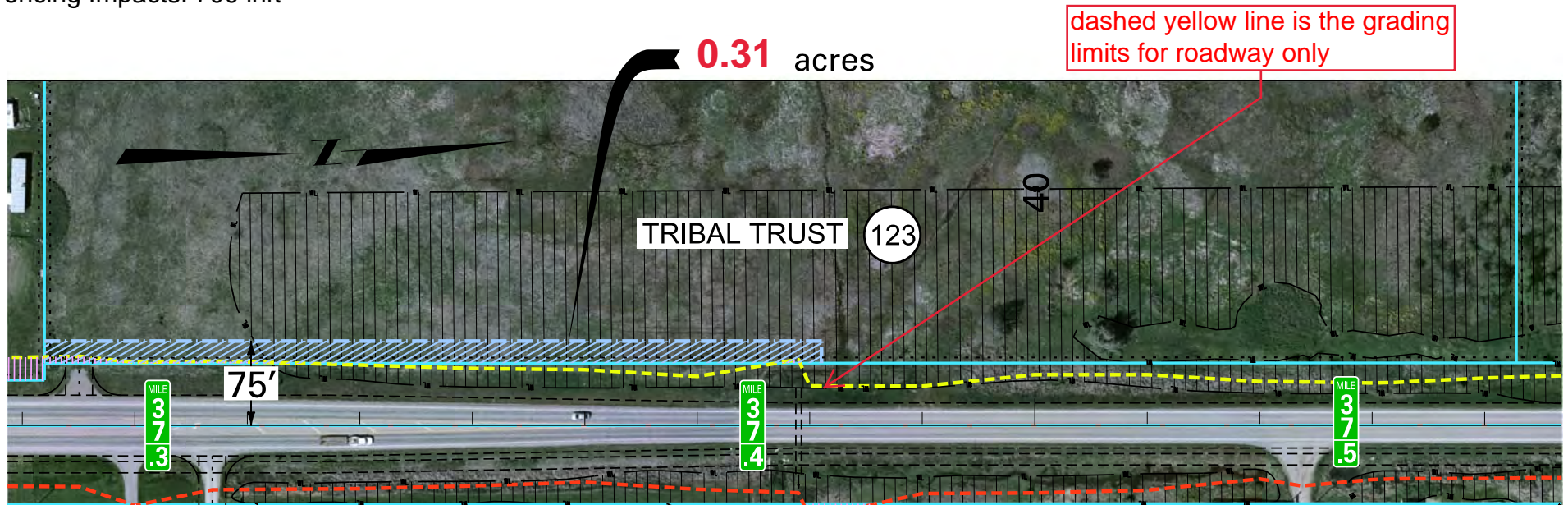
Exhibit 1d. Grading Impacts Ninepipe Reservoir Section 1, Township 19 N, Range 20 W

CSKT

Parcel 123

Wetland Impacts: 0.001 ac

Fencing Impacts: 700 Inft



 PROPOSED ROW

Exhibit 2a. ROW Impacts
Kerr Mitigation Lower Post Creek Management Unit PSC2
Section 23, Township 19 N, Range 20 W

CSKT

Parcel 127

Wetland Impacts: 0.588 ac (perm.) 1.300 ac (temp.)

Fencing Impacts: 0 Inft

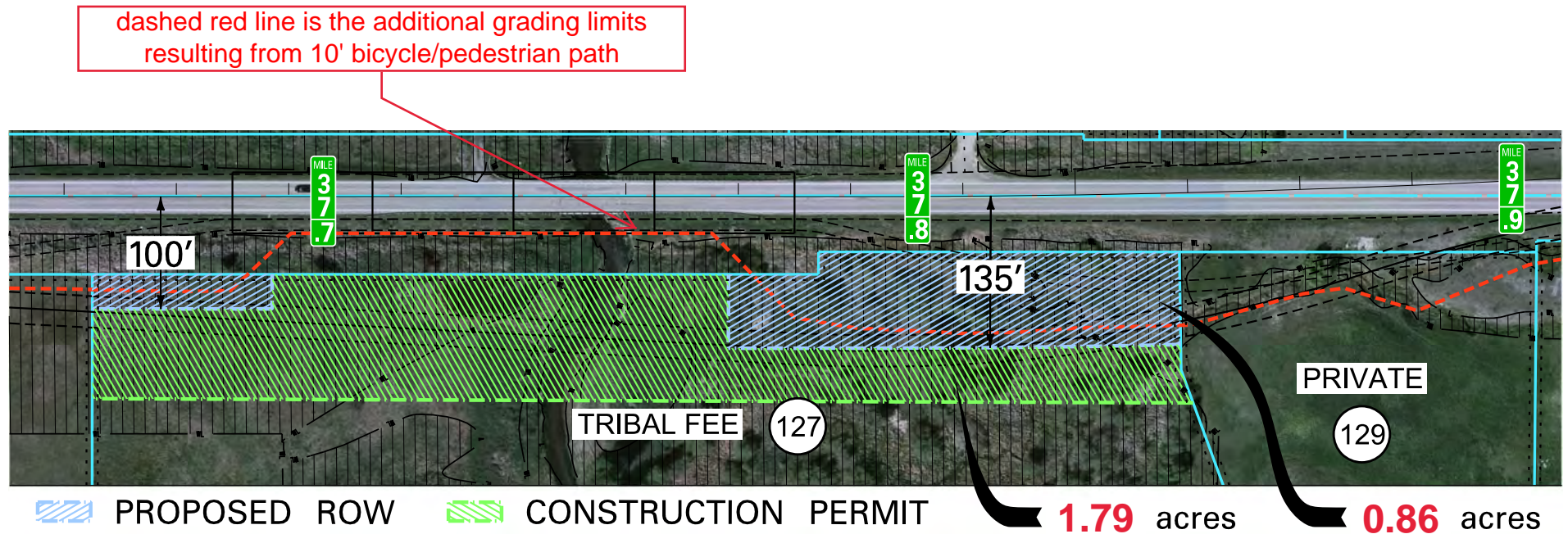


Exhibit 2b. ROW Impacts

Kerr Mitigation Lower Post Creek Management Unit PSC2F
Section 24, Township 19 N, Range 20 W

CSKT

Parcel 201

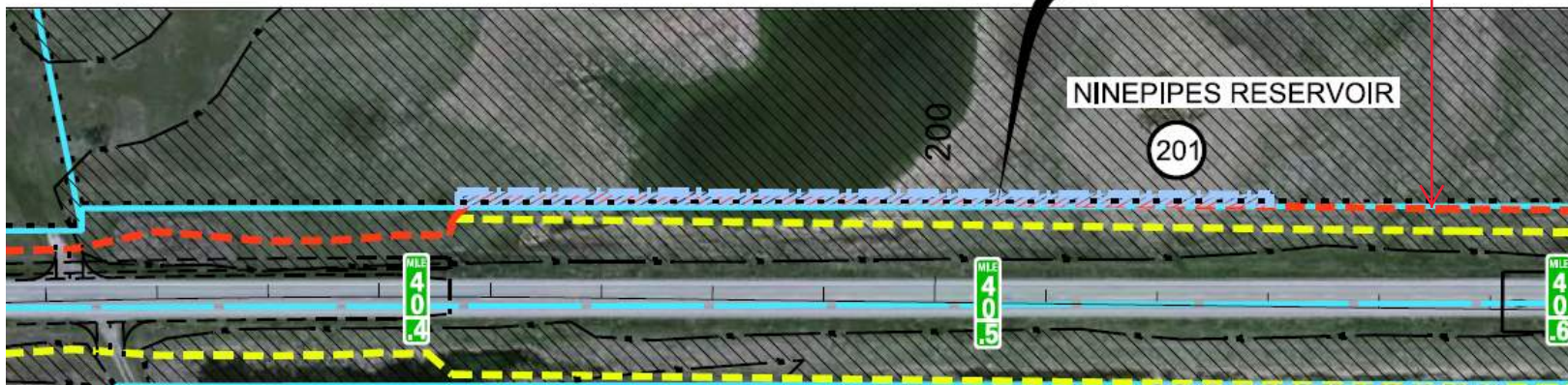
Wetland Impacts: 0.083 ac*

Fencing Impacts: 730 Inft*

**Final design will avoid or minimize impacts*

dashed red line is the additional
grading limits resulting from 10'
bicycle/pedestrian path

0.22 acres



PROPOSED ROW

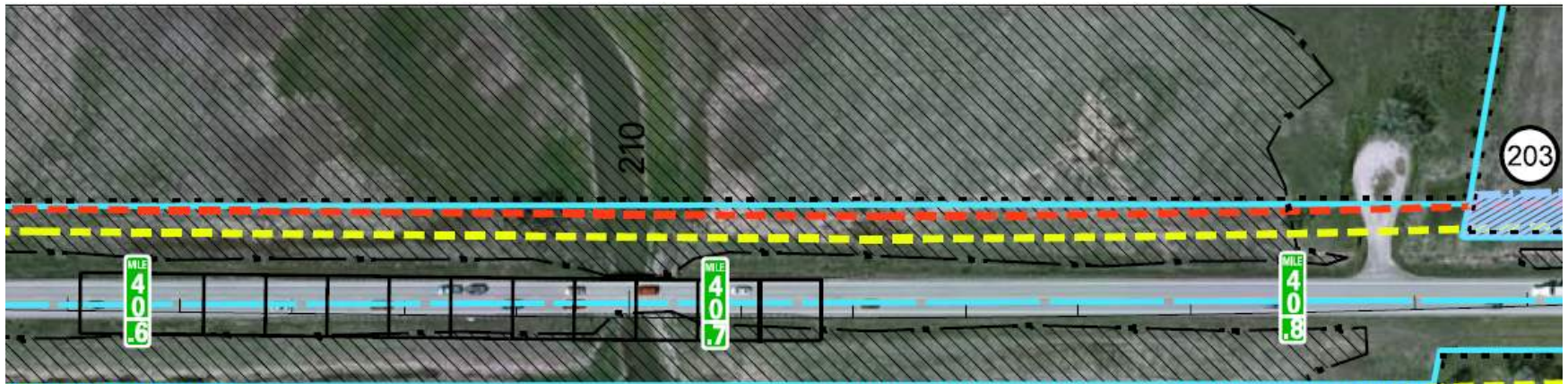


Exhibit 2c. ROW Impacts Ninepipe Reservoir Section 2, Township 19 N, Range 20 W

CSKT

Parcel 202

Wetland Impacts: 0.087 ac*

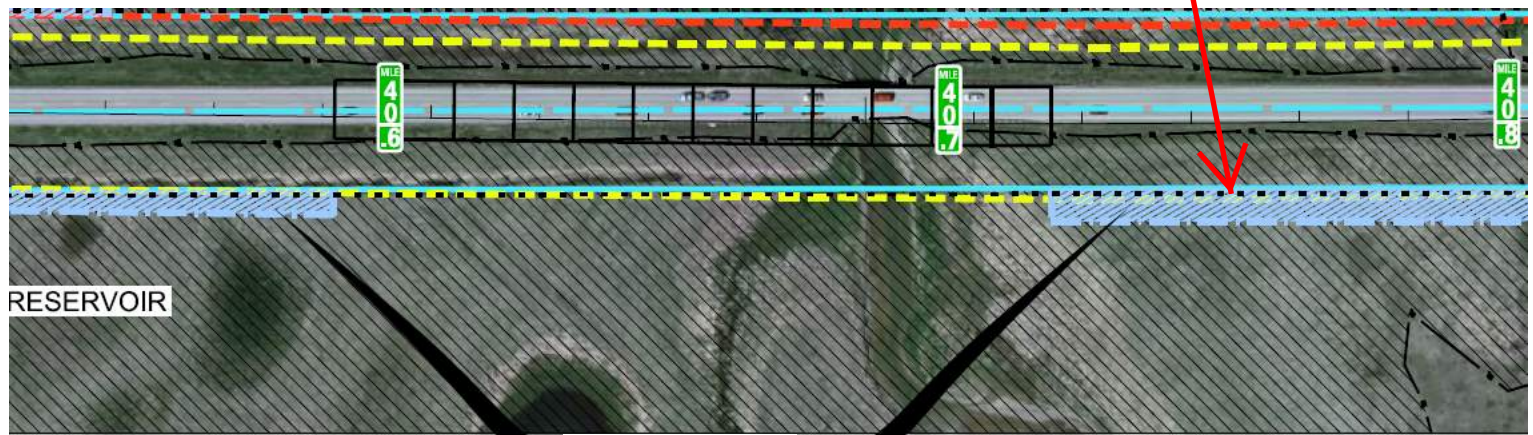
Fencing Impacts: 850 Inft*

**Final design will avoid or minimize impacts*

dashed yellow line is the
grading limits for roadway only



PROPOSED ROW



0.53 acres
(total for
parcel)

Exhibit 2d. ROW Impacts Ninepipe Reservoir Section 1, Township 19 N, Range 20 W

CSKT

Parcel 202

Wetland Impacts: 0.087 ac*

Fencing Impacts: 850 lnft*

**Final design will avoid or minimize impacts*

PROPOSED ROW

0.53 acres (total
for parcel)

dashed yellow line is the
grading limits for roadway only



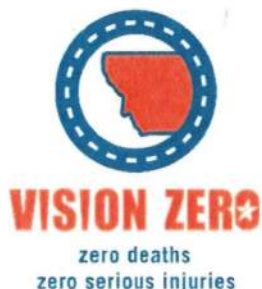
**Exhibit 2d (continued). ROW Impacts
Ninepipe Reservoir
Section 1, Township 19 N, Range 20 W**

Table 1. Post Creek Hill and Ninepipe Section 4(f) Summary of Impacts

3/14/2019

Parcel	Name of Owner	Type of Property	Type of Transportation Use	Total Area (Acres)	Grading Impact Area (Acres)	Proposed ROW (Acres)	Construction Easement Area (Acres)	Geocode	Temporary Occupancy ¹	Wetland Impacts (Acres)	Fence (Feet)
123	USA in Trust (CSKT)	PSC2	Cross Drain	40.00	0.01	0.31		15-2868-23-1-02-01-0000	Approach	0.001	700
127	USA in Trust CSKT	PSC2F	Bike/Ped Path and Bridge Fill	35.58	0.57	0.86	1.79	15-2868-24-2-01-05-0000	Bridge Detour	0.588 (perm.), 1.30 (temp.)	
201	Ninepipe Reservoir (CSKT TR 6023)	Ninepipe NWR	Bike/Ped Path	153.00	0.08	0.22		15-2868-02-1-01-03-0000	Approach	0.083	730
202	Ninepipe Reservoir (CSKT TR 6023)	Ninepipe NWR	US 93	137.54	0.21	0.53		15-2868-01-1-01-08-0000	None	0.087	850

Notes: 1) Not all parcels with Temporary Occupancy Impacts listed in this table. This table only summarizes parcels with permanent impacts and then also identifies any anticipated temporary impacts for those parcels as well.



Montana Department of Transportation

2701Prospect
PO Box 201001
Helena MT 59602-1001

Steve Bullock, Governor

Michael T. Tooley, Director

March 27, 2019

Montana Department of Fish Wildlife & Parks
Attn: Jim Williams, FWP Region 1 Supervisor
490 North Meridian Road
Kalispell, MT 59901

Subject: US 93 N Post Creek Hill and Ninepipe Section
Section 4(f) *De minimis* Determination
Project Number: NH 5-2(159)37
Control Number: 8008000

Dear Mr. Williams:

This letter is intended as a follow up to ongoing discussions that have occurred between representatives of the Montana Fish Wildlife and Parks (FWP), the Montana Department of Transportation (MDT), MDT's consultant, and the Federal Highway Administration (FHWA). MDT has been in periodic communication with the FWP since our first meeting on this topic on November 2, 2016. Most recently we had a conference call discussing potential impacts to FWP property on March 21, 2018 clarifying specific impacts to a portion of the Ninepipe Wildlife Management Area (WMA) resulting from the addition of a separated bicycle/pedestrian path and associated undercrossing.

As you are aware, MDT is proposing to reconstruct US Highway 93 from reference post (RP) 36.8, just south of Redhorn Road, to RP 40.4, which is approximately 2000 feet north of Gunlock Road as part of the Post Creek Hill project (Control Number 8008000). Please refer to the attached Figure 1 for the Post Creek Hill project design limits.

The portion of US 93 from the northern end of the Post Creek Hill project to Brooke Lane (RP 44.5) that has not been reconstructed is referred to as the Ninepipe Section. This segment of US 93 is currently in the environmental analysis and planning stage and therefore is also being included with this Section 4(f) analysis.

Section 4(f) of USDOT Act of 1966

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits USDOT agencies (including FHWA) from using land from publicly owned parks, recreation areas, and wildlife and water fowl refuges, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. In 2005 existing Section 4(f) legislation was amended to simplify the Section 4(f) process and approval for projects that have *de minimis* impacts on lands subject to protection under Section 4(f). A *de minimis* determination may be made by FHWA when all three of the following criteria are satisfied:

- 1) The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into

March 27, 2019

Montana Fish Wildlife & Parks
Jim Williams, FWP Region 1 Supervisor
Page 2 of 4

the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);

- 2) The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource; and
- 3) The official(s) with jurisdiction over the property, after being informed of the public comments and MDT's/FHWA's intent to make the *de minimis* impact finding, concur in writing that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

In this case, team members from FWP, MDT, and FHWA have had many discussions regarding the potential impacts to the Ninepipe WMA that are considered Section 4(f) lands. Based on those discussions, we have preliminarily concluded that the potential impacts are *de minimis* in nature. With this letter, we are seeking written concurrence from FWP, as the officials with jurisdiction over the properties in question. The potential impacts are described below.

4(f) Permanent Impacts/Occupancy – Ninepipe WMA

Based on current project design it is anticipated that Right of Way (ROW) acquisition will be necessary on specific FWP owned properties that are part of the Ninepipe WMA which are protected under Section 4(f). Enclosed are two exhibits that illustrate the proposed permanent grading impacts and associated ROW acquisition that would result from the proposed project. Specific impacts are located on parcels 146, 147, 152, 203, 204, 207, and 214. For your reference, 100 series parcels are adjacent to the Post Creek Hill project and 200 series parcels are located adjacent to the Ninepipe Section planning area. Exhibits 1a through 1g show the areas of grading impact associated with road improvements and the bicycle/pedestrian path on the Ninepipe WMA. Exhibits 2a through 2g show the anticipated ROW acquisition from these parcels. A summary of impacts to these lands are:

- Acquisition up to approximately 6.54 acres of the Ninepipe WMA for highway ROW¹,

Refer to Table 1 for a summary of these impacts by parcel.

These permanent impacts are considered minor and do not appear to materially affect the use and function of the Ninepipe WMA. ROW would be acquired at fair market value by MDT in order to complete this project. Other actions such as new fencing, revegetation, grading, and wetland fill within the acquired ROW would be mitigated in consultation with FWP by restoring vegetation, employing weed control methods, and replacing fencing as part of this project.

4(f) Temporary Occupancy – Ninepipe WMA

In addition to the above described permanent impacts, the following temporary impacts are also anticipated. Section 23 CFR 774.13(d) provides guidance on the conditions under which

¹ Completion of the FHWA 4(f) process does not automatically obligate the property for ROW acquisition or constitute any specific ROW agreement. ROW acquisition will be formalized and completed after final design is complete and actual impacts and ROW requirements are determined. Actual ROW acquisition may be equal to or lower than this value.

March 27, 2019

Montana Fish Wildlife & Parks
Jim Williams, FWP Region 1 Supervisor
Page 3 of 4

“temporary occupancies of land...are so minimal as to not constitute a “use” within the meaning of Section 4(f).” Those conditions are as follows:

- (1) Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
- (2) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
- (3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- (4) The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
- (5) There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

There may be minor temporary occupancies associated with placement or adjustment of approaches and culverts on FWP Section 4(f) parcels. As construction plans and negotiations with property owners are finalized, additional Section 4(f) properties may be similarly temporarily impacted.

In this case, team members from FWP, MDT, and FHWA have had many discussions regarding the potential temporary impacts to the Ninepipe WMA. Based on those discussions, we have preliminarily concluded that the potential temporary impacts meet criteria 1 through 4 above and therefore would not constitute a “use” under Section 4(f). With this letter, we are seeking written concurrence from FWP, as the officials with jurisdiction over the properties in question. FWP’s signature will satisfy condition 5 above.

Determination of a De Minimis Impact to a Section 4(f) Property

Public notice was given via ads in Ronan Valley Journal on January 16, 2019 and Char-koosta on January 17, 2019. Additionally, the public notice news release was issued on January 9 and 22, 2019. The public notice comment period was open from January 9, 2019, through February 20, 2019. Eleven comments were received from the public during this period. Seven of these letters were related to traffic and safety concerns associated with the Post Creek Hill Project, one letter concerned ownership of Ninepipe National Wildlife Refuge (NWR) lands, one commenter wanted to know the total amount of ROW being acquired and project limits, one letter was from an adjacent business owner requesting information on the design and highway access planning, and one letter contained a list of three questions and one offer for sale of land but no specific comments. With the exception of the comment regarding ownership of the NWR lands, none of the written public comment received contained comments or statements relevant to the Section 4(f) process and therefore do not provide any substantive new information that would alter MDT’s evaluation of the impacts to these Section 4(f) parcels. These letters and emails are available to FWP upon request.

March 27, 2019

Montana Fish Wildlife & Parks
Jim Williams, FWP Region 1 Supervisor
Page 4 of 4

Request for Concurrence

We are respectfully requesting your concurrence that the proposed use of Section 4(f) resources will not adversely affect the viability of the Ninepipe WMA and your agreement with the proposed *de minimis* determination.

We would appreciate your prompt response since FWP's concurrence is needed before we can complete the Final Section 4(f) Evaluation and the environmental document for this project. If you need additional information concerning the proposed project in the meantime, please contact me at 523-5842. Thank you for your continued cooperation and assistance.

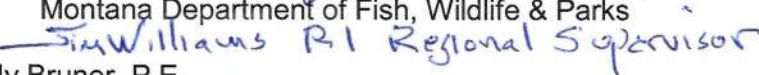
Susan Kilcrease


Missoula District Project Development Engineer
MDT Environmental Services Bureau

Date: March 27, 2019

Concur: 
Montana Department of Fish, Wildlife & Parks

Date: March 28, 2019

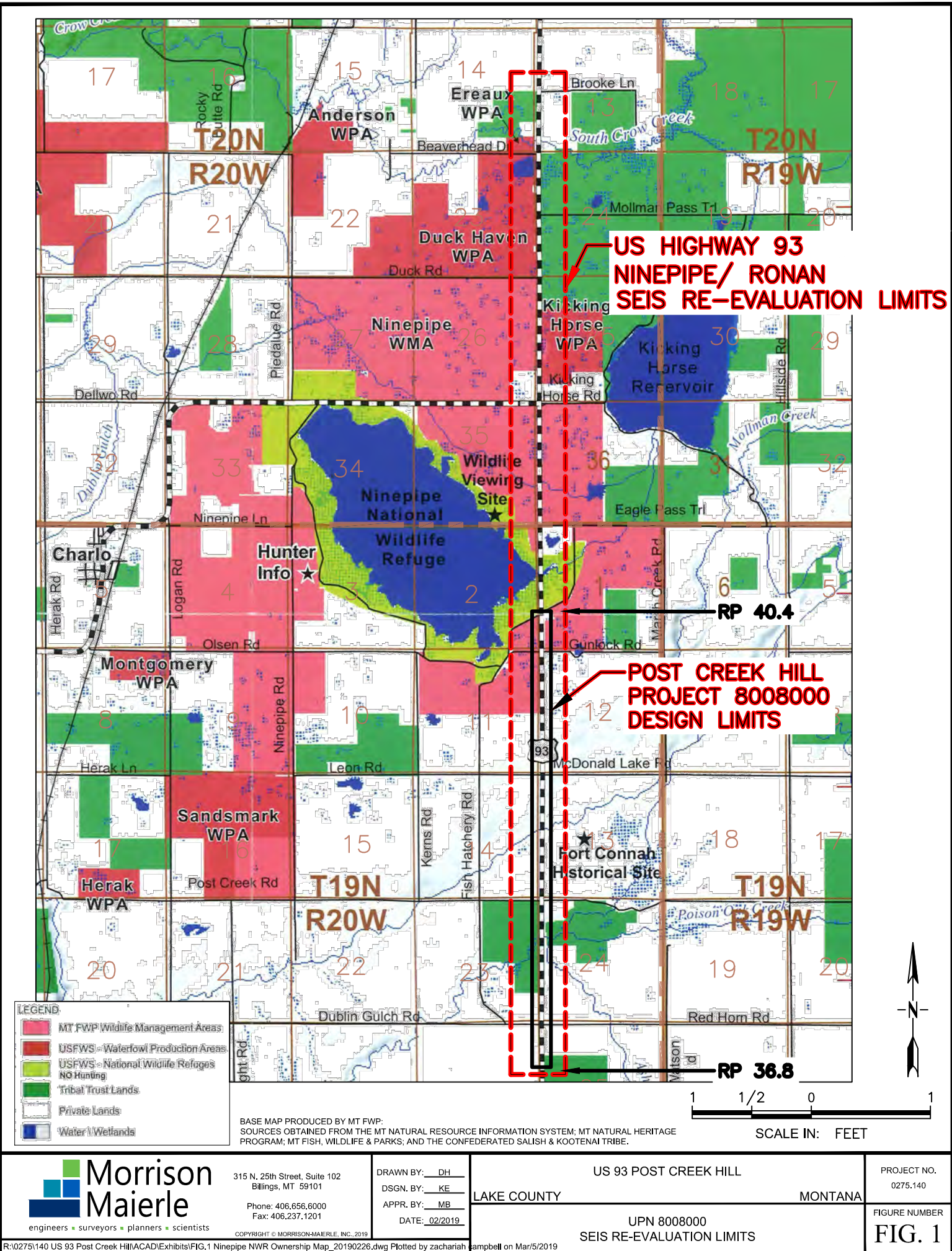

Regional Supervisor
Heidy Bruner, P.E.


FHWA Environmental Engineer and Tribal Liaison

Date: April 11, 2019

Enclosures: Figure 1. FSEIS Re-evaluation Limits
Exhibits 1a through 1g. Grading Impacts to FWP Parcels
Exhibits 2a through 2g. ROW Impacts to FWP Parcels
Table 1. Post Creek Hill and Ninepipe Section 4(f) Summary of Impacts

copies: Miki Lloyd, P.E. MDT, Consultant Design Bureau Project Manager (w/encl.)
Susan Kilcrease, Missoula District Project Development Engineer (w/encl.)
Mark Brooke, P.E., Morrison-Maierle, Consulting Environmental Engineer (w/encl.)



Parcel 146

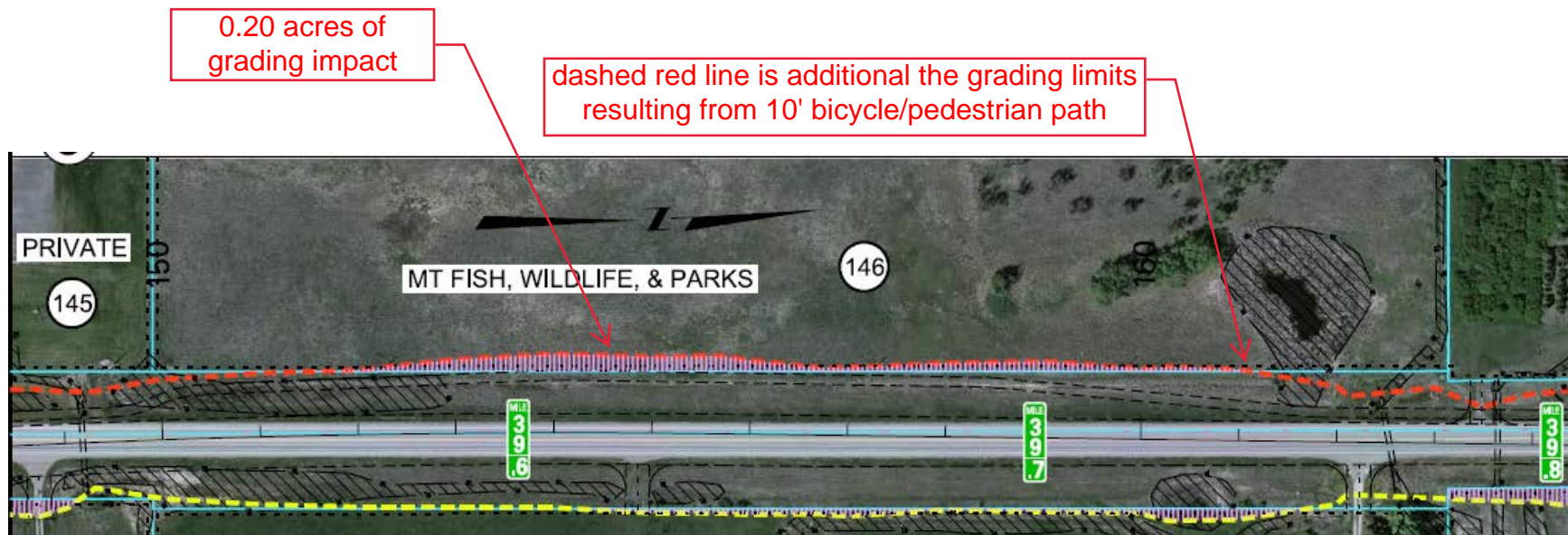


Exhibit 1a. Grading Impacts Ninepipe WMA Section 11, Township 19 N, Range 20 W

Parcel 147

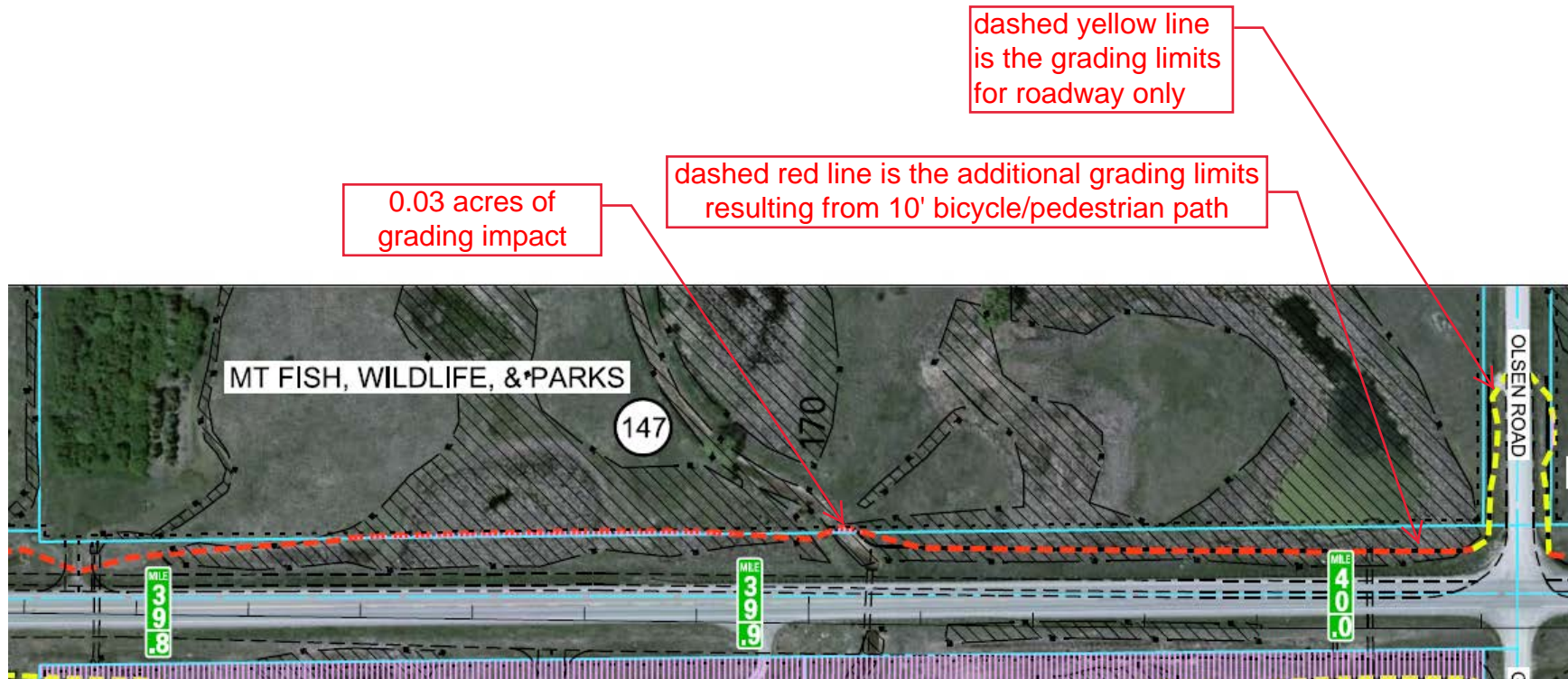


Exhibit 1b. Grading Impacts Ninepipe WMA Section 11, Township 19 N, Range 20 W

Parcel 152



dashed yellow line
is the grading limits
for roadway only

0.01 acres of
grading impacts
related to turtle
crossing culvert
grading



Exhibit 1c. Grading Impacts Ninepipe WMA Section 1, Township 19 N, Range 20 W

Parcel 203

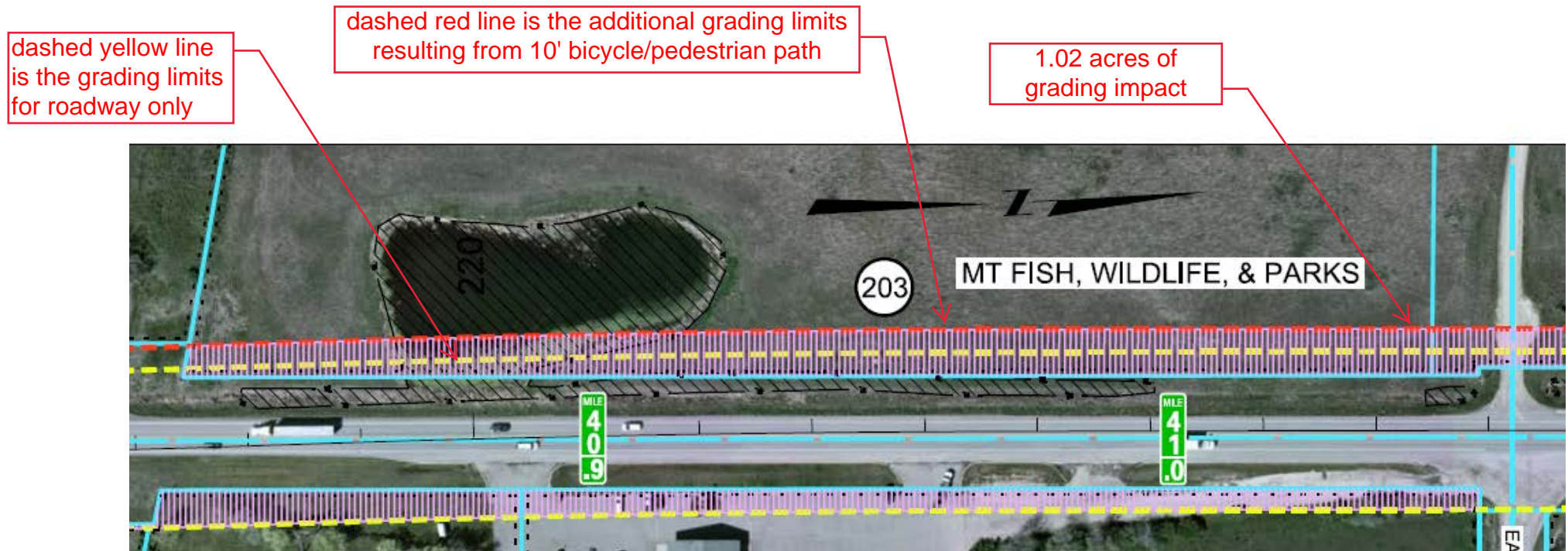


Exhibit 1d. Grading Impacts Ninepipe WMA Section 35, Township 20 N, Range 20 W

Parcel 204

1.54 acres of
grading impact
(total for parcel)

dashed yellow line
is the grading limits
for roadway only

dashed red line is the additional grading limits
resulting from 10' bicycle/pedestrian path



1.54 acres of
grading impact
(total for parcel)

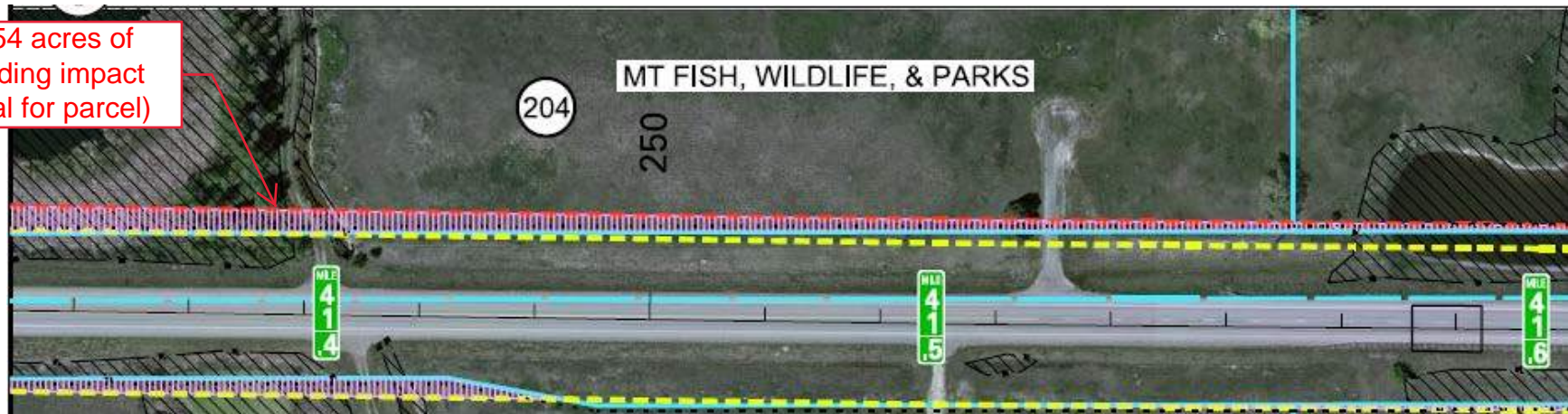


Exhibit 1e. Grading Impacts Ninepipe WMA Section 35, Township 20 N, Range 20 W

Parcel 204-continued

dashed yellow line
is the grading limits
for roadway only

dashed red line is the additional grading limits
resulting from 10' bicycle/pedestrian path

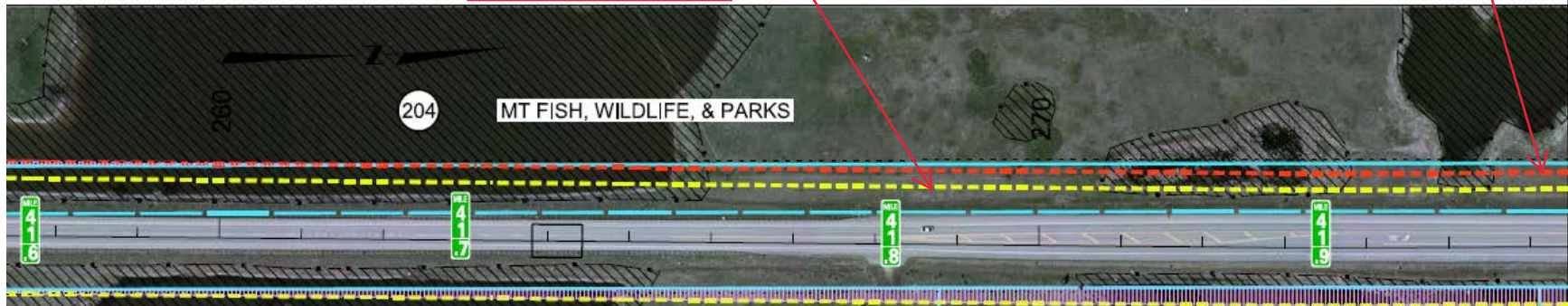


Exhibit 1e (continued). Grading Impacts Ninepipe WMA Section 35, Township 20 N, Range 20 W

Parcel 207

dashed yellow line
is the grading limits
for roadway only




0.90 acres of
grading impact
(total for parcel)

0.90 acres of
grading impact
(total for parcel)



Exhibit 1f. Grading Impacts Ninepipe WMA Section 36, Township 20 N, Range 20 W

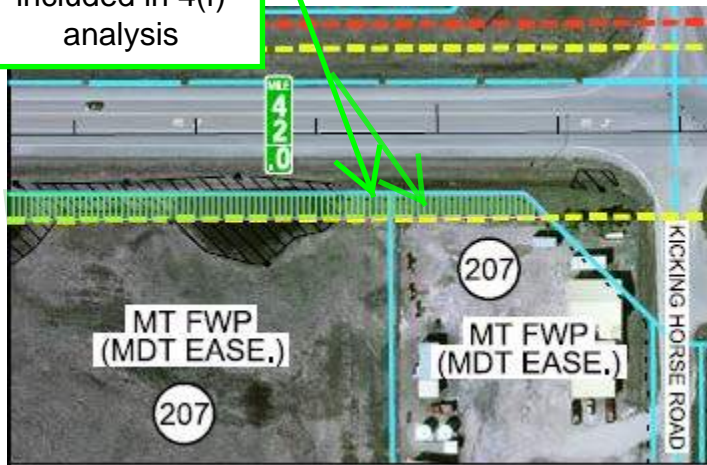
Parcel 207-continued

 Grading impacts that are not
4f impacts

dashed yellow line
is the grading limits
for roadway only



these impacts not
included in 4(f)
analysis



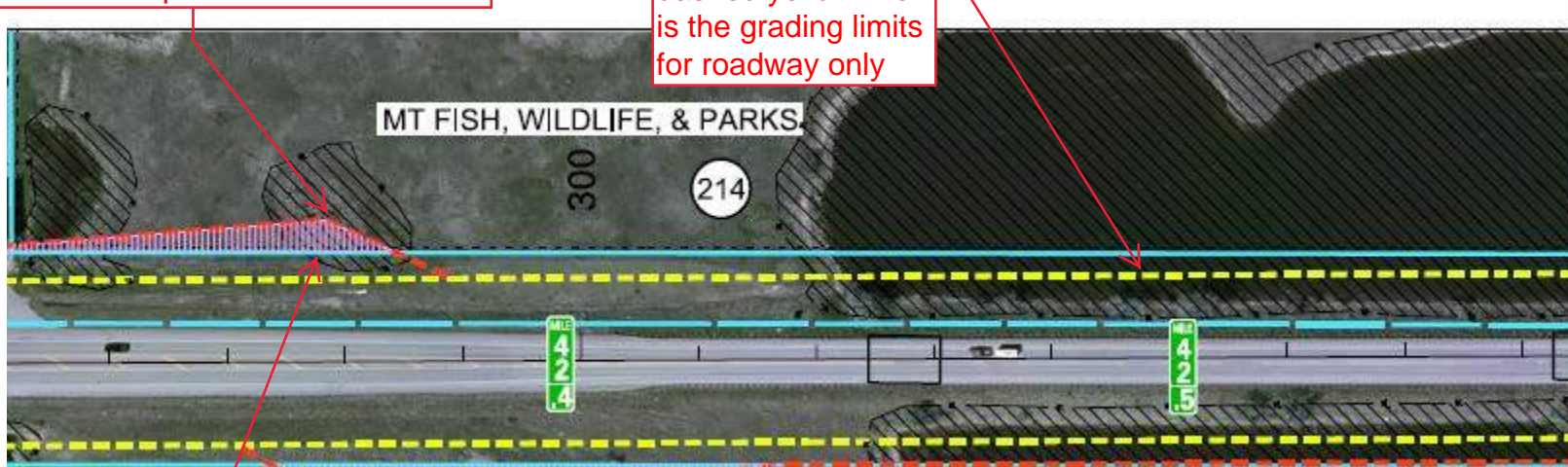
0.90 acres of
grading impact
(total for parcel)

Exhibit 1f (continued). Grading Impacts Ninepipe WMA Section 36, Township 20 N, Range 20 W

Parcel 214

dashed red line is the additional grading limits resulting from 10' bicycle/pedestrian path

dashed yellow line is the grading limits for roadway only



0.12 acres of grading impact



Exhibit 1g. Grading Impacts Ninepipe WMA Section 26 Township 20 N, Range 20 W

Parcel 214-continued

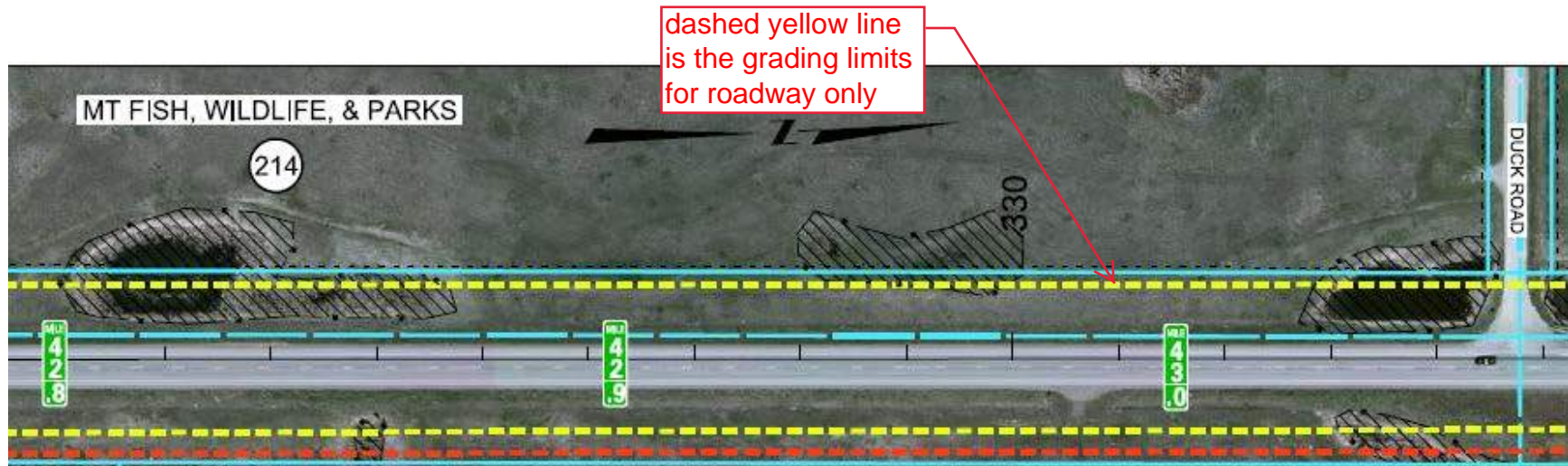


Exhibit 1g (continued). Grading Impacts Ninepipe WMA Section 26, Township 20 N, Range 20 W

FWP

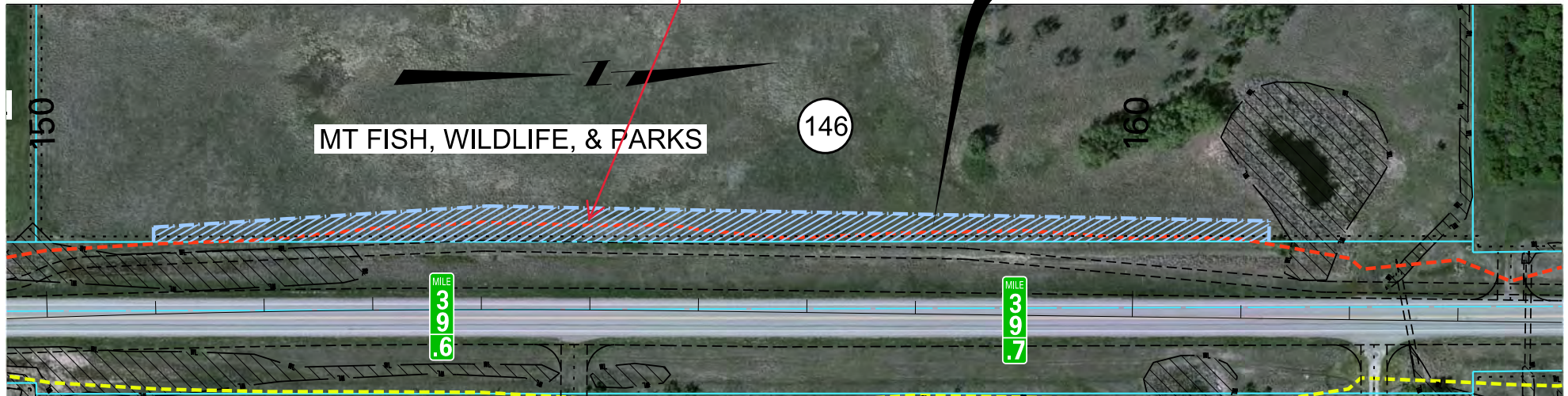
Parcel 146

Wetland Impacts: 0.000 ac

Fencing Impacts: 1,050 lft

dashed red line is the additional grading limits
resulting from 10' bicycle/pedestrian path

0.59 acres



 PROPOSED ROW

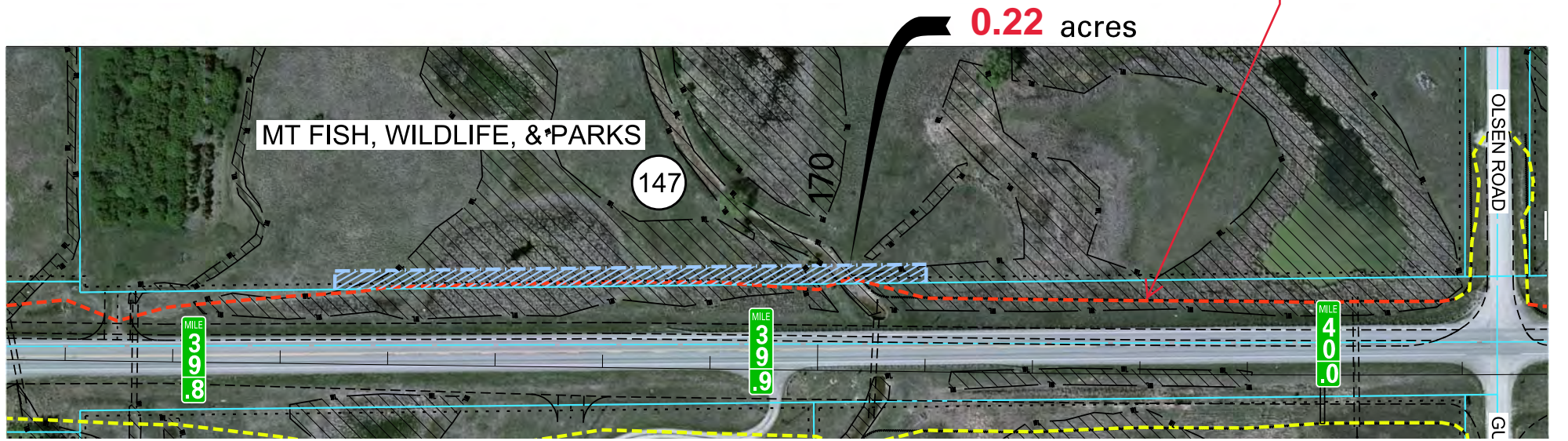
Exhibit 2a. ROW Impacts Ninepipe WMA Parcels Section 11, Township 19 N, Range 20 W

FWP

Parcel 147

Wetland Impacts: 0.025 ac

Fencing Impacts: 360 Inft



 PROPOSED ROW

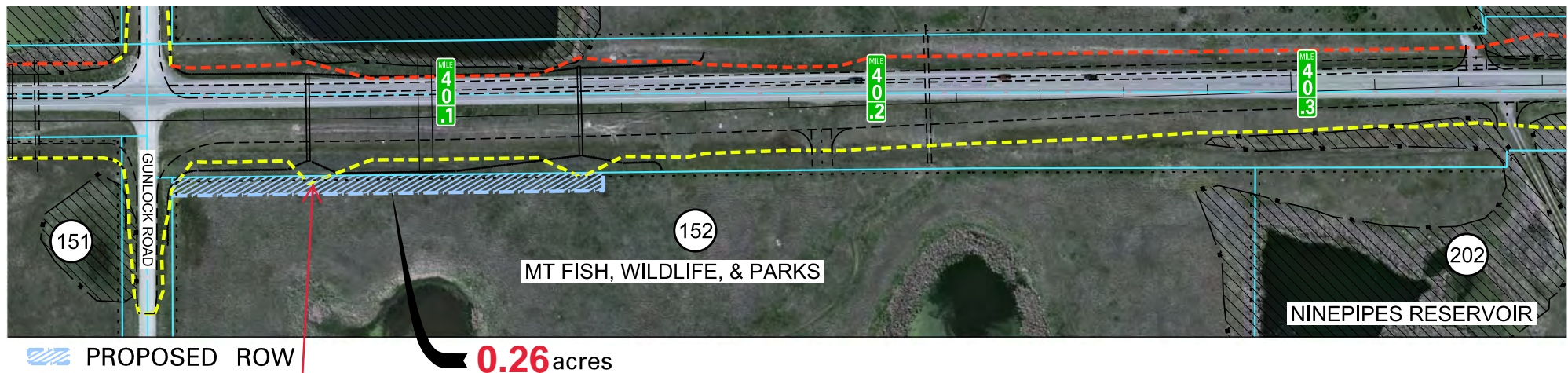
Exhibit 2b. ROW Impacts Ninepipe WMA Parcels Section 11, Township 19 N, Range 20 W

FWP

Parcel 152

Wetland Impacts: 0.000 ac

Fencing Impacts: 530 Inft



dashed yellow line
is the grading limits
for roadway only

Exhibit 2c. ROW Impacts Ninepipe WMA Parcels Section 1, Township 19 N, Range 20 W

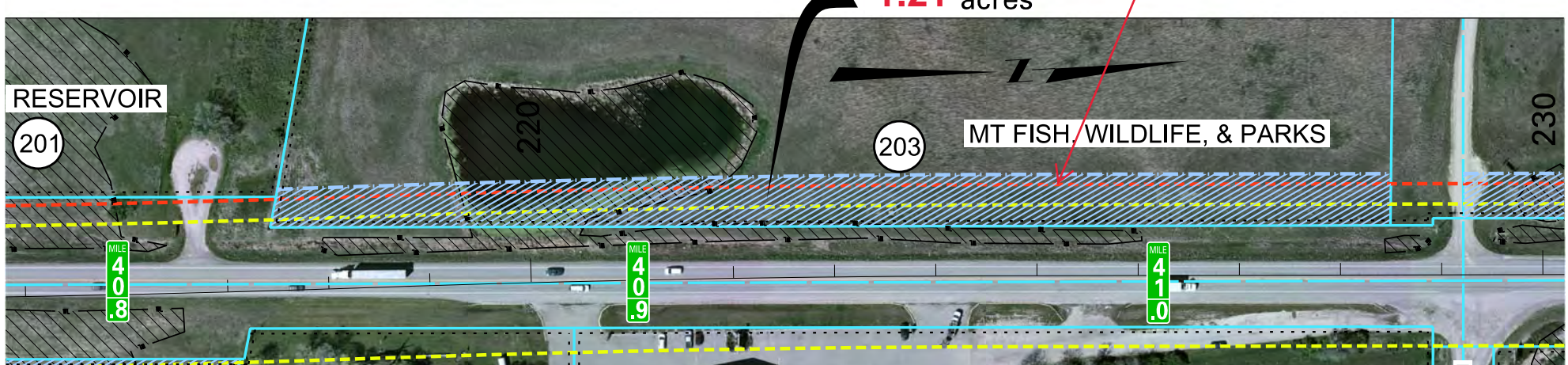
FWP

Parcel 203

Wetland Impacts: 0.142 ac*

Fencing Impacts: 820 Inft*

**Final design will avoid or minimize impacts*



 PROPOSED ROW

Exhibit 2d. ROW Impacts Ninepipe WMA Parcels Section 35, Township 20 N, Range 20 W

FWP

Parcel 204

Wetland Impacts: 0.468 ac*

Fencing Impacts: 2,700 lnft*

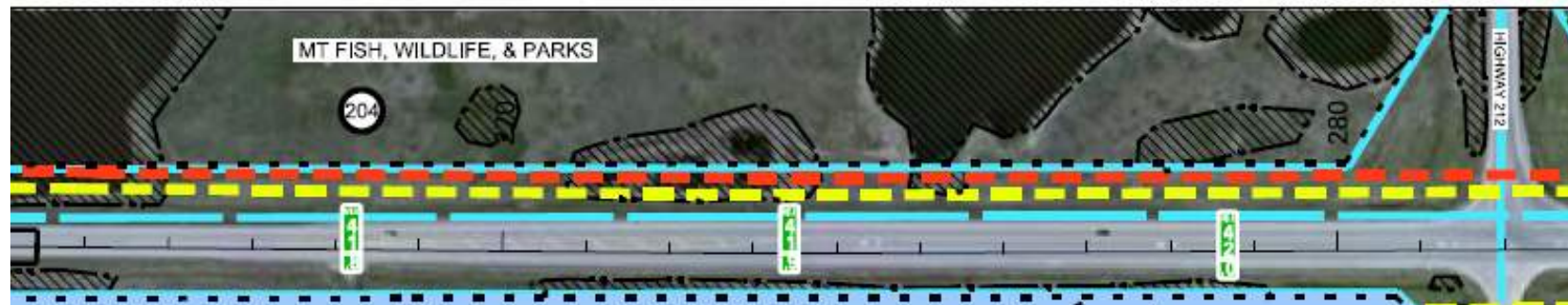
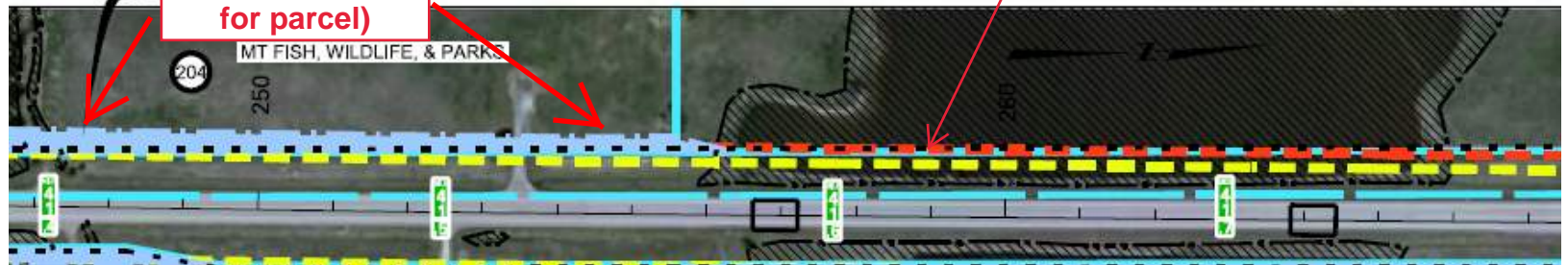
**Final design will avoid or minimize impacts*

dashed red line is the additional grading limits resulting from 10' bicycle/pedestrian path



2.10 acres (total for parcel)

PROPOSED ROW



**Exhibit 2e. ROW Impacts
Ninepipe WMA Parcels
Section 35, Township 20 N, Range 20 W**

FWP

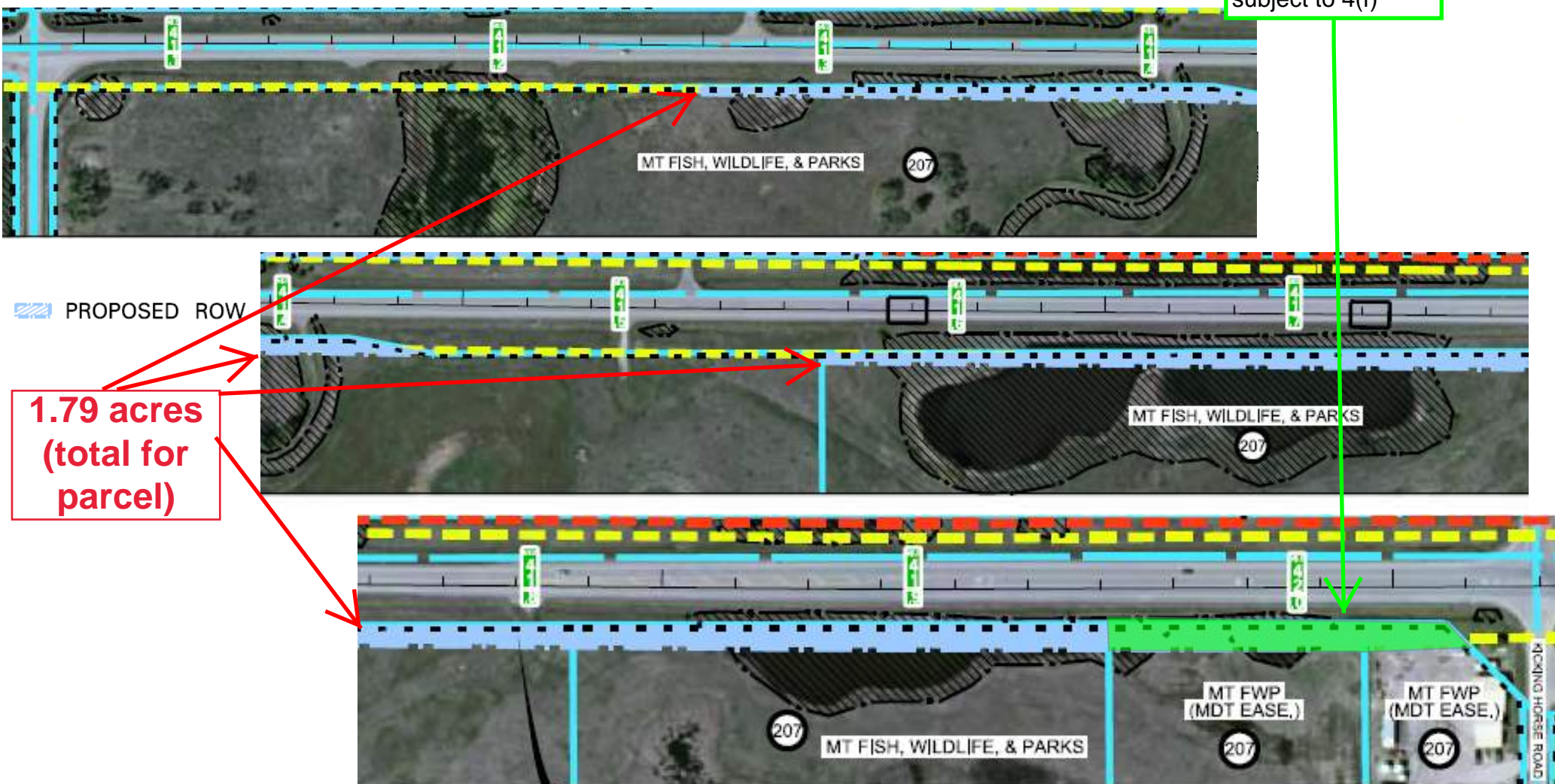
Parcel 207

Wetland Impacts: 0.650 ac*

Fencing Impacts: 2,250 Inft*

**Final design will avoid or minimize impacts*

ROW acquisition
acres do not
include on these
easement parcels
since these
parcels are not
subject to 4(f)



**Exhibit 2f. ROW Impacts
Ninepipe WMA Parcels
Section 36, Township 20 N, Range 20 W**

FWP

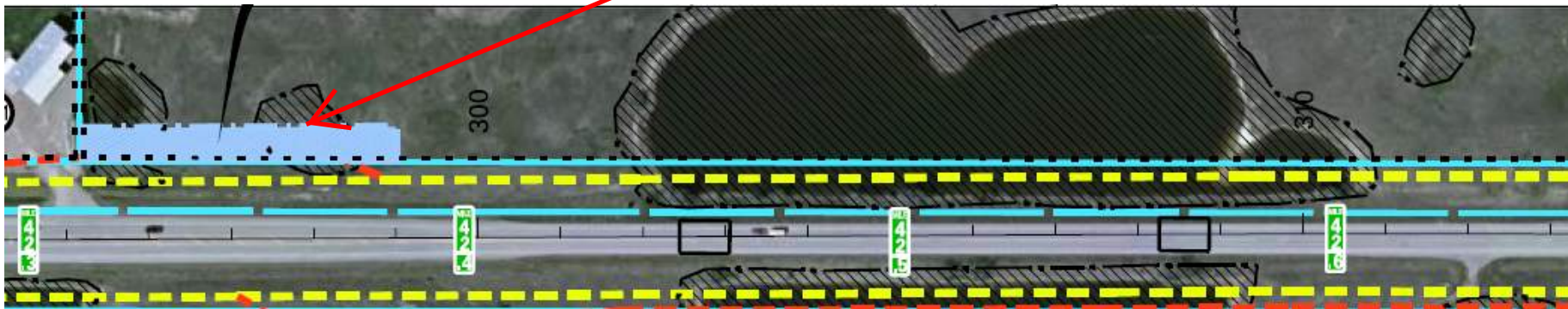
Parcel 214

Wetland Impacts: 0.056 ac*

Fencing Impacts: 430 Inft*

**Final design will avoid or minimize impacts*

0.37 acres



PROPOSED ROW

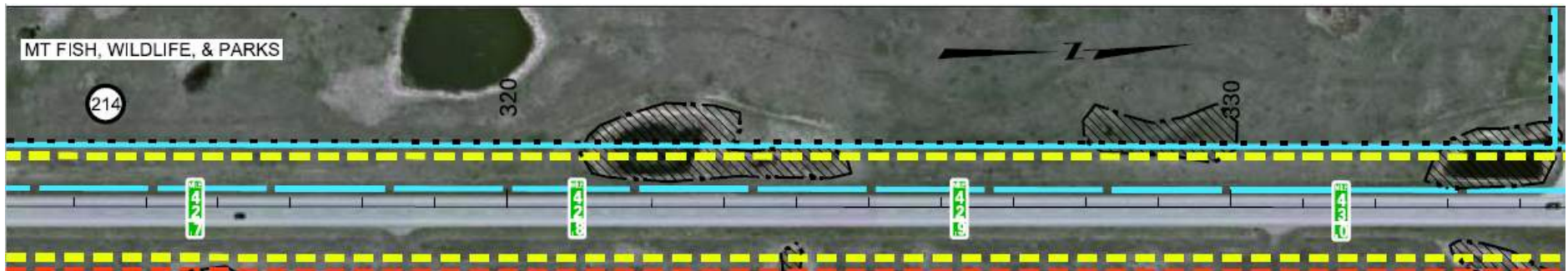


Exhibit 2g. ROW Impacts Ninepipe WMA Parcels Section 26, Township 20 N, Range 20 W

Table 1. Post Creek Hill and Ninepipe Section 4(f) Summary of Impacts

3/14/2019

Parcel	Name of Owner	Type of Property	Type of Transportation Use	Total Area (Acres)	Grading Impact Area (Acres)	Proposed ROW Area	Geocode	Temporary Occupancy ¹	Wetland Impacts (Acres)	Fencing (Feet)
146	MT FWP	Ninepipe WMA	Bike/Ped Path	77.87	0.20	0.59	15-2868-11-1-02-04-0000	Approach & Irrigation Drainage	0.000	1050
147	MT FWP	Ninepipe WMA	Bike/Ped Path	49.67	0.03	0.22	15-2868-11-1-02-03-0000	Approach & 2 Irrigation Drainages	0.025	360
152	MT FWP	Ninepipe WMA	Gunlock Road & Turtle Culvert	137.54	0.01	0.26	15-2868-01-1-01-08-0000	Approaches (3)	0.000	530
203	MT FWP	Ninepipe WMA	US93 and Bike/Ped Path	12.49	1.02	1.21	15-2868-02-1-01-01-0000	None	0.142	820
204	MT FWP	Ninepipe WMA	US93 and Bike/Ped Path	295.46	1.54	2.10	15-2987-35-1-01-03-0000	Approaches (3) & Irrigation Drainage/Culvert	0.468	2700
207	MT FWP	Ninepipe WMA	US 93	310.99	0.90	1.79	15-2987-36-1-01-01-0000	Approach & Irrigation Drainage/Culvert	0.650	2250
214	MT FWP	Ninepipe WMA	Bike/Ped Path Undercrossing	266.56	0.12	0.37	15-2987-26-1-01-02-0000	None	0.056	430
Notes:	1) Not all parcels with Temporary Occupancy Impacts listed in this table. This table only summarizes parcels with permanent impacts and then also identifies any anticipated temporary impacts for those parcels as well.									

ATTACHMENT 6 – Turtle Crossing Technical Memorandum

EXTERNAL MEMORANDUM

To: Mr. John P. Pavsek, PE
Senior Transportation Engineer
Morrison Maierle
1 Engineering Place
Helena, MT 59602

From: Mr. Mark A. Traxler
Wildlife Biologist
RESPEC
820 North Montana Ave., Suite A
Helena, MT 59601

Date: March 27, 2017

Subject: US 93 N – Post Creek Hill; PN INH 5-2(159)37; UPN 8008000
Wildlife Mitigation – Turtle Crossing Technical Memorandum

In accordance with Activity 118 outlined in the approved Amendment 4 for the proposed Turtle Crossing scope of services, RESPEC has prepared this technical memorandum to discuss the need for wildlife mitigation, specifically for painted turtles (*Chrysemys picta*), within the limits of the proposed US93 N – Post Creek Hill project. Also included are preliminary design considerations and recommendations for turtle mitigation within the project limits.

Introduction

The Post Creek Hill project corridor is in Lake County, south of Ronan along US Highway 93 beginning in Sections 1 and 2 and ending in Sections 25 and 26, Township 19 North, Range 20 West. The project limits extend from Reference Post (RP) 36.8 on the south to RP 40.4 on the north. The RPs roughly correlate with the Red Horn Road crossing on the south end and a point approximately 2,000 feet north of the Gunlock/Olsen Road crossing on the north end.

With regard to wildlife mitigation within the Post Creek Hill project corridor, the SEIS included a 500 foot long, 2-lane bridge over Post Creek, a 10'x12' culvert south of Post Creek, a 12'x22' culvert just north of the Gunlock Road intersection, and associated guide fencing for all structures. These proposed structures were intended to benefit all wildlife species, with special consideration for threatened and endangered species including grizzly bears (*Ursus arctos horribilis*). A concept design review meeting was held on November 17, 2014 with representatives from MDT, Confederated Salish and Kootenai Tribes (CSKT), Federal Highways Administration (FHWA) and Morrison Maierle where several changes to the activities described in the scope of work from the SEIS were proposed. These proposed modifications to the project included replacing the 12'x22' wildlife crossing immediately north of Gunlock Road with a series of small culverts and guide fencing that would directly benefit painted turtles and other small reptiles, amphibians, and mammals. The 10'x12' culvert south of Post Creek was also eliminated from the design because of high groundwater in the project area.

Existing Conditions

The US Highway 93 corridor beginning at RP 40.0 (Gunlock/Olsen Road intersection) and extending approximately 2,000' north bisects a glaciated prairie pothole region associated with the Ninepipe National Wildlife Refuge and surrounding conservation lands owned and managed by Montana Fish, Wildlife, and Parks, and the Confederated Salish and Kootenai Tribes. The numerous scattered pothole wetlands provide habitat for a variety of birds, reptiles, amphibians, and small mammals. Ninepipe Reservoir, established by the Flathead Irrigation Project is located immediately north and to the west of this project's northern terminus.

The prairie pothole region bisected by US93 has long been known for its prolific painted turtle population and researchers from the University of Montana (Griffin 2007, 2015) and Salish Kootenai College have studied turtle movements in the highway corridor and documented the impacts from highway mortality. During wildlife field surveys conducted by RESPEC in September 2014 and November 2015, concentrations of road-killed painted turtles were documented from Gunlock Road north for approximately 400 feet and south of Gunlock Road for approximately 300 feet (Figure 1). There are currently no cross highway drainage features within the project segments documented to have road-killed turtles. Several hundred feet to the north of the project area is a bridge that spans a drainage feature that feeds Ninepipe Reservoir. This bridge is the only nearby feature where turtles can safely move from one side of US93 to the other. Turtle densities and road kills increase along US93 to the north of the study area where US93 currently bisects large prairie potholes (Griffin 2015). Seasonal movements between preferred habitat (prairie potholes) on both sides of US93 are known to occur within the project limits. Griffin's research indicates that Highway 93 is a semi-permeable barrier for painted turtles, where an estimated 6% to 16% of the population is killed annually on the roadway (Griffin 2007). Increasing permeability in the roadway corridor would help to ensure the long-term viability of this species into the future.

Design Considerations

Turtle movements and the resulting mortalities appear to be occurring specifically between pothole wetlands located east and west of US93. Design considerations are based on the premise that turtles are making direct movements between potholes and locations of turtle mitigation should be designed based on predicted movement patterns and known mortalities. Figure 1 shows the locations where turtle mortalities were documented by RESPEC during field surveys in 2014 and 2015 and arrows indicating predicted direction of travel by painted turtles on the landscape. It should be noted that movement patterns are predicted based on the location of suitable pothole wetlands and the locations of documented mortalities on US93. Based on these elements, RESPEC along with the Morrison Maierle/KLJ design team, and MDT Environmental Services staff have sorted through the available mitigation options and are proposing three turtle crossing structures and associated fencing to guide turtles to constructed crossings.



Figure 1: Turtle Movement Patterns and Documented Mortalities

In her 2007 PhD dissertation, Kathy Griffin presented a variety of turtle crossing design options and methods to be considered during the design and reconstruction of US93 through the Ninepipe corridor. Many of those recommendations were taken into consideration. Additionally, the design team, including MDT, came up with specific criteria to be used in mitigation design. Specifically, the turtle crossing design should consider the following:

- Annual Maintenance: Minimize time commitment and expense.
- Durability: 75 year expected life with little annual maintenance.
- Safety: Safe for the traveling public in the event of an off-road accident.
- Effectiveness: Ensure use by target species.
- Drainage: Design should not interfere with natural runoff and roadside drain ditch effectiveness.

Figure 2 shows the proposed location of the three proposed turtle crossing culverts and the associated guide fencing. Culvert and guide fence details are discussed in greater detail below.



Figure 2: Proposed Turtle Crossing Culvert Locations and Associated Guide Fence

Roadside Safety

Consideration of roadside safety is a factor when designing the future turtle culverts and guide fence. The fence and culverts would be located well outside of the clear zone close to the ditch bottom on the east side of the highway. On the west side of the highway, the future shared use path will need to butt up to the roadway shoulder to avoid impacting wetlands and waterbodies. In these areas, there will need to be a guard rail separating motorists from pedestrians. The presence of the turtle guide fence on the west side of the roadway therefore does not present a hazard to motorists. The design will consider pedestrian rails on or near the wildlife guide fence.

Culvert Design

Currently there are no cross-highway culverts in the vicinity of the three proposed crossings shown in Figure 2, indicating that natural runoff and flow is not a concern in this area. Turtle crossing culverts should be designed for the intended purpose of helping turtles move between habitat on both sides of the road and not necessarily to serve as a conduit for runoff. Turtle crossing culverts are proposed near Stations 174+80, 178+60, and 180+50. Depending on cost and constructability, culverts designed of concrete (preferred) or corrugated steel should be considered. The goal is to provide a natural bottom substrate

using open-bottomed or buried culverts. At a minimum, the culverts should be at least 3 feet high and 4 feet wide. Taller and wider culverts are preferred so as to encourage use by turtles. A number of factors will go into final design including dimensions that fit within the proposed road prism, constructability (providing a natural bottom substrate), and cost. Culvert design should be compatible with and naturally tie into the guide fencing.

Fencing

The literature discusses a variety of different fencing options which each have their own benefits and drawbacks. In order to meet the criteria listed above, a guide fence made of concrete appears to be the most durable, effective, and low maintenance option of those discussed in the literature. Figure 3 below is an artistic rendering of a concrete box culvert with lipped concrete guide fencing. Because painted turtles and other small mammals, reptiles, and amphibians are very good climbers, a lipped guide fence is important for keeping animals from climbing over. The example below shows a 3-foot lipped concrete guide fence which is slightly larger than what would be needed for painted turtles in the project area. A guide fence that is 18-24 inches is sufficient for this project.

In an effort to prevent turtles and other wildlife from end-running the guide fence, we have proposed lipped concrete guide fencing that turns back at the end points such that it is perpendicular to US93. On the south end, the proposed guide fence would tie into an existing irrigation ditch that will be perpetuated with reconstruction of US93. The irrigation ditch serves as another crossing point for turtles in this area. To ensure the guide fencing does not interfere with periodic flow in the roadside ditch, the design team will work to minimize or eliminate this risk. The total length of guide fence being proposed, including both sides of the road is approximately 2,960 feet (1,480 feet per side). Additionally, the guide fence will likely occur outside the identified clear zone for this project.



Figure 3: Paynes Prairie Ecopassage (Florida) – Artist rendition. Concrete Wall with Lip. Photo: D. Forsyth.

Other options that were considered for guide fencing but discounted for various reasons include: mesh or chain link fencing, common silt fabric, galvanized steel rail, guardrail, and Animex technologies (patented). Each of these options has their own merits and drawbacks that were considered for this

project. Ultimately, a lipped concrete guide fence was chosen because of the low annual maintenance, durability, aesthetics, and anticipated effectiveness in this environment.

Conclusions and Recommendations

After careful review of the literature and discussions between the design team and MDT staff, it has been determined that three culverts will be installed to serve as crossings for turtles. Culverts will be 3'x4' or larger and will include a natural substrate bottom of earthen materials. Lipped concrete guide fence between 18-24 inches tall will be designed between culverts and for a distance far enough south to tie into an existing irrigation facility and to a point approximately 200 feet north (Station 182+50) of the northern most culvert (Station 180+50). The final culvert and guide fence size, type, and location will be determined as design progresses and will take into consideration cost, maintenance, safety, constructability, and potential drainage related issues. The following table provides estimated costs associated with bottomless arch pipes on footings at the three crossings and a 24" retaining wall guide fence. The estimated total cost associated with the turtles crossing based on these dimensions is approximately \$260,108.

Bottomless Arch Pipe					
	Length (ft)	Height	Width	Cost	Cost w/ Labor
1	109.6	3'-0"	4'-0"	\$55,896.00	\$69,870.00
2	90.2	3'-0"	4'-0"	\$46,002.00	\$57,502.50
3	95.3	3'-0"	4'-0"	\$48,603.00	\$60,753.75
Total				\$188,126.25	

24" Retaining Wall				
	Length (ft)	Width (in)	Area (ft ²)	*Cost
	2879.25	6.00	1439.63	\$71,981.25

Total	\$260,108
-------	------------------

*Includes Labor

References

Barichivich, W.J. and C.K. Dodd, Jr. 2002. The effectiveness of wildlife barriers and underpasses on U.S. Highway 441 across Paynes Prairie State Preserve, Alachua County, Florida. Phase II Post-Construction Final Report, Florida Department of Transportation Contract No. BB-854. July 2002. Pp 37.

Griffin, K. 2015. State-wide Grouse Conservation Coordinator. Colorado Parks and Wildlife. Telephone and email communication with Mark Traxler. November 2015.

Griffin, K. 2007. Spatial Population Dynamics of Western Painted Turtles in a Wetland Ecosystem in Northwestern Montana. Doctor of Philosophy in Fish and Wildlife Biology Dissertation. University of Montana. Missoula, MT. Fall 2007.