

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Wetlands / Rocky Flats Site City/County: Jefferson Sampling Date: 9/10/14
 Applicant/Owner: DOE State: CO Sampling Point: A2-D (5)
 Investigator(s): Jody Nelson, Marilyn Kastens Section, Township, Range: T2S, R70W, Sec. 11
 Landform (hillslope, terrace, etc.): hillslope/terrace Local relief (concave, convex, none): concave Slope (%): 2-15
 Subregion (LRR): G Lat: 752225.8890 Long: 2087555.1125 Datum: NAD 27
 Soil Map Unit Name: NA - mitigation area NWI classification: NA

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Mitigation area. New normal circumstances. A-2 dam was breached.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>2.0</u> x 1 = <u>2.0</u> FACW species <u>71.25</u> x 2 = <u>142.5</u> FAC species <u>32.0</u> x 3 = <u>96.0</u> FACU species <u>28.0</u> x 4 = <u>112.0</u> UPL species <u>0.5</u> x 5 = <u>2.5</u> Column Totals: <u>133.75</u> (A) <u>355.0</u> (B) Prevalence Index = B/A = <u>2.65</u>
Sapling/Shrub Stratum (Plot size: <u>wetland</u>)				
1. <u>SAEX1</u>	<u>65</u>	<u>Y</u>	<u>FACW</u>	
2. <u>SYOC1</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>95</u> = Total Cover				
Herb Stratum (Plot size: <u>wetland</u>)				
1. <u>CIAR1</u>	<u>12</u>	<u>Y</u>	<u>FACU</u>	
2. <u>STV11</u>	<u><1</u>		<u>UPL</u>	
3. <u>ANG11</u>	<u><1</u>		<u>FACU</u>	
4. <u>SPPE1</u>	<u>2</u>		<u>FACW</u>	
5. <u>JUBA1</u>	<u>2</u>		<u>FACW</u>	
6. <u>HYPE1</u>	<u><1</u>		<u>FACU</u>	
7. <u>GALLE1</u>	<u><1</u>		<u>FACU</u>	
8. <u>AGST1</u>	<u>1</u>		<u>FACW</u>	
9. <u>JUDU1</u>	<u><1</u>		<u>FACW</u>	
10. <u>SCAL1</u>	<u>1</u>		<u>OBL</u>	
<u>19.25</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>19.5</u> = Total Cover				
% Bare Ground in Herb Stratum <u>3</u> = Total Cover				
Remarks: <u><1 = 0.25 mostly litter</u>				

SOIL

Sampling Point: A2-D (5)

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		
A1 0-5	10YR	3/2					C	
			2.5YR	4/6	3	C	Red Faces, PL	
AC1 A2 5-10	10YR	3/2	40	10YR	5/2	55	D	" , PL 9/10/11* C
			7.5YR	5/6	2	C	" , PL	
AC2 10-14+	10YR	3/2	69	10YR	5/3	30	D	Red Faces C
			5YR	4/4	1	C	Red Faces, PL	

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

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) | |

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

- Wetland Hydrology Indicators:**
- | | | |
|---|--|---|
| <u>Primary Indicators (minimum of one required; check all that apply)</u> | | <u>Secondary Indicators (minimum of two required)</u> |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry-Season Water Table (C2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> (where tilled) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> (where not tilled) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | | <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |

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:

See wetland water level data from earlier in summer

Remarks:

Wetland Determination Data Form - Great Plains Region
 Extra Page for Vegetation Species

Date 9/10/14
 Sampling Point A2-D (5)

Tree Stratum

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
5				
6				
7				
8				
9				
10				

_____ = Total Cover

Sapling/Shrub Stratum

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
6				
7				
8				
9				
10				

_____ = Total Cover

Herb Stratum

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

_____ = Total Cover

Over > ? no

Wetland Determination Data Form - Great Plains Region
Extra Page for Vegetation Species

Date _____

Sampling Point _____

Tree Stratum

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
11				
12				
13				
14				
15				

_____ = Total Cover

Sapling/Shrub Stratum

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
11				
12				
13				
14				
15				

_____ = Total Cover

Herb Stratum

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				

_____ = Total Cover

Wetland Qualitative Revegetation Evaluation Form

Form # _____

Date 9/10/14

Observer(s) Jody Nelson

Location ID A2-D (S)

Photographs taken today? Y N taken earlier

Are desired wetland plant species present? Y N

Are there any issues regarding the establishment of the desired wetland species? Explain, if so.

not in shrub canopy - lots of SAEXI
little wetland understory in herbaceous layer

Are the hydrologic conditions appropriate for successful establishment and sustainability of the wetland. If not, describe the problem/issue.

yes - Fr SAEXI, not really Fr understory plants

Woody Plant Counts

Species	Stem Count	Height			Width		
		1	2	3	1	2	3
SAEXI	Too numerous	8'	8'	7'	4'	4'	4'
SYOC1	"	3'	3'	2'	2'	2'	1.5'

Noxious weed evaluation. See separate noxious weed evaluations conducted throughout the summer months (June - August).

Suggestions for management:

Control weeds as needed.

Other comments:

SAEXI Thicket blends in perfectly now w/ that
downstream that was not disturbed.

Completed by:

Jody K. Nels -



Date 9/10/14