

**WETLAND DETERMINATION DATA FORM – Great Plains Region**

Project/Site: Rochy Flats Site City/County: Jefferson Sampling Date: 8/22/13  
 Applicant/Owner: DOE State: CO Sampling Point: A3-A (98)  
 Investigator(s): Jody Nelson Section, Township, Range: T25, R70W, Sec. 11  
 Landform (hillslope, terrace, etc.): former pond bottom Local relief (concave, convex, none): concave Slope (%): 0-1  
 Subregion (LRR): G Lat: 752474.2370 Long: 2088275.9574 Datum: NAD27  
 Soil Map Unit Name: 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. Former pond bottom backfilled during dam breach activities in 2012 to create new wetland area.</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>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum (Plot size: <u>wetland</u>)</b>				
1. <u>SAEX1</u>	<u>3</u>		<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
<u>3</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>wetland</u>)</b>				
1. <u>HOU1</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2. <u>RUM1</u>	<u>&lt;1</u>		<u>FACW</u>	
3. <u>TYLA1</u>	<u>&lt;1</u>		<u>OBL</u>	
4. <u>RUCR1</u>	<u>&lt;1</u>		<u>FAC</u>	
5. <u>POPE2</u>	<u>2</u>		<u>FACW</u>	
6. <u>SMAL1</u>	<u>1</u>		<u>OBL</u>	
7. <u>XAST1</u>	<u>3</u>		<u>FAC</u>	
8. <u>ECCR1</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
9. <u>LASE1</u>	<u>&lt;1</u>		<u>FAC</u>	
10. <u>CIAR1</u>	<u>&lt;1</u>		<u>FACU</u>	
<u>49 81.25</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb. Stratum <u>0</u>				
Remarks: <u>&lt;1 = 0.25%</u> <u>Bottom of pond is matted w/ TRM.</u>				

2  
3  
4  
5  
6  
7  
8  
9  
10  
11

**SOIL**

Sampling Point: A3-A (98)

**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 <sup>1</sup>	Loc <sup>2</sup>		

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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)	(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 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 checked="" 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)	<sup>3</sup> 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: *Mitigation area w/ disturbed soils. Area with >14 continuous days during growing season. Also since hydrophytic veg & wetland hydrology are present hydric soils are assumed to be developing.*

**HYDROLOGY**

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0-5

Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

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

*See water level data*

Remarks: *Most of center of former pond is still open water. Did not evaluate this area as wetland since it has <5% total veg. cover.*

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

Date 8/22/13  
 Sampling Point A3-A (9R)

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
11	POMDI	<1	FACW	
12	CHGLI	1	FAC	
13	PORAI	<1	FACW	
14	SOARI	<1	UPL	
15	PLMAI	<1	FAC	
16	ELMAI	<1	OBL	
17	HEANI	<1	FACU	
18	AGLAI	<1	FACU	
19	PAVII	<1	FAC	
20	AGSMI	<1	FACU	
21	TAOFI	<1	FACU	
22	TYANI	<1	OBL	
23	SCACI	<1	OBL	
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

4 \_\_\_\_\_ = Total Cover

Over > ?



**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 8/22/13  
 Observer(s) Jody Nelson  
 Location ID A3-A (98)

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.

no - there is plenty of water but not sure why most of pond is open water w/ no veget. May depend on this fall.

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

yes

**Woody Plant Counts**

Species	Stem Count	Height			Width		
		1	2	3	1	2	3
SAEX1	Too numerous	5'	5'	5'	5'	4'	4'

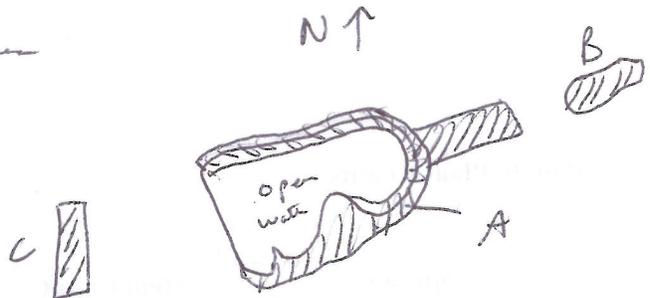
Noxious weed evaluation. See separate noxious weed evaluations conducted throughout the summer months (June - August).

Suggestions for management:

Control weeds as needed. Reseed area w/ willow  
Seed this fall.

Other comments:

Perimeter of wetland is  
drying faster. Open water area  
has nothing growing in it.  
Water ~5-6" deep. Need to  
reseed wetland species.



A3 pond area  
did not sample  
open water area  
this year.

Completed by: Jody Nelson

[Signature]

Date 8/22/13