

Date: 22 September 2021

To: Tony Martinez, U.S. Army Corps of Engineers

From: Tierney Walsh, Matrix Environmental Services

Subject: Wetland Assessment and Delineation Report – Rolling Hills Development at Jimmy Camp Creek East Tributary, West of S Meridian Road and South of Drennan Road, El Paso County, Colorado

Mr. Martinez,

On behalf of the Landhuis Company, Matrix Environmental Services, LLC (MES) is pleased to submit this report summarizing the assessment and delineation of wetlands within the Rolling Hills development area (the Site), which is located west of S. Meridian Road and south of Drennan Road in El Paso County, Colorado.

The scope of work for the wetland assessment and delineation included the entire Site, which totals approximately 1,025 acres. Similar plant communities were identified throughout the Site; therefore, the observed plant communities were divided into eight distinct communities with one data sample point collected in each community.

The assessment and delineation field work were conducted May 13-14, 2021 (Communities 1-5) and August 7-8, 2021 (Communities 6-8). Climatic and hydrologic conditions at the Site were drier than average for the time of year during the May assessment due to below-normal rainfall; however, conditions were normal during the August assessment. The wet season in Colorado Springs is between April and September, peaking in July and August.

Community 1 includes the relatively flat area identified as a seasonally flooded, intermittent riverine system by the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), which is unnamed and shown by the USFWS NWI to converge with the Jimmy Camp Creek East Tributary at a point approximately 1.75-miles southwest. Community 1 is dominated by common kochia (*Bassia scoparia*) and a grass that was not identifiable at the time of assessment due to the lack of inflorescence. Community 1 vegetation also includes minor amounts of groundplum milkvetch (*Astragalus crassicaarpus*), lamb's quarters (*Chenopodium album*) and musk thistle (*Carduus nutans*). No hydric soil indicators were observed within the area's sandy clay soils. Additionally, saturation and a water table were not observed within Community 1: soil was dry to a depth of 28 inches. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of hydric soils and a lack of wetland hydrology.

Community 2 includes a small depression near the eastern boundary of the Site, which is dominated by Russian olive (*Elaeagnus angustifolia*), common kochia (*Bassia scoparia*) and a grass that was not identifiable at the time of assessment due to the lack of inflorescence. Community 2 vegetation also includes minor amounts of field bindweed (*Convolvulus arvensis*) and Russian thistle (*Salsola tragus*). No hydric soil indicators were observed within the area's sandy clay loam and clay soils. Additionally, saturation and a water table were not observed within Community 2 despite the soil pit being advanced to 42 inches below the ground surface. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of hydric soils and a lack of wetland hydrology.

Community 3 includes the drainage swale identified as Jimmy Camp Creek East Tributary, which is dominated by common kochia (*Bassia scoparia*), a grass that was not identifiable at the time of assessment due to the lack of inflorescence and Woods' rose (*Rosa woodsii*). Community 3 vegetation also includes minor amounts of curly dock (*Rumex crispus*) and Russian thistle (*Salsola tragus*). No hydric soil indicators were observed within the area's sandy loam, loamy sand and sand soils. Additionally, saturation and a water table were not observed within Community 3 despite the soil pit being advanced to 52 inches below the ground surface. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of hydric soils and a lack of wetland hydrology.

Community 4 includes the relatively flat area identified as a seasonally flooded, intermittent riverine system by the USFWS NWI, which the NWI shows to converge onsite with Jimmy Camp Creek East Tributary. Community 4 is dominated by common kochia (*Bassia scoparia*) and field bindweed (*Convolvulus arvensis*) with minor amounts of lamb's quarters (*Chenopodium album*) and a grass that was not identifiable at the time of assessment due to the lack of inflorescence. No hydric soil indicators were observed within the area's sandy loam and sandy clay loam soils. Additionally, saturation and a water table were not observed within Community 4 despite the soil pit being advanced to 38 inches below the ground surface. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of dominance of hydrophytic vegetation, a negative prevalence index, the lack of hydric soils and a lack of wetland hydrology.

Community 5 includes a depression near the eastern boundary of the Site within the area identified as a seasonally flooded, intermittent riverine system by the USFWS NWI. Community 5 is dominated by field bindweed (*Convolvulus arvensis*) and a grass that was not identifiable at the time of assessment due to the lack of inflorescence. Vegetation in Community 5 also includes minor amounts of lamb's quarters (*Chenopodium album*) and common kochia (*Bassia scoparia*). No hydric soil indicators were observed within the area's sandy clay and sandy loam soils. Additionally, saturation and a water table were not observed within Community 5: soil was dry to a depth of 38 inches. However, oxidized rhizospheres along living roots were detectable within 12 inches of the soil surface. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of hydric soils.

Community 6 is approximately 0.18 acres and includes a drainage channel associated with a windmill-powered well south of Bradley Road. Community 6 is dominated by foxtail barley (*Hordeum jubatum*) and common kochia (*Bassia scoparia*) with minor amounts of lamb's quarters (*Chenopodium album*), Canada thistle (*Cirsium arvense*), field bindweed (*Convolvulus arvensis*) and alfalfa dodder (*Cuscuta approximata*). The community had visible surface water in approximately 30% of the area, surface soil cracks, algal mats and oxidized rhizospheres along living roots from 4-12 inches. Additionally, 5% prominent redox concentrations from 4-12 inches satisfy the criteria for redox dark surface. In my professional opinion, this community meets the criteria to be identified as a wetland based on the predominance of hydrophytic vegetation and the observation of hydric soil and wetland hydrology indicators.

Community 7 is located immediately south of Community 6 and includes the southern edge of the drainage channel that forms Community 6. Community 7 is dominated by blue grama (*Bouteloua gracilis*) and common kochia (*Bassia scoparia*) with minor amounts of lamb's quarters (*Chenopodium album*), alfalfa dodder (*Cuscuta approximata*), annual meadow grass (*Poa annua*), proso millet (*Panicum miliaceum*), common sunflower (*Helianthus annuus*) and golden crownbeard (*Verbesina encelioides*). No hydric soil indicators were observed within the area's silty clay loam and sandy loam soils. Additionally, saturation and a water table were not observed within Community 7: soil was dry to a depth of 30 inches. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of dominance of hydrophytic vegetation, a negative prevalence index, lack of hydric soils, and a lack of wetland hydrology indicators.

Community 8 includes the relatively flat area identified as Jimmy Camp Creek East Tributary south of Bradley Road, which the USFWS NWI describes as a seasonally flooded, intermittent riverine system. Community 8 is dominated by blue grama (*Bouteloua gracilis*), lamb's quarters (*Chenopodium album*) and red-root amaranth (*Amaranthus retroflexus*) with minor amounts of pineapple-weed (*Matricaria discoidea*), common kochia (*Bassia scoparia*), golden crownbeard (*Verbesina encelioides*) and curly dock (*Rumex crispus*). No hydric soil indicators were observed within the area's clay loam and silty loam soils. Additionally, saturation and a water table were not observed within Community 8: soil was dry to a depth of 48 inches. In my professional opinion, this community does not meet the criteria of a wetland based on the lack of dominance of hydrophytic vegetation, a negative prevalence index, the lack of hydric soils and a lack of wetland hydrology.

According to the National Resources Conservation Service's Web Soil Survey, most soils within the Site are classified as Sampson loam, except soils within Community 3 which are classified as Ellicott loamy coarse sand. Additionally, portions of the Site are classified as wetlands according to the USFWS NWI map, including communities 1, 3, 4, 5 and 8 which the NWI describes as temporarily or seasonally flooded riverine habitats.

Flags were placed along the boundaries of areas identified as wetlands within the Site, which was limited to Community 6 as indicated in the attached figure.

The professional opinions made in this report regarding the location and extent of areas that do or do not satisfy the criteria of a wetland were determined pursuant to the Army Corps of Engineer's Regional Supplement and appropriate guidance and pursuant to confirmation by appropriate regulatory staff including but not limited to the Army Corps of Engineers.

Please contact Ms. Tierney Walsh at 719-457-5613 or Tierney.Walsh@matrixdesigngroup.com should you have any questions or comments.

Sincerely,

Matrix Environmental Services, LLC



Tierney Walsh

Environmental Scientist

Enclosures:

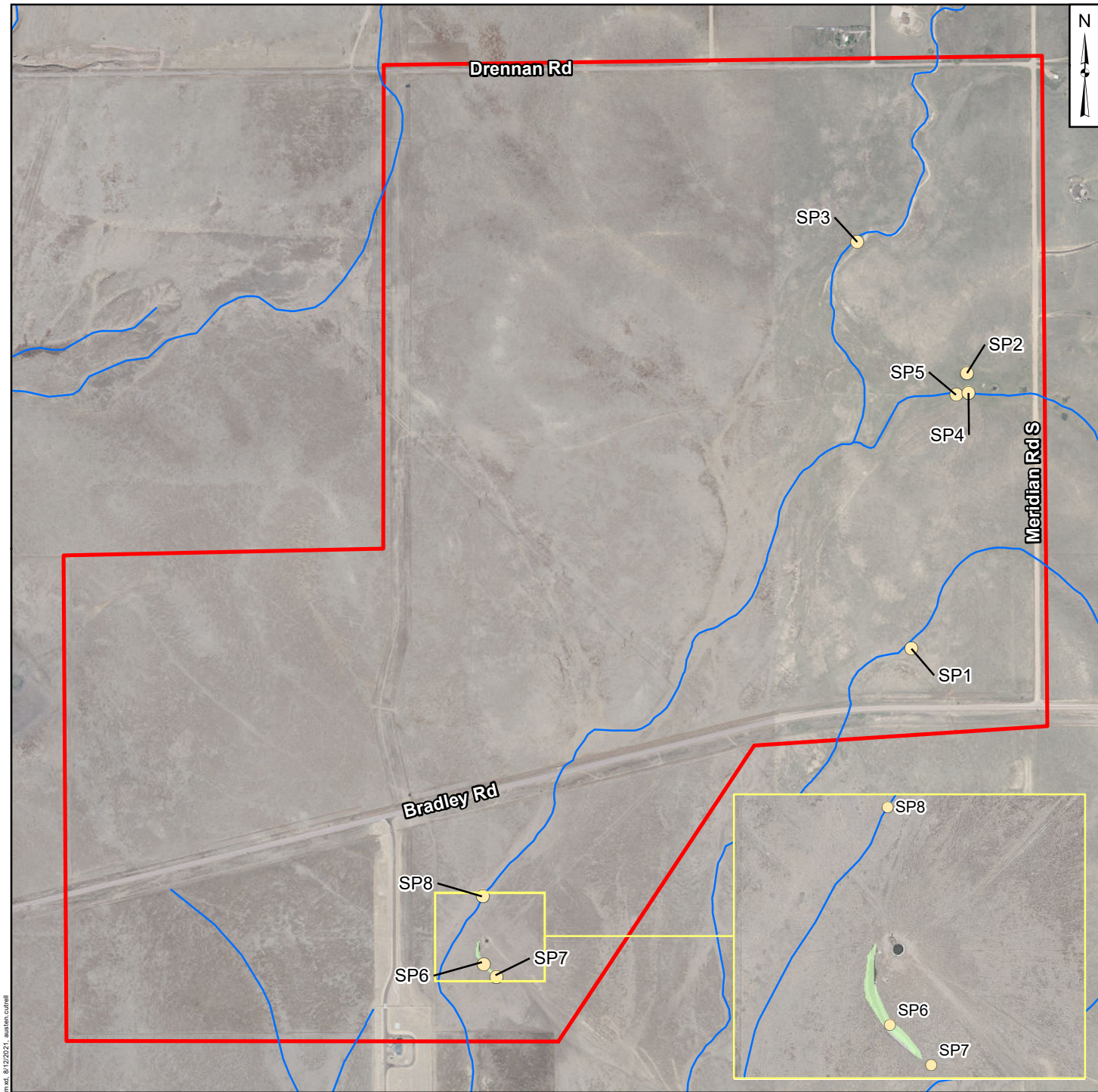
Site Figure

Photolog

Field Data Forms

cc: Mr. Jeff Mark, The Landhuis Company

Figures



Legend

- Sampling Point
- Ephemeral Stream
- Wetland
- Site Boundary

0 1,200 2,400
Feet

Rolling Hills Wetland Delineation



**Figure
1**

Photolog

Photo Log
Wetland Delineation for Rolling Hills Development
Colorado Springs, Colorado



Photo 1 – Community 1 includes a relatively flat area identified as a seasonally flooded riverine system by the USFWS NWI. Test pit shown in center of foreground.



Photo 2 – Community 1's sandy clay soils didn't exhibit hydric soil indicators. Additionally, saturation and a water table were not encountered despite the soil pit extending to a depth of 28 inches.



Photo 3 – Community 2 includes a small depression near the eastern boundary of the Site. Test pit is in the center of the middle ground.



Photo 4 – Community 2's sandy clay loam and clay soils didn't exhibit hydric soil indicators. Additionally, saturation and a water table were not encountered despite the soil pit extending to a depth of 42 inches.

Photo Log
Wetland Delineation for Rolling Hills Development
Colorado Springs, Colorado



Photo 5 – Community 3 includes the drainage swale identified as Jimmy Camp Creek East Tributary. Test pit is in the center of the foreground.



Photo 6 – Community 3's sandy loam, loamy sand and sand soils didn't exhibit hydric soil indicators, and saturation and a water table were not encountered despite the soil pit extending to a depth of 52 inches.



Photo 7 – Community 4 includes a relatively flat area identified as a seasonally flooded riverine system by the USFWS NWI. Test pit is in the center of the middle ground.



Photo 8 – Community 4's sandy loam and sandy clay loam soils didn't exhibit hydric soil indicators, and saturation and a water table were not encountered despite the soil pit extending to a depth of 38 inches.

Photo Log
Wetland Delineation for Rolling Hills Development
Colorado Springs, Colorado



Photo 9 – Community 5 includes a depression near the eastern boundary of the Site within the area identified as a seasonally flooded riverine system by the USFWS NWI. Test pit is on the left in the middle ground.



Photo 10 – Community 5's sandy clay and sandy loam soils didn't exhibit hydric soil indicators; however, oxidized rhizospheres along living roots were detectable within 12 inches of the soil surface.



Photo 11 – Community 6 is approximately 0.18 acres and includes a drainage channel associated with a windmill-powered well south of Bradley Road. Test pit is partially shown in the center of the foreground.



Photo 12 – Community 6's sandy loam soils contained 5% prominent redox concentrations from 4-12 inches, which satisfied the criteria for redox dark surface.

Photo Log
Wetland Delineation for Rolling Hills Development
Colorado Springs, Colorado



Photo 13 – Community 7 includes the southern edge of the drainage channel that forms Community 6. Test pit is in the center of the middle ground.



Photo 14 – Community 7's silty clay loam and sandy loam soils didn't exhibit hydric soil indicators, and saturation and a water table were not encountered despite the soil pit extending to a depth of 30 inches.



Photo 15 – Community 8 includes a relatively flat area identified as a seasonally flooded riverine system by the USFWS NWI. Test pit is in the center of the foreground.



Photo 16 – Community 8's clay loam and silty loam soils didn't exhibit hydric soil indicators, and saturation and a water table were not encountered despite the soil pit extending to a depth of 48 inches.

Field Forms

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 5/13/21
Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 1
Investigator(s): T. Walsh and A. Davis Section, Township, Range: S1 T15S R65W
Landform (hillslope, terrace, etc.): plateau NW boundary Local relief (concave, convex, none): none Slope (%): 0-3%
Subregion (LRR): D Lat: N38.767754 Long: W104.612199 Datum: WGS 84
Soil Map Unit Name: Sampson loam NWI classification: R4SBC

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.)

Hydrophytic Vegetation Present?	Yes _____ No <u>✓</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>✓</u>
Hydric Soil Present?	Yes _____ No <u>✓</u>		
Wetland Hydrology Present?	Yes _____ No <u>✓</u>		
Remarks: Moderate Drought in area during assessment (Drought.gov)			

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
			= Total Cover	

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
			= Total Cover	

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>unidentifiable grass (no reproductive structures)</i>	100%	Y	NA	
2. <i>Bassia scoparia</i>	20%	Y	FAC	
3. <i>Astragalus crassicaupus</i>	5%	N	NI	
4. <i>Chenopodium album</i>	2%	N	FACU	
5. <i>Carduus nutans</i>	2%	N	UPL	
6. <i>Senecio crassulus</i>	1%	N	FACU	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
			90% = Total Cover	

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
			= Total Cover	

% Bare Ground in Herb Stratum 10% _____ = Total Cover

Remarks: **sampled entire plant community*

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-11.5	10YR 2/2	100%					sandy clay moist	
11.5-20	10YR 3/2	99%	10YR 5/8	1%			sandy clay hard, dry	
20-24	10YR 3/2	98%	10YR 5/8	2%	C	M	sandy clay hard, dry	

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 Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): >28"

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 5/3/21
 Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 2
 Investigator(s): T. Walsh and A. Davis Section, Township, Range: S1 T15S R65W
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 1%
 Subregion (LRR): D Lat: N 38.774002 Long: W 104.610502 Datum: NAD 84
 Soil Map Unit Name: Sampson loam NWI classification: None
 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"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: <u>Moderate drought in area during assessment (drought.gov)</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>*</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66%</u> (A/B)	
1. <u>Elaeagnus angustifolia</u>	<u>90%</u>	<u>Y</u>	<u>FAC</u>		
2. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>116</u> x 3 = <u>330</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species _____ x 5 = _____ Column Totals: <u>115</u> (A) <u>350</u> (B) Prevalence Index = B/A = <u>3.04</u>	
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
<u>90%</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <input checked="" type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input checked="" type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) _____ ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover					
Herb Stratum (Plot size: <u>*</u>)					
1. <u>BASSIA scoparia</u>	<u>20%</u>	<u>Y</u>	<u>FAC</u>		
2. <u>unidentifiable grass (warm season bunchgrass)</u>	<u>20%</u>	<u>Y</u>	<u>NA</u>		
3. <u>Convolvulus arvensis</u>	<u>10%</u>	<u>N</u>	<u>NI</u>		
4. <u>Salsola tragus</u>	<u>5%</u>	<u>N</u>	<u>FACU</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>55%</u> = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
% Bare Ground in Herb Stratum <u>45%</u> _____ = Total Cover					
Remarks: <u>* sampled entire plant community</u>					

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	100%					Sandy clay loam	moist
6-13	10YR 2/2	100%					clay	dry, more compact, CaCO ₃
13-21	10YR 3/2	99%	10YR 3/2	1%	C	PL	clay	moist
21-31	10YR 4/2	50%	10YR				clay	moist, CaCO ₃
	10YR 2/2	50%						
31-42	10YR 5/3	98%	10YR 5/8	2%	C	M	loamy sand	moist

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 Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>> 42"</u>
Saturation Present? (includes capillary fringe)	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>> 42"</u>

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 5/13/21
 Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 3
 Investigator(s): T. Walsh and A. Davis Section, Township, Range: S1 T15S R65W
 Landform (hillslope, terrace, etc.): drainage swale Local relief (concave, convex, none): concave Slope (%): 0-3%
 Subregion (LRR): D Lat: N 38.777078 Long: W 104.613523 Datum: NAD 83
 Soil Map Unit Name: Ellicott loamy coarse sand NWI classification: R4SBA
 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 ☐ No ☒
 Hydric Soil Present? Yes ☐ No ☒
 Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks:

Moderate drought in area during assessment (drought.gov)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>*</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rosa woodsii</u>	<u>5%</u>	<u>Y</u>	<u>FACU</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
= Total Cover			
Herb Stratum (Plot size: <u>*</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>unidentifiable grass (no reproductive structures)</u>	<u>40%</u>	<u>Y</u>	<u>NA</u>
2. <u>Bassia scoparia</u>	<u>30%</u>	<u>Y</u>	<u>FAC</u>
3. <u>Rumex crispus</u>	<u>5%</u>	<u>N</u>	<u>FAC</u>
4. <u>Salsola tragus</u>	<u>5%</u>	<u>N</u>	<u>FACU</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
= Total Cover			
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
= Total Cover			
% Bare Ground in Herb Stratum <u>20%</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>35</u>	x 3 = <u>105</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species _____	x 5 = _____
Column Totals: <u>45</u>	(A) <u>145</u> (B)

Prevalence Index = B/A = 3.22

Hydrophytic Vegetation Indicators:

- ☒ 1 - Rapid Test for Hydrophytic Vegetation
 - ☒ 2 - Dominance Test is >50%
 - ☒ 3 - Prevalence Index is ≤3.0¹
 - ☒ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - ☒ 5 - Wetland Non-Vascular Plants¹
 - ☒ Problematic Hydrophytic Vegetation¹ (Explain)
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes ☐ No ☒

Remarks:

* Sampled entire plant community

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 4/2	100%					sandy loam	
3-12	10YR 4/2	100%					sandy loam moist	
12-20	10YR 5/4	99%	10YR 3/6	1 1/2	C	PL	loamy sand moist	
20-33	10YR 5/4	100%					sand	

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 Soils³:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____Water Table Present? Yes _____ No ☒ Depth (inches): > 52"Saturation Present? Yes _____ No ☒ Depth (inches): > 52"

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 5/14/21
 Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 4
 Investigator(s): T. Walsh and A. Davis Section, Township, Range: S1 T15S R65W
 Landform (hillslope, terrace, etc.): flat w/in trib. boundary Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): D Lat: N 38° 46.414' Long: W 104° 36.624' Datum: WGS 84
 Soil Map Unit Name: Sampson loam NWI classification: R4SBC

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 type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: <u>Moderate drought in area during assessment (drought.gov)</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
_____ = Total Cover			
Sapling/Shrub Stratum (Plot size: _____)			
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
_____ = Total Cover			
Herb Stratum (Plot size: <u>2</u>)			
1. <u>Bassia scoparia</u>	<u>40%</u>	<u>Y</u>	<u>FAC</u>
2. <u>Convolvulus arvensis</u>	<u>40%</u>	<u>Y</u>	<u>NI</u>
3. <u>Chenopodium album</u>	<u>10%</u>	<u>N</u>	<u>FACU</u>
4. <u>unidentifiable grass (no reproductive structures)</u>	<u>5%</u>	<u>N</u>	<u>NA</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
<u>95%</u> = Total Cover			
Woody Vine Stratum (Plot size: _____)			
1. _____			
2. _____			
_____ = Total Cover			
% Bare Ground in Herb Stratum <u>5%</u>			
Remarks: <u>* Sampled entire plant community</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species _____	x 5 = _____
Column Totals: <u>50</u> (A)	<u>160</u> (B)

Prevalence Index = B/A = 3.20

Hydrophytic Vegetation Indicators:

- ☒ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☒ 3 - Prevalence Index is ≤3.0¹
- ☒ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☒ 5 - Wetland Non-Vascular Plants¹
- ☒ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present?

Yes ☐ No ☒

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-3	10YR 2/2	100%					sandy loam dry	
3-9.5	10YR 2/2	100%					sandy loam moist	
9.5-38	10YR 2/2	99%	10YR 3/6	1%	C	PL	sandy clay compacted, dry	

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 Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): 13

Water Table Present? Yes _____ No ☒ Depth (inches): >38"

Saturation Present? Yes _____ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 5/14/21
 Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 5
 Investigator(s): T. Walsh and A. Davis Section, Township, Range: S1 T15S R65W
 Landform (hillslope, terrace, etc.): alluvium Local relief (concave, convex, none): concave Slope (%): 12-5
 Subregion (LRR): D Lat: 38°46'43N Long: 104°36'64W Datum: NAD83
 Soil Map Unit Name: Sampson loam NWI classification: R4SBC
 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 type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: <u>Moderate drought in area during assessment (drought.gov)</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
1. _____	_____	_____	_____	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species <u>16</u> x 3 = <u>30</u>
4. _____	_____	_____	_____	FACU species <u>10</u> x 4 = <u>40</u>
5. _____	_____	_____	_____	UPL species _____ x 5 = _____
_____ = Total Cover				Column Totals: <u>20</u> (A) <u>70</u> (B)
Herb Stratum (Plot size: <u>4</u>)	_____	_____	_____	Prevalence Index = B/A = <u>3.5</u>
1. <u>unidentifiable grass (no reproductive structures)</u>	<u>40%</u>	<u>Y</u>	<u>NA</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Convolvulus arvensis</u>	<u>20%</u>	<u>Y</u>	<u>NI</u>	
3. <u>Chenopodium album</u>	<u>10%</u>	<u>N</u>	<u>FACU</u>	
4. <u>Bassia scoparia</u>	<u>10%</u>	<u>N</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>20%</u>	_____	_____	_____	
Remarks: <u>*sampled entire plant community</u>				

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4.5	10YR 2/2						sandy clay	moist
4.5-7.5	10YR 2/2	98%	7.5YR 3/4	27%	C	PL	sandy clay	compacted
7.5-11	10YR 2/2	97%	7.5YR 3/4	31%	C	PL	sandy clay	
11-19	10YR 2/2	97%	10YR 3/6	31%	C	M	sandy clay	↓ dry
19-21	10YR 3/1	93%	10YR 3/6	77%	C	M	sandy clay	
21-22	10YR 5/4	95%	10YR 3/6	51%	C	M	sandy loam	
22-38	10YR 5/4	100%					sandy loam	dry

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

Indicators for Problematic Hydric Soils³:

<input checked="" type="checkbox"/> 2 cm Muck (A10)
<input checked="" type="checkbox"/> Red Parent Material (TF2)
<input checked="" type="checkbox"/> Very Shallow Dark Surface (TF12)
<input checked="" type="checkbox"/> Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input checked="" type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input checked="" type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input checked="" type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input checked="" type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): > 38"

Saturation Present? Yes _____ No ☒ Depth (inches): > 38"

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☒ FBT

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 8/7/21
 Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 6
 Investigator(s): T. Walsh and A. Davis Section, Township, Range: S11T15S R65W
 Landform (hillslope, terrace, etc.): drainage channel for well Local relief (concave, convex, none): concave Slope (%): 0-2%
 Subregion (LRR): D Lat: N38° 45.642' Long: W104° 37.478' Datum: NAD83
 Soil Map Unit Name: Sampson loam NWI classification: None

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"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)														
1. _____																		
2. _____																		
3. _____																		
4. _____																		
				Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <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>03</u></td> <td>x 3 = <u>189</u></td> </tr> <tr> <td>FACU species <u>18</u></td> <td>x 4 = <u>72</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>81</u> (A)</td> <td><u>261</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>3.22</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>03</u>	x 3 = <u>189</u>	FACU species <u>18</u>	x 4 = <u>72</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>81</u> (A)	<u>261</u> (B)
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>03</u>	x 3 = <u>189</u>																	
FACU species <u>18</u>	x 4 = <u>72</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>81</u> (A)	<u>261</u> (B)																	
= Total Cover																		
Sapling/Shrub Stratum (Plot size: _____)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
= Total Cover																		
Herb Stratum (Plot size: <u>1</u> _____)																		
1. <u>Hordeum jubatum</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: - 1 - Rapid Test for Hydrophytic Vegetation + 2 - Dominance Test is >50% - 3 - Prevalence Index is ≤3.0 ¹ - 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) - 5 - Wetland Non-Vascular Plants ¹ - Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Bassia scoparia</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>															
3. <u>Chenopodium album</u>	<u>15</u>	<u>N</u>	<u>FACU</u>															
4. <u>Cirsium arvense</u>	<u>2</u>	<u>N</u>	<u>FAC</u>															
5. <u>Convolvulus arvensis</u>	<u>2</u>	<u>N</u>	<u>NI</u>															
6. <u>Cuscuta approximata</u>	<u>2</u>	<u>N</u>	<u>NI</u>															
7. <u>Rumex crispus</u>	<u>1</u>	<u>N</u>	<u>FAC</u>															
8. <u>Andropogon gerardii</u>	<u>1</u>	<u>N</u>	<u>FACU</u>															
9. <u>Helianthus annuus</u>	<u>1</u>	<u>N</u>	<u>FACU</u>															
10. <u>Verbesina encelioides</u>	<u>1</u>	<u>N</u>	<u>FACU</u>															
11. _____																		
= Total Cover <u>85</u>																		
Woody Vine Stratum (Plot size: _____)																		
1. _____																		
2. _____																		
= Total Cover																		
% Bare Ground in Herb Stratum <u>20%</u>																		
Remarks:																		
* Sampled entire plant community																		

SOIL

Sampling Point: 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4	10YR 2/2	100					sandy loam	
4-6	10YR 2/2	97	10YR 3/6	3%	C	PL		Prominent
6-10	10YR 2/2	95	10YR 3/6	5%	C	PL		
10-16	10YR 2/2	98	10YR 3/6	2%	C	PL		
16-22	10YR 3/2	97	10YR 4/6	3%			Sandy clay	prom.
22-27	10YR 4/2	95	10YR 4/6	5%	C	PL	sandy loam	
27-30	10YR 4/2	99	10YR 4/6	1%	C	M	loamy sand	

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

Indicators for Problematic Hydric Soils³:

- ☒ 2 cm Muck (A10)
- ☒ Red Parent Material (TF2)
- ☒ Very Shallow Dark Surface (TF12)
- ☒ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐Remarks: ± 3/4 2 5% disc/prom in upper 12"

HYDROLOGY

Wetland Hydrology Indicators:

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

- | | |
|---|--|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input checked="" type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input checked="" type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input checked="" type="checkbox"/> Aquatic Invertebrates (B13) |
| <input checked="" type="checkbox"/> Water Marks (B1) | <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input checked="" type="checkbox"/> Sediment Deposits (B2) | <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input checked="" type="checkbox"/> Drift Deposits (B3) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4) | <input checked="" type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input checked="" type="checkbox"/> Iron Deposits (B5) | <input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☒ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☒ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☒ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☒ Raised Ant Mounds (D6) (LRR A)
- ☒ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 0-11"

Water Table Present? Yes ☐ No ☐ Depth (inches): > 48"

Saturation Present? Yes ☐ No ☐ Depth (inches): > 48"

(Includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 8/7/21
Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 7
Investigator(s): T. Walsh and A. Davis Section, Township, Range: S12T15S R65W
Landform (hillslope, terrace, etc.): end of drainage channel Local relief (concave, convex, none): none-concave Slope (%): 23%
Subregion (LRR): D Lat: N 38° 45.625' Long: W 104° 37.456' Datum: NAD83
Soil Map Unit Name: Sampson loam NWI classification: None

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.

<p>Hydrophytic Vegetation Present? Yes _____ No <u>✓</u></p> <p>Hydric Soil Present? Yes _____ No <u>✓</u></p> <p>Wetland Hydrology Present? Yes _____ No <u>✓</u></p>	<p>Is the Sampled Area within a Wetland? Yes _____ No <u>✓</u></p>
<p>Remarks:</p> <p><i>No drought at time of assessment in El Paso (drought.gov)</i></p>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		_____ = Total Cover		

Sapling/Shrub Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		_____ = Total Cover		

Herb Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Bouteloua gracilis</i>	30%	Y	NI
2.	<i>Bassia scoparia</i>	30%	Y	FAC
3.	<i>Chenopodium album</i>	20%	N	FACU
4.	<i>Cuscuta floridensis approximata</i>	10%	N	NI
5.	<i>Poa annua</i>	10%	N	FAC
6.	<i>Panicum miliaceum</i>	5%	N	NI
7.	<i>Helianthus annuus</i>	2%	N	FACU
8.	<i>Verbesina encelioides</i>	2%	N	FACU
9.	<i>Paspalum smithii</i>	1%	N	FACU
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
		110 = Total Cover		

Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
		_____ = Total Cover		

% Bare Ground in Herb Stratum 0

Remarks: *Sampled entire plant community

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>50</u> (A/B)

Prevalence Index worksheet:			
Total % Cover of:		Multiply by:	
OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>40</u>	x 3 =	<u>120</u>
FACU species	<u>25</u>	x 4 =	<u>100</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column Totals:	<u>65</u> (A)		<u>225</u> (B)
Prevalence Index = B/A = <u>3.46</u>			

Hydrophytic Vegetation Indicators:

- ☒ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☒ 3 - Prevalence Index is ≤3.0¹
- ☒ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☒ 5 - Wetland Non-Vascular Plants¹
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present?
Yes _____ No ☒

SOIL

Sampling Point: 7

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		
0-9	10YR2/2	100%					sandy clay	
9-16	10YR2/2	99%	10YR3/6	1%	C	PL	sandy clay	from
16-30	10YR2/2	99%	10YR3/6	1%	C	M	clayey	caliche deposits

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 Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (LRR A)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- | | | |
|--|--|--------------------------------|
| Surface Water Present? | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): _____ |
| Water Table Present? | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): <u>>30"</u> |
| Saturation Present?
(includes capillary fringe) | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): _____ |

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rolling Hills - East Tributary to Jimmy Camp Creek City/County: Colorado Springs - El Paso County Sampling Date: 8/8/21
 Applicant/Owner: Murray Fountain LLC State: CO Sampling Point: 8
 Investigator(s): T. Walsh and A. Davis Section, Township, Range: S1 T15S R65W
 Landform (hillslope, terrace, etc.): flat in trib. boundary Local relief (concave, convex, none): none Slope (%): 0-2%
 Subregion (LRR): D Lat: 38°45.735' Long: W104°37.478' Datum: NAD83
 Soil Map Unit Name: Sampson loam NWI classification: R4SBC
 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 type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B) Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>8</u> x 3 = <u>24</u> FACU species <u>53</u> x 4 = <u>212</u> UPL species _____ x 5 = _____ Column Totals: <u>61</u> (A) <u>296</u> (B) Prevalence Index = B/A = <u>3.87</u> Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____ = Total Cover					
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover					
Herb Stratum (Plot size: <u>1</u>) 1. <u>Bouteloua gracilis</u> <u>50%</u> <u>Y</u> <u>N1</u> 2. <u>Chenopodium album</u> <u>20%</u> <u>Y</u> <u>FACU</u> 3. <u>Amaranthus retroflexus</u> <u>20%</u> <u>Y</u> <u>FACU</u> 4. <u>Matricaria discolor</u> <u>10%</u> <u>N</u> <u>FACU</u> 5. <u>Bassia scoparia</u> <u>5%</u> <u>N</u> <u>FAC</u> 6. <u>Verbesina occidentalis</u> <u>3%</u> <u>N</u> <u>FACU</u> 7. <u>Rumex crispus</u> <u>2%</u> <u>N</u> <u>FAC</u> 8. <u>Convolvulus arvensis</u> <u>1%</u> <u>N</u> <u>N1</u> 9. <u>Cirsium arvense</u> <u>1%</u> <u>N</u> <u>FAC</u> 10. _____ 11. _____ <u>112</u> = Total Cover					
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover					
% Bare Ground in Herb Stratum <u>0</u>					
Remarks:				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-13	10YR 2/2	100%					clay loam	dry
13-30	10YR 3/2	100%					silty loam	
30-48	10YR 3/2	100%					sandy 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.)

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

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

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes _____ No _____	Depth (inches): <u>>48"</u>
Saturation Present?	Yes _____ No _____	Depth (inches): <u>>48"</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

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

Remarks: _____