

8.0 Photographs



Sample Site 1:
View north
December 2015



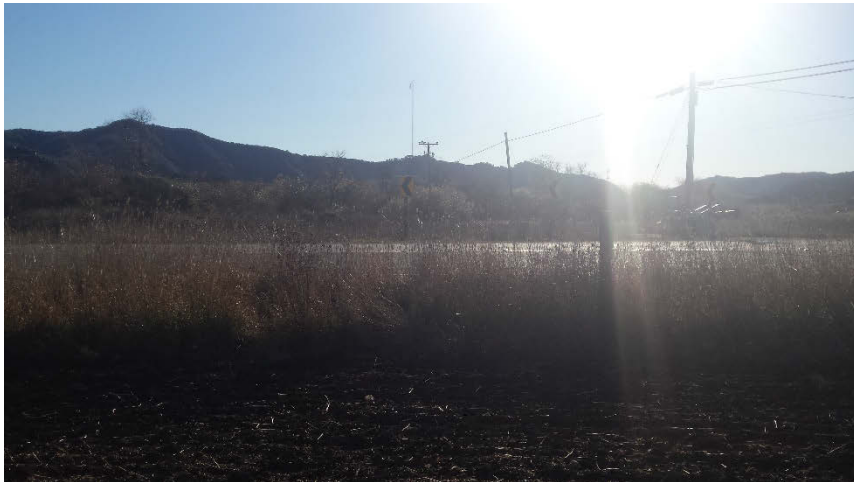
Sample Site 1:
View south
December 2015



Sample Site 1:
Substrate
December 2015



Sample Site 2:
View north
December 2015



Sample Site 2:
View south
December 2015



Sample Site 2:
Substrate
December 2015



Sample Site 4:
View south
Bowl Wetland
May 2014



Sample Site 4:
View north
December 2015



Sample Site 4:
View south
December 2015



Sample Site 5:
View east
December 2015



Sample Site 5:
View west
December 2015



Sample Site 5:
Substrate
December 2015



Sample Site 6:
View east
East West Drainage
December 2015



Sample Site 6:
View west
East West Drainage
December 2015



Sample Site 6:
Substrate
East West Drainage
December 2015



Sample Site 7:
View south
North South Drainage
December 2015



Sample Site 7:
View north
North South Drainage
December 2015



Sample Site 7:
Substrate
North South Drainage
December 2015



Sample Site 10:
View upstream
Tank Farm Creek
December 2015



Sample Site 10:
View downstream
Tank Farm Creek
December 2015



Sample Site 10:
Substrate
Tank Farm Creek
December 2015



Sample Site 11:
View upstream
Tank Farm Riparian
December 2015



Sample Site 11:
Substrate
Tank Farm Riparian
December 2015



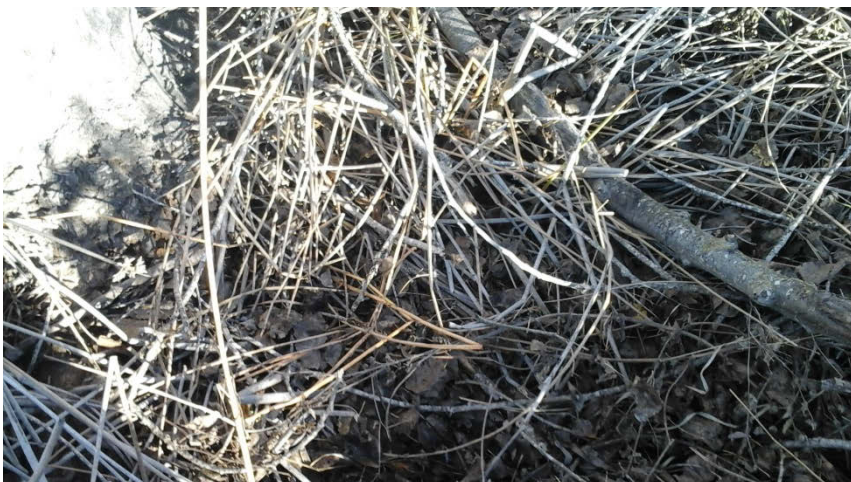
Sample Site 13:
View west
Bowl Wetland
December 2015



Cross-Section B:
View upstream
December 2015



Cross-Section B:
View downstream
December 2015



Cross-Section B:
Substrate
December 2015



Cross-Section H:
View upstream
December 2015



Cross-Section H:
View downstream
December 2015



Cross-Section H:
Substrate
December 2015



Cross-Section I:
View upstream
December 2015



Cross-Section I:
View downstream
December 2015



Cross-Section I:
Substrate
December 2015



Cross-Section J:
View upstream
December 2015



Cross-Section J:
View downstream
December 2015



Cross-Section J:
Substrate
December 2015

Exhibit A – Delineation of Potentially Jurisdictional Wetlands and Waters

Exhibit A. Delineation of Potentially Jurisdictional Wetlands and Waters

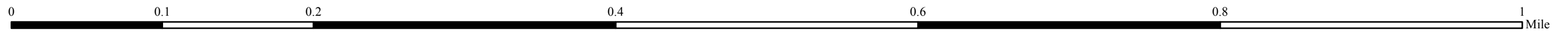
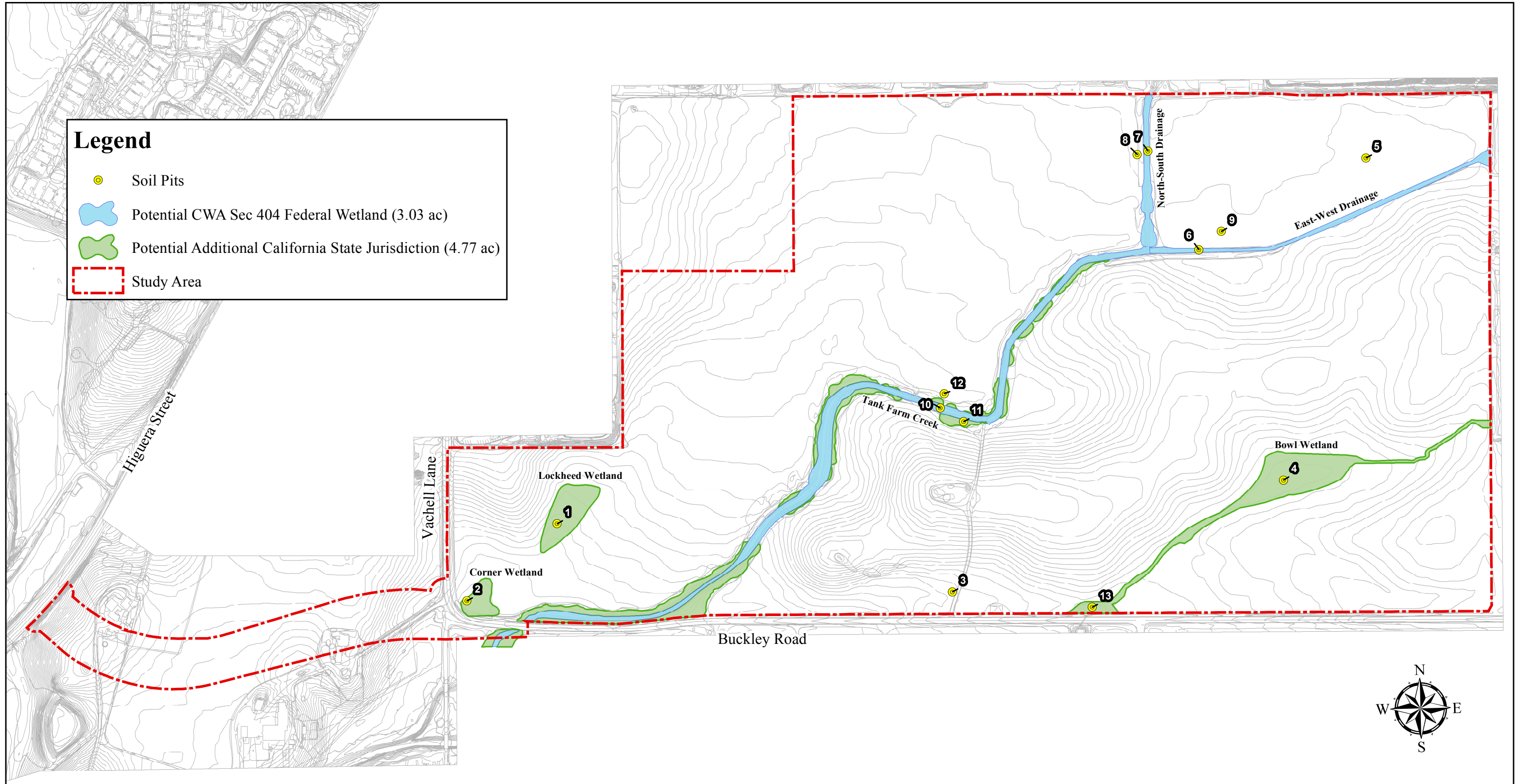


Exhibit B – Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Avila Ranch City/County: San Luis Obispo Sampling Date: 4-11-14
 Applicant/Owner: Steve Peck State: CA Sampling Point: 1 (14.1)
 Investigator(s): J. Tilligke Section, Township, Range: Sec 10 T 31 S R 12 E
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 1-2
 Subregion (LRR): Mediterranean CA Lat: 35.23677 Long: -120.67432 Datum: WGS84
 Soil Map Unit Name: Marine sandy clay loam NWI classification: PEMAP
 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 <u>+</u> No <u>—</u>	Hydic Soil Present? Yes <u>—</u> No <u>+</u>	Is the Sampled Area within a Wetland? Yes <u>state</u> No <u>—</u>
Wetland Hydrology Present? Yes <u>+</u> No <u>—</u>		

Remarks:
drought year

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>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>15</u> x 2 = <u>30</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>20</u> (A) <u>50</u> (B) Prevalence Index = B/A = <u>2.5</u>
Sapling/Shrub Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>1m²</u>)	1. <u>Polypogon monspeliensis</u>	<u>15</u>	<u>Y</u> <u>FACW</u>	
2. <u>Helminthotheca echioides</u>	<u>5</u>	<u>N</u> <u>FACU</u>		
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>80</u> % Cover of Biotic Crust <u>0</u>				

Hydrophytic Vegetation Indicators:
+ Dominance Test is >50%
+ Prevalence Index is ≤3.0¹
— Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
+ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes + No —

Remarks:
drought conditions and plowed ground - remnants of polypogon & evidence of inhibited crop growth

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				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
1-10	10YR2/1	100					S.C/SCL	
10-12+	10YR2/1	70	10YR5/2	30	D	M	SCI	no redox

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"/> Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present):
 Type: none
 Depth (inches):

Hydric Soil Present? Yes No +

Remarks:
soil mixing by recent farming activities, complicated evaluation of light soil features. However, no redox observed.

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <u> </u> No <input checked="" type="checkbox"/>	Depth (inches): <u>>12+</u>	Wetland Hydrology Present? Yes <u>+</u> No <u> </u>
Water Table Present?	Yes <u> </u> No <input checked="" type="checkbox"/>	Depth (inches): <u>>12+</u>	
Saturation Present? (includes capillary fringe)	Yes <u> </u> No <input checked="" type="checkbox"/>	Depth (inches): <u>>12+</u>	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Avila Ranch City/County: San Luis Obispo Sampling Date: 4-11-14
 Applicant/Owner: Steve Peck State: CA Sampling Point: 2 (0.2)
 Investigator(s): J. Tilligert Section, Township, Range: Sec 10 T31S R12E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): Mediterranean CA Lat: 35.23596 Long: -120.67597 Datum: NAD83
 Soil Map Unit Name: Diablo/Cropley Clay NWI classification: PEMAP

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 type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <u>state</u> No <input type="checkbox"/>
Remarks: <u>drought year</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>n/a</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>6</u></td> <td>x 5 = <u>30</u></td> </tr> <tr> <td>Column Totals: <u>8</u> (A)</td> <td><u>38</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.75</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>6</u>	x 5 = <u>30</u>	Column Totals: <u>8</u> (A)	<u>38</u> (B)	Prevalence Index = B/A = <u>4.75</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>0</u>	x 3 = <u>0</u>																			
FACU species <u>2</u>	x 4 = <u>8</u>																			
UPL species <u>6</u>	x 5 = <u>30</u>																			
Column Totals: <u>8</u> (A)	<u>38</u> (B)																			
Prevalence Index = B/A = <u>4.75</u>																				
_____ = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>n/a</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover																				
Herb Stratum (Plot size: <u>m²</u>)																				
1. <u>Convolvulus arvensis</u>	<u>1</u>	<u>N</u>	<u>UPL</u>																	
2. <u>Malvula leprosa</u>	<u>1</u>	<u>N</u>	<u>FACU</u>																	
3. <u>Helminthotheca echioides</u>	<u>1</u>	<u>N</u>	<u>FACU</u>																	
4. <u>Safflower crop</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>																	
5. <u>Plantago aquatica lanceolata</u>	<u>Adjacent</u>		<u>FACU</u>																	
6. <u>Phalaris aquatica</u>	<u>Adjacent</u>		<u>FAC</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>8</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>n/a</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>90</u>		% Cover of Biotic Crust <u>0</u>																		

Hydrophytic Vegetation Indicators:

- Dominance Test is >50%
- Prevalence Index is ≤3.0¹
- Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks: Minimal veg, mostly safflower crop. Evidence of inhibited crop growth. Roadside veg on higher ground is not hydrophytic.

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		
0-13	10YR 2/1	100					SCI	
13-18	10YR 2/1	96	10YR 5/2	3	D	M	SCI	
			10YR 6/8	1	C	M		

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)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- 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)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: n/a
 Depth (inches): > 18 inches

Hydric Soil Present? Yes No

Remarks:

too few depletions and concentrations and below 12 inches

HYDROLOGY

Wetland Hydrology Indicators:

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

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- 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)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

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

Field Observations:

Surface Water Present? Yes No Depth (inches): > 18"
 Water Table Present? Yes No Depth (inches): > 18"
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): > 18"

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Avila Ranch City/County: San Luis Obispo Sampling Date: 4-11-14
 Applicant/Owner: Steve Peck State: CA Sampling Point: 3 (063)
 Investigator(s): J. Tilligkert Section, Township, Range: Sec 10 T31S R1E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1-2
 Subregion (LRR): Mediterranean CA Lat: 35.73606 Long: -120.66929 Datum: NAD83
 Soil Map Unit Name: Salinas silty clay loam NWI classification: PEMAP
 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"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology 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"/>
Remarks: <u>drought year, plowed field</u>	

VEGETATION – Use scientific names of plants.

<p><u>Tree Stratum</u> (Plot size: <u>N/A</u>)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">1. _____</th> <th style="width:15%;">Absolute % Cover</th> <th style="width:15%;">Dominant Species?</th> <th style="width:10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p><u>Sapling/Shrub Stratum</u> (Plot size: <u>N/A</u>)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p><u>Herb Stratum</u> (Plot size: <u>m²</u>)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">1. <u>Metacaria discoides</u></th> <th style="width:15%;">5</th> <th style="width:15%;">N</th> <th style="width:10%;">FACU</th> </tr> </thead> <tbody> <tr> <td>2. <u>Spergular arvensis</u></td> <td>5</td> <td>N</td> <td>UPL</td> </tr> <tr> <td>3. <u>Avena fatua</u></td> <td>10</td> <td>Y</td> <td>UPL</td> </tr> <tr> <td>4. <u>Hordeum vulgare</u></td> <td>25</td> <td>Y</td> <td>UPL</td> </tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="4" style="text-align: right;">45 = Total Cover</td></tr> </tbody> </table> <p><u>Woody Vine Stratum</u> (Plot size: <u>N/A</u>)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust _____</p>	1. _____	Absolute % Cover	Dominant Species?	Indicator Status	2. _____				3. _____				4. _____				_____ = Total Cover				1. _____				2. _____				3. _____				4. _____				5. _____				_____ = Total Cover				1. <u>Metacaria discoides</u>	5	N	FACU	2. <u>Spergular arvensis</u>	5	N	UPL	3. <u>Avena fatua</u>	10	Y	UPL	4. <u>Hordeum vulgare</u>	25	Y	UPL	5. _____				6. _____				7. _____				8. _____				45 = Total Cover				1. _____				2. _____				_____ = Total Cover				<p>Dominance Test worksheet:</p> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
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Remarks: <u>plowed, consistent crop growth</u>																																																																																													

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		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-13	10YR 2/1	70	7.5YR 5/8	1	C ₈	M	SCI	minimal
	10YR 3/2	30						

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): > 13 inches

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): > 13 in

Water Table Present? Yes No Depth (inches): > 13 in

Saturation Present? (includes capillary fringe) Yes No Depth (inches): > 13 in

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Avila Ranch City/County: San Luis Obispo Sampling Date: 5-8-14
 Applicant/Owner: Steve Peck State: CA Sampling Point: 4 (0.4)
 Investigator(s): Jo Tilligkeit + LD Althouse Section, Township, Range: Sec 11 T31S R12E
 Landform (hillslope, terrace, etc.): swale/bowl Local relief (concave, convex, none): Concave Slope (%): 0.5
 Subregion (LRR): Mediterranean CA Lat: 35.23723 Long: -120.66508 Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: _____

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 checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <u>state</u> No _____
Remarks: <p align="center"><i>plowed field, drought year</i></p>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>N/A</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>N/A</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
				_____ = Total Cover
Herb Stratum (Plot size: <u>m²</u>)				
1. <u>Malvella leprasa</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Convolvulus arvensis</u>	<u>2</u>	<u>N</u>	<u>N/A</u>	
3. <u>Avena sativa</u>	<u>1</u>	<u>N</u>	<u>UPL</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
				<u>8</u> = Total Cover
Woody Vine Stratum (Plot size: <u>N/A</u>)				
1. _____				
2. _____				
				_____ = Total Cover
% Bare Ground in Herb Stratum <u>92</u> % Cover of Biotic Crust <u>0</u>				

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (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>0</u>	x 3 = <u>0</u>
FACU species <u>5</u>	x 4 = <u>20</u>
UPL species <u>1</u>	x 5 = <u>5</u>
Column Totals: <u>6</u> (A)	<u>25</u> (B)

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

- Dominance Test is >50%
- Prevalence Index is ≤3.0¹
- Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No _____

Remarks:
Pattern of veg suggests long periods of saturation that inhibited crop growth. Outs upland from bowl feature are more dense, ~10% cover. All plants < 6" tall

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				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/1	100	-	-	-	-	C	
5-17	10YR 3/1	100	-	-	-	-	C	
18+	10YR 3/1	95	10YR 6/8	1	C	M	C	oxidized horizons
			10YR 4/6	5	C	M		10YR 6/8

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
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<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present):
 Type: none
 Depth (inches): >18in

Hydric Soil Present? Yes No

Remarks:
Area plowed but still much darker than upland areas. Redox features present at 18 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
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	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:
 Surface Water Present? Yes No Depth (inches): >18in
 Water Table Present? Yes No Depth (inches): >18in
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): >18in

Wetland Hydrology Present? Yes No

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

Remarks:
soil moist but not saturated below 6 inches. Moisture appears to concentrate in this topography bowl feature.