

SOIL

Sampling Point: SP-1004a**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/2	100					Loamy/Clayey	Silty clay loam

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

☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) **(LRR C)** ☐ Depleted Matrix (F3)
☐ 1 cm Muck (A9) **(LRR D)** ☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12) ☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)

Indicators for Problematic Hydric Soils³:

☐ 1 cm Muck (A9) **(LRR C)**
☐ 2 cm Muck (A10) **(LRR B)**
☐ Iron-Manganese Masses (F12) **(LRR D)**
☐ Reduced Vertic (F18)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Type: Rock
 Depth (inches): 10

Hydric Soil Present?Yes ☒ No ☐

Remarks:

shallow problematic soils

HYDROLOGY

Wetland Hydrology Indicators:

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

☐ Surface Water (A1) ☐ Salt Crust (B11)
☐ High Water Table (A2) ☐ Biotic Crust (B12)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) **(Nonriverine)** ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) **(Nonriverine)** ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) **(Nonriverine)** ☐ Presence of Reduced Iron (C4)
☒ Surface Soil Cracks (B6) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☐ Water Marks (B1) **(Riverine)**
☐ Sediment Deposits (B2) **(Riverine)**
☐ Drift Deposits (B3) **(Riverine)**
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
 Water Table Present? Yes ☐ No ☒ Depth (inches):
 Saturation Present? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1004B

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 036

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.431324 Long: -119.288999 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

<table style="width: 100%;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u><i>Pseudoroegneria spicata</i></u></td><td style="text-align: center;">80</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2.</td><td><u><i>Bromus tectorum</i></u></td><td style="text-align: center;">20</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u><i>Achillea millefolium</i></u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4.</td><td><u><i>Ericameria nauseosa</i></u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">115</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <p>% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u></p>	Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	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Indicator Status	1.					2.								=Total Cover		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>105</u></td> <td>x 5 = <u>525</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>565</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.91</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0¹ ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Present? 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SOIL

Sampling Point: SP-1004B

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
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<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1005a

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 036

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR B Lat: 45.431289 Long: -119.288708 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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Remarks: Problematic vegetation - early season visit suggests much more growth for vernal pool plants																																																																																																																																																								

SOIL

Sampling Point: SP-1005a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>3</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Problematic soils - shallow clay soils retain water

HYDROLOGY

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

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1005b

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 036

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.431346 Long: -119.288699 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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SOIL

Sampling Point: SP-1005b

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

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

HYDROLOGY

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

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

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1006a

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR B Lat: 45.429973 Long: -119.291305 Datum: WGS 1984

Soil Map Unit Name: Bakeoven-Morrow Complex, 2 to 20 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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2.	<u>Taeniatherum caput-medusae</u>	10	Yes	UPL																																																																																																																																																				
3.	<u>Poa secunda</u>	5	No	FACU																																																																																																																																																				
4.	<u>Deschampsia spp.</u>	20	Yes	FACW																																																																																																																																																				
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Column Totals: <u>40</u> (A)	<u>120</u> (B)																																																																																																																																																							
Prevalence Index = B/A = <u>3.00</u>																																																																																																																																																								
Remarks: Problematic vegetation - early season visit																																																																																																																																																								

SOIL

Sampling Point: SP-1006a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>3</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Problematic soils - shallow clay soils retain water

HYDROLOGY

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

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1006b

Investigator(s): Katie Pyne, Sara Frank, Jessica Taylor Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.430008 Long: -119.291262 Datum: WGS 1984

Soil Map Unit Name: Bakeoven-Morrow complex, 2 to 20 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

<table style="width: 100%;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Bromus tectorum</u></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2.</td><td><u>Pseudoroegneria spicata</u></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u>Achillea millefolium</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">90</td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <p>% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u></p>	Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	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Indicator Status	1.					2.								=Total Cover		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>80</u></td> <td>x 5 = <u>400</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>440</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.89</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0¹ ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>80</u>	x 5 = <u>400</u>	Column Totals: <u>90</u> (A)	<u>440</u> (B)	Prevalence Index = B/A = <u>4.89</u>	
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Remarks: Upland Plot																																																																																																																																																								

SOIL

Sampling Point: SP-1006b

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1007a

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR B Lat: 45.430673 Long: -119.290279 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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SOIL

Sampling Point: SP-1007a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>3</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Problematic soils - Shallow clay soils retain water

HYDROLOGY

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

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1007b

Investigator(s): Katie Pyne, Sara Frank, Jessica Taylor Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.430633 Long: -119.290361 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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3.	<u>Pseudoroegneria spicata</u>	40	Yes	UPL																																																																																																																																																				
4.	<u>Bromus tectorum</u>	40	Yes	UPL																																																																																																																																																				
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UPL species <u>85</u>	x 5 = <u>425</u>																																																																																																																																																							
Column Totals: <u>95</u> (A)	<u>465</u> (B)																																																																																																																																																							
Prevalence Index = B/A = <u>4.89</u>																																																																																																																																																								
Remarks: Upland plot.																																																																																																																																																								

SOIL

Sampling Point: SP-1007b

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1008a

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 036

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR B Lat: 45.432763 Long: -119.287504 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

<table style="width: 100%;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Taeniatherum caput-medusae</u></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2.</td><td><u>Navarretia intertexta</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">55</td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <p>% Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust <u> </u></p>	Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.								=Total Cover		Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.								=Total Cover		Herb Stratum	(Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u>Taeniatherum caput-medusae</u>	50	Yes	UPL	2.	<u>Navarretia intertexta</u>	5	No	FACW	3.					4.					5.					6.					7.					8.							55	=Total Cover		Woody Vine Stratum	(Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.								=Total Cover		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>260</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.73</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0¹ ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>55</u> (A)	<u>260</u> (B)	Prevalence Index = B/A = <u>4.73</u>	
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Remarks: Moss present as 50% ground cover. Problematic vegetation - early seson visit																																																																																																																																																								

SOIL

Sampling Point: SP-1008a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>3</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Remarks:
Problematic soils - Shallow clay soils retain water

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
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<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
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<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1008b

Investigator(s): Katie Pyne, Sara Frank, Jessica Taylor Section, Township, Range: 1S 28E 036

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.432716 Long: -119.287614 Datum: WGS 1984

Soil Map Unit Name: Morrow Silt Loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

<table style="width: 100%;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Poa bulbosa</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>2.</td><td><u>Ericameria nauseosa</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u>Pseudoroegneria spicata</u></td><td style="text-align: center;">80</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>4.</td><td><u>Bromus tectorum</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">95</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <p>% Bare Ground in Herb Stratum <u>5</u> % Cover of Biotic Crust <u> </u></p>	Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.							=Total Cover			Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.							=Total Cover			Herb Stratum	(Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u>Poa bulbosa</u>	5	No	FACU	2.	<u>Ericameria nauseosa</u>	5	No	UPL	3.	<u>Pseudoroegneria spicata</u>	80	Yes	UPL	4.	<u>Bromus tectorum</u>	5	No	UPL	5.					6.					7.					8.							95	=Total Cover		Woody Vine Stratum	(Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.							=Total Cover			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>90</u></td> <td>x 5 = <u>450</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>470</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.95</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0¹ ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>90</u>	x 5 = <u>450</u>	Column Totals: <u>95</u> (A)	<u>470</u> (B)	Prevalence Index = B/A = <u>4.95</u>	
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Remarks: Upland plot.																																																																																																																																																								

SOIL

Sampling Point: SP-1007b

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

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

HYDROLOGY

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

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

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Wheatridge East</u>	City/County: <u>Morrow</u>	Sampling Date: <u>03/29/2023</u>
Applicant/Owner: <u>NextEra</u>	State: <u>OR</u>	Sampling Point: <u>SP-1010a</u>
Investigator(s): <u>Katie Pyne, Jessica Taylor, Sara Frank</u> Section, Township, Range: <u>1S 28E 035</u>		
Landform (hillside, terrace, etc.): <u>Ridge</u>	Local relief (concave, convex, none): <u>Concave</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR B</u>	Lat: <u>45.43036</u>	Long: <u>-119.290283</u> Datum: <u>WGS 1984</u>
Soil Map Unit Name: <u>Morrow Silt Loam, 1 to 7 percent slopes</u>		NWI classification: <u>N/A</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u>X</u> , or Hydrology <u> </u> naturally problematic? (If needed, explain any answers in Remarks.)		

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

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

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					
2.					
3.					
4.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				
1.	<u>Poa secunda</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>Navarretia intertexta</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
3.	<u>Agrostis spp.</u>	<u>5</u>	<u>No</u>		
4.					
5.					
6.					
7.					
8.					
		<u>46</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>5 ft</u>)				
1.					
2.					
		=Total Cover			
% Bare Ground in Herb Stratum <u>50</u>		% Cover of Biotic Crust <u> </u>			
Remarks: Moss present as 50% ground cover. Problematic vegetation - early seson visit					

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>1</u>	x 2 = <u>2</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>40</u>	x 4 = <u>160</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>41</u> (A)	<u>162</u> (B)
Prevalence Index = B/A = <u>3.95</u>	

Hydrophytic Vegetation Indicators:

 Dominance Test is >50%

 Prevalence Index is ≤3.0¹

 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No X

SOIL

Sampling Point: SP-1010a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>5</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Problematic soils - Shallow clay soils retain water

HYDROLOGY

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

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1010b

Investigator(s): Katie Pyne, Sara Frank, Jessica Taylor Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.430405 Long: -119.29023 Datum: WGS 1984

Soil Map Unit Name: Morrow silt loam, 1 to 7 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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SOIL

Sampling Point: SP-1010b

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1011a

Investigator(s): Katie Pyne, Jessica Taylor, Sara Frank Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR B Lat: 45.429973 Long: -119.291305 Datum: WGS 1984

Soil Map Unit Name: Bakeoven-Morrow Complex, 2 to 20 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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SOIL

Sampling Point: SP-1011a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>3</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Problematic soils - shallow clay soils retain water

HYDROLOGY

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

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023

Applicant/Owner: NextEra State: OR Sampling Point: SP-1011b

Investigator(s): Katie Pyne, Sara Frank, Jessica Taylor Section, Township, Range: 1S 28E 035

Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0

Subregion (LRR): LRR B Lat: 45.429549 Long: -119.291597 Datum: WGS 1984

Soil Map Unit Name: Bakeoven-Morrow complex, 2 to 20 percent slopes NWI classification: N/A

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

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

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

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

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

VEGETATION – Use scientific names of plants.

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SOIL

Sampling Point: SP-1011b

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

SOIL

Sampling Point: SP-1012a

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed): Type: <u>Rock</u> Depth (inches): <u>3</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Problematic soils - shallow clay soils retain water

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
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<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
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<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	

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

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Wheatridge East City/County: Morrow Sampling Date: 03/29/2023
 Applicant/Owner: NextEra State: OR Sampling Point: SP-1012b
 Investigator(s): Katie Pyne, Sara Frank, Jessica Taylor Section, Township, Range: 1S 28E 035
 Landform (hillside, terrace, etc.): Ridge Local relief (concave, convex, none): Flat Slope (%): 0
 Subregion (LRR): LRR B Lat: 45.429423 Long: -119.291748 Datum: WGS 1984
 Soil Map Unit Name: Bakeoven-Morrow complex, 2 to 20 percent slopes NWI classification: N/A

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

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

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

VEGETATION – Use scientific names of plants.

<table style="width: 100%;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Bromus tectorum</u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2.</td><td><u>Pseudoroegneria spicata</u></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u>Achillea millefolium</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4.</td><td><u>Deschampsia elongata</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>5.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>6.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>7.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>8.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>5 ft</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <p>% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u></p>	Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	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Yes <u> </u> No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>80</u>	x 5 = <u>400</u>	Column Totals: <u>100</u> (A)	<u>460</u> (B)	Prevalence Index = B/A = <u>4.60</u>	
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SOIL

Sampling Point: SP-1012b

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Wheatridge East Wind</u>	City/County: <u>Morrow County</u>	Sampling Date: <u>3/27/2023</u>
Applicant/Owner: <u>NextEra</u>	State: <u>OR</u>	Sampling Point: <u>SP-NW-1000</u>
Investigator(s): <u>Katie Pyne, Sara Frank</u>	Section, Township, Range: <u>1S 28 E 006</u>	
Landform (hillside, terrace, etc.): <u>Bench</u>	Local relief (concave, convex, none): <u>None</u>	Slope (%): <u>0</u>
Subregion (LRR): <u>LRR B</u>	Lat: <u>45.514837</u>	Long: <u>-119.380079</u>
Datum: <u>WGS 84</u>		
Soil Map Unit Name: <u>35 - Onyx silt loam</u>	NW1 classification: <u>PEM1C</u>	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No <u> </u> (If no, explain in Remarks.)		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed? Are "Normal Circumstances" present? Yes <u>x</u> No <u> </u>		
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </u> naturally problematic? (If needed, explain any answers in Remarks.)		

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

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

VEGETATION – Use scientific names of plants.

<table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u> </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u> </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Phalaris arundinacea</u></td><td style="text-align: center;">100</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2.</td><td><u>Centaurea stoebe</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u>Onopordum acanthium</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>4.</td><td><u>Cynoglossum officinale</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>6.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>7.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>8.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">109 =Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u> </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2.</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <div style="margin-top: 10px;"> % Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u> </u> </div>	Tree Stratum	(Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>			=Total Cover			Sapling/Shrub Stratum	(Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>			=Total Cover			Herb Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	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Yes <u>X</u> No <u> </u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>6</u>	x 5 = <u>30</u>	Column Totals: <u>109</u> (A)	<u>242</u> (B)	Prevalence Index = B/A = <u>2.22</u>	
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SOIL

Sampling Point: SP-999

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

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if observed):	Hydric Soil Present?	Yes	No
Type: _____ Depth (inches): _____			

Remarks:
No redox, earthworms present

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
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<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	

Field Observations:				Wetland Hydrology Present?	Yes	No	X
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:
No saturation, soils are damp

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Appendix B. Wetlands and Other Waters Photolog

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Photo 1. Overview of wetland conditions north of road crossing. Looking S. Taken: 7/21/2022.



Photo 2. Junk pile located to the SE of wetland shows up on orthoimagery as dark spot. Looking NW. Taken: 7/22/2022.



Photo 3. Stream does not continue beyond this point. Looking SW. Taken: 7/22/2022.

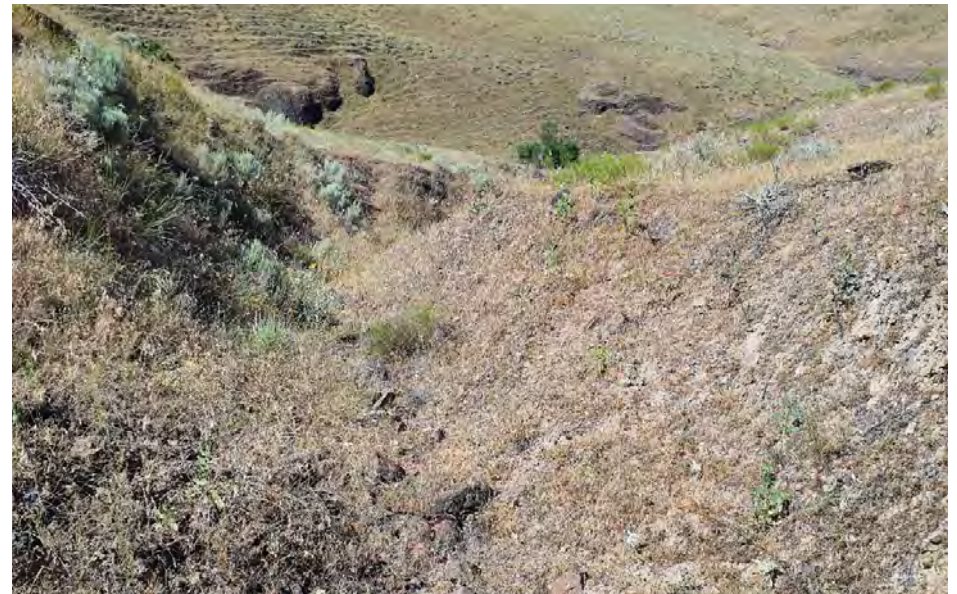


Photo 4. Overview of stream conditions. Looking NW. Taken: 7/22/2022.



Photo 5. Overview of stream conditions. Looking SW. Taken: 7/22/2022.



Photo 6. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 7. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 8. Overview of stream conditions. Looking SW. Taken: 7/22/2022.



Photo 9. Overview of stream conditions. Looking SW. Taken: 7/22/2022.



Photo 10. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 11. Overview of riverine wetland conditions. Looking N. Taken: 7/22/2022.



Photo 12. No bed or banks in this sandy soil. What appears to be a waterway in ortho is a cow trail. Looking W. Taken: 7/22/2022.



Photo 13. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 14. Overview of riverine wetland conditions. Looking N. Taken: 7/22/2022.



Photo 15. Overview of stream conditions. Looking W. Taken: 7/22/2022.



Photo 16. Overview of stream conditions. Looking W. Taken: 7/22/2022.



Photo 17. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking NE. Taken: 7/22/2022.



Photo 18. Overview of stream conditions. Looking W. Taken: 7/22/2022.



Photo 19. Riverine wetland transitions to ephemeral waterway at this point. Looking N. Taken: 7/22/2022.



Photo 20. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 21. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking NE. Taken: 7/22/2022.



Photo 22. General conditions of the riverine wetland in this area. Looking S. Taken: 7/22/2022.



Photo 23. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 24. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 25. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 26. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 27. Overview of stream conditions. Looking SW. Taken: 7/22/2022.



Photo 28. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 29. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 30. Overview of stream conditions. Looking SW. Taken: 7/22/2022.



Photo 31. Overview of stream conditions. Looking S. Taken: 7/22/2022.



Photo 32. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 33. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 34. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 35. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking W. Taken: 7/22/2022.



Photo 36. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 37. Overview of stream conditions. Looking NW. Taken: 7/23/2022.



Photo 38. Stream loses bed and banks at cattle trail before ledge to wetland Looking SW. Taken: 7/22/2022.



Photo 39. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 40. Stream loses bed and banks at cattle trail before ledge to wetland Looking SW. Taken: 7/22/2022.



Photo 41. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 42. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 43. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 44. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 45. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 46. Upstream of survey area Looking NE. Taken: 7/22/2022.



Photo 47. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 48. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking W. Taken: 7/22/2022.



Photo 49. Overview of stream conditions. Looking E. Taken: 7/22/2022.



Photo 50. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking W. Taken: 7/22/2022.



Photo 51. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 52. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking W. Taken: 7/22/2022.



Photo 53. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 54. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking SW. Taken: 7/22/2022.



Photo 55. Overview of stream conditions. Looking NE. Taken: 7/22/2022.



Photo 56. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking NE. Taken: 7/22/2022.



Photo 57. Overview of stream conditions. Looking NW. Taken: 7/22/2022.



Photo 58. No more bed or banks downhill from this location in ephemeral alluvial waterway. Looking NE. Taken: 7/22/2022.



Photo 59. Dark spot in orthoimagery is dirt pile. Looking S. Taken: 10/18/2022.



Photo 60. Overview of riverine wetland in this reach. Looking NW. Taken: 10/18/2022.

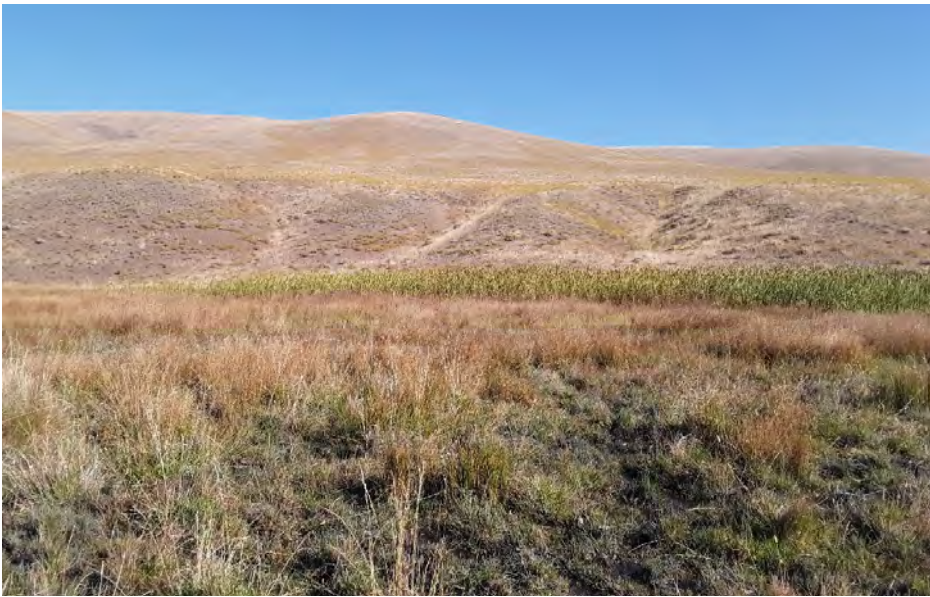


Photo 61. Overview of wetland and upland conditions. Looking NE. Taken: 10/18/2022.



Photo 62. Overview of stream conditions. Looking NE. Taken: 10/18/2022.



Photo 63. Overview of stream conditions. Looking NE. Taken: 10/18/2022.



Photo 64. Overview of stream conditions. Looking NE. Taken: 10/18/2022.



Photo 65. Origin of spring fed wetland, water follows the slope to the larger ponded area in the background. Looking N. Taken: 10/18/2022.



Photo 66. Overview of stream conditions. Looking E. Taken: 10/18/2022.



Photo 67. Overview of stream conditions. Looking N. Taken: 10/18/2022.



Photo 68. Overview of stream conditions. Looking N. Taken: 10/18/2022.



Photo 69. Overview of stream conditions. Looking N. Taken: 10/18/2022.



Photo 70. Overview of stream conditions. Looking N. Taken: 10/18/2022.



Photo 71. one looking up slope and one downslope draining into WT-002 Looking N. Taken: 10/18/2022.



Photo 72. Overview of riverine wetland in this reach. Looking W. Taken: 10/18/2022.



Photo 73. US view at bend, 2nd pic is DS View Looking N. Taken: 10/18/2022.



Photo 74. Overview of riverine wetland in this reach. Looking E. Taken: 10/18/2022.



Photo 75. Ephemeral waterway that drains towards riverine wetland. Looking S. Taken: 10/18/2022.



Photo 76. No bed or banks, cow path down slope. Looking S. Taken: 10/19/2022.



Photo 77. upstream. Tall wheat grass. 3-4 feet wide. Silty bottom. ephemeral or intermittent. No flow. Looking S. Taken: 10/19/2022.



Photo 78. Overview of wetland in roadside drainage ditch. Looking S. Taken: 10/19/2022.



Photo 79. Wetland is spanned by culvert here. Looking N. Taken: 10/19/2022.



Photo 80. No bed or banks on NHD line. Looking SW. Taken: 10/19/2022.



Photo 81. Overview of ephemeral drainage. Looking E. Taken: 10/19/2022.



Photo 82. No bed or banks on NHD line. Looking SE. Taken: 10/19/2022.



Photo 83. No bed or banks, this is a cow path down slope. Looking E. Taken: 10/19/2022.



Photo 84. No bed or banks. Looking NE. Taken: 10/19/2022.



Photo 85. No bed or banks beyond this point. Looking SW. Taken: 10/19/2022.

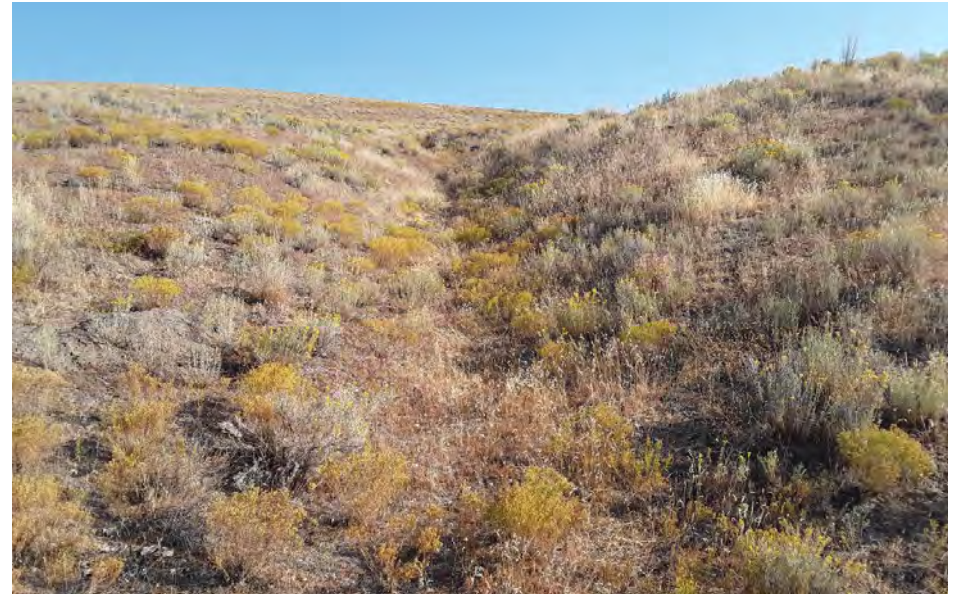


Photo 86. Overview of stream conditions. Looking NE. Taken: 10/19/2022.



Photo 87. Slight ephemeral drainage on slope. Looking NE. Taken: 10/19/2022.



Photo 88. No hydrologic features at toe of slope. Looking SW. Taken: 10/19/2022.



Photo 89. Slight ephemeral drainage on slope. Looking NE. Taken: 10/19/2022.



Photo 90. Slight ephemeral drainage on slope. Looking NE. Taken: 10/19/2022.



Photo 91. Rocky erosional feature that likely drains water during storm events. Looking NE. Taken: 10/19/2022.



Photo 92. Slight ephemeral drainage on slope. Looking NE. Taken: 10/19/2022.



Photo 93. Overview of stream conditions. Looking SW. Taken: 10/19/2022.



Photo 94. Overview of stream conditions. Looking SW. Taken: 10/19/2022.



Photo 95. Ephemeral waterway that drains into riverine wetland (in the foreground). Looking NE. Taken: 10/19/2022.



Photo 96. Riverine wetland flows through culvert. Looking S. Taken: 10/19/2022.



Photo 97. Riverine wetland conditions in this reach. Looking NW. Taken: 10/19/2022.



Photo 98. Slight ephemeral drainage flowing through grassland. Looking S. Taken: 10/19/2022.



Photo 99. Riverine wetland flows through rangeland. Looking S. Taken: 10/19/2022.



Photo 100. Riverine wetland flows through culvert under access road in quarry. Looking S. Taken: 10/19/2022.



Photo 101. No feature in area that appears dark on orthoimagery. It is a cattle wallow/salt lick. Looking W. Taken: 10/20/2022.



Photo 102. Water trough has a float valve and does not overflow. Looking SE. Taken: 10/20/2022.



Photo 103. Livestock trough not directly connected to seep wetland on surface 15 feet away. Looking E. Taken: 10/20/2022.



Photo 104. Entire seep wetland in photo. Looking NW. Taken: 10/20/2022.



Photo 105. Wetland slopes downhill from overflowing trough. Barnyard grass growing throughout. Looking SE. Taken: 10/20/2022.



Photo 106. Overflowing trough has created wetland conditions. Looking NW. Taken: 10/20/2022.



Photo 107. Black dot in orthoimagery is pile of wood on the ground. Looking S. Taken: 10/20/2022.



Photo 108. No bed or banks on NHD line. Looking N. Taken: 10/20/2022.



Photo 109. General conditions in this slight ephemeral drainage. Looking SW. Taken: 10/20/2022.



Photo 110. Overview of riverine wetland. Looking SE. Taken: 10/20/2022.



Photo 111. No bed or banks on NHD line. Looking SE. Taken: 10/20/2022.



Photo 112. General conditions in this drainage. Looking NW. Taken: 10/20/2022.



Photo 113. No bed or banks beyond this point. Looking NW. Taken: 10/20/2022.



Photo 114. No bed or banks, roadway adjacent to cropfield. Looking E. Taken: 10/20/2022.



Photo 115. Riverine wetland in this reach. Looking W. Taken: 10/20/2022.



Photo 116. Overview of ephemeral drainage. Looking S. Taken: 10/20/2022.



Photo 117. No bed or banks. Looking SW. Taken: 10/20/2022.



Photo 118. No bed or banks, this is a sand dune. Looking NW. Taken: 10/20/2022.



Photo 119. Overview of ephemeral drainage. Looking SE. Taken: 10/20/2022.



Photo 120. Overview of ephemeral drainage. Looking SW. Taken: 10/20/2022.



Photo 121. Overview of ephemeral drainage adjacent to cropfield. Looking N. Taken: 10/20/2022.



Photo 122. No bed and banks beyond this point. Looking SW. Taken: 10/20/2022.



Photo 123. Overview of drainage and cowpath. Looking SW. Taken: 10/21/2022.



Photo 124. Overview of riverine drainage in this reach. Looking SW. Taken: 10/20/2022.



Photo 125. Overview of ephemeral drainage. Looking NE. Taken: 10/20/2022.

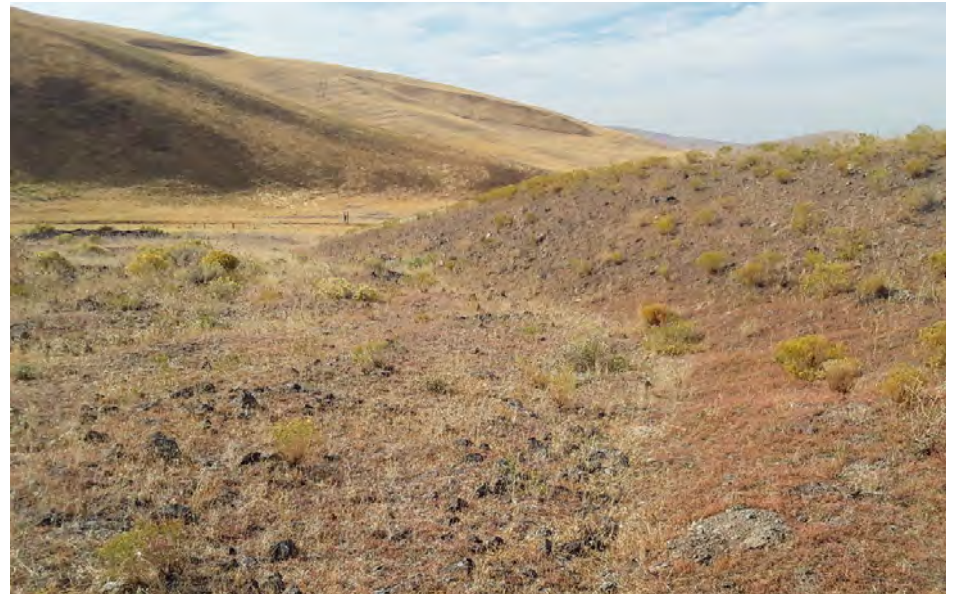


Photo 126. Overview of ephemeral drainage. Looking W. Taken: 10/20/2022.



Photo 127. Overview of ephemeral drainage. Looking N. Taken: 10/20/2022.



Photo 128. Overview of ephemeral drainage. Looking N. Taken: 10/20/2022.



Photo 129. Overview of ephemeral drainage. Looking S. Taken: 10/20/2022.



Photo 130. Overview of ephemeral drainage. Looking S. Taken: 10/20/2022.



Photo 131. Overview of riverine wetland. Looking W. Taken: 10/20/2022.



Photo 132. No bed or banks beyond this point. Looking E. Taken: 10/20/2022.



Photo 133. downstream view. 2ft width, gravel and silt and cobble, Looking SW. Taken: 10/20/2022.



Photo 134. Slight ephemeral drainage on slope. Looking SW. Taken: 10/20/2022.



Photo 135. No bed or banks on NHD. Looking N. Taken: 10/20/2022.



Photo 136. Overview of ephemeral drainage. Looking SW. Taken: 10/20/2022.



Photo 137. Overview of ephemeral drainage. Looking SW. Taken: 10/20/2022.



Photo 138. Stream ST-63 does not cross road or connect with riverine wetland. Looking NE. Taken: 10/20/2022.



Photo 139. Overview of ephemeral drainage. Looking NE. Taken: 10/20/2022.



Photo 140. No bed or banks on NHD line. Looking NE. Taken: 10/20/2022.

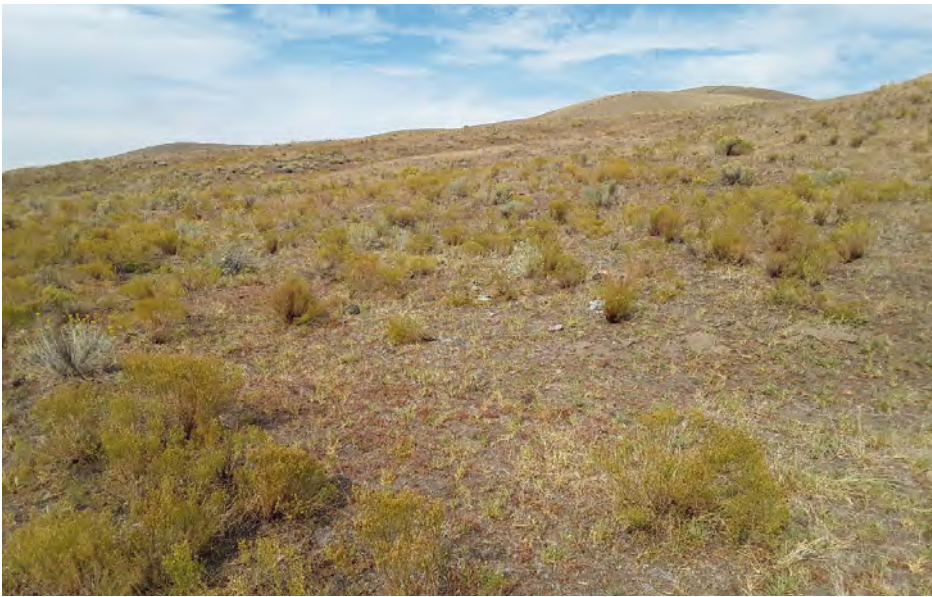


Photo 141. No bed or banks beyond this point. Looking N. Taken: 10/20/2022.



Photo 142. Overview of ephemeral drainage. Looking NE. Taken: 10/20/2022.



Photo 143. Overview of ephemeral drainage. Looking NE. Taken: 10/20/2022.



Photo 144. Overview of ephemeral drainage. Looking SW. Taken: 10/20/2022.



Photo 145. Overview of ephemeral drainage. Looking SW. Taken: 10/20/2022.



Photo 146. No bed or banks on NHD line. Looking S. Taken: 10/21/2022.



Photo 147. Dark area in orthoimagery is quarry. Looking E. Taken: 10/21/2022.



Photo 148. Riverine wetland has bank to bank reed canarygrass. Looking NW. Taken: 10/21/2022.



Photo 149. Shallow ephemeral drainage runs through sagebrush. Looking NE. Taken: 10/21/2022.



Photo 150. Riverine wetland transitions to ephemeral waterway at this point. Looking NW. Taken: 10/21/2022.



Photo 151. Ephemeral drainage loses bed and banks in pasture area. Looking S. Taken: 10/21/2022.



Photo 152. Overview of ephemeral drainage. Looking W. Taken: 10/21/2022.



Photo 153. Light green spot on orthoimagery is cereal rye. Looking SW. Taken: 10/21/2022.



Photo 154. No hydric features in abandoned stock pond. Looking SE. Taken: 10/21/2022.



Photo 155. Abandoned irrigation infrastructure. Looking NW. Taken: 10/21/2022.



Photo 156. No bed or banks on NHD Looking SW. Taken: 10/21/2022.



Photo 157. Garbage pit appears as dark area on orthoimagery. Looking SW. Taken: 10/21/2022.



Photo 158. Ephemeral drainage between two crop fields, loses bed and banks in crop field. Looking N. Taken: 10/21/2022.



Photo 159. Ephemeral drainage has cut down to bedrock. Looking NE. Taken: 10/21/2022.



Photo 160. Bed and banks do not extend downhill from this point. Looking E. Taken: 10/21/2022.



Photo 161. Riverine wetland conditions in this reach. Looking W. Taken: 10/22/2022.



Photo 162. Riverine wetland no longer has standing water and reed canarygrass is dessicated. Looking NW. Taken: 10/21/2022.



Photo 164. Overview of riverine wetland. Looking N. Taken: 10/21/2022.



Photo 165. Overview of ephemeral drainage. Looking NW. Taken: 10/22/2022.



Photo 166. Overview of ephemeral drainage. Looking NW. Taken: 10/22/2022.



Photo 167. Overview of shallow ephemeral drainage. Looking NW. Taken: 10/22/2022.



Photo 168. Overview of ephemeral waterway from where bed and banks end. Looking NW. Taken: 10/22/2022.



Photo 169. Overview of ephemeral waterway in this reach. Looking SE. Taken: 10/22/2022.



Photo 170. Overview of slight ephemeral drainage. Looking E. Taken: 10/22/2022.



Photo 171. Overview of slight ephemeral drainage. Looking E. Taken: 10/22/2022.



Photo 172. No bed or banks on terrace. Looking N. Taken: 10/22/2022.



Photo 173. Overview of ephemeral drainage, all upland plants. Looking NE. Taken: 10/22/2022.



Photo 174. No feature on dark spot in orthoimagery, basalt rock with very little soil and vegetation. Looking S. Taken: 10/22/2022.



Photo 175. Livestock pond does not meet hydric criteria. Water is from rain earlier in the day and is sitting on surface, soils not saturated. Looking NE. Taken: 10/22/2022.



Photo 176. Overview of ephemeral drainage. Looking NW. Taken: 10/22/2022.



Photo 177. Seep wetland, hydrology disrupted by road. Looking E. Taken: 10/22/2022.



Photo 178. Double culvert under road drains riverine wetland to drainage on other side. Looking W. Taken: 10/22/2022.



Photo 179. Riverine wetland, Little Butter Creek, has vegetation covering bank to bank in this section. Looking N. Taken: 10/22/2022.



Photo 180. Overview of alluvial ephemeral drainage. Looking NE. Taken: 10/21/2022.



Photo 181. Overview of alluvial ephemeral drainage. Looking NE. Taken: 10/21/2022.



Photo 182. No bed or banks inside survey area, ephemeral drainage outside of survey. Looking NE. Taken: 10/21/2022.



Photo 183. Overview of ephemeral drainage. Looking NE. Taken: 10/21/2022.



Photo 184. Overview of ephemeral drainage on slope. Looking NE. Taken: 10/21/2022.



Photo 185. Overview of ephemeral drainage on slope. Looking NE. Taken: 10/21/2022.



Photo 186. Overview of ephemeral drainage on slope above riverine wetland. Looking NE. Taken: 10/21/2022.



Photo 187. Overview of slight ephemeral drainage. Looking NE. Taken: 10/21/2022.



Photo 188. Overview of ephemeral drainage. Looking N. Taken: 10/21/2022.



Photo 189. Ephemeral waterway joins riverine wetland. Looking S. Taken: 10/21/2022.



Photo 190. Ephemeral waterway flows towards riverine wetland in background. Looking S. Taken: 10/21/2022.



Photo 191. Overview of alluvial ephemeral drainage. Looking NW. Taken: 10/21/2022.



Photo 192. Overview of wetland originating from cow pond outside of the survey area. Looking N. Taken: 10/21/2022.



Photo 193. Riverine wetland conditions in this reach. Looking NE. Taken: 10/22/2022.



Photo 194. Ephemeral drainage starts on right side of the gate. Looking NE. Taken: 10/22/2022.



Photo 195. Ephemeral drainage runs alongside fence. Looking NE. Taken: 10/22/2022.



Photo 196. Wetland originates from piped water trough. Water is continuously flowing. Looking S. Taken: 10/22/2022.



Photo 197. Standing water in wetland. Looking SW. Taken: 10/22/2022.



Photo 198. Riverine wetland conditions in this reach. Looking W. Taken: 10/22/2022.



Photo 199. Riverine wetland conditions in this reach. Looking SW. Taken: 10/22/2022.



Photo 200. Riverine wetland conditions in this reach. Looking N. Taken: 10/22/2022.



Photo 201. south side of culvert looking upstream Looking SW. Taken: 10/22/2022.



Photo 202. Riverine wetland conditions in this reach. Looking N. Taken: 10/22/2022.



Photo 203. Riverine wetland conditions in this reach. Looking SW. Taken: 10/22/2022.



Photo 204. No bed or banks. Looking S. Taken: 10/22/2022.



Photo 205. Riverine wetland. Looking S. Taken: 10/22/2022.



Photo 206. Slight ephemeral drainage in valley bottom. Looking E. Taken: 10/22/2022.



Photo 207. Ephemeral waterway running through swale between hills. Looking E. Taken: 10/22/2022.



Photo 208. Overview of ephemeral drainage adjacent to cow path. Looking E. Taken: 10/22/2022.



Photo 209. Overview of ephemeral drainage. Looking E. Taken: 10/22/2022.



Photo 210. Ephemeral drainage in alfalfa field is a continuation of riverine wetland on opposite side of the road. Looking S. Taken: 10/22/2022.



Photo 211. Overview of slight ephemeral drainage, runs through culvert under the highway. Looking E. Taken: 10/23/2022.



Photo 212. downstream view Looking W. Taken: 10/23/2022.



Photo 213. Overview of ephemeral drainage in this reach. Looking E. Taken: 10/23/2022.



Photo 214. Overview of ephemeral drainage in this reach. Looking S. Taken: 10/23/2022.



Photo 215. General conditions in this ephemeral drainage. Looking SE. Taken: 10/23/2022.



Photo 216. General conditions in this reach of the ephemeral drainage. Looking NW. Taken: 10/23/2022.



Photo 217. Culvert under road but no bed or banks in crop field or other evidence of flow. Looking NW. Taken: 10/23/2022.



Photo 218. No bed or banks on NHD in crop field. Looking SE. Taken: 10/23/2022.



Photo 218. No bed or banks on NHD in crop field. Looking SE. Taken: 10/23/2022.



Photo 219. No bed or banks on NHD in crop field. Looking SE. Taken: 10/23/2022.



Photo 220. No bed or banks on NHD line. Looking SE. Taken: 10/23/2022.



Photo 221. Overview of ephemeral drainage. Looking S. Taken: 10/23/2022.



Photo 222. Small wetland around irrigation pipe. Looking N. Taken: 10/23/2022.



Photo 223. Standing water in small wetland around irrigation pipe. Looking S. Taken: 10/23/2022.



Photo 224. Obstruction in drainage. Looking S. Taken: 10/23/2022.



Photo 225. Overview of conditions in this reach. Looking SE. Taken: 10/23/2022.



Photo 226. No bed or bank on NHD line. Looking NW. Taken: 10/24/2022.



Photo 227. No bed or bank Looking SE. Taken: 10/24/2022.



Photo 228. Overview of ephemeral drainage. Looking SE. Taken: 10/24/2022.



Photo 229. No bed or banks on NHD in this area. Looking NW. Taken: 10/24/2022.



Photo 230. Overview of ephemeral drainage. Looking S. Taken: 10/24/2022.



Photo 231. Overview of ephemeral drainage. Looking S. Taken: 10/24/2022.



Photo 232. No bed or banks. Looking N. Taken: 10/24/2022.



Photo 233. Little Butter Creek does not cross into project area here. Looking N. Taken: 10/24/2022.



Photo 234. No bed or banks towards Little Butter Creek. Looking SW. Taken: 10/24/2022.



Photo 235. Ephemeral drainage 1 foot wide. Cereal rye, mustard, cheatgrass, rattail fescue. Looking W. Taken: 10/25/2022.



Photo 236. No bed or banks at farm crossing. Looking W. Taken: 10/25/2022.



Photo 237. Ephemeral waterway does not have bed or banks beyond this point. Looking E. Taken: 10/25/2022.



Photo 238. Barely discernable drainage in pasture. 1 foot wide. Looking N. Taken: 10/25/2022.



Photo 239. No wetland features on NWI. Looking N. Taken: 10/25/2022.



Photo 240. Slight ephemeral drainage in pasture. Looking W. Taken: 10/25/2022.



Photo 241. Overview of ephemeral drainage in pasture. Looking W. Taken: 10/25/2022.



Photo 242. No more bed and banks beyond this point. Looking E. Taken: 10/25/2022.



Photo 243. Riverine wetland drains into Butter Creek. Looking SW. Taken: 10/25/2022.



Photo 244. Butter Creek, general conditions in riverine wetland flow through. Looking NW. Taken: 10/25/2022.



Photo 245. Overview of ephemeral drainage. Looking SW. Taken: 10/25/2022.



Photo 246. No bed or banks. Looking NW. Taken: 10/25/2022.



Photo 247. Overview of ephemeral drainage. Looking S. Taken: 10/25/2022.



Photo 248. Overview of ephemeral drainage. Looking NE. Taken: 10/25/2022.



Photo 249. No more bed or banks downhill from this location in ephemeral drainage. Looking SW. Taken: 10/25/2022.

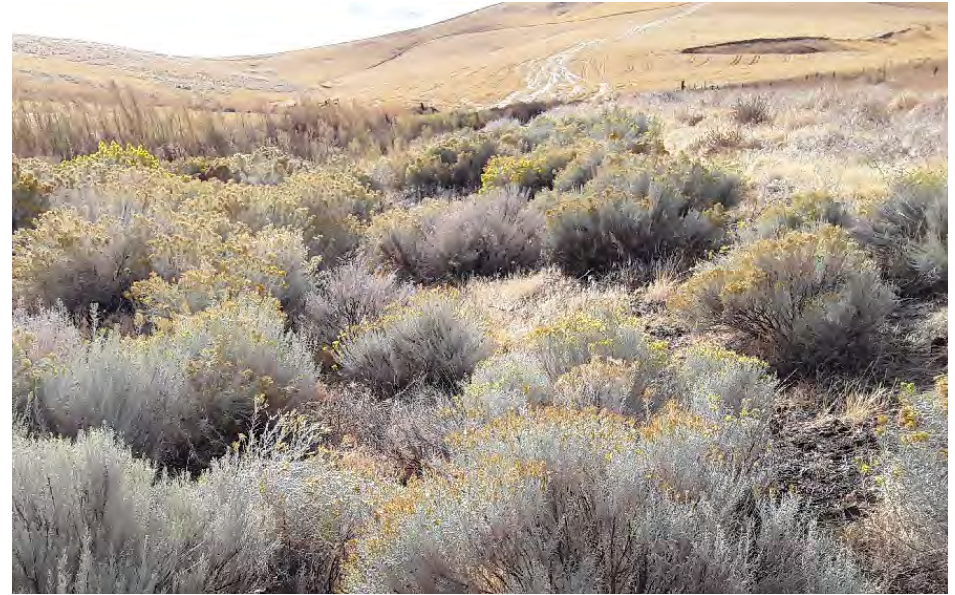


Photo 250. Overview of ephemeral drainage in rabbitbrush. Looking S. Taken: 10/25/2022.



Photo 251. Overview of ephemeral drainage. Looking E. Taken: 10/25/2022.



Photo 252. Overview of ephemeral drainage. Looking E. Taken: 10/25/2022.



Photo 253. No bed or banks beyond this point. Looking W. Taken: 10/25/2022.



Photo 254. Overview of ephemeral drainage. Looking E. Taken: 10/25/2022.



Photo 255. Ephemeral drainage doesn't connect to Butter Creek. Looking W. Taken: 10/25/2022.



Photo 256. Overview of ephemeral drainage. Looking E. Taken: 10/25/2022.



Photo 257. No bed or banks beyond this point. Looking NE. Taken: 10/25/2022.



Photo 258. Overview of ephemeral drainage. Looking W. Taken: 10/25/2022.



Photo 259. No bed or banks on NHD. Looking SE. Taken: 10/26/2022.



Photo 260. Intermittent drainage adjacent to irrigated cropfield. Looking S. Taken: 10/25/2022.



Photo 261. View of stream looking into the survey area. Looking SE. Taken: 10/25/2022.



Photo 262. Irrigation pond in concrete box in drainage. Looking SW. Taken: 10/25/2022.



Photo 263. Overview of Little Butter Creek in this reach. Looking N. Taken: 10/25/2022.



Photo 264. No bed or banks on NHD. Looking NE. Taken: 10/25/2022.



Photo 265. Overview of Little Butter Creek in this reach. Looking W. Taken: 10/25/2022.



Photo 266. Irrigation canal on north side of Butter Creek. Looking W. Taken: 10/25/2022.



Photo 267. Butter Creek in this reach. Looking E. Taken: 10/25/2022.



Photo 268. No bed or banks on this side of road. Looking N. Taken: 10/25/2022.



Photo 269. No bed or banks on NHD line in cropfield. Looking N. Taken: 10/25/2022.



Photo 270. Bed and banks end at road. Looking S. Taken: 10/25/2022.



Photo 271. Overview of ephemeral drainage. Looking N. Taken: 10/26/2022.



Photo 272. No more bed or banks Looking S. Taken: 10/27/2022.



Photo 273. Slight ephemeral drainage. Looking N. Taken: 10/28/2022.



Photo 274. Overview of alluvial ephemeral drainage. Looking SE. Taken: 10/25/2022.



Photo 275. Drainage present on both sides of the road but more prominent on this north side. Looking S. Taken: 10/25/2022.



Photo 276. Overview of ephemeral drainage. Looking S. Taken: 10/26/2022.



Photo 277. Overview of ephemeral drainage. Looking S. Taken: 10/27/2022.



Photo 278. Ephemeral drainage between wheat fields full of russian thistle, ripgut brome, prickly lettuce, rabbitbrush, and prickly lettuce Looking NE. Taken: 10/25/2022.



Photo 279. Ephemeral drainage between fields. Looking S. Taken: 10/25/2022.



Photo 280. Ephemeral drainage adjacent to cropfield. Looking SW. Taken: 10/25/2022.



Photo 281. Ephemeral drainage adjacent to cropfield. Looking S. Taken: 10/25/2022.



Photo 282. No bed or banks on this side of road Looking N. Taken: 10/25/2022.



Photo 283. Irrigation canal on north side of Butter Creek conditions in this reach. Looking E. Taken: 10/25/2022.



Photo 284. Bridge over Butter Creek, farm access only. Looking W. Taken: 10/25/2022.



Photo 285. Overview of slight ephemeral drainage running across valley bottom. Looking S. Taken: 10/25/2022.



Photo 286. No bed or banks on north side of road. Looking N. Taken: 10/25/2022.



Photo 287. Culvert outflow, no wetland indicators. Looking SE. Taken: 10/26/2022.



Photo 288. Channel does not continue past this point. Looking NE. Taken: 10/26/2022.



Photo 289. Overview of ephemeral stream conditions. Looking SW. Taken: 10/26/2022.



Photo 290. Looking downstream little butter creek Looking NE. Taken: 10/26/2022.



Photo 291. Intermittent distributary of Little Butter Creek. Looking SW. Taken: 10/26/2022.



Photo 292. Little Butter Creek and distributary split here. Looking N. Taken: 10/26/2022.



Photo 293. Culvert under farm road. Looking N. Taken: 10/26/2022.



Photo 294. Channel loses bed and banks, becomes more of a two track farm road. Looking N. Taken: 10/26/2022.



Photo 295. Little Butter Creek on north side of culvert. Looking N. Taken: 10/26/2022.



Photo 296. Looking upstream from a high point adjacent to Little Butter Creek. Looking SW. Taken: 10/26/2022.



Photo 297. Little Butter Creek in this reach. Looking N. Taken: 10/26/2022.



Photo 298. Overview of ephemeral drainage at toe of slope. Looking N. Taken: 10/24/2022.



Photo 299. Overview of ephemeral drainage. Looking SE. Taken: 10/24/2022.



Photo 300. Overview of Little Butter Creek in this reach. Looking S. Taken: 10/24/2022.



Photo 301. No more bed or banks on ephemeral waterway, turns to two-track farm road. Looking SE. Taken: 10/25/2022.



Photo 302. Overview of ephemeral waterway conditions. Looking SE. Taken: 10/25/2022.



Photo 303. Irrigation pipeline crosses Butter Creek where tributary NHD line crosses. Looking NW. Taken: 10/25/2022.



Photo 304. General conditions in riverine wetland/Butter Creek. Looking SE. Taken: 10/25/2022.



Photo 305. Wetland sample site. Looking N. Taken: 10/25/2022.



Photo 306. Upland sample site. Looking S. Taken: 10/25/2022.



Photo 307. Overview of incised ephemeral drainage. All upland plants inbetween banks. Looking SW. Taken: 11/8/2022.



Photo 308. Riverine wetland, no water present at any time from March to October. Looking NE. Taken: 11/8/2022.



Photo 309. No wetland or waters downslope from here. Looking NW. Taken: 11/8/2022.



Photo 310. Ephemeral drainage in this reach. Looking SW. Taken: 11/8/2022.



Photo 311. General conditions in this reach, all upland vegetation. Looking NE. Taken: 11/8/2022.



Photo 312. Riverine wetland in incised drainage. Looking NE. Taken: 11/8/2022.



Photo 313. Overview of wetland Looking NE. Taken: 11/8/2022.



Photo 314. Overview of pond with about 6 to 12 inches of wetland fringe. Looking NW. Taken: 11/8/2022.



Photo 315. Overview of ephemeral stream conditions. Looking N. Taken: 11/8/2022.



Photo 316. No bed or banks discernible in this section. Looking NW. Taken: 11/8/2022.



Photo 317. This is where a very shallow ephemeral drainage can be observed. A cow trail creates a depression in the swale. Looking NW. Taken: 11/8/2022.



Photo 318. Two track interrupts shallow ephemeral channel. Looking SW. Taken: 11/8/2022.



Photo 319. Overview of ephemeral drainage in this reach. Looking E. Taken: 11/8/2022.



Photo 320. Overview of ephemeral drainage. Looking SE. Taken: 11/8/2022.



Photo 321. Vegetated ephemeral drainage. Looking NW. Taken: 11/8/2022.



Photo 322. No bed or banks on the valley floor downslope from alluvial ephemeral waterway. Looking NE. Taken: 11/8/2022.



Photo 323. Shallow ephemeral drainage. Looking NE. Taken: 11/8/2022.



Photo 324. Ephemeral drainage, general conditions. Looking SW. Taken: 11/8/2022.



Photo 325. No bed or banks on valley floor. Looking SW. Taken: 11/8/2022.



Photo 326. Overview of riverine wetland. Looking SE. Taken: 11/9/2022.



Photo 327. Upland conditions adjacent to wetland. Looking SE. Taken: 11/9/2022.



Photo 328. General conditions in ephemeral drainage. Looking N. Taken: 11/9/2022.



Photo 329. No more bed or banks before road crossing. Site is slightly elevated, no hydric plants. Looking S. Taken: 11/9/2022.



Photo 330. Wetland originates from piped water trough. Water is continuously flowing. Looking S. Taken: 11/9/2022.



Photo 331. Overview of small wetland. Looking S. Taken: 11/9/2022.



Photo 332. Barely discernible channel in valley bottom. Looking N. Taken: 11/9/2022.



Photo 333. Overview of ephemeral drainage. Looking E. Taken: 11/9/2022.



Photo 334. Overview of ephemeral drainage. Looking W. Taken: 11/9/2022.



Photo 335. No bed or banks in ephemeral drainage beyond this point. Looking W. Taken: 11/9/2022.



Photo 336. Overview of ephemeral drainage, all upland plants. Looking E. Taken: 11/9/2022.



Photo 337. Overview of ephemeral drainage, all upland plants. Looking E. Taken: 11/9/2022.



Photo 338. Overview of ephemeral drainage. Looking SW. Taken: 11/10/2022.



Photo 339. Overview of drainage. Looking NE. Taken: 11/10/2022.



Photo 340. Ephemeral drainage general conditions. Looking NE. Taken: 11/10/2022.



Photo 341. Dark area in orthoimagery is basalt outcrop. Looking NW. Taken: 11/10/2022.



Photo 342. Overview of ephemeral drainage. Looking NE. Taken: 11/10/2022.



Photo 343. No more bed and banks after this point in short ephemeral drainage (gully). Looking NE. Taken: 11/10/2022.



Photo 344. Overview of ephemeral drainage. Looking NE. Taken: 11/10/2022.



Photo 345. Overview of ephemeral drainage on steep slope. Looking S. Taken: 11/10/2022.



Photo 346. Ephemeral drainage flows over basalt waterfall. Looking E. Taken: 11/10/2022.



Photo 347. Overview of ephemeral drainage. Looking E. Taken: 11/10/2022.



Photo 348. No drainage here, swale feature. Looking S. Taken: 11/10/2022.



Photo 349. Drainage begins outside of study area. Looking SW. Taken: 11/10/2022.



Photo 350. No bed or banks. Looking E. Taken: 11/12/2022.



Photo 351. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/12/2022.



Photo 352. Bed and banks do not cross cultivated field. Looking W. Taken: 11/12/2022.



Photo 353. No bed or banks in this cultivated field. Looking W. Taken: 11/12/2022.



Photo 354. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/12/2022.



Photo 355. This shallow channel is interrupted by a plowed field. Looking W. Taken: 11/12/2022.



Photo 356. No more bed and banks beyond this point. Looking NW. Taken: 11/12/2022.



Photo 357. Channel is full of Russian thistle. Looking SE. Taken: 11/12/2022.



Photo 358. Wheat field. No bed or banks. Looking S. Taken: 11/12/2022.



Photo 359. Dirt road interrupts channel. May be a fireline. Looking E. Taken: 11/12/2022.



Photo 360. No bed or banks. Looking NW. Taken: 11/12/2022.



Photo 361. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/12/2022.



Photo 362. Bed and banks do not cross cultivated field. Looking SW. Taken: 11/12/2022.



Photo 363. Looking downstream onto property with no access, ephemeral drainage does extend onto their property along road. Looking N. Taken: 11/12/2022.



Photo 364. Overview of ephemeral drainage running down gradual slope. Looking S. Taken: 11/12/2022.



Photo 365. Gravel road does not have bed or banks and there is no culvert. Looking E. Taken: 11/12/2022.



Photo 366. Looking downstream onto property with no access, ephemeral drainage does extend onto their property along road. Looking W. Taken: 11/12/2022.



Photo 367. Overview of ephemeral drainage. Looking NW. Taken: 11/12/2022.



Photo 368. Overview of ephemeral drainage. Looking N. Taken: 11/12/2022.



Photo 369. Overview of ephemeral drainage. Looking S. Taken: 11/12/2022.



Photo 370. Overview of ephemeral drainage. Looking S. Taken: 11/12/2022.



Photo 371. Ephemeral drainage in swale. Looking S. Taken: 11/14/2022.



Photo 372. Ephemeral drainage with upland vegetation throughout channel. Looking NE. Taken: 11/14/2022.



Photo 373. Overview of ephemeral drainage. Looking N. Taken: 11/14/2022.

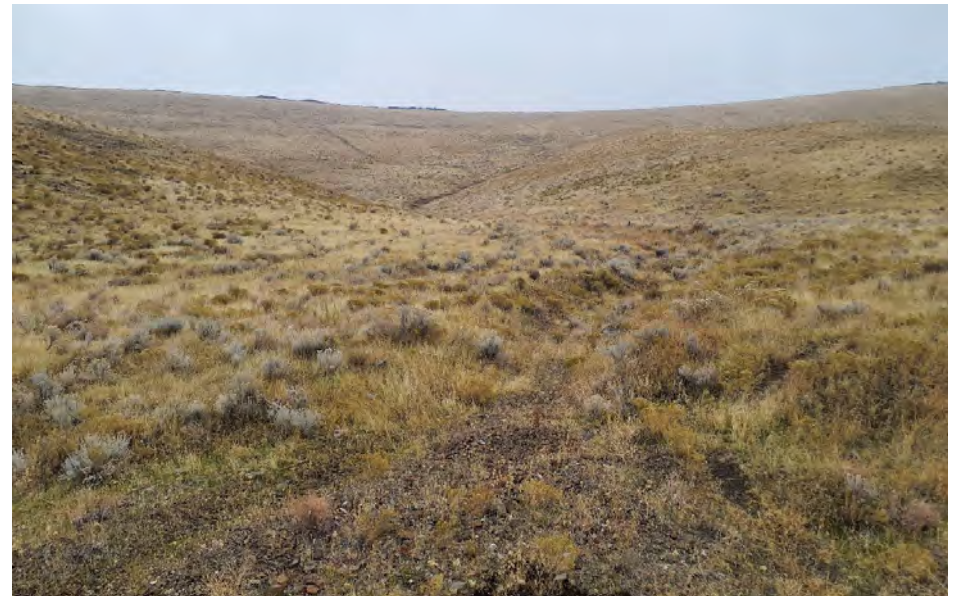


Photo 374. Ephemeral drainage on valley bottom. Looking E. Taken: 11/14/2022.



Photo 375. No wetland on NWI. THIS BELONGS IN B2H DATA Looking SE. Taken: 11/14/2022.



Photo 376. Riverine wetland in incised drainage Looking NE. Taken: 11/14/2022.



Photo 377. General conditions in this reach, no wetland features. Looking N. Taken: 11/14/2022.



Photo 378. Alluvial ephemeral drainage one foot wide. Looking E. Taken: 11/14/2022.



Photo 379. Overview of alluvial ephemeral drainage. Looking E. Taken: 11/14/2022.



Photo 380. No bed or banks beyond this point. Looking W. Taken: 11/14/2022.



Photo 381. Overview of ephemeral drainage. Looking SE. Taken: 11/14/2022.



Photo 382. Overview of ephemeral drainage. Looking SE. Taken: 11/14/2022.



Photo 383. Overview of ephemeral drainage. Looking NE. Taken: 11/14/2022.



Photo 384. No bed or banks downhill from this spot. Looking SE. Taken: 11/14/2022.



Photo 385. Overview of ephemeral drainage. Looking NW. Taken: 11/14/2022.



Photo 386. Overview of ephemeral drainage. Looking SE. Taken: 11/14/2022.



Photo 387. Overview of ephemeral drainage. Looking N. Taken: 11/14/2022.



Photo 388. No bed or banks on NHD line. Looking E. Taken: 11/14/2022.



Photo 389. Overview of ephemeral drainage. Looking SW. Taken: 11/14/2022.



Photo 390. Overview of ephemeral drainage that is tributary to another ephemeral drainage. Looking S. Taken: 11/14/2022.



Photo 391. Overview of ephemeral drainage that is tributary to another ephemeral drainage. Looking S. Taken: 11/14/2022.



Photo 392. Overview of ephemeral drainage. Looking E. Taken: 11/14/2022.



Photo 393. Overview of ephemeral drainage. Looking SW. Taken: 11/14/2022.



Photo 394. Livestock watering trough, has float and does not overflow. Looking NW. Taken: 11/14/2022.



Photo 395. Ephemeral drainage loses bed and banks in pasture area. Looking S. Taken: 11/14/2022.



Photo 396. No more bed and banks beyond this point. Looking SE. Taken: 11/14/2022.



Photo 397. Overview of ephemeral drainage in deep valley. Looking S. Taken: 11/14/2022.



Photo 398. Showing built up road crossing in drainage. No hydric features on uphill or downhill sides. Looking SE. Taken: 11/14/2022.



Photo 399. No more bed and banks in this pasture area. Looking N. Taken: 11/14/2022.



Photo 400. Culvert under Butter Creek Road, tumble mustard growing at entrance. Looking NW. Taken: 11/14/2022.



Photo 401. Overview of ephemeral drainage. Looking SE. Taken: 11/14/2022.



Photo 402. Culvert is perched coming out from under Butter Creek Rd, there is no bed or banks on this downhill end either. Looking NW. Taken: 11/14/2022.



Photo 403. Irrigation ditch flow control structures. Looking E. Taken: 11/14/2022.



Photo 404. Overview of ephemeral drainage. Looking W. Taken: 11/14/2022.



Photo 405. Overview of ephemeral drainage. Looking S. Taken: 11/14/2022.

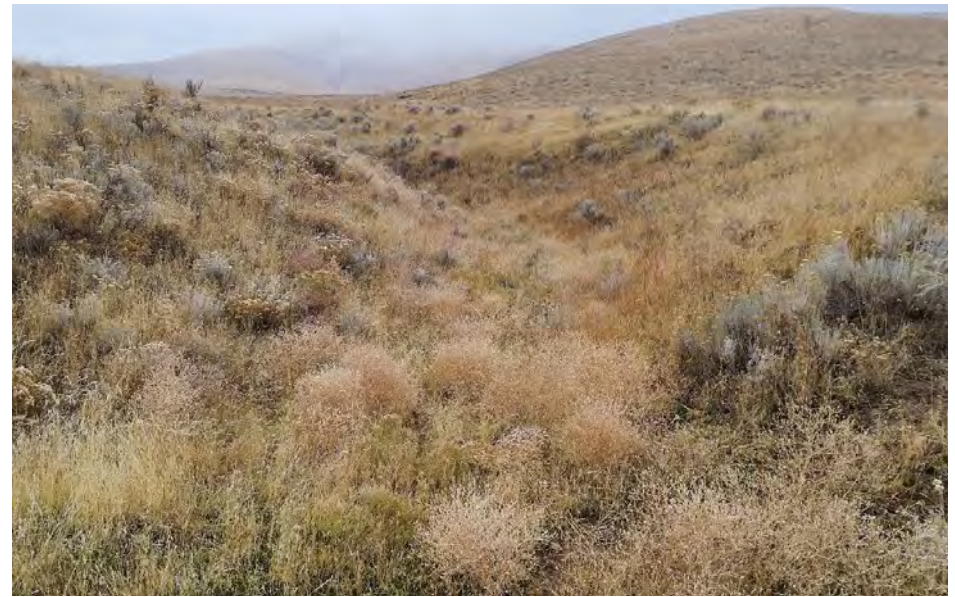


Photo 406. Overview of ephemeral drainage. Looking SW. Taken: 11/14/2022.



Photo 407. Overview of ephemeral drainage. Looking W. Taken: 11/14/2022.



Photo 408. Overview of ephemeral drainage conditions in this reach. No wetland features. Looking N. Taken: 11/14/2022.



Photo 409. Overview of ephemeral drainage. Looking SW. Taken: 11/14/2022.



Photo 410. Overview of ephemeral drainage. Looking SW. Taken: 11/14/2022.

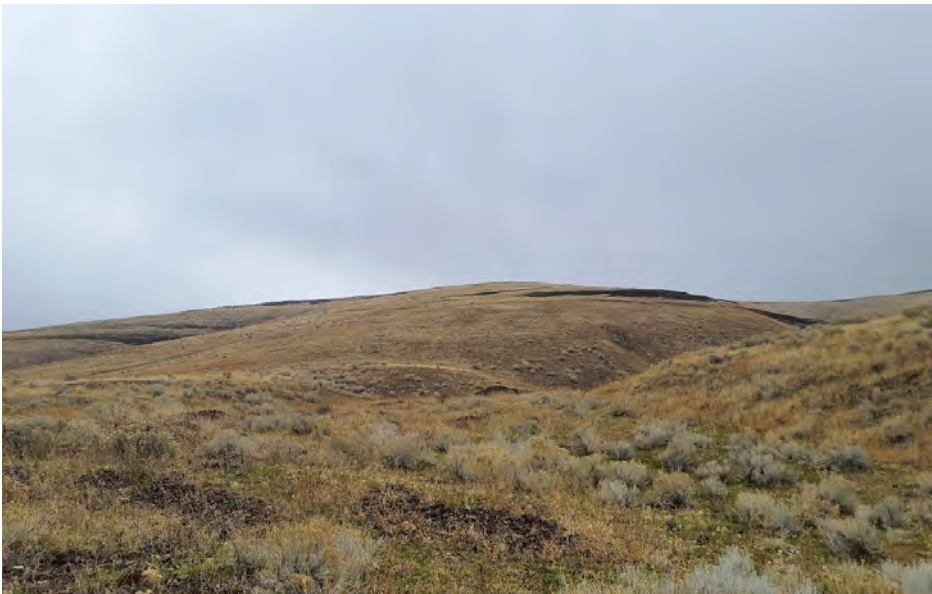


Photo 411. Overview of ephemeral drainage. Looking E. Taken: 11/14/2022.



Photo 412. Overview of incised ephemeral drainage. Looking N. Taken: 11/14/2022.



Photo 413. Salt lick not wetland in area that appears lighter in orthoimagery Looking SW. Taken: 11/15/2022.



Photo 414. Ephemeral drainage on valley bottom. Looking E. Taken: 11/15/2022.



Photo 415. Ephemeral drainage becomes incised as it slope increases. Looking SE. Taken: 11/15/2022.



Photo 416. Ephemeral drainage in steep valley. Looking W. Taken: 11/15/2022.



Photo 417. Riverine wetland (Little Butter Creek). Looking N. Taken: 11/15/2022.



Photo 418. Little Butter Creek conditions in this reach. Looking S. Taken: 11/15/2022.



Photo 419. Overview of ephemeral drainage. Looking NE. Taken: 11/15/2022.



Photo 420. Ephemeral drainage transitions to riverine wetland. Looking NW. Taken: 11/15/2022.



Photo 421. Overview of ephemeral drainage. Looking E. Taken: 11/15/2022.



Photo 422. Overview of riverine wetland conditions in this reach. Looking SW. Taken: 11/15/2022.



Photo 423. Overview of ephemeral drainage. Looking NE. Taken: 11/15/2022.



Photo 424. No hydric features in bermed drainage area. All upland vegetation (*Poa bulbosa*, common mullein). Looking E. Taken: 11/15/2022.



Photo 425. Ephemeral drainage 1 ft wide, incised. Looking SW. Taken: 11/15/2022.



Photo 426. Ephemeral drainage 1 foot wide Looking NW. Taken: 11/15/2022.



Photo 427. Barely discernible ephemeral channel. Looking NE. Taken: 11/15/2022.



Photo 428. Overview of ephemeral drainage. Looking N. Taken: 11/15/2022.



Photo 429. Overview of ephemeral drainage running down gradual slope. Looking N. Taken: 11/15/2022.



Photo 430. Overview of ephemeral drainage. Looking S. Taken: 11/15/2022.



Photo 431. Looking downstream onto property with no access, ephemeral drainage does extend onto their property along road. Looking N. Taken: 11/15/2022.



Photo 432. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/15/2022.



Photo 433. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/15/2022.



Photo 434. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/15/2022.



Photo 435. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/15/2022.



Photo 436. Overview of ephemeral drainage. Looking SW. Taken: 11/15/2022.



Photo 437. Dry waterfall in drainage. Looking SW. Taken: 11/15/2022.



Photo 438. Dehydrated minerals on flowpath over waterfall. Looking E. Taken: 11/15/2022.



Photo 439. Bed and banks do not extend downhill from this point. Looking W. Taken: 11/15/2022.



Photo 440. Overview of ephemeral drainage. Looking SW. Taken: 11/15/2022.



Photo 441. Road crossing (for farm equipment) berm interrupts ephemeral drainage. No culvert or hydric indicators. Looking S. Taken: 11/15/2022.



Photo 442. Overview of ephemeral drainage. Looking NW. Taken: 11/15/2022.



Photo 443. Overview of ephemeral drainage. Looking W. Taken: 11/15/2022.



Photo 444. Overview of ephemeral drainage. Looking N. Taken: 11/15/2022.



Photo 445. Overview of ephemeral drainage. Looking SE. Taken: 11/16/2022.



Photo 446. No bed or banks beyond this point. Looking E. Taken: 11/15/2022.



Photo 447. Area that looks green on orthoimagery is cattle feeding area, no wetland features. Looking S. Taken: 11/15/2022.



Photo 448. Stock tank overflow wetland on banks of riverine wetland (trees in background are growing out of riverine wetland). Looking N. Taken: 11/15/2022.



Photo 449. Stock tank overflow wetland drains towards riverine wetland that runs south north through the valley bottom. Looking NW. Taken: 11/15/2022.



Photo 450. No wetland on green spot in orthoimagery, livestock pond contained without overflow. Looking S. Taken: 11/16/2022.



Photo 451. Overview of ephemeral drainage that runs along roadway. Looking NW. Taken: 11/16/2022.



Photo 452. Ephemeral drainage/animal trail in deep canyon. Looking E. Taken: 11/16/2022.



Photo 453. Ephemeral drainage conditions in this reach. Looking E. Taken: 11/16/2022.



Photo 454. Ephemeral drainage conditions in this reach. Looking NE. Taken: 11/16/2022.



Photo 455. No more bed and banks downhill from this point. Looking S. Taken: 11/16/2022.



Photo 456. Overview of ephemeral drainage running down gradual slope. Looking SW. Taken: 11/16/2022.



Photo 457. Overview of ephemeral drainage running down gradual slope. Looking SW. Taken: 11/16/2022.



Photo 458. Overview of ephemeral drainage running down gradual slope. Looking W. Taken: 11/16/2022.



Photo 459. Overview of ephemeral drainage. Looking W. Taken: 11/16/2022.



Photo 460. No bed or banks, swale feature. Looking SW. Taken: 11/16/2022.



Photo 461. Overview of ephemeral drainage. Looking SW. Taken: 11/16/2022.



Photo 462. Overview of ephemeral drainage. Looking N. Taken: 11/16/2022.

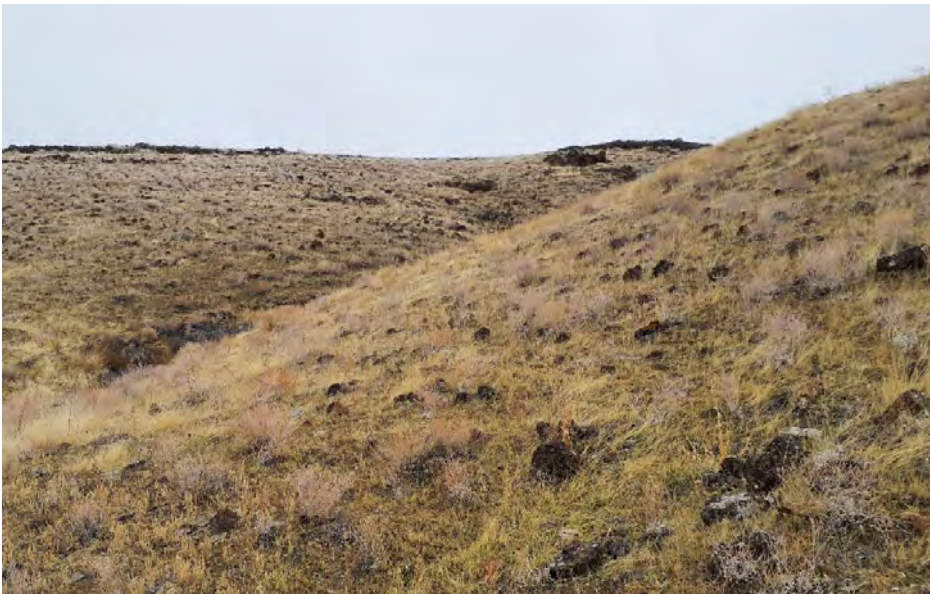


Photo 463. Overview of ephemeral drainage. Looking N. Taken: 11/16/2022.



Photo 464. Overview of ephemeral drainage. Looking NE. Taken: 11/16/2022.



Photo 465. Overview of ephemeral drainage. Looking NE. Taken: 11/16/2022.



Photo 466. Overview of ephemeral drainage. Looking NE. Taken: 11/16/2022.



Photo 467. Overview of irrigation ditch running along Butter Creek Road. Looking E. Taken: 11/16/2022.



Photo 468. Overview of irrigation ditch flowing towards irrigated crop fields. Looking S. Taken: 11/16/2022.



Photo 469. No wetland at green spot on aerial vegetation is thistle and tumble mustard. Looking S. Taken: 11/16/2022.



Photo 470. Wetland vegetation and hydrology end here in drainage. Looking S. Taken: 11/17/2022.

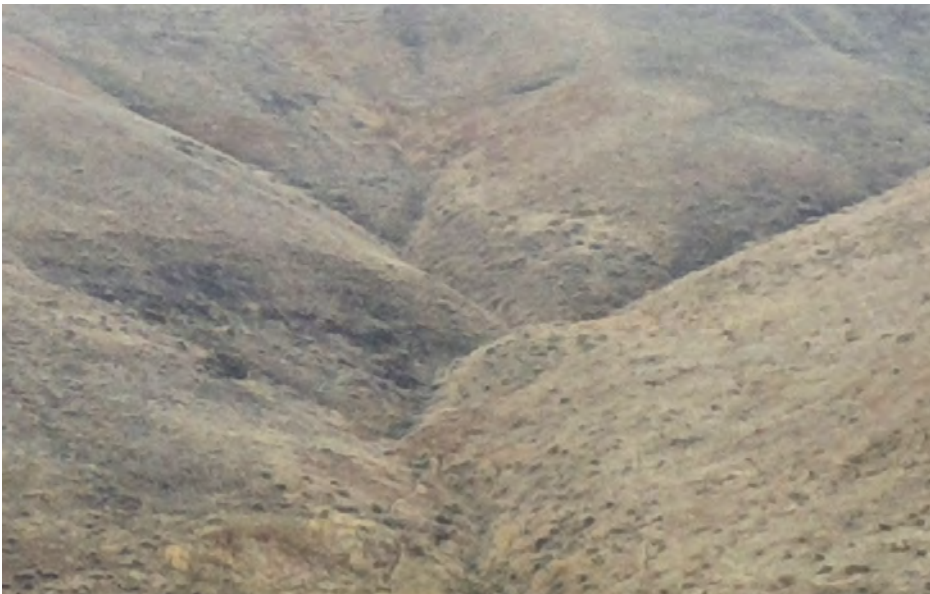


Photo 471. Overview of ephemeral drainage Looking NE. Taken: 11/17/2022.



Photo 472. Overview of ephemeral drainage. Looking NE. Taken: 11/17/2022.



Photo 1000. No bed or banks uphill of rock outcrop. Looking NE. Taken: 3/27/2023.



Photo 1001. Overview of ephemeral drainage. Looking NE. Taken: 3/27/2023.



Photo 1002. Roadside ditch with upland vegetation in field. Looking SE. Taken: 3/27/2023.



Photo 1003. Soil is cracking in a rocky patch in between a wheat field and rocky scabland with upland vegetation. Looking S. Taken: 3/27/2023.



Photo 1004. Upland vegetation in ephemeral stream. Looking W. Taken: 3/27/2023.



Photo 1005. Upland vegetation in ephemeral stream. Looking W. Taken: 3/27/2023.



Photo 1006. No signs of wetland in green sopt on aerial imagery. Looking SE. Taken: 3/27/2023.



Photo 1007. Vernal pool on ridge top. Looking N. Taken: 3/28/2023.



Photo 1013. No vernal pool vegetation. Looking N. Taken: 3/28/2023.



Photo 1015. Vernal pool on ridge top. Looking NE. Taken: 3/28/2023.



Photo 1017. No vernal pool vegetation. Looking SW. Taken: 3/28/2023.



Photo 1008. Vernal pool on ridge top. Looking SW. Taken: 3/28/2023.



Photo 1009. No vernal pool vegetation. Looking W. Taken: 3/28/2023.



Photo 1010. No vernal pool vegetation. Looking NE. Taken: 3/28/2023.



Photo 1011. No vernal pool vegetation. Looking SE. Taken: 3/28/2023.



Photo 1012. No vernal pool vegetation. Looking SW. Taken: 3/28/2023.



Photo 1014. No vernal pool vegetation. Looking W. Taken: 3/28/2023.



Photo 1016. Vernal pool on ridge top. Looking SW. Taken: 3/28/2023.



Photo 1021. Ephemeral swale crosses two track. Looking SW. Taken: 3/29/2023.



Photo 1040. Stream does not continue to the southwest. Looking SW. Taken: 3/29/2023.



Photo 1041. Ephemeral swale. Looking N. Taken: 3/29/2023.



Photo 1018. No signs of wetland in green sopt on aerial imagery. Looking N. Taken: 3/29/2023.



Photo 1019. No bed or banks in crop field. Looking N. Taken: 3/29/2023.



Photo 1023. Wide swale like ephemeral drainage crosses two track. Looking N. Taken: 3/29/2023.



Photo 1024. Rocky outcrop, no bed or banks. Looking S. Taken: 3/29/2023.



Photo 1025. Salt lick. Looking S. Taken: 3/29/2023.



Photo 1026. Human made rock pile. Looking W. Taken: 3/29/2023.



Photo 1028. Vernal pool on ridge top. Looking SE. Taken: 3/29/2023.



Photo 1029. Vernal pool on ridge top. Looking SW. Taken: 3/29/2023.



Photo 1032. Vernal pool on ridge top. Looking SE. Taken: 3/29/2023.



Photo 1034. Vernal pool on ridge top. Looking SW. Taken: 3/29/2023.



Photo 1037. Vernal pool extends into no access parcel. Looking SW. Taken: 3/29/2023.



Photo 1038. Drainage forms in rocky outcropping. Looking S. Taken: 3/29/2023.



Photo 1039. Ephemeral drainage crosses two track. Looking N. Taken: 3/29/2023.



Photo 1043. Ephemeral drainage begins in rocky outcrop. Looking S. Taken: 3/29/2023.



Photo 1044. Ephemeral swale crosses two track on ridge. Looking NE. Taken: 3/29/2023.



Photo 1020. No signs of wetland in green sopt on aerial imagery. Looking SW. Taken: 3/29/2023.



Photo 1022. Ephemeral drainage across two-track. Looking SW. Taken: 3/29/2023.



Photo 1027. Vernal pool with weedy vegetation and navarettia. Looking SW. Taken: 3/29/2023.



Photo 1030. Vernal pool at base of short drainage extends out of survey corridor. Looking NE. Taken: 3/29/2023.



Photo 1031. Shallow soil drainage towards vernal pool. Looking W. Taken: 3/29/2023.



Photo 1033. Vernal pool on ridge top. Looking W. Taken: 3/29/2023.



Photo 1035. Vernal pool on ridge top. Looking W. Taken: 3/29/2023.



Photo 1036. Vernal Pool extends off site to the south. Looking SW. Taken: 3/29/2023.

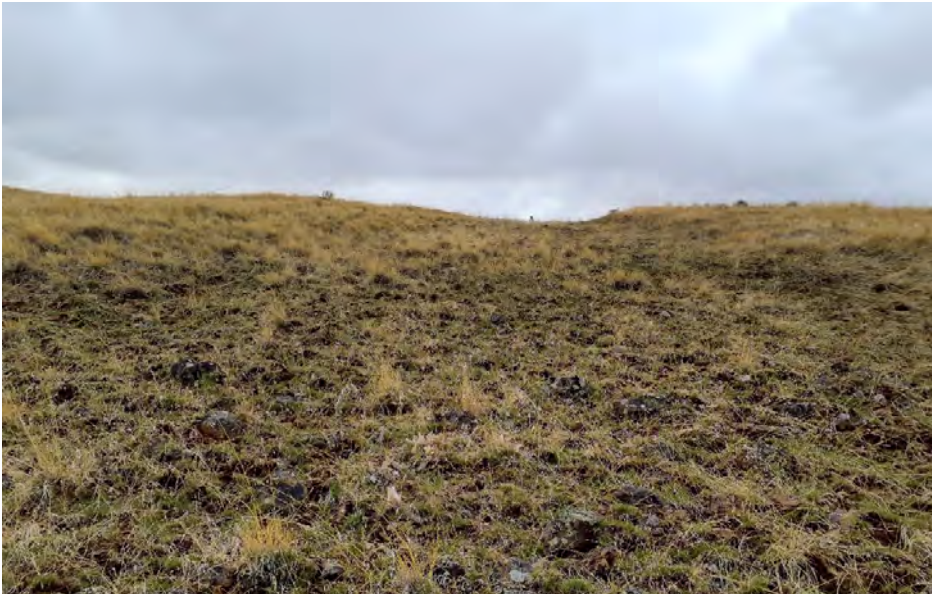


Photo 1042. Ephemeral wash crosses road and flows downhill. Looking NE. Taken: 3/29/2023.

Appendix C. Wetlands and Waters Summary Tables

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Wetland Summary			
Wetland Name	Wetland Type	General Conditions	Acres
WET-01	Riverine	Riverine wetland in area heavily used by livestock. Vegetation was sparse in early spring but by late summer was full across bed and banks.	5.15
WET-02	Riverine	Upstream continuation of WET-01, also a riverine wetland in drainage.	4.61
WET-03	Riverine	Wetland originates from trough overflow and drains into WET-02.	0.08
WET-04	Riverine	Riverine wetland in incised drainage. Standing water/running water about 5 inches deep.	0.25
WET-05	Emergent	Stock tank fed wetland.	0.03
WET-06	Emergent	Small wetland near stock tank.	0.00
WET-07	Riverine	Riverine wetland is confined by road crossing.	0.07
WET-08	Emergent	Livestock pond with wetland fringe.	0.06
WET-09	Emergent	Riverine wetland in narrow drainage. Very incised with mature cottonwood and vegetation bank to bank.	0.41
WET-10	Emergent	Riverine wetland in mostly dry drainage. Wetland conditions only exist in this small area where ground water reaches soil surface and wetland vegetation is present. Water goes subsurface just outside the project boundary and there are not more wetland plants downstream.	0.11
WET-11	Riverine	Perennial stream (Little Butter Creek) with riverine wetland conditions throughout.	2.39
WET-12	Riverine	Riverine wetland with no running water at any season we were there.	7.10
WET-13	Emergent	Seep wetland on slope above a two-track road. Wetland conditions do not extend past road edge.	0.03
WET-14	Emergent	Wetland around overflowing livestock pond. Drains towards WET-12 outside of the survey area.	0.07
WET-15	Riverine	Wetland fed via pipe from spring fed cattle pond just outside and upstream from the survey boundary.	0.34
WET-16	Emergent	Seep wetland, highly disturbed by livestock.	0.05
WET-17	Emergent	Livestock trough overflows down a slight slope, creating wetland.	0.14
WET-18	Riverine	Riverine wetland. Long stream with bank to bank vegetation at the bottom of hillside. Flows into WET-19.	11.17
WET-19	Emergent	Riverine wetland. WET-18 flows into.	0.05
WET-20	Emergent	Small wetland within a deep, mostly dry ditch.	0.04
WET-1000	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.02
WET-1001	Vernal Pool	Standing water in vernal pool.	0.10
WET-1002	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.16
WET-1003	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.04
WET-1004	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.21
WET-1005	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.04
WET-1006	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.08
WET-1007	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.06
WET-1008	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils. Weedy vegetation and vernal pool plants.	0.09
WET-1010	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.03
WET-1011	Vernal Pool	Shallow wetland on ridgetop with cracked clay soils.	0.03
WET-1012	Vernal Pool	Vernal pool extends into inaccessible parcel to the south.	0.07
WET-1013	Vernal Pool	Desktop delineated vernal pool inside inaccessible parcel.	0.01
Total			33.08

Waters Summary		
Stream Name	Stream Duration	Flow Origination
ST-1	Ephemeral	Flows into study area
ST-2	Ephemeral	Flows into study area
ST-3	Ephemeral	Flows into study area
ST-4	Ephemeral	Completely within study area
ST-5	Ephemeral	Completely within study area
ST-6	Ephemeral	Flows into study area
ST-7	Ephemeral	Flows into study area
ST-8	Ephemeral	Flows into study area
ST-9	Intermittent	Completely within study area
ST-10	Ephemeral	Flows into study area
ST-11	Ephemeral	Completely within study area
ST-12	Ephemeral	Completely within study area
ST-13	Ephemeral	Flows into study area
ST-14	Ephemeral	Completely within study area
ST-15	Ephemeral	Completely within study area
ST-16	Ephemeral	Completely within study area
ST-17	Ephemeral	Completely within study area
ST-18	Ephemeral	Completely within study area
ST-19	Ephemeral	Completely within study area
ST-20	Ephemeral	Completely within study area
ST-21	Ephemeral	Completely within study area
ST-22	Ephemeral	Flows into study area
ST-23	Ephemeral	Completely within study area
ST-24	Ephemeral	Completely within study area
ST-25	Ephemeral	Flows into study area
ST-26	Ephemeral	Flows into study area
ST-27	Ephemeral	Flows into study area
ST-28	Ephemeral	Completely within study area
ST-29	Ephemeral	Completely within study area
ST-30	Ephemeral	Flows into study area
ST-31	Ephemeral	Completely within study area
ST-32	Ephemeral	Completely within study area
ST-33	Ephemeral	Flows into study area
ST-34	Intermittent	Flows into study area

Stream Name	Stream Duration	Flow Origination
ST-35	Ephemeral	Flows in and out of study area
ST-36	Ephemeral	Flows in and out of study area
ST-37	Ephemeral	Completely within study area
ST-38	Ephemeral	Completely within study area
ST-39	Ephemeral	Completely within study area
ST-40	Ephemeral	Flows into study area
ST-41	Ephemeral	Completely within study area
ST-42	Ephemeral	Flows into study area
ST-43	Ephemeral	Flows into study area
ST-44	Ephemeral	Flows into study area
ST-45	Ephemeral	Flows into study area
ST-46	Ephemeral	Completely within study area
ST-47	Ephemeral	Originates and flows out of study area
ST-48	Ephemeral	Completely within study area
ST-49	Ephemeral	Originates and flows out of study area
ST-50	Ephemeral	Originates and flows out of study area
ST-51	Ephemeral	Originates and flows out of study area
ST-52	Ephemeral	Flows into study area
ST-53	Ephemeral	Flows in and out of study area
ST-54	Ephemeral	Flows into study area
ST-55	Ephemeral	Flows into study area
ST-56	Ephemeral	Completely within study area
ST-57	Ephemeral	Flows into study area
ST-58	Ephemeral	Completely within study area
ST-59	Ephemeral	Originates and flows out and back into study area
ST-60	Ephemeral	Completely within study area
ST-61	Ephemeral	Completely within study area
ST-62	Ephemeral	Completely within study area
ST-63	Ephemeral	Flows into study area
ST-64	Ephemeral	Completely within study area
ST-65	Ephemeral	Flows into study area
ST-66	Ephemeral	Completely within study area
ST-67	Ephemeral	Completely within study area
ST-68	Ephemeral	Flows into study area
ST-69	Ephemeral	Flows into study area
ST-70	Ephemeral	Flows into study area

Stream Name	Stream Duration	Flow Origination
ST-71	Ephemeral	Flows into study area
ST-72	Ephemeral	Flows in and out of study area
ST-73	Ephemeral	Flows into study area
ST-74	Ephemeral	Originates and flows out of study area
ST-75	Ephemeral	Completely within study area
ST-76	Ephemeral	Completely within study area
ST-77	Ephemeral	Completely within study area
ST-78	Ephemeral	Completely within study area
ST-79	Ephemeral	Flows into study area
ST-81	Ephemeral	Completely within study area
ST-82	Ephemeral	Originates and flows out of study area
ST-83	Ephemeral	Flows into study area
ST-84	Ephemeral	Flows into study area
ST-85	Ephemeral	Flows into study area
ST-86	Ephemeral	Flows into study area
ST-87	Ephemeral	Flows into study area
ST-88	Ephemeral	Flows into study area
ST-89	Intermittent	Flows into study area
ST-90	Ephemeral	Completely within study area
ST-91	Ephemeral	Completely within study area
ST-92	Ephemeral	Flows into study area
ST-93	Ephemeral	Completely within study area
ST-94	Ephemeral	Completely within study area
ST-95	Ephemeral	Completely within study area
ST-96	Ephemeral	Flows in and out of study area
ST-97	Ephemeral	Flows into study area
ST-98	Ephemeral	Completely within study area
ST-99	Ephemeral	Flows in and out of study area
ST-100	Ephemeral	Flows in and out of study area
ST-101	Ephemeral	Flows in and out of study area
ST-102	Ephemeral	Flows into study area
ST-103	Ephemeral	Flows in and out of study area
ST-104	Ephemeral	Flows into study area
ST-105	Ephemeral	Flows in and out of study area
ST-106	Ephemeral	Flows in and out of study area
ST-107	Ephemeral	Flows in and out of study area

Stream Name	Stream Duration	Flow Origination
ST-108	Ephemeral	Flows in and out of study area
ST-109	Ephemeral	Flows in and out of study area
ST-110	Ephemeral	Completely within study area
ST-111	Ephemeral	Completely within study area
ST-112	Ephemeral	Flows in and out of study area
ST-113	Ephemeral	Completely within study area
ST-114	Ephemeral	Flows in and out of study area
ST-115	Ephemeral	Flows into study area
ST-116	Ephemeral	Flows in and out of study area
ST-117	Ephemeral	Flows in and out of study area
ST-118	Ephemeral	Flows into study area
ST-119	Ephemeral	Flows into study area
ST-120	Ephemeral	Flows into study area
ST-121	Ephemeral	Completely within study area
ST-122	Ephemeral	Completely within study area
ST-123	Ephemeral	Flows into study area
ST-124	Ephemeral	Flows into study area
ST-125	Ephemeral	Flows into study area
ST-126	Perrenial	Flows in and out of study area
ST-127	Ephemeral	Flows into study area
ST-128	Ephemeral	Flows into study area
ST-129	Ephemeral	Flows in and out of study area
ST-130	Ephemeral	Flows into study area
ST-131	Ephemeral	Flows into study area
ST-132	Ephemeral	Completely within study area
ST-133	Ephemeral	Flows into study area
ST-134	Ephemeral	Flows in and out of study area
ST-135	Ephemeral	Flows into study area
ST-136	Intermittent	Completely within study area
ST-137	Perrenial	Flows in and out of study area
ST-138	Ephemeral	Flows in and out of study area
ST-139	Ephemeral	Flows in and out of study area
ST-140	Ephemeral	Flows in and out of study area
ST-141	Ephemeral	Flows in and out of study area
ST-142	Ephemeral	Flows into study area
ST-143	Ephemeral	Flows in and out of study area

Stream Name	Stream Duration	Flow Origination
ST-144	Ephemeral	Flows in and out of study area
ST-145	Ephemeral	Flows into study area
ST-146	Ephemeral	Flows into study area
ST-147	Ephemeral	Flows into study area
ST-148	Ephemeral	Flows into study area
ST-149	Ephemeral	Flows into study area
ST-150	Ephemeral	Flows into study area
ST-151	Ephemeral	Flows into study area
ST-152	Ephemeral	Originates and flows out of study area
ST-153	Ephemeral	Originates and flows out of study area
ST-154	Ephemeral	Originates and flows out of study area
ST-155	Ephemeral	Originates and flows out of study area
ST-156	Ephemeral	Originates and flows out of study area
ST-157	Ephemeral	Originates and flows out of study area
ST-158	Ephemeral	Originates and flows out of study area
ST-159	Ephemeral	Completely within study area
ST-160	Ephemeral	Originates and flows out of study area
ST-161	Ephemeral	Flows into study area
ST-162	Ephemeral	Flows into study area
ST-163	Ephemeral	Flows in and out of study area
ST-164	Ephemeral	Completely within study area
ST-165	Ephemeral	Flows into study area
ST-166	Ephemeral	Flows into study area
ST-167	Ephemeral	Flows into study area
ST-168	Ephemeral	Flows in and out of study area
ST-169	Ephemeral	Flows in and out of study area
ST-170	Ephemeral	Flows into study area
ST-171	Ephemeral	Flows in and out of study area
ST-172	Ephemeral	Flows in and out of study area
ST-173	Ephemeral	Flows into study area
ST-174	Ephemeral	Flows into study area
ST-175	Ephemeral	Flows into study area
ST-176	Ephemeral	Flows into study area
ST-177	Ephemeral	Flows into study area
ST-178	Ephemeral	Originates and flows out of study area
ST-179	Ephemeral	Flows into study area

Stream Name	Stream Duration	Flow Origination
ST-180	Ephemeral	Completely within study area
ST-181	Ephemeral	Completely within study area
ST-182	Ephemeral	Originates and flows out of study area
ST-183	Ephemeral	Completely within study area
ST-184	Ephemeral	Originates and flows out of study area
ST-185	Ephemeral	Originates and flows out of study area
ST-186	Ephemeral	Flows into study area
ST-187	Ephemeral	Flows in and out of study area
ST-188	Ephemeral	Flows into study area
ST-189	Ephemeral	Flows into study area
ST-190	Intermittent	Completely within study area
ST-191	Ephemeral	Flows into study area
ST-192	Ephemeral	Flows into study area
ST-193	Ephemeral	Flows into study area
ST-194	Ephemeral	Flows into study area
ST-195	Ephemeral	Flows into study area
ST-196	Ephemeral	Originates and flows out of study area
ST-197	Ephemeral	Flows into study area
ST-198	Ephemeral	Originates and flows in and out of study area
ST-199	Ephemeral	Flows into study area
ST-200	Ephemeral	Completely within study area
ST-201	Ephemeral	Flows into study area
ST-202	Ephemeral	Originates and flows out of study area
ST-203	Ephemeral	Flows in and out of study area
ST-204	Ephemeral	Originates and flows out of study area
ST-205	Ephemeral	Flows in and out of study area
ST-206	Ephemeral	Completely within study area
ST-207	Ephemeral	Originates and flows in and out of study area
ST-208	Ephemeral	Completely within study area
ST-209	Ephemeral	Flows into study area
ST-210	Ephemeral	Flows into study area
ST-211	Ephemeral	Flows into study area
ST-212	Ephemeral	Flows into study area
ST-213	Ephemeral	Flows into study area
ST-214	Ephemeral	Flows in and out of study area
ST-215	Ephemeral	Flows into study area

Stream Name	Stream Duration	Flow Origination
ST-216	Ephemeral	Flows in and out of study area
ST-217	Ephemeral	Flows in and out of study area
ST-218	Ephemeral	Flows into study area
ST-219	Ephemeral	Flows in and out of study area
ST-220	Ephemeral	Flows in and out of study area
ST-221	Ephemeral	Flows into study area
ST-222	Ephemeral	Flows into study area
ST-223	Ephemeral	Flows in and out of study area
ST-224	Ephemeral	Flows into study area
ST-225	Ephemeral	Flows into study area
ST-226	Ephemeral	Flows into study area
ST-227	Ephemeral	Completely within study area
ST-228	Ephemeral	Completely within study area
ST-229	Intermittent	Flows in and out of study area
ST-230	Ephemeral	Flows in and out of study area
ST-231	Ephemeral	Completely within study area
ST-232	Ephemeral	Flows into study area
ST-233	Ephemeral	Originates and flows out of study area
ST-234	Ephemeral	Completely within study area
ST-235	Ephemeral	Flows into study area
ST-1000	Ephemeral	Originates and flows out of study area
ST-1001	Ephemeral	Flows in and out of study area
ST-1002	Ephemeral	Originates and flows out of study area
ST-1003	Ephemeral	Originates and flows out of study area
ST-1004	Ephemeral	Originates and flows out of study area
ST-1005	Ephemeral	Originates and flows out of study area
ST-1006	Ephemeral	Originates and flows out of study area
ST-1007	Ephemeral	Originates and flows out of study area
ST-1008	Ephemeral	Originates and flows out of study area
ST-1009	Ephemeral	Completely within study area
ST-1010	Ephemeral	Originates and flows out of study area
ST-1011	Ephemeral	Flows in and out of study area




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Attachment J-2 Joint Permit Application

Joint Permit Application

This is a joint application, and must be sent to all agencies (Corps, DSL, and DEQ). Alternative forms of permit applications may be acceptable; contact the Corps and DSL for more information.

Date Stamp

	U.S. Army Corps of Engineers Portland District		Oregon Department of State Lands		Oregon Department of Environmental Quality
Action ID Number		Number			
(1) TYPE OF PERMIT(S) IF KNOWN (check all that apply)					
Corps: <input type="checkbox"/> Individual <input checked="" type="checkbox"/> Nationwide No.: <u>57</u> <input type="checkbox"/> Regional General Permit <input type="checkbox"/> Other (specify): _____					
DSL: <input type="checkbox"/> Individual <input type="checkbox"/> GP Trans <input type="checkbox"/> GP Min Wet <input type="checkbox"/> GP Maint Dredge <input type="checkbox"/> GP Ocean Energy <input type="checkbox"/> No Permit <input type="checkbox"/> Waiver					
(2) APPLICANT AND LANDOWNER CONTACT INFORMATION					
	Applicant	Property Owner (if different)	Authorized Agent (if applicable) <input checked="" type="checkbox"/> Consultant <input type="checkbox"/> Contractor		
Name (Required)	David Lawlor	See list of Project property	Jess Taylor		
Business Name	Wheatridge East Wind, LLC	Owners in Attachment A.	Tetra Tech		
Mailing Address 1	700 Universe Blvd		1750 S Harbor Way		
Mailing Address 2	Juno Beach, FL 33408		Suite 400		
City, State, Zip			Portland, OR 97201		
Business Phone	(587) 956-0081		(509) 386-5036		
Cell Phone	(403) 689-6285				
Fax					
Email	David.Lawlor@nexteraenergy.com		Jess.Taylor1@tetratech.com		
(3) PROJECT INFORMATION					
A. Provide the project location.					
Project Name Wheatridge Renewable Energy Facility East			Latitude & Longitude* 45.495567, -119.3625417		
Project Address / Location Rural Morrow and Umatilla counties		City (nearest) Pine City, Oregon		County Morrow and Umatilla counties	
Township		Range	Section	Quarter / Quarter	Tax Lot
Please see Attachment B Wetland Delineation Report (WDR) for cadastral and tax lot information.					
Brief Directions to the Site: See attached WDR for locations of features, project is linear and directions are dependent on area of interest.					
B. What types of waterbodies or wetlands are present in your project area? (Check all that apply.)					
<input checked="" type="checkbox"/> River / Stream		<input checked="" type="checkbox"/> Non-Tidal Wetland		<input type="checkbox"/> Lake / Reservoir / Pond	
<input type="checkbox"/> Estuary or Tidal Wetland		<input type="checkbox"/> Other		<input type="checkbox"/> Pacific Ocean	
Waterbody or Wetland Name** See attached WDR		River Mile See attached WDR	6th Field HUC Name Upper Sand Hollow	6th Field HUC (12 digits) <u>170701031101</u>	

* In decimal format (e.g., 44.9399, -123.0283)

** If there is no official name for the wetland or waterbody, create a unique name (such as "Wetland 1" or "Tributary A").

C. Indicate the project category. (Check all that apply.)		
<input type="checkbox"/> Commercial Development	<input type="checkbox"/> Industrial Development	<input type="checkbox"/> Residential Development
<input type="checkbox"/> Institutional Development	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Recreational
<input type="checkbox"/> Transportation	<input type="checkbox"/> Restoration	<input type="checkbox"/> Bridge
<input type="checkbox"/> Dredging	<input checked="" type="checkbox"/> Utility lines	<input type="checkbox"/> Survey or Sampling
<input type="checkbox"/> In- or Over-Water Structure	<input type="checkbox"/> Maintenance	<input checked="" type="checkbox"/> Other: Wind turbines, substation, and Operations & Maintenance facility.

(4) PROJECT DESCRIPTION

- **Summarize the overall project including work in areas both in and outside of waters or wetlands.**

The proposed Wheatridge Renewable Energy Facility East (Project) a wind energy generation facility consisting of up to 106 turbines and related or supporting facilities with a peak generating capacity of up to 300 megawatts (MW), to be located in approximately 15,564 acres on over 79,424 acres of leased land in Morrow and Umatilla counties, Oregon.

The Project includes the following components:

- Up to 106 wind turbines,
- Project substation,
- 20 MW battery energy storage system,
- Up to 31.5-mile overhead 230--kilovolt (kV) generation-tie transmission line,
-
- underground collector lines, and
- associated Project access roads (temporary and permanent).

The Project will interconnect at the existing Blue Ridge Substation in Morrow County.

- **Describe work within waters and wetlands.**

The Project was able to microsite and avoid almost all wetlands and waters with the exception of the area near Spur Loop Road which has a hairpin turn and a narrow county road. The road needs to be widened in a couple of areas and a culvert will be installed in two places in a riverine wetland where it was impossible to avoid crossing. Culverts are expected to be 60 inches in diameter and constructed per the attached grading design set(Attachment C). Attachment C shows details of each impact and they are summarized below :

- Grading of roadbed associated with an existing culvert in WET-18(1)
- A 16-foot transmission line access road across ephemeral waterway (ST-113 in the attached WDR)
- A culvert in an ephemeral drainage (ST-72 in the attached WDR)
- Minor fill (29.9 cubic yards) in wetland WET-18(4) to expand access road
- Fill (242.2) at edge of wetland WET-18(3) to expand access road
- A culvert within wetland WET-18(2) to reduce impacts of access road crossing
- Minor fill (24.8 cubic yards) in ephemeral drainage (ST-196)

- **Construction Methods. Describe how the removal and/or fill activities will be accomplished to minimize impacts to waters and wetlands.**

Impacts to wetlands and waters have been minimized throughout the project planning, design, and yet to be completed construction phases as described in this section.

Planning: The following design considerations were implemented to avoid and minimize impacts to wetlands and waters:

- The proposed locations of turbine pads and transmission towers were micrositied, wherever possible, to avoid wetlands, waters and their buffers.
- Underground collector lines and access roads are to be routed around wetlands and waters that do not span the entire width of the right-of-way.
- To minimize new road construction, existing roads leading to proposed turbine locations have been used for construction and maintenance purposes to the extent practicable.
- To the extent practicable, necessary road widening will take place on the side of the road that does not have an adjacent jurisdictional wetland or other water.

Design: The following list includes construction methods and impact minimization measures for project activities that are expected to impact wetlands or waters:

- Collector lines: collector lines will span any waterways or wetlands with any poles installed outside of the buffers.
- Establishment of permanent access roads between wind turbines. Access roads will cross waterways/wetlands in three locations. It is expected that 60-inch culverts will be utilized to facilitate crossings. Heavy equipment (likely excavators or backhoes) will be used to install crossings over potentially jurisdictional features. Crossing sizes will be selected to maintain water conveyance for each feature and allow for movement of aquatic life, where present. Access roads will be constructed to the minimum width necessary.
- Establishment of temporary access roads for construction. Access roads will cross waterways and wetlands in three locations. It is expected that culverts will be utilized to facilitate crossings. Heavy equipment (likely excavators or backhoes) will be used to install crossings over potentially jurisdictional features.

Construction: The following measures will be implemented during construction to avoid impacts:

- Indirect impacts to wetlands and other waters will be avoided and minimized by employing Best Management Practices for erosion and sediment control required by the National Pollutant Discharge Elimination System permit required for the proposed Project, and the accompanying Erosion and Sediment Control Plan.
- The Certificate Holder will develop an environmental awareness course for the construction contractors that will provide information on the sensitive wetland and stream resources present onsite, the exclusion flagging/signing, permit requirements, and other environmental issues.
- Construction site personnel will be required to attend the environmental awareness course in conjunction with hazard and safety training prior to working on-site. The Certificate Holder's construction contractor will maintain a list of on-site construction personnel who have received the training