Project/Site: Hereim Ranch Mitigation Bank	City/County: Meaghe	r Sampling Date: 7/10/2020
Applicant/Owner: ECOA		State: Montana Sampling Point: SP01up
Investigator(s): R McEldowney, R Quire	Section, Township, Ra	
Landform (hillslope, terrace, etc.): Terrace		
Subragion // BBN LRR E	46.563948	3 Long:
Soil Map Unit Name: 2A: Fairway silt loam, 0-2% slopes		NWI classification:PEM
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes _ Vo _	[(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly disturbed? Are	"Normal Circumstances" present? Yes 🔽 No 🔲
Are Vegetation, Soil, or Hydrology na	aturally problematic? (If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map s	showing sampling point	locations, transects, important features, etc.
Hydric Soil Present? Yes No	Is the Sampled within a Wetla	
Remarks:		
Upland sample point located in conservation area 2.		
VEGETATION - Use scientific names of plan	<u> </u>	
Absolute	Domiant Indicator	Dominance Test worksheet
Tree Stratum Plot size (30 Foot Radius) % Cover:	Species? Status	Number of Dominant Species that are OBL, FACW or FAC:
		Total Number of Dominant Species Across All Strata:
		Percent of Dominant Species That Are OBL, FACW, or FAC: 50 % (A/B)
Sapling/Shrub Stratum Plot size (15 Foot Radius)		Prevalence Index worksheet
		Total % Cover of: Multiply by:
		OBL species 0 X 1 0
		FACW species 0 X 2 0
		FAC species 58 X 3 174 FACU species 5 X 4 20
Herbaceous Stratum Plot size (5 Foot Radius)		UPL species 27 X 5 135
Bromus inermis 20	✓ UPL	Column Totals: 90 (A) 329 (B)
Cirsium arvense 3	FAC	Prevalence Index = B/A =: 3.65556
Elymus repens 55	✓ FAC	Hydrophytic Vegetation Indicators
Hedysarum boreale 7	NL NL	1 - Rapid Test for Hydrophytic Vegetation
Rhinanthus minor 5	FACU	2 - Dominance Test is >50%
		3 - Prevalence Index is <= 3.0
		4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet.
		5 - Wetland Non-Vascular Plants
		Problematic Hydrophytic Vegetation (Explain)
		Indicators of hydric sil and wetland hydrology must be
Woody Vine Stratum Plot size (30 Foot Radius)		present, unless disturbed or problematic for #3, 4, 5.
		Hydrophytic Vegetation Yes □ NO ✓
Percent Bare Ground 10 Remarks:		Present?
BG/litter=10%		
100		
US Army Corps of Engineers		Western Mountains, Valleys, and Coasts - Version 2.0

Profile Description: (Description: Mati	-		k Features				
(inches) Color (moist		Color (moist)	% Typ	e ¹ Loc ²	<u> </u>	Texture	Remarks
0-15 10YR 3/1	90	10YR 4/1	10 D	M :	Silty	Clay Loam	
ype: C=Concentration, D=				 oated Sand	 d Gra		cation: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Ap 	plicable to all		-				ors for Problematic Hydric Soils ³ :
 ☐ Histosol (A1) ☐ Histic Epipedon (A2) ☐ Black Histic (A3) ☐ Hydrogen Sulfide (A4) ☐ Depleted Below Dark Summer 	urface (A11)	Sandy Redox (S Stripped Matrix Loamy Mucky M Loamy Gleyed M Depleted Matrix	(S6) lineral (F1) (exc Matrix (F2)	cept MLRA	\ 1)	Red	n Muck (A10) Parent Material (TF2) y Shallow Dark Surface (TF12) er (Explain in Remarks)
Thick Dark Surface (A12 Sandy Mucky Mineral (S Sandy Gleyed Matrix (S-	2) 1)	Redox Dark Sur Depleted Dark S Redox Depressi	face (F6) Surface (F7)			wetla	ors of hydrophytic vegetation and nd hydrology must be present, as disturbed or problematic.
estrictive Layer (if presen	it):	·					
Туре:							
Depth (inches):						Hardwin Cnil	Present? Yes No
emarks:						nyaric soil	
emarks: epletions likely relict.						nyuric Soil	
emarks: epletions likely relict. /DROLOGY /etland Hydrology Indicat	ors:	d: check all that apply	·)				
emarks: epletions likely relict. /DROLOGY /etland Hydrology Indicat	ors:		,) (except		Secor	ndary Indicators (2 or more required)
emarks: epletions likely relict. /DROLOGY /etland Hydrology Indicated imary Indicators (minimum Surface Water (A1)	ors:	Water-Stai	ned Leaves (B9			Secor	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2
emarks: epletions likely relict. /DROLOGY /etland Hydrology Indicated image indicators (minimum	ors:	Water-Stai	ned Leaves (B9 I, 2, 4A, and 4 E			Secor	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
emarks: epletions likely relict. /DROLOGY /etland Hydrology Indicatrimary Indicators (minimum Surface Water (A1) High Water Table (A2)	ors:	Water-Stair MLRA 1 Salt Crust (ned Leaves (B9 I, 2, 4A, and 4 E	3)		Secor W	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2
Pemarks: epletions likely relict. POROLOGY Petland Hydrology Indicate rimary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	ors:	Water-Stair MLRA 1 Salt Crust (Aquatic Inv	ned Leaves (B9 I , 2, 4A, and 4E (B11)	3) 3)		Secon W	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10)
emarks: epletions likely relict. **TOROLOGY** **Jetland Hydrology Indicate rimary Indicators (minimum and Surface Water (A1)	ors:	☐ Water-Stain MLRA 1 ☐ Salt Crust (☐ Aquatic Inv ☐ Hydrogen 5	ned Leaves (B9 I, 2, 4A, and 4E (B11) rertebrates (B13	3) 3) 1)	Roots	Secon W D D S S S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
emarks: epletions likely relict. //DROLOGY /etland Hydrology Indicaterimary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ors:		ned Leaves (B9 I , 2, 4A, and 4E (B11) rertebrates (B13 Gulfide Odor (C	B) 3) 1) pong Living I	Roots	Secor W D D S. s (C3) G	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Pattems (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C5
Proposits (B4) Toron Deposits (B5) Proposits (B5)	ors: of one required	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	ned Leaves (B9 I, 2, 4A, and 4E (B11) rertebrates (B13 Gulfide Odor (C ⁷ hizospheres ald of Reduced Iron n Reduction in T	3) 3) 1) ong Living I (C4) Filled Soils	(C6)	Secor	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Properties (B2) Toron Deposits (B4) Toron Deposits (B5) Surface Soil Cracks (B6)	ors: of one required	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or	ned Leaves (B9 I, 2, 4A , and 4E (B11) rertebrates (B13 Sulfide Odor (C ² hizospheres ald of Reduced Iron n Reduction in T Stressed Plants	3) 1) 2) 2) 3) 1) 2) 3) 2) 3) 4) 4) 5) 6) 6) 6) 7) 6) 7) 6) 7) 6) 7) 7) 8) 8) 8) 8) 8) 9) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1)	(C6)	Secon D D S S S S C S C S R R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Pattems (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
PROLOGY Petland Hydrology Indicate imary Indicators (minimum) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae	ors: of one required	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves (B9 I, 2, 4A, and 4E (B11) rertebrates (B13 Gulfide Odor (C ⁷ hizospheres ald of Reduced Iron n Reduction in T	3) 1) 2) 2) 3) 1) 2) 3) 2) 3) 4) 4) 5) 6) 6) 6) 7) 6) 7) 6) 7) 6) 7) 7) 8) 8) 8) 8) 8) 9) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1)	(C6)	Secon D D S S S S C S C S R R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
remarks: epletions likely relict. PROLOGY Petland Hydrology Indicate firmary Indicators (minimum) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con	ors: of one required	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves (B9 I, 2, 4A , and 4E (B11) rertebrates (B13 Sulfide Odor (C ² hizospheres ald of Reduced Iron n Reduction in T Stressed Plants	3) 1) 2) 2) 3) 1) 2) 3) 2) 3) 4) 4) 5) 6) 6) 6) 7) 6) 7) 6) 7) 6) 7) 7) 8) 8) 8) 8) 8) 9) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1)	(C6)	Secon D D S S S S C S C S R R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Pattems (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
emarks: epletions likely relict. /DROLOGY /etland Hydrology Indicaterimary Indicators (minimum) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Condicted Observations:	ors: of one required rial Imagery (B' cave Surface (I	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	ned Leaves (B9 I, 2, 4A, and 4E (B11) rertebrates (B13 Sulfide Odor (C' hizospheres ald of Reduced Iron in Reduction in T Stressed Plants lain in Remarks	B) 1) 2) 2) 3) 1) 2) 2) 3) 3) 4) 4) 5) 6) 6) 6) 7) 6) 7) 6) 7) 6) 7) 6) 7) 7) 8)	(C6)	Secon D D S S S S C S C S R R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Pattems (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
emarks: epletions likely relict. **TOROLOGY** **Jetland Hydrology Indicate rimary Indicators (minimum and property of the control of the co	ors: of one required rial Imagery (B' cave Surface (I	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp	ned Leaves (B9 I, 2, 4A, and 4E (B11) Pertebrates (B13 Gulfide Odor (C- hizospheres alco of Reduced Iron on Reduction in T Stressed Plants lain in Remarks	3) 1) 2) 2) 3) 1) 2) 2) 3) 3) 4) 4) 5) 6) 6) 6) 7) 6) 7) 6) 7) 7) 8) 8) 8)	(C6)	Secon D D S S S S C S C S R R	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Pattems (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Perpletions likely relict. Proposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Conficient Observations: Surface Water Present? Surface Water Present? Staturation Present?	ors: of one required rial Imagery (B' cave Surface (I	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp 38)	ned Leaves (B9 I, 2, 4A, and 4E (B11) rertebrates (B13 Sulfide Odor (C' hizospheres ald of Reduced Iron in Reduction in T Stressed Plants lain in Remarks	B) 1) ong Living I (C4) Filled Soils s (D1) (LRI	(C6) R A)	Secon	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Pattems (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Proposits (B2) Depletions likely relict. Primary Indicators (minimum (Ma) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae	ors: of one required rial Imagery (B') cave Surface (I) Yes Yes Yes	Water-Stain MLRA 1 Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp 38) No Depth (inc	ned Leaves (B9 I, 2, 4A, and 4E (B11) rertebrates (B13 Gulfide Odor (C' hizospheres alc of Reduced Iron n Reduction in T Stressed Plants lain in Remarks ches):	B) 1) 2) 2) 3) 1) 2) 2) 3) 3) 4) 4) 5) 6) 6) 6) 7) 6) 7) 6) 7) 6) 7) 6) 7) 6) 7) 7) 8) 8) 8) 8) 8) 8) 8) 8) 8) 8) 8) 8) 8)	(C6) R A)	Secon D D S S S S F F F F T T T T T T T T T T T T	ndary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (Cseomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site: Hereim Ranch Mitigation Bank	City/County: Meaghe	Sampling Date: 7/10/2020
Applicant/Owner: ECOA		State: Montana Sampling Point: SP02wet
Investigator(s): R McEldowney, R Quire		
		convex, none): concave Slope (%): 3
Cubassian (I DD) LRR F	Local relief (concave,	3 Slope (%) Slope (%)
Subregion (LRR): LRR E Soil Map Unit Name: 2A: Fairway silt loam, 0-2% slo	Lat:io.ee	Long: Datum: 1.0.10 00
Soil Map Unit Name: 27.17 dil Way 311 Toditi, 0-270 310	,pes	NWI classification:
Are climatic / hydrologic conditions on the site typical for the site ty		
		"Normal Circumstances" present? Yes 🔽 No 🔲
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point I	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes V Remarks:	No Is the Sampled within a Wetlan	
PEM depressional/riverine wetland.		
VEGETATION - Use scientific names of pl	ant	
Δheoli		Dominance Test worksheet
Tree Stratum Plot size (30 Foot Radius) % Cov	ver: Species? Status	Number of Dominant Species that are OBL, FACW or FAC:
		Total Number of Dominant Species Across All Strata: 3 (B)
		Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)
Sapling/Shrub Stratum Plot size (15 Foot Radiu	us)	Prevalence Index worksheet
		Total % Cover of: Multiply by: OBL species 1 X 1 1
		FACW species 25 X 2 50
		FAC species 22 X 3 66
		FACU species 42 X 4 168
Herbaceous Stratum Plot size (5 Foot Radiu	us)	UPL species 5 X 5 25
Carex nebrascensis	1 OBL	Column Totals: 95 (A) 310 (B)
Equisetum arvense	2 FAC	Prevalence Index = B/A =: 3.26316
Iris missouriensis	5 FACW	Hydrophytic Vegetation Indicators
	20 FACW	1 - Rapid Test for Hydrophytic Vegetation
<u> </u>	20 ▼ FAC 30 ▼ FACU	✓ 2 - Dominance Test is >50%
Schedonorus pratensis	30 FACU FACU	3 - Prevalence Index is <= 3.0
Trifolium pratense	7 FACU	
Zigadenus elegans	5 NL	4 - Morphological Adaptations (Provide supporting data in remarks or on separate
		sheet.
		5 - Wetland Non-Vascular Plants
		Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum Plot size (30 Foot Radiu	us)	Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5.
		Hydrophytic Vegetation Yes ✓ NO
Percent Bare Ground 10		Present?
Remarks: BG/litter=10%		
US Army Corps of Engineers		Western Mountains, Valleys, and Coasts - Version 2.0

Profile Description: (Describe to the depth seeded to document the indicator or confirm the absence of indicators.) Depth Matrix	SOIL											;	Sampling Poir	nt: SP02wet
Solid Color Colo	Profile Desc	ription: (Describe	to the de	pth neede	ed to docui	nent the in	ndicato	r or c	onfirm	the absence			
0-8 10 YR 2/1 100 Silty Clay Loam 8-16 10 YR 3/1 93 10 YR 4/6 2 C PL Silty Clay Loam 8-16 10 YR 3/1 93 10 YR 7/1 5 D M Silty Clay Loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix, Hydric Sall Indicators: (Applicable to all LRRs, unless otherwise noted.) Histos Eppedon (A2)														
8-16 10YR 3/1 93 10YR 4/6 2 C PL Sitry Clay Loam 8-16 10YR 3/1 93 10YR 7/1 5 D M Sitry Clay Loam 8-16 10YR 3/1 93 10YR 7/1 5 D M Sitry Clay Loam Type: C=Concentration, D=Depletion, RM=Reduced Marinx, CS=Covered or Coated Sand Grains.		Color	(moist)	%	Color	(moist)	%	Type'	L				Remarks	3
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Reduced Tripe Type: Calculation of Hydrophylic vagetation and wetland hydrology must be present, unless disturbed or problematic. Type: C=Concentration Type:	0-8	10YR	2/1	100						Silty	/ Clay Loam			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. To cation: PL=Pore Lining, M=Matrix. Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators (Applicable to all LRRs, unless otherwise (B) Indicators (Applicable to all LR	8-16	10YR	3/1	93	10YR	4/6	2	С	PL	Silty	/ Clay Loam			
Hydric Soil Indicators (Applicable to all LRs, unless otherwise noted.) Histosol (A1)	8-16	10YR	3/1	93	10YR	7/1	5	D	M	Silty	/ Clay Loam			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)														
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Histocal (A1)														
Hydric Soil Indicators (Applicable to all LRs, unless otherwise noted.) Histosol (A1)				_					_					
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)														
Hydric Soil Indicators (Applicable to all LRs, unless otherwise noted.) Histosol (A1)	1		D-D-			al Matrice Of			C-		21	DI	-Dana Linina	NA-NA-4
Histosol (A1)									ted Sa	and Gra				
Histic Epipedon (A2)			s. (Appli	cable to al				.u.,					-	3110 00113 .
Black Histic (A3)			(2)		_								•	
Hydrogen Sulfide (A4)			/) (exce	pt ML	RA 1)			, ,	(TF12)
Thick Dark Surface (A12)			(A4)			-				,				,
Sandy Mucky Mineral (S1)				ce (A11)							_			
Sardy Gleyed Matrix (S4)							, ,					•		
Restrictive Layer (if present): Type: Depth (inches): No Depth (inches): Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. Hydric Soil Present? Yes all that apply a line within the soil profile. Hydric Soil Present? Yes all not profile. Wetland Hydrology Indicators: Wetland Hydrology Present? Yes all not profile. Wetland Hydrology Present? Yes all not profile. No all profile. Wetland Hydrology Present? Yes all not profile. Remarks:							•	7)				-		
Type:					<u></u> Red	lox Depress	sions (F8)				unles	s disturbe	d or problema	itic.
Remarks: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) (except High Water Table (A2) MIRA 1, 2, 4A, and 4B) Saturation (A3) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Drainage Patterns (B10) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Surface Soil Cracks (B6) Sutrated On Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Ves No Depth (inches): Wetland Hydrology Present? Ves No Depth (inches):														
Remarks: Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Water-Stained Leaves (B9) (except High Water Table (A2) High Water Table (A2) MLRA 1, 2, 4A, and 4B) Saturation (A3) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Drainage Patterns (B10) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Surface Soil Cracks (B6) Sturface Soil Cracks (B6) Sturface Voil Cracks (B8) Field Observations: Surface Water Present? Ves No Depth (inches): Water Table Present? Ves No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:											Lludria Cail	Drocont?	V 🗸	No. 🗆
Distinct redoximorphic features common within the matrix, starting at 8 inches within the soil profile. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)											nyuric Soil	rieseiltr	res <u> </u>	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) In Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) In Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Field Observations: Yes No Popth (inches): Wetland Hydrology Present? Yes No No No No Popth (inches): Water Table Present? Yes No Popth (inches): Wetland Hydrology Present? Yes No No No Popth (inches): <tr< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr<>														
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) High Water Table (A2) MLRA 1, 2, 4A, and 4B) Saturation (A3) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describer (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	HYDROLO	GY												
Surface Water (A1)	Wetland Hy	drology In	ndicators	:										
High Water Table (A2)	Primary Indic	cators (min	nimum of	one require	ed; check	all that appl	y)				Secor	dary Indic	ators (2 or mo	ore required)
High Water Table (A2) Saturation (A3) Saturation (B1) Saturati	Surface	Water (A1)			Water-Sta	ined Leave	s (B9) (excep	ot	w	/ater-Stain	ed Leaves (B	9) (MLRA 1, 2,
Water Marks (B1)														
Sediment Deposits (B2)	Saturation	on (A3)				Salt Crust	(B11)				D	rainage Pa	atterns (B10)	
□ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Shallow Aquitard (D3) □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Yes □ No ☑ Depth (inches): Saturation Present? Yes □ No ☑ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Water M	arks (B1)				Aquatic In	vertebrates	s (B13)			D	ry-Season	Water Table	(C2)
Algal Mat or Crust (B4)	Sedimer	nt Deposits	s (B2)					. ,				aturation \	/isible on Aeri	al Imagery (C9)
□ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost-Heave Hummocks (D7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (inches): □ Water Table Present? Yes □ No ☑ Depth (inches): □ Wetland Hydrology Present? Yes ☑ No □ Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Drift Dep	oosits (B3)			<u>_</u>	-			-	g Root	ts (C3) 👱 G	eomorphic	Position (D2)
Surface Soil Cracks (B6)	_ `		` '		<u> </u>			,	,					
□ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost-Heave Hummocks (D7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (inches): □ Water Table Present? Yes □ No ☑ Depth (inches): □ Wetland Hydrology Present? Yes ☑ No □ Depth (inches): □ No □ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:						7								
□ 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) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			. ,						D1) (L	RR A)				
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	_			• • •	· —	Other (Exp	olain in Rer	marks)			F	ost-Heave	Hummocks	(D7)
Surface Water Present? Yes No Depth (inches):			d Concav	е Ѕипасе	(88)									
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:				/aa 🗆	No.	Donath (in	ah a a\.							
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): No Remarks:						-								
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:						_				\A(-41-	1 1 1	. D 4	0 V 🔽	No.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:				res	NO <u>V</u>	⊥ Deptn (in	cnes):			vvetia	ana Hyarolog	/ Present	? Yes <u>▼</u>	NO <u> </u>
	Describe Re	corded Da	tá (strear	n gauge, m	nonitoring	well, aerial	photos, pre	evious ir	spect	ions), i	if available:			
Soil very moist.											·			
	Soli very mo	JISI.												

Project/Site: Hereim Ranch Mitigation Bank	City/County: Meagher	Sampling Date:7/10/2020
Applicant/Owner: ECOA		State: Montana Sampling Point: SP03wet
	Section, Township, Ran	
Landform (hillslope, terrace, etc.): Floodplain		
Subregion (LRR): LRR E	Lat: 46.561944	Long:110.872804 Datum: NAD 83
Soil Map Unit Name: 501B: Typic Fluvaquents-Fluvac		
Are climatic / hydrologic conditions on the site typical for the	nis time of year? Yes 🗹 No [(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		
Are Vegetation, Soil, or Hydrology		
SUMMARY OF FINDINGS - Attach site map		
	No le the Sempled	A
	No Is the Sampled within a Wetland	
Wetland Hydrology Present? Yes Remarks:	No within a wetian	
PEM/PSS riverine wetland.		
VEGETATION - Use scientific names of pla		
Tree Stratum Plot size (30 Foot Radius) Absolu % Cove		Dominance Test worksheet
		Number of Dominant Species that are OBL, FACW or FAC: 3 (A)
		Total Number of Dominant Species Across All Strata: 4 (B)
One Hand Observe Observe District A.S. South Desire	,	Percent of Dominant Species That Are OBL, FACW, or FAC: 75 % (A/B)
Sapling/Shrub Stratum Plot size (15 Foot Radius	,	Prevalence Index worksheet
Salix bebbiana 2	5 ✓ FACW	Total % Cover of: Multiply by:
		OBL species 21 X 1 21 FACW species 40 X 2 80
		FAC species 45 X 3 135
		FACU species 17 X 4 68
Herbaceous Stratum Plot size (5 Foot Radius		UPL species 0 X 5 0
Alopecurus pratensis 4		Column Totals: 123 (A) 304 (B)
Carex nebrascensis 1 Carex praticola 1		Prevalence Index = B/A =: 2.47154
	5 OBL	Hydrophytic Vegetation Indicators
	5	1 - Rapid Test for Hydrophytic Vegetation
Rhinanthus minor 1		✓ 2 - Dominance Test is >50%
	2 FACU	✓ 3 - Prevalence Index is <= 3.0
Triglochin maritima	1 OBL	4 - Morphological Adaptations (Provide supporting data in remarks or on separate
		sheet.
		☐ 5 - Wetland Non-Vascular Plants
		Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum Plot size (30 Foot Radius	;)	Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5.
		Hydrophytic Vegetation Present 2 Yes ✓ NO
Percent Bare Ground 3		Present?
Remarks: BG/litter=3%		
US Army Corps of Engineers		Western Mountains, Valleys, and Coasts - Version 2.0

OIL									Sampling Point: SP03wet
Profile Description: (Describe	to the dep	oth neede	d to docun	nent the in	dicator	or confi	m the	absence	of indicators.)
Depth Matrix		0-1		x Features	- 1	12			Damada
(inches) Color (moist)	%		(moist)	<u>%</u> _	Type ¹	Loc ²		exture	Remarks
0-16 10YR 4/1	98	10YR	4/6	2	С	M	Clay L	_oam	
									-
	_								
		-				-			
				·					
		-							
Type: C=Concentration, D=De						ed Sand (Grains.		cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applic	cable to all				l.)				ors for Problematic Hydric Soils ³ :
Histosol (A1)		=	dy Redox (S	,					m Muck (A10)
Histic Epipedon (A2)		_ :	ped Matrix	(S6) /lineral (F1)	(ovoor	+ MI DA	1)	_	d Parent Material (TF2) y Shallow Dark Surface (TF12)
☐ Black Histic (A3) Hydrogen Sulfide (A4)		_	ny Mucky N ny Gleyed I	, ,	(excep	T WLKA	1)		er (Explain in Remarks)
Depleted Below Dark Surface	ce (A11)	$\overline{}$	leted Matrix	, ,				0	er (Explain in Nemarks)
Thick Dark Surface (A12)	,	= :	ox Dark Sui	` '				3Indicate	ors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)				Surface (F7))				and hydrology must be present,
Sandy Gleyed Matrix (S4)		Red	ox Depress	ions (F8)					ss disturbed or problematic.
Restrictive Layer (if present):									
Туре:									
Depth (inches):							Ну	dric Soil	Present? Yes 🔽 No 🔲
			•	ed matrix.					
			·	od mann.					
			•						
YDROLOGY									
	:								
Wetland Hydrology Indicators		d; check a						Seco	ndary Indicators (2 or more required)
Wetland Hydrology Indicators Primary Indicators (minimum of		d; check a	ill that apply	/)	(B9) (r	except			· · · · · ·
Netland Hydrology Indicators Primary Indicators (minimum of o		d; check a	ıll that apply Water-Stai	/) ned Leaves		except			Vater-Stained Leaves (B9) (MLRA 1,
Wetland Hydrology Indicators Primary Indicators (minimum of or wind of the wi		d; check a	ıll that apply Water-Stai MLRA	/) ned Leaves 1, 2, 4A, an		except		v	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Wetland Hydrology Indicators Primary Indicators (minimum of of other primary Indicators) Surface Water (A1) High Water Table (A2) Saturation (A3)		d; check a	ull that apply Water-Stai MLRA Salt Crust	/) ned Leaves 1, 2, 4A, an (B11)	d 4B)	except		v	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Prainage Patterns (B10)
Wetland Hydrology Indicators Primary Indicators (minimum of a ✓ Surface Water (A1) ☐ High Water Table (A2) ✓ Saturation (A3) ☐ Water Marks (B1)			ull that apply Water-Stai MLRA Salt Crust Aquatic Inv	/) ned Leaves 1, 2, 4A, an (B11) /ertebrates	d 4B) (B13)	except		v	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
Wetland Hydrology Indicators Primary Indicators (minimum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)			will that apply Water-Stai MLRA Salt Crust Aquatic Inv	r) ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo	(B13) r (C1)		pots (C		Vater-Stained Leaves (B9) (MLRA 1 , 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (C
Wetland Hydrology Indicators Primary Indicators (minimum of of other parts) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)			tll that apply Water-Stai MLRA - Salt Crust Aquatic Inv Hydrogen : Oxidized R	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo	d 4B) (B13) r (C1) s along	ı Living Ro	oots (C:		Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coseomorphic Position (D2)
Wetland Hydrology Indicators Primary Indicators (minimum of of other parts) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)			will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced	d 4B) (B13) r (C1) s along Iron (C	ı Living Ro 4)			Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coseomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators Primary Indicators (minimum of of open content content open c			will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced n Reduction	d 4B) (B13) r (C1) s along lron (C	ı Living Ro 4) ed Soils (0	26)	□ V □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (Caseomorphic Position (D2) Phallow Aquitard (D3) Pac-Neutral Test (D5)
Wetland Hydrology Indicators Primary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	one require		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P	d 4B) (B13) r (C1) s along lron (C i in Tille	ı Living Ro 4) ed Soils (0	26)	V C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Ca) Secomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators Primary Indicators (minimum of of open content content open c	one require		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced n Reduction	d 4B) (B13) r (C1) s along lron (C i in Tille	ı Living Ro 4) ed Soils (0	26)	V C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Praturation Visible on Aerial Imagery (Caseomorphic Position (D2) Phallow Aquitard (D3) Pac-Neutral Test (D5)
Wetland Hydrology Indicators Primary Indicators (minimum of or wind wind wind wind wind wind wind wind	one require		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P	d 4B) (B13) r (C1) s along lron (C i in Tille	ı Living Ro 4) ed Soils (0	26)	V C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Ca) Secomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators Primary Indicators (minimum of or	one require		will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced n Reductior Stressed P	d 4B) (B13) r (C1) s along lron (C) in Tille lants (I arks)	ı Living Ro 4) ed Soils (0	26)	V C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Ca) Secomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators Primary Indicators (minimum of a ✓ Surface Water (A1) ☐ High Water Table (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Surface Soil Cracks (B6) ☐ Inundation Visible on Aerial ☐ Sparsely Vegetated Concaverield Observations:	Imagery (B	37) (B8)	will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence Recent Iron Stunted or Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reductior Stressed P olain in Rem	d 4B) (B13) r (C1) s along lron (C) in Tille lants (E)	Living Ro 4) ed Soils (0 01) (LRR	26)	V C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Ca) Secomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators Primary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concaverield Observations: Surface Water Present? Water Table Present?	Imagery (B	37) (B8)	will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced n Reductior Stressed P	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A)	□ V □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Ca) Secomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators Primary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concaverial Concaverial Sparsely Vegetated Concaverial Concaverial Sparsely Vegetated Concaverial	Imagery (B re Surface (res res		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduction Stressed P olain in Rem ches): ches):	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A) tland H	V C C C C C C C C C C C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coeomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Caised Ant Mounds (D6) (LRR A) Orost-Heave Hummocks (D7)
Wetland Hydrology Indicators Primary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concaverial Sparsely Vegetated Conc	Imagery (B re Surface (res res		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduction Stressed P olain in Rem ches): ches):	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A) tland H	V C C C C C C C C C C C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coeomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Caised Ant Mounds (D6) (LRR A) Orost-Heave Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concaverield Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strean	Imagery (B re Surface (res res		Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduction Stressed P olain in Rem ches): ches):	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A) tland H	V C C C C C C C C C C C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coeomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Caised Ant Mounds (D6) (LRR A) Orost-Heave Hummocks (D7)
Wetland Hydrology Indicators Primary Indicators (minimum of or wind wind wind wind wind wind wind wind	Imagery (B	(B8) No Vonitoring vo	will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduction Stressed P olain in Rem ches): ches):	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A) tland H	V C C C C C C C C C C C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coeomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Caised Ant Mounds (D6) (LRR A) Orost-Heave Hummocks (D7)
Wetland Hydrology Indicators Primary Indicators (minimum of a ✓ Surface Water (A1) ☐ High Water Table (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Surface Soil Cracks (B6) ☐ Inundation Visible on Aerial ☐ Sparsely Vegetated Concaverield Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present? Sincludes capillary fringe) Describe Recorded Data (stream	Imagery (B	(B8) No Vonitoring vo	will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduction Stressed P olain in Rem ches): ches):	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A) tland H	V C C C C C C C C C C C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coeomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Caised Ant Mounds (D6) (LRR A) Orost-Heave Hummocks (D7)
Wetland Hydrology Indicators Primary Indicators (minimum of or winder of w	Imagery (B	(B8) No Vonitoring vo	will that apply Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inc Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduction Stressed P olain in Rem ches): ches):	d 4B) (B13) r (C1) s along lron (C in Tille lants (I arks)	Living Ro 4) ed Soils (0 01) (LRR	C6) A) tland H	V C C C C C C C C C C C C C C C C C C C	Vater-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Coeomorphic Position (D2) Shallow Aquitard (D3) CAC-Neutral Test (D5) Caised Ant Mounds (D6) (LRR A) Orost-Heave Hummocks (D7)

Project/Site: Hereim Ranch Mitigation Bank	City/County: Meagher	Sampling Date:7/10/2020
Applicant/Owner: ECOA		State: Montana Sampling Point: SP04up
Investigator(s): R McEldowney	Section, Township, Rang	ge: S 8 T 9N R 7E
Landform (hillslope, terrace, etc.): Floodplain		
Subregion (LRR): LRR E		Long:110.872084 Datum: NAD 83
Soil Map Unit Name: 501B: Typic Fluvaquents-Fluvaque	ntic Haplaquolls, 0-4% slopes	NWI classification:PEM
Are climatic / hydrologic conditions on the site typical for this t	ime of year? Yes 🗹 No 🔼	(If no, explain in Remarks.)
Are Vegetation $\underline{\hspace{1cm}}$, Soil $\underline{\hspace{1cm}}$, or Hydrology $\underline{\hspace{1cm}}$ sig	nificantly disturbed? Are "N	ormal Circumstances" present? Yes 🔽 No 🔲
Are Vegetation, Soil, or Hydrology nat	curally problematic? (If nee	ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map sl	howing sampling point lo	cations, transects, important features, etc.
Hydric Soil Present? Yes No	✓ Is the Sampled A within a Wetland	
VEGETATION - Use scientific names of plant		
Tree Stratum Plot size (30 Foot Radius) Absolute	Domiant Indicator	Dominance Test worksheet
Tree Stratum Piot size (30 Poot Radius) % Cover:	Species? Status	Number of Dominant Species that are OBL, FACW or FAC: 0 (A)
		Total Number of Dominant Species Across All Strata: 0 (B)
Sapling/Shrub Stratum Plot size (15 Foot Radius)		Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)
,		Prevalence Index worksheet Total % Cover of: Multiply by:
		OBL species 0 X 1 0 FACW species 0 X 2 0
		FACW species 0 X 2 0 FAC species 20 X 3 60
		FACU species 11 X 4 44
Herbaceous Stratum Plot size (5 Foot Radius)		UPL species 70 X 5 350
Bromus inermis 70	✓ UPL	Column Totals: 101 (A) 454 (B)
Cirsium arvense 10 Elymus lanceolatus 10	FAC FACU	Prevalence Index = B/A =: 4.49505
Elymus repens 10	FAC	Hydrophytic Vegetation Indicators
Taraxacum officinale 1	FACU	1 - Rapid Test for Hydrophytic Vegetation
	_	2 - Dominance Test is >50%
		☐ 3 - Prevalence Index is <= 3.0
		 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet.
		5 - Wetland Non-Vascular Plants
		Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum Plot size (30 Foot Radius)		Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5.
Powert Pow Over 1 2		Hydrophytic Vegetation Present? NO ✓
Percent Bare Ground 0 Remarks:		
US Army Corps of Engineers		Western Mountains, Valleys, and Coasts - Version 2.0

SOIL								Sampling Point: SP04up
Profile Desc	ription: (Describ	e to the depth	needed to docu	ment the i	ndicator	or confirr	n the absence	
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
0-14	10YR 3/2	100						Mixed soil profile - organics m
¹ Type: C=C	oncentration, D=D	enletion RM=R	educed Matrix C	S=Covered			rains ² l oc	 cation: PL=Pore Lining, M=Matrix.
	Indicators: (Appl					o Cario C		ors for Problematic Hydric Soils ³ :
Histosol			Sandy Redox (-		☐ 2 cn	n Muck (A10)
_	oipedon (A2)		Stripped Matrix	(S6)				l Parent Material (TF2)
Hydroge	istic (A3) en Sulfide (A4)		Loamy Mucky I	Matrix (F2		t MLRA 1)		y Shallow Dark Surface (TF12) er (Explain in Remarks)
	d Below Dark Surf	ace (A11)	Depleted Matri	. ,			31	
_	ark Surface (A12) /lucky Mineral (S1)	_	☑ Redox Dark Su ☑ Depleted Dark	, ,	7)			ors of hydrophytic vegetation and nd hydrology must be present,
	Gleyed Matrix (S4)		Redox Depress	•	')			s disturbed or problematic.
	Layer (if present)	<u> </u>	2	(. 0)			1	
	, , ,							
Depth (in							Hydric Soil	Present? Yes No
	oil indicators obs							
LIVDBOL O	OV							
HYDROLO								
_	drology Indicator							
	cators (minimum o	r one requirea; c						ndary Indicators (2 or more required)
	Water (A1)		Water-Sta			xcept	W	Vater-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)			1, 2, 4A, a	nd 4B)			4A, and 4B)
Saturation			Salt Crust ☐ Aquatic In		~ (D42)			rainage Patterns (B10)
	larks (B1)		Hydrogen		. ,			ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9)
	nt Deposits (B2) posits (B3)		Hydrogen		` '	Livina Bo		seomorphic Position (D2)
	at or Crust (B4)		Presence		_	_		hallow Aquitard (D3)
	posits (B5)		Recent Iro			•		AC-Neutral Test (D5)
:	Soil Cracks (B6)		Recent ind			-	_	aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria	I Imagery (B7)	Other (Ex			i) (Little	_	rost-Heave Hummocks (D7)
	/ Vegetated Conca				markoj			rest risave traininoske (Br)
Field Obser		(20)						
Surface Wat		Yes No	Depth (in	ches).				
Water Table		Yes No				1		
Saturation P	resent? pillary fringe)	Yes No	Depth (in	ches):		Wetl		y Present? Yes No
Describe Re	corded Data (strea	m gauge, monit	oring well, aerial	photos, pre	evious ins	pections),	if available:	
Remarks:	jic indicators obs	enved during	eite vieit. Elovet	ed area a	of the floo	ndnlain G	Soil moiet	
ino flydrolog	lic indicators obs	served during	site visit. Elevai	eu area c	n the not	эаргатт. З	SOII MOISL	

Project/Site: Hereim Ranch Mitigation Bank City/County: Meagher Sampling Date: 7/10/2 Applicant/Owner: ECOA State: Montana Sampling Point: SP05up	
Investigator(s): R McEldowney Section, Township, Range: S 8 T 9N R 7E	
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): flat Slope (%):	0
Subregion (LRR): LRR E Lat: 46.558627 Long: -110.883426 Datum: NAD	33
Subregion (LRR): LRR E Lat: 46.558627 Long: -110.883426 Datum: NAD Soil Map Unit Name: 604A: Villmeagher-Villsprings silt loams, 0-2% slopes NWI classification: PEM	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly disturbed?	
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 No No No No No No N	, 010.
Hydric Soil Present? Yes No 🗸 Is the Sampled Area	
Wetland Hydrology Present? Yes No Within a Wetland? Yes No Within a Wetland?	
Remarks:	
Upland sample point located in conservation area 1.	
VEGETATION - Use scientific names of plant	
Absolute Domient Indicator	
Tree Stratum Plot size (30 Foot Radius) % Cover: Species? Status Dominance Test worksheet Number of Dominant Species	
that are OBL, FACW or FAC: (A)	
Total Number of Dominant Species Across All Strata: 1 (B)	
Sapling/Shrub Stratum Plot size (15 Foot Radius) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A	√B)
Prevalence Index worksheet Total % Cover of: Multiply by	
OBL species 0 X1 0	
FACW species 0 X2 0	
FACULATION OF THE PROPERTY OF	4
Herbaceous Stratum Plot size (5 Foot Radius) FACU species 22 X 4 88 UPL species 65 X 5 325	=
Bromus inermis 65 V UPL Column Totals: 97 (A) 443	(B)
Carum carvi 15 FACU	(D)
Dactylis glomerata 5 FACU Prevalence Index = B/A =: 4.56701	
Poa pratensis 10 FAC Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation	ion
Trifolium pratense 2 FACU 2 - Dominance Test is >50%	OII
3 - Prevalence Index is <= 3.0	
☐ 4 - Morphological Adaptations (Provide supporting data in remarks or on sepa sheet.	
5 - Wetland Non-Vascular Plants	
Problematic Hydrophytic Vegetation (E	xplain)
Indicators of hydric sil and wetland hydrology mu	
Woody Vine Stratum Plot size (30 Foot Radius) Plot size (30 Foot Radius)	
Hydrophytic Vegetation Yes □ NO ✓	
Percent Bare Ground 3 Present?	
Remarks: BG/litter=3%	
US Army Corps of Engineers Western Mountains, Valleys, and Coasts - Versi	on 2.0

		eeded to documen Redox Fe			40001106	
Depth Matrix (inches) Color (moist)			% Type ¹	Loc ²	Texture	Remarks
0-15 10YR 3/1	100				Clay	
Type: C=Concentration, D=Dep	letion, RM=Rec	luced Matrix, CS=C	overed or Coated	Sand Gra		cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applic	able to all LRR	s, unless otherwis	e noted.)			rs for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Histic Epipedon (A2)		Sandy Redox (S5) Stripped Matrix (S6	١			n Muck (A10) Parent Material (TF2)
Black Histic (A3)	블	Loamy Mucky Mine	ral (F1) (except N	ILRA 1)	Ven	Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	블	Loamy Gleyed Matr			Oth	er (Explain in Remarks)
Depleted Below Dark Surfac	e (A11) \square	Depleted Matrix (F3			3, ,, ,	
☐ Thick Dark Surface (A12)☐ Sandy Mucky Mineral (S1)		Redox Dark Surface	` '			ors of hydrophytic vegetation and
Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)	믐	Depleted Dark Surfa Redox Depressions				nd hydrology must be present, s disturbed or problematic.
Restrictive Layer (if present):		Nedox Depressions	5 (1 0)		unies	s disturbed of problematic.
Type:						
Depth (inches):					Hydric Soil	Present? Yes No
Remarks:		=			•	
Vetland Hydrology Indicators:						
Wetland Hydrology Indicators:		eck all that apply)				ndary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of o		Water-Stained	Leaves (B9) (exc	eept		/ater-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2)		Water-Stained	, 4A, and 4B)	ept	v	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Stained MLRA 1, 2,	, 4A, and 4B) 1)	eept	v	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		Water-Stained MLRA 1, 2, Salt Crust (B1	, 4A , and 4B) 1) ebrates (B13)	ept	w	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		Water-Stained MLRA 1, 2, Salt Crust (B1 Aquatic Inverte Hydrogen Sulf	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1)			/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (CS
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		Water-Stained MLRA 1, 2, Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li			/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Water-Stained MLRA 1, 2, Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4)	ving Roots		/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (CS eomorphic Position (D2) hallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		Water-Stained MLRA 1, 2, Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Lir educed Iron (C4) eduction in Tilled S	ving Roots	W D D S S (C3) G S S	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	ne required; ch	Water-Stained MLRA 1, 2, Salt Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhizo Presence of R Recent Iron Re	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled S essed Plants (D1)	ving Roots	D D D S S (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I	ne required; ch	Water-Stained MLRA 1, 2, Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled S essed Plants (D1)	ving Roots	D D D S S (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I	ne required; ch	Water-Stained MLRA 1, 2, Salt Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhizo Presence of R Recent Iron Re	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled S essed Plants (D1)	ving Roots	D D D S S (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Incided Observations:	ne required; ch	Water-Stained MLRA 1, 2, Salt Crust (B1: Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Stunted or Stre	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Lir educed Iron (C4) eduction in Tilled Sessed Plants (D1) in Remarks)	ving Roots	D D D S S (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concave	magery (B7)	Water-Stained MLRA 1, 2, Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Stunted or Stre	, 4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled 3 essed Plants (D1) in Remarks)	ving Roots	D D D S S (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Saturation Present? Visible on Aerial I Sparsely Vegetated Concave Field Observations: Surface Water Present? Vater Table Present?	magery (B7) e Surface (B8) es No _ es No _ es No _	Water-Stained MLRA 1, 2, Salt Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Stunted or Stre Other (Explain	A4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled S essed Plants (D1) in Remarks) s):	ving Roots Soils (C6) (LRR A)	D D D S S (C3) S S F S F S C S C S C S C S C S C S C S	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Y Saturation Present? Y Saturation Present? Y Situration Present?	magery (B7) e Surface (B8) es No _ es No _ es No _	Water-Stained MLRA 1, 2, Salt Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Stunted or Stre Other (Explain	A4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled S essed Plants (D1) in Remarks) s):	ving Roots Soils (C6) (LRR A)	D D D S S (C3) S S F S F S C S C S C S C S C S C S C S	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (CS eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Y Saturation Present? Y (includes capillary fringe) Describe Recorded Data (stream	magery (B7) e Surface (B8) es No _ es No _ es No _	Water-Stained MLRA 1, 2, Salt Crust (B1) Aquatic Inverte Hydrogen Sulf Oxidized Rhize Presence of R Recent Iron Re Stunted or Stre Other (Explain	A4A, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Li educed Iron (C4) eduction in Tilled S essed Plants (D1) in Remarks) s):	ving Roots Soils (C6) (LRR A)	D D D S S (C3) S S F S F S C S C S C S C S C S C S C S	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (CS eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Y Saturation Present? Y Situration Present? Second Situration Present? Y Situration Present? Second Situration Present? Y Situration Present? Situration Present? Y Situration Present? Y Situration Present? Situration Present? Y Situration Present?	magery (B7) e Surface (B8) es No _ es No _ es No _ gauge, monitor	Water-Stained MLRA 1, 2, Salt Crust (B1: Aquatic Inverted: Hydrogen Sulf Oxidized Rhized: Presence of R: Recent Iron Recent Iron Recent Iron Recent Iron Recent Iron Struted or Street Depth (inchessoring well, aerial photes	AAA, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Lireduced Iron (C4) eduction in Tilled Sessed Plants (D1) in Remarks) 3): 3): 3): 3): 3): 3): 3): 3	ving Roots Soils (C6) (LRR A)	D D D S S (C3) S S F S F S C S C S C S C S C S C S C S	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (CS eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial I Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Y Saturation Present? Y (includes capillary fringe) Describe Recorded Data (stream	magery (B7) e Surface (B8) es No _ es No _ es No _ gauge, monitor	Water-Stained MLRA 1, 2, Salt Crust (B1: Aquatic Inverted: Hydrogen Sulf Oxidized Rhized: Presence of R: Recent Iron Recent Iron Recent Iron Recent Iron Recent Iron Struted or Street Depth (inchessoring well, aerial photes	AAA, and 4B) 1) ebrates (B13) ide Odor (C1) ospheres along Lireduced Iron (C4) eduction in Tilled Sessed Plants (D1) in Remarks) 3): 3): 3): 3): 3): 3): 3): 3	ving Roots Soils (C6) (LRR A)	D D D S S (C3) S S F S F S C S C S C S C S C S C S C S	/ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site: Hereim Ranch Mitigation Bank City/Co	Dunty: Meagher Sampling Date: 7/10/2020
Applicant/Owner: ECOA	State: Montana Sampling Point: SP06wet
Investigator(s): R McEldowney Section	
Landform (hillslope, terrace, etc.): Floodplain Local	relief (concave, convex, none): flat Slope (%):0
Subregion (LRR): LRR E	46.558719 Long: -110.883148 Datum: NAD83
Soil Map Unit Name: 604A: Villmeagher-Villsprings silt loams, 0-2% slo	ppes NWI classification:PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	
Are Vegetation, Soil, or Hydrology significantly disturb	ned? Are "Normal Circumstances" present? Yes 🔽 No 🔲
Are Vegetation $__$, Soil $__$, or Hydrology $__$ naturally problemat	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.
riyunc son riesent:	Is the Sampled Area within a Wetland? Yes No
Remarks: PEM riverine wetland.	
VEGETATION - Use scientific names of plant	
Troc Stratum Plot cizo (20 Foot Podius)	dicator atus Dominance Test worksheet
·	Number of Dominant Species that are OBL, FACW or FAC: (A)
	Total Number of Dominant Species Across All Strata: (B)
Sapling/Shrub Stratum Plot size (15 Foot Radius)	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B)
,	Prevalence Index worksheet
	Total % Cover of: Multiply by: OBL species 30 X 1 30
	FACW species 0 X2 0
	FAC species 70 X 3 210
Herbaceous Stratum Plot size (5 Foot Radius)	FACU species 0 X 4 0 UPL species 0 X 5 0
Alopecurus arundinaceus 35 ✓ FAC	
Alopecurus pratensis 35 FAC	
Carex nebrascensis 25 ✓ OBL	
Carex utriculata 5 OBL	Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation
	✓ 2 - Dominance Test is >50%
	✓ 3 - Prevalence Index is <= 3.0
	 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet.
	5 - Wetland Non-Vascular Plants
	Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum Plot size (30 Foot Radius)	Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5.
Percent Bare Ground 0	Hydrophytic Vegetation Present? NO □
Remarks:	
Dominated by hydrophytic plant species.	
US Army Corps of Engineers	Western Mountains, Valleys, and Coasts - Version 2.0

Color (moist)	Depth Matrix		needed to document the indica Redox Features		
Clay Loam				e ¹ Loc ²	Texture Remarks
Histosol (A1)					
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)					
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)					
Histosol (A1)				oated Sand Gra	
Type:	Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surfa Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	ace (A11)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (exc) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7)	cept MLRA 1)	2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present,
PROLOGY Wetland Hydrology Indicators: trimary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Saturation (A3) Sati Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) Drift Deposits (B2) Algal Mat or Crust (B4) Presence of Reduced fron (C4) Inon Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes No Depth (inches): urface Water Present? Yes No Depth (inches): o Wetland Hydrology Present? Yes No Depth (inches): o Wetland Hydrology Present? Yes No Depth (inches): o Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No No Wetland Hydrology Present? Yes No No No Wetland Hydrology Present? Yes No No No No Wetland Hydrology Present? Yes No No No No No Wetland Hydrology Present? Yes No	_	;			
Vertand Hydrology Indicators: Indicators (minimum of one required; check all that apply)	• •		_		LI dia 0.11 Duranto Maria
YDROLOGY Vettand Hydrology Indicators: **trimary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) MLRA 1, 2, 4A, and 4B) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits (B5) Surface Soil Cracks (B6) Induction Visible on Aerial Imagery (B7) Surface Soil Cracks (B6) Induction Visible on Aerial Imagery (B7) Stunted or Stressed Plants (D1) (LRR A) Induction Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummocks (D7) Saturation Present? Yes ✓ No ◯ Depth (inches): Veterarks: **Remarks** **Remarks** **Remarks** **Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2) Water-Stained Leaves (B10) Water-Stained Leaves (B10) Water-Stained Leaves (B9) (MLRA 1, 2) Water-Stained Leaves (B10) Water-Stained Leaves (B10) Water-Stained Leaves (Depth (inches):				
Secondary Indicators (2 or more required)			_		Hydric Soil Fresent? Tes <u>Le</u> No <u>L</u>
Surface Water (A1)	YDROLOGY				Hydric Soil Fresent? Tes <u>Le</u> No <u>L</u>
High Water Table (A2) MLRA 1, 2, 4A, and 4B) Saturation (A3) Satt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Sulface Soil Cracks (B6) Sunface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes No Depth (inches): urface Water Present? Yes No Depth (inches): overland Table (C2) Saturation Visible on Aerial Present? Yes No Depth (inches): overland Hydrology Present? Overland Hydrology Present? Overland Hydrology Present? Overland Hy	remarks: POROLOGY Vetland Hydrology Indicator	s:	heck all that apply)		
Saturation (A3)	Pemarks: POROLOGY Petland Hydrology Indicator rimary Indicators (minimum of	s:		I) (except	Secondary Indicators (2 or more required)
Water Marks (B1)	emarks: /DROLOGY /etland Hydrology Indicator rimary Indicators (minimum of	s:	Water-Stained Leaves (B9		Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 ,
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present?	YDROLOGY Vetland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2)	s:	Water-Stained Leaves (B9		Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Drift Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Ield Observations: urface Water Present? Vater Table Present? Yes No Depth (inches): vater Table Present? Yes No Depth (inches): overland Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Depth (inches): Vater Table Present? Yes No Depth (inches): overland Hydrology Present? Yes No Depth (inches): overland Hydrology Present	POROLOGY Vetland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3)	s:	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11)	3)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Presence of Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Present? Yes No Depth (inches): Vater Table Present? Yes No Depth (inches): Owtland Hydrology Present? Yes No Depth (inches): Owtland Hydrology Present? Yes No Present? Yes Yes No Present? Yes Yes Yes Yes Yes Yes Yes Yes	rDROLOGY Vetland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1)	s:		3)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Iron Deposits (B5)	rDROLOGY Vetland Hydrology Indicators rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	s:	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C	3) 3) 1)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes No Depth (inches): //ater Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): order Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): order Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): order Table Present? Yes No Depth (inches):	rDROLOGY /etland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	s:	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C	3) 3) 1) ong Living Roots	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3)
□ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost-Heave Hummocks (D7) □ Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes □ No □ Depth (inches): □ 10 atturation Present? Yes ☑ No □ Depth (inches): □ 0 wetland Hydrology Present? Yes ☑ No □ ncludes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:	rDROLOGY /etland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	s:	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (Cooperation of the cooperation of the cooper	B) 1) ong Living Roots (C4)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 of Secondary C9) S (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes No Depth (inches): //ater Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): ncludes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:	rimary Indicators (minimum of Marks) ✓ Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	s:	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T	3) 1) ong Living Roots (C4) Filled Soils (C6)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
ield Observations: urface Water Present? Yes No Depth (inches): vater Table Present? Yes No Depth (inches): aturation Present? Yes No Depth (inches): oncludes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:	rDROLOGY Vetland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	s: f one required; c	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C) Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T	B) 1) ong Living Roots (C4) Filled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vater Table Present? Yes V No Depth (inches): 10 aturation Present? Yes No Depth (inches): 0 Wetland Hydrology Present? Yes No Depth (inches): sescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:	rDROLOGY retland Hydrology Indicators rimary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria	s: f one required; c	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (Explain in Remarks	B) 1) ong Living Roots (C4) Filled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vater Table Present? Yes V No Depth (inches): 10 aturation Present? Yes No Depth (inches): 0 Wetland Hydrology Present? Yes No Depth (inches): sescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:	rDROLOGY /etland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) ✓ Water Marks (B1) ✓ Sediment Deposits (B2) ✓ Drift Deposits (B3) ✓ Algal Mat or Crust (B4) ✓ Iron Deposits (B5) ✓ Surface Soil Cracks (B6) ✓ Inundation Visible on Aeria ✓ Sparsely Vegetated Conca	s: f one required; c	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (Explain in Remarks	B) 1) ong Living Roots (C4) Filled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
raturation Present? Yes No Depth (inches): 0 Wetland Hydrology Present? Yes No Depth (inches): 10 Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	YDROLOGY Vetland Hydrology Indicator Inimary Indicators (minimum of Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Concal ield Observations:	s: f one required; c	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (Explain in Remarks	B) 1) ong Living Roots (C4) Filled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
lemarks:	YDROLOGY Vetland Hydrology Indicator Immary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Concained Observations: Surface Water Present?	s: f one required; c Il Imagery (B7) Ive Surface (B8)	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C) Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (Explain in Remarks	B) 1) 2) 2) 2) 3) 3) 4) 5) 5) 6) 6) 7) 6) 7) 7) 7) 8) 8) 8)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
	YDROLOGY Vetland Hydrology Indicators rimary Indicators (minimum of Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca ield Observations: surface Water Present? vater Table Present? saturation Present? includes capillary fringe)	s: If one required; c If one required; c If one required; c If one required; c	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (Explain in Remarks ✓ Depth (inches): Depth (inches):	B) 3) 1) 5) 5) 6) 7) 6) 7) 6) 7) 7) 8) 7) 8) 7) 8) 7) 8) 10 10 10 10 10 10 10 10 10 1	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	YDROLOGY Vetland Hydrology Indicator: Primary Indicators (minimum of Surface Water (A1) Vetland Hydrology Indicators (minimum of Surface Water (A1) Vetland High Water Table (A2) Vetland Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Concative Water Present? Vater Table Present? Saturation Present? Saturation Present? Sincludes capillary fringe)	s: If one required; c If one required; c If one required; c If one required; c	Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13 ✓ Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (Explain in Remarks ✓ Depth (inches): Depth (inches):	B) 3) 1) 5) 5) 6) 7) 6) 7) 6) 7) 7) 8) 7) 8) 7) 8) 7) 8) 10 10 10 10 10 10 10 10 10 1	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Applicant/Owner_ECOA Section, Township, Range: Section, Section, Township, Range: Section, Section, Township, Range: Section, Township, Range: Section, Township, Range: Section, Range: S	Project/Site: Hereim Ranch Mitigation Bank	City/County: Meagher Sa	mpling Date:7/10/2020
Investigator(s): R Quitre			
Landform (illislope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (b): 5 Subregion (LRR): LRR E	• • • • • • • • • • • • • • • • • • • •		
Submey on Name Soft Bit Typlo Fixivaquents Fluvaquents Haptquotts, 0-4% slopes Name Soft Bit Typlo Fixivaquents Fluvaquents Haptquotts, 0-4% slopes Name Soft Bit Typlo Fixivaquents Fluvaquents Haptquotts, 0-4% slopes Name Na	Landform (hillslope, terrace, etc.): Floodplain	Local relief (concave, convex, none): concave	Slope (%): 5
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Subregion (LRR): LRR E	Lat: 46.556753 Long: -110.8	381148 _{Datum:} NAD 83
Are Vegetation Soil or Hydrology naturally problematic?	Soil Map Unit Name: 501B: Typic Fluvaquents-Fluvaqu	uentic Haplaquolls, 0-4% slopes NWI classificatio	n:PSS
Are Vegetation	Are climatic / hydrologic conditions on the site typical for thi	s time of year? Yes 🗹 No 🔲 (If no, explain in Rema	arks.)
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?	Are Vegetation, Soil, or Hydrology s	significantly disturbed? Are "Normal Circumstances" pres	ent? Yes 🗹 No 🔲
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland Pytorotogy Present? Yes No Present? Yes No Present? Yes No Present?	Are Vegetation, Soil, or Hydrology r	naturally problematic? (If needed, explain any answers in	າ Remarks.)
Hydric Soil Present? Westland Hydrology Present? Ves ✓ No ☐ Is the Sampled Area within a Wetland? Westland Hydrology Present? PSS riverine wetland. VEGETATION - Use scientific names of plant Tree Stratum Plot size (30 Foot Radius) Absolute Domiant Indicator Number of Dominant Species that are OBL, FACW or FAC: Total Number of	SUMMARY OF FINDINGS – Attach site map	showing sampling point locations, transects, ir	nportant features, etc.
PSS riverine wetland. VEGETATION - Use scientific names of plant	Hydric Soil Present? Yes ✓ N Wetland Hydrology Present? Yes ✓ N	Is the Sampled Area	No
Dominance Test worksheet Number of Dominant Species Status			
Dominance Test worksheet Number of Dominant Species Status	VEGETATION - Use scientific names of plan	<u> </u>	
Sapling/Shrub Stratum	Absolute	Domient Indicator	
Sapling/Shrub Stratum Plot size (15 Foot Radius) Salix bebbiana 27 ▼ FACW Salix bebbiana 27 ▼ FACW Herbaceous Stratum Plot size (5 Foot Radius) Alopecurus arundinaceus 40 ▼ FAC Carex pellita 15 OBL Equisetum arvense 3 FAC Poa palustris 20 ▼ FAC Ribes oxyacanthoides 3 FACW Solidago canadensis 2 FACU Woody Vine Stratum Plot size (30 Foot Radius) Berein Gall Number of Dominant Species Across All Strata: 3 (B) Prevalence Index worksheet Total % Cover of: Multiply by: OBL species 15 ×1 15 FACW Scover of: Multiply by: OBL species 15 ×1 15 FACW species 30 ×2 60 FAC FAC species 63 ×3 189 FACU species 2 ×4 8 UPL species 0 ×5 0 Column Totals: 110 (A) 272 (B) Prevalence Index = B/A =: 2.47273 Hydrophytic Vegetation Indicators 1- Rapid Test for Hydrophytic Vegetation 2- 2 Dominance Test is >50% ▼ 3 - Prevalence Index is < 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet unless disturbed or problematic for #3, 4, 5. Hydrophytic Vegetation Yes ▼ NO	Tree Stratum Plot size (30 Foot Radius) % Cover	: Species? Status	
Salix bebbiana 27 FACW Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B)			
Sapiling/Shrub Stratum Plot size (15 Foot Radius) Salix bebbiana 27 ▼ FACW FACW Provalence Index worksheet Total % Cover of: Multiply by: OBL species 15 X1 15 FACW species 30 X2 60 FAC species 63 X3 189 FACU species 2 X4 8 UPL species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 2 X4 B UPL species 3 X3 189 FACU species 2 X4 B UPL species 2 X4 B UPL species 2 X4 B UPL species 3 X5 In SP FACU species 2 X4 B UPL species 2 X4 B UPL species 3 X5 In SP FACU species 2 X4 B UPL species 2 X4 B UPL species 3 X5 In SP FACU species 2 X4 B UPL species 3 X5 In SP FACU species 2 X4 B UPL species 2 X4 B UPL species 2 X4 B UPL species 3 X5 In SP FACU species 1 X1 In SP FACU species 1 X5 In			
Salix bebbiana 27		That Are OBL_FACW_or	
Herbaceous Stratum Plot size (5 Foot Radius) Alopecurus arundinaceus 40	,	Prevalence Index works	
Herbaceous Stratum Plot size (5 Foot Radius) Alopecurus arundinaceus 40 FAC Carex pellita 15 OBL Equisetum arvense 3 FAC Poa palustris 20 FAC Ribes oxyacanthoides 3 FACU Solidago canadensis 2 FACU Woody Vine Stratum Plot size (30 Foot Radius) Woody Vine Stratum Plot size (30 Foot Radius) Percent Bare Ground 20 Remarks: BG/litter/shallow ponded water=20%	Salix bebbiana 27	FACW Total % Cover of:	Multiply by:
Alopecurus arundinaceus 40		FACW species 30 FAC species 63 FACU species 2	X 2 60 X 3 189 X 4 8
Carex pellita 15 OBL Equisetum arvense 3 FAC Poa palustris 20 FAC Ribes oxyacanthoides 3 FACW Solidago canadensis 2 FACU ✓ 2 - Dominance Test is >50% ✓ 3 - Prevalence Index is <= 3.0	Herbaceous Stratum Plot size (5 Foot Radius)	UPL species 0	X 5 0
Equisetum arvense Poa palustris Pac Pac Poa palustris Pac Pac Poa palustris Pac Poa palustris Pac		Column Totals: 110	(A) 272 (B)
Poa palustris 20		Prevalence Index =	B/A =: 2.47273
Ribes oxyacanthoides Solidago canadensis 2		Hydronhytic Vegetation	Indicators
Solidago canadensis 2		1 - Rapid Test for	or Hydrophytic Vegetation
Woody Vine Stratum Plot size (30 Foot Radius) Woody Vine Stratum Plot size (30 Foot Radius) Percent Bare Ground 20 Remarks: BG/litter/shallow ponded water=20% 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Vegetation Yes ✓ NO □ Present?		2 Daminanaa	Γest is >50%
woody Vine Stratum Plot size (30 Foot Radius) Percent Bare Ground 20 Remarks: BG/litter/shallow ponded water=20% supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Vegetation Yes ✔ NO □ Present?		✓ 3 - Prevalence I	ndex is <= 3.0
Woody Vine Stratum Plot size (30 Foot Radius) Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Vegetation Yes ✓ NO □ Present? Remarks: BG/litter/shallow ponded water=20%		supporting data	
Woody Vine Stratum Plot size (30 Foot Radius) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Vegetation Yes ✓ NO □ Present? Remarks: BG/litter/shallow ponded water=20%			
Plot size (30 Foot Radius) Present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Vegetation Yes NO Present? Remarks: BG/litter/shallow ponded water=20%			. , , , ,
Percent Bare Ground 20 Remarks: BG/litter/shallow ponded water=20%	Woody Vine Stratum Plot size (30 Foot Radius)		
Remarks: BG/litter/shallow ponded water=20%	Percent Bare Ground 20	Vegetation Yes	✓ NO □
	Remarks:	1	
US Army Corps of Engineers Western Mountains, Valleys, and Coasts - Version 2.0	BG/litter/shallow ponded water=20%		
	US Army Corps of Engineers	Western Mountains. Valle	ys, and Coasts - Version 2.0

Profile Description: (Description: Depth Matri (inches) Color (moist)						Sampling Point: SP07wet
	be to the dep	th needed to docur	nent the indicato	r or confirm	the absence	of indicators.)
(IIICHES) COIOI (IIIOISI)			x Features % Type ¹	Loc ²	Texture	Pomorko
		Color (moist)				Remarks
0-16 10YR 3/1	97	10YR 4/6	3 C	M S	Silty Clay	
			· ——			
						
¹ Type: C=Concentration, D=I				ted Sand Gr		cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (App	olicable to all		-			rs for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Redox (•			า Muck (A10) Parent Material (TF2)
Histic Epipedon (A2) Black Histic (A3)		Stripped Matrix	(So) Mineral (F1) (exce	nt MI DA 1)		rearent Material (1F2) Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed	, , ,	pt WILIXA 1)		er (Explain in Remarks)
Depleted Below Dark Sur	face (A11)	Depleted Matrix	` '		•	, , , , , , , , , , , , , , , , , , , ,
Thick Dark Surface (A12)		Redox Dark Su			³ Indicato	rs of hydrophytic vegetation and
Sandy Mucky Mineral (S		Depleted Dark	Surface (F7)			nd hydrology must be present,
Sandy Gleyed Matrix (S4	6	Redox Depress	ions (F8)		unles	s disturbed or problematic.
Restrictive Layer (if present):					
Туре:						
Depth (inches):					Hydric Soil	Present? Yes <u>✓</u> No <u></u>
VDBOLOCV						
YDROLOGY						
Wetland Hydrology Indicato Primary Indicators (minimum		d: abook all that appl				
Surface Water (A1)	Ji one required	<u>и, спеск ап шагаррг</u>			Socor	udany Indicators (2 or more required)
Surface vvater (AT)		Motor Cto		·		ndary Indicators (2 or more required)
			ined Leaves (B9) (except		/ater-Stained Leaves (B9) (MLRA 1, 2,
☑ High Water Table (A2)		MLRA	ined Leaves (B9) (1, 2, 4A, and 4B)	except	w	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
✓ High Water Table (A2) ✓ Saturation (A3)		MLRA Salt Crust	ined Leaves (B9) (1, 2, 4A, and 4B) (B11)	except	w	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1)		MLRA Salt Crust Aquatic In	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13)	except	w b	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
		MLRA Salt Crust Aquatic In• WHydrogen	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1)			//ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9
		MLRA Salt Crust Aquatic In WHydrogen Oxidized F	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alon	g Living Roo	W D D S S ts (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2)
		MLRA ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized F ☐ Presence	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (G	g Living Roo C4)	□ W □ D □ D □ S ts (C3) ☑ G □ S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		MLRA Salt Crust Aquatic In Y Hydrogen Oxidized F Presence Recent Iro	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (C n Reduction in Till	g Living Roo C4) ed Soils (C6	D D D D S S S S S (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
	al Imagery (B'	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (G	g Living Roo C4) ed Soils (C6	D D D S S S S S P F P P P P P P P P P P P P P	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3)
	0 , (MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (C n Reduction in Till Stressed Plants (g Living Roo C4) ed Soils (C6	D D D S S S S S P F P P P P P P P P P P P P P	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
	0 , (MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (C n Reduction in Till Stressed Plants (g Living Roo C4) ed Soils (C6	D D D S S S S S P F P P P P P P P P P P P P P	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
	cave Surface (I	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaves (B9) (I, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonof Reduced Iron (Cn) Reduction in Till Stressed Plants (I) Stressed Plants (II) Stressed Plants (III)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	D D D S S S S S P F P P P P P P P P P P P P P	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Conc	eave Surface (I	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonof Reduced Iron (C) n Reduction in Till Stressed Plants (plain in Remarks)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	D D D S S S S S P F P P P P P P P P P P P P P	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
	Yes V	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaves (B9) (Inc. 1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonof Reduced Iron (Cnn Reduction in Till Stressed Plants (Inc. 1) Stresse	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
	Yes V Yes V	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8) No Depth (in No Depth (in	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonor of Reduced Iron (C) n Reduction in Till Stressed Plants (Dain in Remarks) Ches): Ches): Ches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3) S S S S S S S S S S S S S S S S S S S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
	Yes V Yes V	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8) No Depth (in No Depth (in	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonor of Reduced Iron (C) n Reduction in Till Stressed Plants (Dain in Remarks) Ches): Ches): Ches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3) S S S S S S S S S S S S S S S S S S S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
High Water Table (A2) Vater Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Concerications: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streen)	Yes V Yes V	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8) No Depth (in No Depth (in	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonor of Reduced Iron (C) n Reduction in Till Stressed Plants (Dain in Remarks) Ches): Ches): Ches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3) S S S S S S S S S S S S S S S S S S S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
	Yes V Yes V Yes V Yes M	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8) No Depth (in No Depth (in	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonor of Reduced Iron (C) n Reduction in Till Stressed Plants (Dain in Remarks) Ches): Ches): Ches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3) S S S S S S S S S S S S S S S S S S S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
	Yes V Yes V Yes V Yes M	MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8) No Depth (in No Depth (in	ined Leaves (B9) (1, 2, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonor of Reduced Iron (C) n Reduction in Till Stressed Plants (Dain in Remarks) Ches): Ches): Ches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3) S S S S S S S S S S S S S S S S S S S	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

State: Montianal a spanjing Point S-PUBUP State: Montianal a spanjing Point Society State: Montianal a spanjing Point Montianal a	Project/Site: Hereim Ranch Mitigation Bank	City/County: Meagher	Sampling Date: 7/10/2020
Investigator(s): R Quire	Applicant/Owner: ECOA		State: Montana Sampling Point: SP08up
Landform (fillslope, terrace, etc.) Terrace Lat	• •	Section, Township, Ran	
Subregion (LRR): LRRE			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Subregion (LRR): LRR E	Lat: 46.557317	-110.879803 _{Datum:} NAD 83
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Soil Map Unit Name: 501B: Typic Fluvaquents-Fluvaque	entic Haplaquolls, 0-4% slopes	NWI classification:PSS
Are Vegetation			
Are Vegetation	Are Vegetation, Soil, or Hydrology sig	gnificantly disturbed? Are "N	lormal Circumstances" present? Yes <u>✓</u> No □
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes	SUMMARY OF FINDINGS - Attach site map s	howing sampling point lo	cations, transects, important features, etc.
Hydric Soil Present? Yes			, , ,
VEGETATION - Use scientific names of plant		Is the Sampled	
Upland sample point located in conservation area 1. VEGETATION - Use scientific names of plant		within a Wetland	d? Yes □ No <u>♥</u>
Tree Stratum			
Plot size (30 Foot Radius) Absolute Species? Status Status Species? Status Species? Status Species? Status Species? Status Species Status Status Status Species Status Status Species Status Status Species Status	opiana dampio point locatoa in concentation area 1.		
Sapling/Shrub Stratum Plot size (30 Foot Radius) % Cover: Species? Status	VEGETATION - Use scientific names of plant	;	
Number of Dominant Species that are OBL, FACW or FAC: 1 (A) Total Number of Dominant Species that are OBL, FACW or FAC: 2 (B) Percent of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50 % (A/B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50 % (A/B) 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 0 X 4 0 UPL species 70 X 5 350 Column Totals: 95 (A) 425 (B) Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominant Species 3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic	Tues Ctuetume Districts (OC Foot Dedition)		Dominance Test worksheet
Sapling/Shrub Stratum Plot size (15 Foot Radius) Percent of Dominant Species That Are OBL, FACW, or FAC: 50 % (A/B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50 % (A/B) Prevalence Index worksheet Total % Cover of: Multiply by: OBL species 0 X1 0 FACW species 0 X2 0 FAC species 25 X3 75 FACU species 0 X4 0 UPL species 70 X5 350 Column Totals: 95 (A) 425 (B) Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. Sheet. Droblematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic Dominant Species 50 % (A/B) Frevalence Index worksheet Dominant Species Dominant Species	, % Cover.	Species? Status	
That Are OBL, FACW, or FAC: Sol % (A/B)			
Prevalence Index worksheet Total % Cover of: Multiply by:	Sanling/Shruh Stratum Plot size #5 Foot Radius)		
Herbaceous Stratum Plot size (5 Foot Radius) Bromus inermis 70 ☑ UPL Elymus repens 25 ☑ FAC Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is <= 3.0 □ 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. □ 5 - Wetland Non-Vascular Plants □ Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic □ Hydrophytic □ Hydrophytic □ Hydrophytic □	Sapring/Sitratum 1 fot size (13 1 oot readius)		
Herbaceous Stratum Plot size (5 Foot Radius) Bromus inermis 70 ✓ UPL Elymus repens 25 ✓ FAC Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is <= 3.0 □ 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. □ 5 - Wetland Non-Vascular Plants □ Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic Hydrophytic Hydrophyt			OBL species 0 X 1 0
Herbaceous Stratum Plot size (5 Foot Radius) Bromus inermis 70 V UPL Elymus repens 25 FAC Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic Hydrophytic			
Herbaceous Stratum			
Elymus repens 25 FAC Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic	Herbaceous Stratum Plot size (5 Foot Radius)		
Elymus repens 25 ▼ FAC Prevalence Index = B/A =: 4.47368 Hydrophytic Vegetation Indicators □ 1 - Rapid Test for Hydrophytic Vegetation □ 2 - Dominance Test is >50% □ 3 - Prevalence Index is <= 3.0 □ 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. □ 5 - Wetland Non-Vascular Plants □ Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic		V UPL	
Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic	Elymus repens 25	✓ FAC	
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hy			
□ 2 - Dominance Test is >50% □ 3 - Prevalence Index is <= 3.0 □ 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. □ 5 - Wetland Non-Vascular Plants □ Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic □ Hydrophytic			<u> </u>
3 - Prevalence Index is <= 3.0 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic			
Woody Vine Stratum Plot size (30 Foot Radius) 4 - Morphological Adaptations (Provide supporting data in remarks or on separate sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic			
woody Vine Stratum Plot size (30 Foot Radius) Sheet. 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic			4 - Morphological Adaptations (Provide
Woody Vine Stratum Plot size (30 Foot Radius) Problematic Hydrophytic Vegetation (Explain) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic Hydrophytic			sheet.
Woody Vine Stratum Plot size (30 Foot Radius) Indicators of hydric sil and wetland hydrology must be present, unless disturbed or problematic for #3, 4, 5. Hydrophytic			5 - Wetland Non-Vascular Plants
Woody Vine Stratum Plot size (30 Foot Radius) present, unless disturbed or problematic for #3, 4, 5. Hydrophytic			☐ Problematic Hydrophytic Vegetation (Explain)
	Woody Vine Stratum Plot size (30 Foot Radius)		
Vegetation Yes	Percent Bare Ground 5		Vegetation Yes □ NO ✓
Remarks:			
BG/litter=5%	BG/IITTer=5%		
US Army Corps of Engineers Western Mountains, Valleys, and Coasts - Version 2.0	US Army Corps of Engineers		Western Mountains, Valleys, and Coasts - Version 2.0

Depth	Matrix		Redox Features		
	Color (moist)		Color (moist) % Typ	pe ¹ Loc ²	Texture Remarks
	0YR 2/2	100			Clay Loam
			duced Matrix, CS=Covered or C Rs, unless otherwise noted.)	oated Sand Gra	ains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
☐ Thick Dark S ☐ Sandy Muck	don (A2) (A3) ulfide (A4) elow Dark Surface Surface (A12) ky Mineral (S1) ed Matrix (S4)	(A11)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (exc Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	cept MLRA 1)	2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
_	er (ii preseiit).				
Туре:	- \.		-		Hydric Soil Present? Yes No
Donth (inches					
	ndicators obser	ved during s	- ite visit.		Tryunc Son Fresent: Tes No
Remarks: No hydric soil ii YDROLOGY	ndicators obser	ved during s	- ite visit.		Tryunc 3011 Fresent: Tes No
Remarks: No hydric soil ii YDROLOGY Wetland Hydrol	ndicators obser				
Remarks: No hydric soil in YDROLOGY Wetland Hydrol- Primary Indicator	ndicators obser		eck all that apply)	a) (except	Secondary Indicators (2 or more required)
Remarks: No hydric soil in YDROLOGY Wetland Hydrol Primary Indicator Surface Wat	ndicators obser		eck all that apply)		Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
Remarks: No hydric soil in YDROLOGY Wetland Hydrol- Primary Indicator Surface Wat	ogy Indicators: rs (minimum of orter (A1) Table (A2)		eck all that apply) Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 48		Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Remarks: No hydric soil in YDROLOGY Wetland Hydrol Primary Indicator Surface Wat	ogy Indicators: rs (minimum of orter (A1) Table (A2)		eck all that apply)	В)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
Primary Indicator Surface Wate High Water Saturation (A	ogy Indicators: rs (minimum of order (A1) Table (A2) A3) s (B1)		eck all that apply) Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 46 Salt Crust (B11)	3)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Primary Indicator High Water Saturation (A Water Marks	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2)		eck all that apply) Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B15	3) (1)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS
PROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water Saturation (A Water Marks	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3)		eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C	B) 3) :1) ong Living Root:	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS
PROLOGY Wetland Hydrol Primary Indicator High Water Saturation (A Water Marks Sediment De Drift Deposit	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4)		eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres alc	B) 3) (1) ong Living Roots (C4)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Remarks: No hydric soil in YDROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5)		eck all that apply) Water-Stained Leaves (B9 MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron	B) 3) c1) ong Living Roote n (C4) Tilled Soils (C6)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
PROLOGY Wetland Hydrol Primary Indicator Saturation (A Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) //sible on Aerial In	ne required; ch	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres all Presence of Reduced Iron Recent Iron Reduction in	B) 3) c1) ong Living Roots n (C4) Tilled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 of Secondary C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
PREMARKS: No hydric soil in the hydrology Wetland Hydrology Primary Indicator Surface Water High Water Saturation (A) Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation Vereical	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) //isible on Aerial Ingetated Concave	ne required; ch	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres als Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant	B) 3) c1) ong Living Roots n (C4) Tilled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Ver	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) is (B3) Crust (B4) s (B5) Cracks (B6) //isible on Aerial Ingetated Concave	magery (B7) Surface (B8)	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks	B) 3) c1) ong Living Roots n (C4) Tilled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indicator Surface Water High Water Surface Water High Water Staturation (A) Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Vereild Observation	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) //isible on Aerial Ingetated Concave	magery (B7) Surface (B8)	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks	B) 3) c1) ong Living Roots n (C4) Tilled Soils (C6) s (D1) (LRR A)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
PROLOGY Wetland Hydrol Primary Indicator Saturation (A Water Marks Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Ver Field Observation Surface Water Prese Saturation Prese	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) //isible on Aerial Ingetated Concave ons: resent? yeart? yeart?	magery (B7) Surface (B8)	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks	B) 3) cong Living Roots (C4) Tilled Soils (C6) s (D1) (LRR A) s)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 s (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water Saturation (A Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Verental Surface Water Prese Water Table Prese (includes capillar	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) Cracks (B6) //isible on Aerial Ingetated Concave ons: resent? yeart? yeart? yeart? yeart? yeart?	magery (B7) Surface (B8) es No _ es No _	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres ale Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks Depth (inches): Depth (inches):	B) 3) cong Living Roots (C4) Tilled Soils (C6) s (D1) (LRR A) s) Wetlan	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water Saturation (A Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Verental Surface Water Prese Water Table Prese (includes capillar	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) Cracks (B6) //isible on Aerial Ingetated Concave ons: resent? yeart? yeart? yeart? yeart? yeart?	magery (B7) Surface (B8) es No _ es No _	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks Depth (inches): Depth (inches):	B) 3) cong Living Roots (C4) Tilled Soils (C6) s (D1) (LRR A) s) Wetlan	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 S (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY Wetland Hydrol Primary Indicator Surface Wat High Water Saturation (A Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Vet Field Observation Surface Water P Water Table Prese Saturation Prese (includes capillar Describe Record	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) Cracks (B6) //isible on Aerial Ingetated Concave ons: resent? yeart? yeart? yeart? yeart? yeart?	magery (B7) Surface (B8) es No _ es No _	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres ale Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks Depth (inches): Depth (inches):	B) 3) cong Living Roots (C4) Tilled Soils (C6) s (D1) (LRR A) s) Wetlan	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Secondary) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indicator Saturation (A) Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Ver Surface Water Prese Surface Water Prese (includes capillar Describe Record	ogy Indicators: rs (minimum of orter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) /isible on Aerial Ingetated Concave ons: resent? Yesent? Ye	magery (B7) Surface (B8) es No _ es No _ gauge, monito	eck all that apply) Water-Stained Leaves (BS MLRA 1, 2, 4A, and 4B Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C Oxidized Rhizospheres ale Presence of Reduced Iron Recent Iron Reduction in Stunted or Stressed Plant Other (Explain in Remarks Depth (inches): Depth (inches):	B) 3) cong Living Roots (C4) Tilled Soils (C6) s (D1) (LRR A) s) Wetlan	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Secondary) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)