

Appendix I Data Collection Forms from the  
USACE Wetland Successional  
Development Assessment

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ARKELIAN 103-230-04

10.0Ac



# Characterization

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arkellian 103-230-04 City/County: Mendocino Sampling Date: 6/11/2011  
 Applicant/Owner: Caltrans State: CA Sampling Point: Parcel Baseline  
 Investigator(s): DM KG / JM / RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): ALLUVIAL PLAIN Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Gelow SLo-5/1, Colu c0 0-27 NWI classification: Pf  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel characterization. V/S/H observations reflect generalized wetland components of Parcel.</u>	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sampling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Quercus lobata</u>	_____	_____	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Fraxinus latifolia</u>	_____	_____	<u>FACW</u>	
3. <u>Rubus ursinus</u>	_____	_____	<u>FACW</u>	
4. <u>Turdus sp</u>	_____	_____	<u>+</u>	
5. <u>Cypripus sp</u>	_____	_____	<u>+</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks: Parcel is mostly forested @ mature oak/ash, open understory @ some herbaceous cover. Does NOT appear to be grazed. A small portion is hayed.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10"	10YR 2/6	95	7.5YR 4/6	15	C	PL/SM	cl	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- 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)

Indicators for Problematic Hydric Soils<sup>3</sup>:

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

<sup>3</sup>Indicators 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: Redox Dark Surface -

**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) (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)

Secondary Indicators (2 or more required)

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

Field Observations:

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

Wetland Hydrology Present? Yes  No

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

Remarks: • NO current standing water but has water stained leaves.  
 • Water draining off surface into (ditch? channel?)  
 Broad Swale running to NW.

PARCEL/UNIT: <i>Archeology 103-230-04</i>		FIELD INSP DATE: <i>6 JAN 2011</i>	TOTAL PARCEL AC: <i>10.0</i>	
TOTAL WETLAND AC: <i>8.6 AC</i>	OTHER WATER AC: <i>0.4 AC</i> <i>UPLAND 1.4 AC</i>	IMPACTS IN WETLAND AC: <i>0</i>	ENHANCEMENT AC: <i>.4 AC</i>	PRESERVATION AC: <i>9.6 AC</i> <i>Pf - 8.2 AC</i> <i>Upl 6.4 AC</i>
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>subtropical forested, seasonally saturated - Pf</i>		LANDSCAPE POSITION: <i>ALLUVIAL PLAIN - swales</i> <i>0-2% slope</i>	
	HYDROLOGY TYPE & DURATION: <i>very long duration, subsurface saturation</i> <i>surface over-flow from upstate @ surface drainage confined to swales/old channels draining to NW</i> <i>unlikely to flood but may pond water in surface depressions unable to drain for short duration periods after ppt events.</i>			
HYDRIC SOIL INDICATOR: <i>Redox disk surface -</i> <i>No Ap</i>		SOIL SURVEY MAP UNIT: <i>Geilow s-l</i> <i>0-5%</i> <i>cole cl</i> <i>0-2%</i>	WETLAND/UPLAND BOUNDARY: <i>transitional</i>	SLOPE & DRAINAGE: <i>0-1% surface</i> <i>swale flow</i> <i>some swales</i> <i>low flow &amp; drainage</i> <i>water s</i>
Dominant Species * Common Species+ <i>Quercus lobata</i> <i>Cornus LATIFOLIA</i> <i>Juncus sp</i> <i>Rubus ursinus</i> <i>Cyperus sp</i> <i>Scirpus sp</i>			NOXIOUS SPECIES: <i>None</i>	
Mature closed canopy forest			GROWTH FORM: <i>Forested</i>	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

North - Palustrine forested  
South - agr. pasture  
East - agr. pasture  
West - agr. pasture

OBSERVED/INFERRED MODIFICATIONS:

- V - appears to be mature trees @ herbaceous understorey
- S - None - no evidence of manipulation
- H - None - Swales (may have been historic ditches?)  
down water across and off the parcel.  
Primarily hydrology is subsurface saturation

CHARACTERIZATION:

closed canopy Palustrine forested seasonally  
saturated wetland. Parcel does not appear to be  
GRAZED or have significant modifications  
to warrant circumstance of hydrology or soil.

COMMENTS:

- Small population of Pc ho observed on site.
- Small upland inclusions at edge of  
Parcel
- No observed Li b n or POTENTIAL HABITAT
- Confusing map symbol for Lowland oak Grassland  
..... is this an upland?



GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Benbow I

007-020-03

33.5Ac



BENBOW 1

# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: BENBOW 1 007-020-03 City/County: Willits Sampling Date: 28 Dec 10  
 Applicant/Owner: CACTIONS State: CA Sampling Point: PARCEL BASELINE  
 Investigator(s): DM / SZJM / RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLAT PLAIN TERRACE Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: COLR @ FELIZ + TALMAGE NWI classification: Per  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation X, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: PARCEL CHARACTERIZATION. V/S/H OBSERVATIONS REFLECT GENERALIZATION OF WETLAND COMPONENT OF PARCEL

### VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
= Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species <sup>1</sup> _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>FESTUCA arundINACEA</u>	_____	_____	<u>FAC</u>	1 - Rapid Test for Hydrophytic Vegetation.
2. <u>LOLUM perenne</u>	_____	_____	<u>FAC</u>	2 - Dominance Test is >50%
3. <u>RANUNCULUS (orthORhynchus?)</u>	_____	_____	<u>FACW</u>	3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. <u>JUNCUS arvens</u>	_____	_____	<u>FAC</u>	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. <u>TRISOLIA (repens?)</u>	_____	_____	<u>FACW</u>	5 - Wetland Non-Vascular Plants <sup>1</sup>
6. <u>HYDROCHORIS radicata</u>	_____	_____	<u>UPL</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. <u>SPRANUM dissectum</u>	_____	_____	<u>UPL</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. <u>see JD data sheets for additional species</u>	_____	_____	_____	
= Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum _____				

Remarks: GRAZED PASTURE - PARCEL MANAGED FOR FORAGE SPECIES / MOST COMMON / DOMINANT SPECIES

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-2"	10Y R4/2	100%					sil	dense roots
2-16"	10Y R4/2	80%	7.5Y R4/6	20%	C		pl, smt sil	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<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)	

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: Depleted matrix / many Redox concentrations / No Ap or Dark A / No obvious or recent soil manipulations

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0-1"

Water Table Present? Yes  No  Depth (inches): 3"

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0"

Wetland Hydrology Present? Yes  No

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

Remarks: ▽ 3" / standing water in depressional positions - 0-1" / swale flowing - not flooding parcel

PARCEL/UNIT: Benbow 1 APN# 007-020-03		FIELD INSP DATE: 28 Dec 10	TOTAL PARCEL AC: 33.5 Ac	
TOTAL WETLAND AC: 26.6 Ac	OTHER WATER AC: 0.2 Ac -	IMPACTS IN WETLAND AC: 8.5 Ac	ENHANCEMENT AC: 15.0 Ac	PRESERVATION AC: 0.2 Ac OW 3.1 Ac Pf 6.7 Ac UPLAND
Pf-3.1 Ac Pem-23.5 Ac	No IMPACTS TO OW. PART of CHANNEL AT edge of Parcel	6.7 Ac UPLAND		
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: GRAZED PASTURE - Pem seasonally SATURATED - PLANTS MANAGED FOR FORAGE		LANDSCAPE POSITION: wet meadow - Floodplain Terrace	
HYDROLOGY TYPE & DURATION: - Very long DURATION sub-surface SATURATION - OCCASIONAL flooding - short duration - micro-depressional Ponding / Localized SURFACE SHEET FLOW				
HYDRIC SOIL INDICATOR: - Depleted MATRIX F-3 - No DARK SURFACE HORIZON No buried soil to 16" "		SOIL SURVEY MAP UNIT: Cole clay LOAM - 0-2 %	WETLAND/ UPLAND BOUNDARY: TRANSITIONAL - Higher Ridges ADJACENT TO tributaries	SLOPE & DRAINAGE: N 1/2 S to N. Two vegetated SWALES Running WATER
DOMINANT SPECIES: * common species * Parcel dominated by PASTURE GRASSES & FORBS INCLUDING Festuca* Lolium* Ranunculus* Juncus* Trifolium* Ilypachne* Galium* POA* Hordeum* (see sp. for complete list)			NOXIOUS SPECIES: None Identified	
			GROWTH FORM: Herbaceous	



CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

S → E. commercial Rd. / AG fields - PASTURE  
E → TRIBUTARY @ RIPARIAN INTO AG field - PASTURE  
W → BAECHTEL Creek @ RIPARIAN - RECREATIONAL FIELDS?  
N → BANBOW II - MANAGED/GRAZED PASTURE

OBSERVED/INFERRED MODIFICATIONS:

VEGETATION - MANAGED/GRAZED PASTURE, PLANT COMMUNITY  
APPEARS TO BE DOMINATED BY INTRODUCED PASTURE  
GRASSES AND MANAGED THROUGH GRAZING  
TO RESTRICT SUCCESSIONAL DEVELOPMENT  
SOIL - NO OBVIOUS MODIFICATION UNDER CURRENT CONDITION  
HYDROLOGY - NO OBVIOUS MODIFICATION UNDER CURRENT CONDITION

CHARACTERIZATION:

GRAZED PASTURE @ MANAGED VEGETATION ON  
INTACT HYDRIC SOIL AND VERY LONG DURATION  
SUB-SURFACE SATURATED WETLAND HYDROLOGY. PARCEL  
MAY BE OCCASIONALLY FLOODED DURING EXTREME  
PPT EVENTS.

COMMENTS:

- No observed populations of *P. ho* or *Li ba*.
- Most of WETLANDS ON PARCEL IDENTIFIED AS POTENTIAL HABITAT FOR *Li ba*.
- PROJECT AREA (PERMANENT + TEMPORARY IMPACTS) OCCUR @ IN THIS PARCEL.
- HOUSE + OUTBUILDINGS ON PARCEL



<p>EXCLOSURE DESCRIPTION/ REFERENCE SITE</p>	<p>No exclosures @ in Parcel. SIMILAR SOIL UNITS ON PARCELS TO THE N HAVE STUMPS AND TREE THROW DEPRESSIONS INDICATING POTENTIAL TO SUPPORT WOODLAND/FOREST Qu ls, FR la, Um ca. Increased cover Jupa.</p> <div style="border: 1px solid black; padding: 5px;"> <p>SOIL SURVEY MAP UNIT: Cole CLAY LOAM 0-2% -</p> </div>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>SOIL: None - current normal circumstance</p>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>HYDROLOGY: None - historically altered but currently in normal circumstances, VLD-SSS, occasional flooding</p>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>VEGETATION CLASS: currently P<sub>em</sub> seasonally saturated Agriculture Pasture Likely would support P<sub>f/em</sub> seasonally saturated wetland woodland/meadow.</p>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>ESTIMATED SPECIES COMPOSITION CHANGE: Shift from managed AG GRASSES (Festuca, Lolium, Trifolium, Geranium etc) to likely include a large % cover or dominance by Junus, Cstex, Quercus, Floxinus, Hordeum br, Alopecurus</p>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  <ul style="list-style-type: none"> <li>Remove GRAZING AND VEGETATION MANAGEMENT OR OTHER MODIFICATIONS THAT INTERFERE @ VEGETATION SUCCESSIONAL DEVELOPMENT</li> </ul> </p>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>OTHER POTENTIAL ACTIONS:  <ul style="list-style-type: none"> <li>Remove debris</li> <li>Remove UNNECESSARY FENCING</li> <li>Remove STOCK LIFTING FILL PILE</li> <li>Remove Rubus patches</li> <li>RIPARIAN PLANTINGS IN WETLAND ADJ TO CREEK</li> <li>UPLAND RIPARIAN PLANTINGS ADJ TO CREEK</li> <li>EROSION CONTROL for RWQCD</li> </ul> </p>



GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	



BenBow II 007-010-04

36.2 AC



# CHARACTERIZATION

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

Project/Site: BENBOW # 007-010-04 City/County: WILLITS Sampling Date: 28 Dec 10  
 Applicant/Owner: CAUTIONS State: CA Sampling Point: PARCEL CORNER  
 Investigator(s): DM/RR/SZ/JM Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): TERRACE Local relief (concave, convex, none): FLAT/SINGLE Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: COLE CL 0-2%, FELUZLAM 0-2% NWI classification: Pem  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Parcel characterization. V/S/H observations reflect general conditions of wetland component of Parcel</u>			

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>FESTUCA ALUNDINACOA</u>	_____	_____	<u>FAC</u>	
2. <u>JUNCEUS CATENS</u>	_____	_____	<u>FAC</u>	
3. <u>RANUNCULUS sp</u>	_____	_____	<u>FACU</u>	
4. <u>TRIFOLIUM (NORRIS?)</u>	_____	_____	<u>FACU</u>	
5. <u>HYPOCHOERIS RABICORNIS</u>	_____	_____	<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
<b>% Bare Ground in Herb Stratum _____</b>				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				

Remarks: GRAZED PASTURE - PARCEL MARKED FOR FOLIOLE SPECIES

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR4/2	70%	7.5YR4/6	30%	C	PLM	cl	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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 checked="" 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)	

<sup>3</sup>Indicators 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: F-3 Depleted Matrix  
 No observable Ap or soil manipulations

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0-2"	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 4"	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0"	

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

▽ 4"

Remarks: Very long duration subsurface saturation  
 shallow water in swales/depressions  
 surface sheet flow across parcel in swales towards W

PARCEL/UNIT: Ben Bow II 007-010-04		FIELD INSP DATE: 28 Dec 10	TOTAL PARCEL AC: 36.2 AC
TOTAL WETLAND AC: P <sub>1</sub> -Riparian 3.5 AC P <sub>em</sub> 25.3 AC - 3.9	OTHER WATER AC: .3 AC UPLAND AC 7.1 AC - 3.9 AC	IMPACTS IN WETLAND AC: P <sub>1</sub> 0.7 AC P <sub>em</sub> 3.9 AC UPL - 3.9 AC	ENHANCEMENT AC: P <sub>em</sub> - 21.4 AC PRESERVATION AC: P <sub>1</sub> -Riparian 3.5 AC - .7 ----- 2.8 AC UPL - 3.2 AC
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: GRAZED PASTURE P <sub>em</sub> seasonally saturated FORAGE GRASSES - does NOT appear to be idled	LANDSCAPE POSITION: Foodplain Terrace - wet meadow	
HYDROLOGY TYPE & DURATION: Very long duration sub surface saturation - occasional flooding - short duration - micro depressional ponding - localized surface sheet flow swales / ood channels? collecting water			
HYDRIC SOIL INDICATOR: F3 - Dypered MOLLIX No observable sp or soil manipulation		SOIL SURVEY MAP UNIT: Coleal 0-2' / Feliz 0-2'	WETLAND/ UPLAND BOUNDARY: TRANSITIONAL SLOPE & DRAINAGE: 0-1% S to N, FLAT @ SWALES
Dominant Species * Common Species+ Festuca ximbriensis Rumex sp Juncus rostratus Trifolium sp Lysichiton  oak & Trees (Quercus)		NOXIOUS SPECIES: None  GROWTH FORM: Herbaceous	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

S - open PASTURE  
N - open PASTURE  
E - Riparian - open PASTURE  
W - Riparian BAECHTEL Creek / WILLIS KIDDER POOL

OBSERVED/INFERRED MODIFICATIONS:

V - managed grazed pasture, dominated by classes for FORAGE.  
S - No observed modification - No AP  
H - No obvious modification under current circumstances  
- Swales/old channels may be remnants from flooding or surface disturbances.

CHARACTERIZATION:

GRAZED PASTURE @ managed vegetation on INTACT  
HYDRIC SOIL @ very long duration sub surface SATURATED  
WETLAND. PRAIRIE may be OCCASIONALLY FLOODED.

COMMENTS:

- No observed populations of Li SA or PL to W of PRAIRIE
- Most of PRAIRIE prepared HABITAT for Li SA.
- PRAIRIE IMPACTS occur ON W edge of PRAIRIE.
- few exotic TREES
- Riparian communities ON creeks on both E + W edge.

Benbow II 007-010-04

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

NONE. SIMILAR SOIL UNIT ON Benbow III  
have numerous tree stumps indicating it  
was capable of supporting  
woody vegetation

SOIL SURVEY MAP UNIT:

col cl 0-21.  
feliz l 0-21.

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL:

NONE - no observed modification

HYDROLOGY:

NONE - historically altered

VEGETATION CLASS:

currently Pen seasonally saturated Ag Pasture

ESTIMATED SPECIES COMPOSITION CHANGE:

likely support Quercus/florinus  
wetland and meadow species including  
Juncus, Carex, biennial Grasses

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

Remove GRAZING and allow successional  
vegetation development

OTHER POTENTIAL ACTIONS:

- remove debris
- Remove fences
- Additional riparian planting

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Bearbow III 108-040-13 41.0 AC

Riparian woodland/wetland  $\rightarrow$   $\left. \begin{array}{l} 1.2 \\ .3 \\ .3 \end{array} \right\} \begin{array}{l} 1.3 \\ .2 \\ .1 \\ .2 \end{array} \right] 3.8 \text{ AC}$  ~~Riparian~~ Forested wetland

Upland -  $\left. \begin{array}{l} .28 \\ .18 \\ .38 \end{array} \right\} \begin{array}{l} .44 \\ .24 \\ .61 \end{array} \rightarrow 2.3 \text{ AC}$

Other water 1.2 AC

Wetland  $\left\{ \begin{array}{l} \text{wet meadow} \\ \text{swale} \end{array} \right. \rightarrow 33.7 \text{ AC}$



*characterization*

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

Project/Site: Bendow III 108-040-13 City/County: WILLITS Sampling Date: 28 Dec 10  
 Applicant/Owner: CAUTIONS State: CA Sampling Point: Parcel Boundary  
 Investigator(s): DM/RIL/SZJM Section, Township, Range: Ridge  
 Landform (hillslope, terrace, etc.): Floodplain Terrace Local relief (concave, convex, none): FLAT/Swales Slope (%): 0-2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: cola cl 0-2% FELIZ 0-2% NWI classification: Pem  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation X, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks: <u>Parcel characterization V/S/A observations reflect generalized wetland STATE of Parcel.</u>			

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>FLAXIUM PATENS</u>			<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. <u>JUNCUS ROBOTIN</u>			<u>FAC</u>	Total Number of Dominant Species Across All Strata: _____ (B)
3. <u>channel along old channel?</u>				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. <u>erotic</u>				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. <u>FESTUCA ALUNDINACEA</u>			<u>FAC</u>	___ 1 - Rapid Test for Hydrophytic Vegetation.
2. <u>JUNCUS CATENS</u>			<u>FAC</u>	___ 2 - Dominance Test is >50%
3. <u>Phytolacca sp (leaves?)</u>			<u>FACU</u>	___ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. <u>Hypochaeris RALICAND</u>			<u>UPL</u>	___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. <u>MINTHA ALEGUM</u>			<u>OBL</u>	___ 5 - Wetland Non-Vascular Plants <sup>1</sup>
6. <u>Lythrum hyssopifolia</u>			<u>FACW</u>	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
7. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____				
9. _____				
10. _____				
11. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				

Remarks: glazed pasture - parcel managed for forage grass - numerous tree stumps and throw holes on parcel surface - indicates parcel supported trees

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-9"	10YR4/2	95	7.5YR4/6	5	C	PL/M	CL		
9-16"	10YR4/1	100					CL		

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" 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)	

<sup>3</sup>Indicators 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: F3 - Depleted Matrix  
 No Ap no observed modification  
 some small ridge development but mostly flat

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	
<input type="checkbox"/> Other (Explain in Remarks)	

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0-3" - surface depression

Water Table Present? Yes  No  Depth (inches): 3"

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0"

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: ▽ 3"

Remarks: Very low duration subsurface saturation, occasional flooding excess water sheet flowing into swales then flowing off to N ~ 5% of surface in low swales

BenBow III 108-040-13

PARCEL/UNIT: BenBow III 108-040-13		FIELD INSP DATE: 28 Dec 10	TOTAL PARCEL AC: 41.0 AC	
TOTAL WETLAND AC:	OTHER WATER AC: 1.2 AC <hr/> UPLAND AC	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: Pcm seasonally saturated AGRICULTURAL PASTURE	LANDSCAPE POSITION: Floodplain Terrace WET meadow		
	HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>very long duration sub surface saturation @</li> <li>occasional flooding</li> <li>depressional swales + tree throws, in places swales are deeper (swale/ridge) and contain flowing water.</li> </ul>			
HYDRIC SOIL INDICATOR: F-3 depleted MSHIX No dark surface horizon No observed A <sub>0</sub>		SOIL SURVEY MAP UNIT: Coke cl 0-2% Feuz P 0-2%	WETLAND/ UPLAND BOUNDARY: Riparian Small + Ridge to Flat	SLOPE & DRAINAGE: 0-2%
Dominant Species * Common Species+			NOXIOUS SPECIES:	
Festuca Junco Thymus Hypochaeris Mentha Lythrum			None	
			GROWTH FORM: Herbaceous Wooded Gully	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

S - open PASTURE  
N - open PASTURE  
W - WASTE TREATMENT Pond?  
E. Riparian collidal along creek - open PASTURE

OBSERVED/INFERRED MODIFICATIONS:

V - managed/Grazed PASTURE - wetter end species  
in shallow ponded smaller depressions -  
H - None obvious  
S - None

CHARACTERIZATION:

Grazed PASTURE @ managed forage species on  
INTACT Hydric Soil @ VLD - SSS and  
occasional flooding. Appears to have supported  
Trees in the past. (Stumps + Tree Throw depressions  
across surface of Parcel)

COMMENTS:

- A tiny Population of Li ba observed  
on Parcel. No PL ho
- Much of Parcel identified as POTENTIAL  
Li ba HABITAT
- No Project impacts on Parcel
- A small Riparian gallery and oblique  
Trees. May have been wooded.

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

None -

SOIL SURVEY MAP UNIT:

cole d 0-2'.  
Feliz l 0-2'.

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL:

None

HYDROLOGY:

None - historically may have been heads of  
tributaries or high flow channels -

VEGETATION CLASS:

Pem

ESTIMATED SPECIES COMPOSITION CHANGE:

Likely to support due to PR DA  
w/ wetland and meadow species including  
Juncus, Carex, Perennial Grasses

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

Remove grazing and vegetation management  
and allow successional vegetation  
management

OTHER POTENTIAL ACTIONS:

- remove fencing
- remove debris

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

BearBow IV 108-030-07 54.7ac



# CHARACTERIZATION

Bearbow IV

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

Project Site: Bearbow IV 108-030-07 City/County: MIKINS State: CA Sampling Date: 28 Dec 10  
 Applicant Owner: COBATIONS Sampling Point: Palmer Baseline  
 Investigator(s): DM/RR/JMS2 Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLAT/SHOULDER Local relief (concave, convex, none): FLAT/sho Slope (%): 0-2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: col c10-2x Gielow slope FUMS RENTS NWI classification: Pem  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation X, Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ significantly disturbed? Are 'Normal Circumstances' present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: <u>Palmer characterization. VISIA observations reflect generalized wetland character of wetland component of Palmer</u>	

**VEGETATION – Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b>				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. <u>OLIVUS TILIA</u>				Total Number of Dominant Species Across All Strata: _____ (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				
4. _____				
	= Total Cover			
<b>Sapling/Shrub Stratum</b>				<b>Prevalence Index worksheet:</b>
1. <u>ROSA CALIFORNICA</u>				Total % Cover of:      Multiply by:
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
	= Total Cover			UPL species _____ x 5 = _____
				Column Totals: _____ (A)      _____ (B)
				Prevalence Index = B/A = _____
<b>Herb Stratum</b>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>FESTUCA RUPESTRIS</u>			<u>FAC</u>	___ Dominance Test is >50%
2. <u>JUNCUS PATENS</u>			<u>FAC</u>	___ Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>ALICEA SP</u>			<u>OBL</u>	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>AGASTIS STOLONIFERA</u>			<u>FACW</u>	___ Wetland Non-Vascular Plants <sup>1</sup>
5. <u>CYPRIUS SP</u>			<u>OBL</u>	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. <u>ABRUS SP</u>			<u>FACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u>CICARIUM LUTYBOS</u>			<u>UPL</u>	
8. _____				
9. _____				
10. _____				
11. _____				
	= Total Cover			
<b>Woody Vine Stratum</b>				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
1. _____				
2. _____				
	= Total Cover			
% Bare Ground in Herb Stratum _____				
Remarks: <u>Grazed Pasture -</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-10"	10YR4/2	95	2.5YR4/6	5	C	PL/M	SI CL		

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)            |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" 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)                   |   |

<sup>3</sup>Indicators 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: F-3 Depleted Matrix  
No observed Ap

**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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Salt Crust (B11)   | <input type="checkbox"/> Drainage Patterns (B10)                           |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Aquatic Invertebrates (B13)                              | <input type="checkbox"/> Dry-Season Water Table (C2)                       |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                               | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)         |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input type="checkbox"/> Geomorphic Position (D2)                          |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input type="checkbox"/> Shallow Aquitard (D3)                             |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)               | <input type="checkbox"/> FAC-Neutral Test (D5)                             |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)                  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Other (Explain in Remarks)                               | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |   |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

Field Observations:

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 12"  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): surface

Wetland Hydrology Present? Yes  No

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

Remarks: shallow standing water 0-1" on surface in depressions  
 • very long duration sub surface saturation  
 • deep wet swales @ flowing water, occasional flooding

PARCEL/UNIT: Barbow IV 108-030-07		FIELD INSP DATE: 28 Dec 10		TOTAL PARCEL AC: 54.7 AC	
TOTAL WETLAND AC: Pen-53.8 AC	OTHER WATER AC: 0 AC UPLAND 0.9 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 53.8 AC	PRESERVATION AC: 0.9 AC	
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: Pen seasonally saturated Grazed Ag pasture		LANDSCAPE POSITION: Floodplain Terrace		
HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>• very long duration sub surface saturation</li> <li>• occasional flooding</li> <li>• slow ponded water in swales + depressions</li> <li>• deep swales (high from channels?) w flowing water</li> </ul>					
HYDRIC SOIL INDICATOR: F-3 Depleted MPTX No obvious Ap		SOIL SURVEY MAP UNIT: Colo c 2 0-1 Sic low SL 0-5-1 FUMADENTS 0-11	WETLAND/ UPLAND BOUNDARY: TRANSITIONAL	SLOPE & DRAINAGE: 0-1% Slight swales @ flowing water	
Dominant Species * Common Species+ Festuca Suaeda Alysicarpus Atriplex Cyperus Rhus Ciclatum			NOXIOUS SPECIES: None		
			GROWTH FORM: Herbaceous Shrub trees		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - open pasture  
S - open pasture  
E - open pasture  
W - open pasture

OBSERVED/INFERRED MODIFICATIONS:

V - grazed pasture

H - None

S - None

CHARACTERIZATION:

Polustrine emergent seasonally saturated grazed  
sclerophyllous pasture @ INLET hydric soil  
and very low duration sub surface saturated  
wet meadow. May occasionally flood and  
has swales @ shallow flowing water.

COMMENTS:

- Li ba populations observed @ IN parcel
- Wetland @ IN parcel has been proposed  
AS Li ba potential habitat
- No PL ho populations observed on Parcel
- No Protect impacts @ IN parcel

Beeson NT 108-030-07

EXCLOSURE DESCRIPTION/ REFERENCE SITE	None -  <div style="border: 1px solid black; padding: 5px;">SOIL SURVEY MAP UNIT: Coke cl 0-1/4 Ginlow sl 0-5' FLUVAQUENT 0-1/4</div>
DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:	SOIL: None
	HYDROLOGY: None
	VEGETATION CLASS: P-em
	ESTIMATED SPECIES COMPOSITION CHANGE: Decrease in pasture classes and increase in perennial grasses/forbs <i>Wegelia</i> , <i>Junco</i> , <i>Carex</i> <i>Bottle</i> <i>Quercus</i> / <i>Flourens</i>
	MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: Remove Vegetation management + grazing
	OTHER POTENTIAL ACTIONS: Remove fencing Remove water trough and piping

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Ben Bow I 108-020-06

46.6 AC



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

Project Site: Benbow IV 108-020-06 City/County: Willits State: CA Sampling Date: 28 Dec 10  
 Applicant/Owner: COASTALS Sampling Point: Parcel Boundary  
 Investigator(s): DM/JM 52/RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLAT Local relief (concave, convex, none): FLAT Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Gelow sL 0-5% NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel disintegration, V/S/H observations reflect generalized site condition for Wetland Component of Parcel</u>	

## VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				
<b>Herb Stratum</b> (Plot size: _____)				
1. <u>RANUNCULUS sp</u>	_____	_____	<u>FACW</u>	
2. <u>JUNCUS ARTENSIS</u>	_____	_____	<u>FAC</u>	
3. <u>Thalictrum sp (yellow)</u>	_____	_____	<u>FACU</u>	
4. <u>FESTUCA ALBA/INVADES</u>	_____	_____	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<b>Woody/Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
<b>% Bare Ground in Herb Stratum</b> _____				
Remarks: <u>Parcel cleared - does not appear to be hoed</u> <u>more trees (oaks)</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10"	10YR 3/2	95	7.5YR 4/6	5%	C	R/SM	CL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: 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)	Indicators for Problematic Hydric Soils <sup>3</sup> :  <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
<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 checked="" 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)	

<sup>3</sup>Indicators 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: F6 - Redox Dark Surface  
 No apparent sp

**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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

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

Water Table Present? Yes  No  Depth (inches): 3"

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0"

Wetland Hydrology Present? Yes  No

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

Remarks: - random water in swales / depressions 0-4"  
 - vely flat - N end of the head @ surface water

PARCEL/UNIT: <u>Benbow V 108-020-06</u>		FIELD INSP DATE: 28 Dec 10	TOTAL PARCEL AC: 46.6 AC
--	--	-------------------------------	-----------------------------

TOTAL WETLAND AC:	OTHER WATER AC: 0	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
-------------------	----------------------	------------------------	-----------------	------------------

CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: Per seasonally saturated Graced Ag PASTURE	LANDSCAPE POSITION: Franklin Terrace
----------------------------------	--	---

HYDROLOGY TYPE & DURATION:

- sub surface saturation for very long duration
- occasionally flooded
- standing water in swales/depressions

HYDRIC SOIL INDICATOR: F-6 Redox DARK surface No apparent sp	SOIL SURVEY MAP UNIT: Galloway 0-57	WETLAND/UPLAND BOUNDARY: Transition	SLOPE & DRAINAGE: 0-1%
--	---	--	---------------------------

Dominant Species * Common Species+ Juncus patens Thypha Festuca Ranunculus Atriplex Juncus (oxymalis?) mentha Typha Carex	NOXIOUS SPECIES: None
--	--------------------------

GROWTH FORM: herbaceous
----------------------------

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N, E, W, S → No pasture

OBSERVED/INFERRED MODIFICATIONS:

V - Grazed - few forage crosses, mostly wetland  
and perennial

H - None

S - None

CHARACTERIZATION:

Rem seasonally saturated grazed AG pasture  
w/ intact soil and current circumstances  
hydrology

COMMENTS:

- few populations of Li ba scattered across  
pasture. Remainder of pasture identified  
as Li ba potential habitat.
- No Phlox impacts on pasture
- No PC ho identified on pasture
- endemic trees

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:

Gravelly sl 0-5%

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL:

NONE

HYDROLOGY:

NONE

VEGETATION CLASS:

Perennial seasonal saturated grazed Ag  
- PASTURE

ESTIMATED SPECIES COMPOSITION CHANGE:

increase-perennial Juncus, Carex, Grass  
Less - forbs  
Likely - Quercus/Flaxinus

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

Remove Vegetation Management and allow  
successional plant development

OTHER POTENTIAL ACTIONS:

- Remove levee
- Remove fencing

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Brooke	108-030-01	11.9 Acres
	038-040-09	15.0 Acres
	108-020-03	9.2 Acres
	108-030-01	16.9 Acres



# CHARACTERIZATION

PARCELS 108-030-01, 038-040-09, 038-020-11, 108-020-03  
**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project Site: BROOKS FOREST City/County: Merced State: CA Sampling Date: 27 JAN 2011  
 Applicant Owner: CALTRANS Sampling Point: PARCEL BOUNDARIES  
 Investigator(s): DM, KL, DW, RD, SZ Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLOODPLAIN TERRAIN Local relief (concave, convex, none): FLAT Slope (%): 0-1%  
 Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FLUVALENTS 0-1% HYPONETS 0-1% NWI classification: P5/S5  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Wetland characterizations. V/S/H observations reflect generalized condition across P5/S5 units of 4 parcels</u>	

**VEGETATION - Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>ERUCALES PORTULACA</u>			<u>WAW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>ERUCALES LOBATA</u>			<u>FAC</u>	
3. <u>ERUCALES SP</u>			<u>FACW</u>	
4. _____				
= Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. <u>ROBUS L. SCULPT</u>			<u>FACW</u>	
2. <u>ROBUS URSINUS</u>			<u>FACW</u>	
3. _____				
= Total Cover				
<b>Herb Stratum</b> (Plot size: _____)				
1. <u>JUNCUS EFFRUSUS</u>			<u>OBL</u>	
2. <u>JUNCUS</u>			<u>NI</u>	
3. <u>JUNCUS</u>			<u>OBL</u>	
4. <u>JUNCUS NATURENS</u>			<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
= Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____				
2. _____				
= Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>Follow fields</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14"	10YR 4/2		7.5YR 4/6	5				depletions 7.5YR 4/6 S/1

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 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)
- Other (Explain in Remarks)

<sup>3</sup>Indicators 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: F-3, Depleted Matrix

**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)
- 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)

- 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): 10"  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 6"

Wetland Hydrology Present? Yes  No

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

Remarks: Moist throughout top 10"

PARCEL/UNIT: <u>BROOKS FORESTED</u> Parcels 108-030-01, 038-040-09, 038-020-11, 108-020-03 11.9      15.0      9.2      16.9		FIELD INSP DATE: <u>27 JAN 2004</u>	TOTAL PARCEL AC: <u>53.0</u> <u>4 PARCELS</u>	
TOTAL WETLAND AC: <u>Pem-marsh</u> <u>29.5 AC</u> <u>Pf-21.0 AC</u>	OTHER WATER AC: <u>1.4 AC</u> <hr/> <u>UPLAND AC</u> <u>1.1 AC</u>	IMPACTS IN WETLAND AC: <u>Pf-2.3 AC</u> <u>Pem-2.7 AC</u>	ENHANCEMENT AC: <del><u>Pem-2.7 AC</u></del> <u>0 AC</u>	PRESERVATION AC: <u>Pf-18.7 AC</u> <u>1.4 AC OW</u> <u>1.1 AC UPL</u> <u>26.8 AC Pem Marsh</u>
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <u>palustrine forest/shrub</u>		LANDSCAPE POSITION: <u>edge of forest</u>	
	HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>- very long duration ponding</li> <li>- subsurface saturation</li> <li>- occasional flooding</li> </ul>			
HYDRIC SOIL INDICATOR: <u>F3</u>		SOIL SURVEY MAP UNIT: <u>FLUVALENTS</u> <u>0-1</u> <u>HYPERGLEYS</u> <u>0-1%</u>	WETLAND/UPLAND BOUNDARY: <u>thick marsh</u>	SLOPE & DRAINAGE: <u>0-1%</u> <u>flat</u> <u>pond</u>
Dominant Species * Common Species+ <u>- P. maritima</u> <u>- D. proserpinacifolia</u> <u>- S. patens</u> <u>- S. alterniflora</u>		<u>- Quercus</u> <u>- A. rubra</u> <u>- Liriodendron</u>	NOXIOUS SPECIES: <u>None</u>	
		GROWTH FORM: <u>tree</u> <u>shrub</u> <u>herb</u>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - fallow field, riparian woodland of pasture  
W - highway, hillside  
S - agr. pasture  
E - creek, riparian, agr. pasture

OBSERVED/INFERRED MODIFICATIONS:

S - none  
H - none  
V - unit has been fallow since disturbance of  
early 90's

CHARACTERIZATION:

- pastures forested by shrubs & herbaceous  
understory. very long duration, ponding with  
submergence, occasional flooding  
- parcel is fallow, no current grazing or  
vegetation management.

COMMENTS:

- No L1 bn or R1 ho
- PROTECT IMPACTS ON  
2 Parcels  
038-020-11 + 038-040-09

FORESTED  
PLOT - 27 JAN 2011

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:  
FLUVENTS 0-17  
HYPERPTS 0-17

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS:  
post disturbance / parcel is currently fallow

ESTIMATED SPECIES COMPOSITION CHANGE:  
continued colonisation of Fragmorus  
and Quercus by understory veg.

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

NONE-

OTHER POTENTIAL ACTIONS:

- rubus removal
- debris removal - assess, to edge

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

# CHARACTERIZATION

Parcels 108-030-01, 038-040-09, 038-020-11, 108-020-03

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

UNIT B

Project Site: BROOKS - Mendocino City/County: MENDOCINO Sampling Date: 27 JAN 2001  
 Applicant Owner: ALTAIRUS State: CA Sampling Point: Along Baselines  
 Investigator(s): D.M. K.G. DAVIS JR. 57 Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood Plain Terrace Local relief (concave, convex, none): FLAT Slope (%): 0-17  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FLUVENTS 0-1% IMPLAQUEPTS 0-17 NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>CHARACTERIZATION OF 4 PARCELS FOR MARSH WETLAND UNITS. V/S/H OBSERVATIONS REFLECT GENERALIZED CHARACTER</u>	

### VEGETATION - Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
= Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
<b>Herb Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Juncus glaberrimus inf</u>	_____	_____	<u>FACW</u>	___ Dominance Test is >50%
2. <u>Juncus</u>	_____	_____	<u>OBL</u>	___ Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Bidens</u>	_____	_____	<u>OBL</u>	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>Hyssopus</u>	_____	_____	<u>NI</u>	___ Wetland Non-Vascular Plants <sup>1</sup>
5. <u>EUTHAMIA</u>	_____	_____	<u>OBL</u>	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. <u>Carex</u>	_____	_____	<u>FACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
<b>% Bare Ground in Herb Stratum</b> _____				
Remarks: <u>- Fallow fields. NO GRAZING/VEGETATION MANAGEMENT FOR 15+ YEARS.</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR4-5/2		2.5YR 4/6	30			silty clay	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>1</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<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)	

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: *root zone is loose that is starting to develop as A horizon - 15+ years ago parcel @ being grubbed to remove vegetation but was stopped as unauthorized. small piles from root balls still evident. Gouges in ground @ standing water.*

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<b>Primary Indicators (minimum of one required, check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
<b>Field Observations:</b>		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1-4"</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>surface</u>	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>surface</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <i>- standing water in depressions</i>		

PARCEL/UNIT: <i>BROOK - Marsh</i>		FIELD INSP DATE: <i>27 Oct 2011</i>		TOTAL PARCEL AC:	
<i>4 PARCELS @ PARTIAL MARSH UNITS (B)</i>					
<i>108-030-01, 038-040-09, 038-020-17 + 108-020-03</i>					
TOTAL WETLAND AC:	OTHER WATER AC:	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:	
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine emergent</i>		LANDSCAPE POSITION: <i>food plain terrace</i>		
	HYDROLOGY TYPE & DURATION: <i>- very long duration ponding</i> <i>- VLD subsurface saturation</i> <i>- occasional flooding</i>				
	HYDRIC SOIL INDICATOR: <i>F3</i>		SOIL SURVEY MAP UNIT: <i>FLUMOENTS 0-1% IMPLA OXPSS 0-1%</i>	WETLAND/ UPLAND BOUNDARY: <i>trans.</i>	SLOPE & DRAINAGE: <i>0-1% direction to N</i>
Dominant Species * Common Species+ <i>gladiated-leaved Junco</i> <i>Scirpus</i> <i>Carex</i> <i>Dipsacos</i> <i>Belderrandia</i>			<i>Epilobium</i> <i>Buxus</i>		NOXIOUS SPECIES: <i>None</i>
			GROWTH FORM: <i>H. 6000000</i>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - riparian woodland, ag. pasture  
E - riparian woodland, mostly, ag. pasture  
W - riparian, hillside w/ development  
S - woodland, then ag. pasture

OBSERVED/INFERRED MODIFICATIONS:

ag. pasture left fallow.

Early '90's potlery period had been  
grazed to convert to ag. pasture as they  
abandoned.

CHARACTERIZATION:

transitive emergent, with some long-term  
mounding, sub-surface entrenchment,  
no current grazing or veg. management.  
- glaucous-leaved junceous sedge  
already going to seed in veg. stage.

COMMENTS:

- No populations of Li BA or PL to  
identified on any Parcel
- No identified potential habitat  
proposed on any Parcel
- Protect impacts on parcels  
038-020-11 + 038-040-09

Brooke

- NUNO

<p>EXCLOSURE DESCRIPTION/ REFERENCE SITE</p>	<p>BROOKE R3 JAN 2014 4 PARCELS</p> <p>NONE</p>	<p>SOIL SURVEY MAP UNIT: PLUMBRENTS HYPERMERTS</p>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>SOIL: NONE</p>	
	<p>HYDROLOGY: NONE</p>	
	<p>VEGETATION CLASS: - palustrine emergent / palustrine forested</p>	
	<p>ESTIMATED SPECIES COMPOSITION CHANGE: - increase in Fraxinus colonization Cerratis trees encroaching into marsh</p>	
	<p>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - NONE</p>	
	<p>OTHER POTENTIAL ACTIONS: • Remove SASQ with washing machine ① Beer CAN IN TUB • Remove FAVUNO</p>	

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Ford

108-010-05

76.6 ac

#1



*Characterization*  
**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

FORD

Project Site: FORD-108-910-05-Parcel A City/County: NEEDHAMS State: CA Sampling Date: 26 JAN 2004  
 Applicant Owner: CALTRANS Section, Township, Range: \_\_\_\_\_  
 Investigator(s): DH, K.G. Dwy/00, 57 Local relief (concave, convex, none): FLAT Slope (%): <1%  
 Landform (hillslope, terrace, etc.): Floodplain Terrace Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: HAPLOQUEPTS 0-1Y FLUMMOUS 0-1Y Golden Slope NWI classification: Pem  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation 4-, 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
--	--

Remarks: Parcel UNIT characterization. V/S/A observations reflect generalized condition of wetland in Parcel UNIT

**VEGETATION - Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b>				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. _____				Total Number of Dominant Species Across All Strata: _____ (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				
4. _____				
= Total Cover				
<b>Sapling/Shrub Stratum</b>				<b>Prevalence Index worksheet:</b>
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
<b>Herb Stratum</b>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Sclerurus</u>			<u>Obl</u>	___ Dominance Test is >50%
2. <u>Juncus (oxymeliss?)</u>			<u>FACW</u>	___ Prevalence Index is <3.0
3. <u>Panicum dawe</u>			<u>OBL</u>	___ Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
4. _____				___ Wetland Non-Vascular Plants
5. _____				___ Problematic Hydrophytic Vegetation (Explain)
6. _____				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
= Total Cover				
<b>Woody Vine Stratum</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
1. _____				
2. _____				
= Total Cover				
<b>% Bare Ground in Herb Stratum</b> _____				

Remarks: Dense Sclerurus stand, open to grazing but appears to have little to no effect on PUNT community

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3								newly deposited silt
3-5	10YR 4/1	50	7.5YR 4/6	50			silty clay	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils <sup>3</sup> :  <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
<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 checked="" 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)	

<sup>3</sup>Indicators 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: F-3 Depleted matrix  
- Newly deposited layer of silt on surface

**HYDROLOGY**

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (U6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> Salt Crust (B11)	
<input checked="" type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes  No  Depth (inches): 0-10"  
 Water Table Present? Yes  No  Depth (inches): 0"  
 Saturation Present? Yes  No  Depth (inches): 0"  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks: SNAIL GRASS ON newly deposited silt  
 - very long duration subsurface saturation  
 - very long duration ponding 0"-3"  
 - frequent flooding likely

UNIT A

PARCEL/UNIT: FORD 108-010-05 Marsh UNIT A		FIELD INSP DATE: 26 Jun 2011	TOTAL PARCEL AC: 76.6 AC	
TOTAL WETLAND AC:	OTHER WATER AC: 1.2 AC	IMPACTS IN WETLAND AC:	ENHANCEMENT AC: PRESERVATION AC:	
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: subestuarine emergent - ponded marsh SEASONAL TO PERENNIAL		LANDSCAPE POSITION: floodplain terrace	
	HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>• very long duration ponding</li> <li>• VLD subsurface saturation</li> <li>• seasonal flooding may be frequent</li> </ul>			
HYDRIC SOIL INDICATOR: R3 depleted matrix 3"-4" inches of newly deposited SILT ON SURFACE		SOIL SURVEY MAP UNIT: HAPLAQUEPTS 0-1% FLUVAQUEPTS 0-1% GLEW S P 0-5%	WETLAND/UPLAND BOUNDARY: trees	SLOPE & DRAINAGE: 0-1% shallow to N-NW
Dominant Species * Common Species+ Scirpus - Dark stand Junco Phalaris		NOXIOUS SPECIES: None		
		GROWTH FORM: herbaceous		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N, E, W, S - agricultural pasture

OBSERVED/INFERRED MODIFICATIONS:

S - NONE  
H - NONE  
V - grazing but probably little to no effect on  
SCIRPUS community.

CHARACTERIZATION:

- palustrine emergent - seasonally flooded marsh  
- likely @ a stable perennial marsh community

COMMENTS:

- Li BA populations across site and within Parcel UNIT
- Most of Parcel UNIT identified as POTENTIAL Li BA habitat
- No Project impacts on Parcel UNIT
- UNIT is mostly dominated @ SCIRPUS stands, UNIT is open to grazing but does NOT appear to be affected or any effects to plant community from grazing.

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

FORD 108-010-05 Marsh 20 Jan 80  
NONE

SOIL SURVEY MAP UNIT:

HAPOQUEPTS 0-1Y  
FLUVAQUEPTS 0-1Y  
Gleadow sl 0-5Y

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL:  
NONE

HYDROLOGY:  
NONE

VEGETATION CLASS:

palustrine emergent - marsh vegetation is already  
at expected, wetter species of scirpus, juncus.

ESTIMATED SPECIES COMPOSITION CHANGE:

? probably none w/o seasonal flooding.

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

• removal of grazing may have a limited effect.

OTHER POTENTIAL ACTIONS:

• Remove fencing

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:	UNIT ENHANCEMENT:	

*Characterization*

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

Project Site: FORD 108-010-05-Header City/County: Wendover NV Sampling Date: 10/20/04  
 Applicant/Owner: AKTRANS State: CA Sampling Point: UNIT BARLINE  
 Investigator(s): DM, R.G., DW/SZ, AP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): ROADSIDE/INTER. Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hydric MPTS 0-1X FLUVAQUONS 0-1X GIRON 0-5X 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel UNIT characterization. V/S/H observations reflect generalization of wetland characters in parcel UNIT.</u>	

### VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
2. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
Herb Stratum				Column Totals: _____ (A) _____ (B)
1. <u>Allopecurus sp</u>	_____	_____	<u>OBL</u>	Prevalence Index = B/A = _____
2. <u>Ranunculus sp</u>	_____	_____	<u>FACW</u>	
3. <u>Mentha rubra</u>	_____	_____	<u>OBL</u>	
4. <u>Ranunculus sp</u>	_____	_____	<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>Parcel UNIT appears to be mowed and grazed. ALMOST TOTAL COVER by Allopecurus.</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4"	5YR 5/1	100%					clayey silt	dense roots
4-12"	10YR 4/1	80	3.5YR 4/2	40	C	12/SM	clayey silt	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- 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)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators 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: *root mass of perennial grasses appears to be developing an A horizon.*

**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)

Secondary Indicators (2 or more required)

- 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)
- 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): 2'  
 Saturation Present? Yes  No  Depth (inches): surface  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks: *surface water in ditches and surface depressions. - seasonal / occasional flooding*

UNIT B

PARCEL/UNIT: <i>F020 103-010-05 Meadow</i> <p style="text-align: center;">UNIT B</p>		FIELD INSP DATE: <i>26 JAN 2014</i>	TOTAL PARCEL AC: <p style="text-align: center;">76.6 AC</p>	
TOTAL WETLAND AC:	OTHER WATER AC: <p style="text-align: center;">1.2 AC</p>	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>saline emergent-wet meadow</i> <i>SEASONALLY SATURATED</i> <i>Hayed/Grazed Ag PASTURE</i>		LANDSCAPE POSITION: <i>Floodplain terrace</i>	
	HYDROLOGY TYPE & DURATION: <i>very long duration ponding, subsurface saturation</i> <i>seasonal/occasional flooding</i>			
HYDRIC SOIL INDICATOR: <p style="text-align: center;">F3 Degraded MPTLIX</p>		SOIL SURVEY MAP UNIT: <i>Hapludults 8-1X</i> <i>Fluvisols 0-1X</i> <i>Gleba sl 0-5X</i>	WETLAND/UPLAND BOUNDARY: <i>none</i>	SLOPE & DRAINAGE: <p style="text-align: center;">0.1%</p> <i>shallow to N. side</i>
Dominant Species * Common Species+ <i>Hesperis - almost 100%</i> <i>Ranunculus</i> <i>Mentha</i> <i>Rumex</i>		<i>gladiolus leaves</i> <i>Juncus</i>	NOXIOUS SPECIES: <p style="text-align: center;">None</p>	
		GROWTH FORM: <i>Herbaceous</i>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

- N - Agricultural pasture
- E - Agricultural pasture
- W - Agricultural pasture
- S - Agricultural pasture

OBSERVED/INFERRED MODIFICATIONS:

- S - None
- H - ditch running from S-W probably to help take surface water off <sup>and grazed</sup>
- V - Hayed area probably dominated by *Stipa* species

CHARACTERIZATION:

- Most of parcel appears to be hayed due to uniform vegetation; additional grazing
- Disturbance emergent wet meadow that has <sup>the ability to</sup> flood; resulting in high water table; surface saturation

COMMENTS:

- Numerous observed Li BA plant populations observed in Parcel unit
- Most of Parcel unit proposed as Li BA potential habitat
- No project impacts @ in Parcel unit
- Wet meadow supporting *Dryopteris* but NOT introduced forb GRASSES - may not result in change in vegetation type but shift in species composition.

UNIT 3

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

FORD 108-010-05 meadow

NONE

SOIL SURVEY MAP UNIT:

UNPLAQUEATS 0-1%  
FLUVAQUATS 0-1%  
Giblow sl 0-5%

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY:

NONE

VEGETATION CLASS:

palustrine emergent - wetland meadow

ESTIMATED SPECIES COMPOSITION CHANGE:

shift to water sub species. 7 more vegetation (Sagittaria, Carex, Juncus) rather than almost total domination by Sphagnum  
Few elliptic thistles (FLXINUS) along fence line.

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

removal of grazing and vegetation management

OTHER POTENTIAL ACTIONS:

stake removal

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

FORD 108-010-06

#2

138.9 AC



# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

CHARACTERIZATION

FORD

Project Site: FORD 108-010-06 N. Highway City/County: Merced State: CA Sampling Date: 26 June 2004  
 Applicant/Owner: CASTRANS Section, Township, Range: \_\_\_\_\_  
 Investigator(s): DM, H, DW/SZ, RP Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Landform (hillslope, terrace, etc.): terrace Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: HAPLAQUEPTS 0-1X, FLWAQUEPTS 0-1X, GMLWN 5P 0-5X NWI classification: P 0 m  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel unit characterization. V/S/H observations reflect generalized conditions of wetland character @ parcel unit.</u>	

**VEGETATION - Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u>				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. _____				Total Number of Dominant Species Across All Strata: _____ (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				
4. _____				
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u>				<b>Prevalence Index worksheet:</b>
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
<u>Herb Stratum</u>				Column Totals: _____ (A) _____ (B)
1. <u>Festuca arundinacea</u>			<u>FAC</u>	Prevalence Index = B/A = _____
2. <u>Juncus roemerianus</u>			<u>FAC</u>	
3. <u>Ranunculus sp</u>			<u>FACW</u>	
4. <u>Alopecurus sp</u>			<u>OBL</u>	
5. <u>Juncus (oxymeris?)</u>			<u>FACW</u>	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
_____ = Total Cover				
<u>Woody Vine Stratum</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. _____				___ Dominance Test is >50%
2. _____				___ Prevalence Index is <math>\leq 3.0</math>
				___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
				___ Wetland Non-Vascular Plants <sup>1</sup>
				___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
% Bare Ground in Herb Stratum _____				
Remarks: <u>Vegetation grazed and some of parcel unit may be grazed. eRotic trees</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 4/2	10	2.5Y 0/6	20	C	PL/SM	sil	1070 10YR 4/1

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 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)
- Other (Explain in Remarks)

<sup>3</sup>Indicators 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: *r. 3 Depleted Matrix*

**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)
- 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)

- Water-Stained Leaves (E9) (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): *0-6"*  
 Water Table Present? Yes  No  Depth (inches): *11"*  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): *surface*

Wetland Hydrology Present? Yes  No

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

Remarks: *-saturated w/in rooting zone and further below along ped faces  
-depression at 15ft, boded or flooded some @ ALGAL MATS*

UNIT A

PARCEL/UNIT: FORD 108-010-06 - wet meadow		FIELD INSP DATE: 26 JAN 2011		TOTAL PARCEL AC: 138.9 AC	
TOTAL WETLAND AC: 111.9 AC	OTHER WATER AC: 3.4 AC	UNIT A → 81.8 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 81.8 AC	PRESERVATION AC: 23.6 AC UPL, 3.2 AC Pf, 26.9 AC MARSH, 3.4 AC OW
	UPLAND AC: 23.6 AC	UNIT B → 26.9 AC MARSH Pf → 3.2 AC			
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent - seasonally saturated GRAZED / mowed to Ag Pasture		LANDSCAPE POSITION: floodplain terrace		
	HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>• very long duration</li> <li>• subsurface saturation</li> <li>• with occasional flooding</li> <li>• surface ponding in swales and depressions</li> </ul>				
	HYDRIC SOIL INDICATOR: R3 Depleted Matrix	SOIL SURVEY MAP UNIT: Haploquips 0-1% Fluvaquents 0-1% Griclow SA 0-5%	WETLAND/UPLAND BOUNDARY: trans.	SLOPE & DRAINAGE: 1-2% north-south to N.W.	
Dominant Species * Common Species+ <ul style="list-style-type: none"> <li>• <i>Echinochloa</i></li> <li>• <i>Juncus patens</i></li> <li>• <i>Rumex crispus</i></li> <li>• <i>Alopecurus</i></li> <li>• <i>Juncus (unclear?)</i></li> </ul>		<ul style="list-style-type: none"> <li>• <i>Fraxinus - alba riparian</i></li> <li>• <i>River Birch</i></li> <li>• <i>Heather</i></li> <li>• <i>Willow</i></li> <li>• <i>oak leaf litter</i></li> <li>• <i>Red maple</i></li> </ul>		NOXIOUS SPECIES: NONE	
		GROWTH FORM: herbaceous			

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - agr. pasture  
E - agr. pasture  
S - agr. pasture  
W - Haying 101, hillsides.

OBSERVED/INFERRED MODIFICATIONS:

N - grazing across parcel unit and portions may  
also be hayed  
S - None  
H - None

CHARACTERIZATION:

\* palustrine emergent wet meadows with grazing and haying  
\* very long duration, deep surface water  
\* occasional flooding  
in elliptic fleximus

COMMENTS:

- fill site in Northeastern portion of parcel  
possible restoration
- scatter small to large populations of Li ba  
across parcel unit. the remainder of  
unit was identified as potential  
Li ba habitat.
- No populations of PL ho were identified in  
parcel unit.
- No project impacts @ in parcel unit.

wet meadow  
FORD 108-110-05 26 JAN 2011 UNIT A

EXCLOSURE DESCRIPTION/ REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:  
HAPLAQUEPTS 0-1%  
PLUVAQUEMBS 0-1%  
Giclow sl 0-5%

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS:  
palustrine emergent → per. sedge forest with an increase of wetter grasses and forbs

ESTIMATED SPECIES COMPOSITION CHANGE:  
Increases in Juncus, Carex, Fragaria, Quercus may shift to P f/cm

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  
- removal of grazing and vegetation management

OTHER POTENTIAL ACTIONS:  
• Remove fencing

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site: FORD - 128-010-06-AMMCA City/County: Montezuma Sampling Date: 06/11/2004  
 Applicant/Owner: CALTRANS State: CA Sampling Point: \_\_\_\_\_  
 Investigator(s): DM, KG, DW, LR, RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLOODPLAIN TERR. Local relief (concave, convex, none): FLAT Slope (%): 21%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: HAPLOQUECTS 0-1X FLUVAQUENTS 0-1X GLEYS 0-1X NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel UNIT CHARACTERIZATION. V/S/H OBSERVATIONS REFLECT GENERALIZED CONDITIONS ACROSS WETLAND IN PARCEL UNIT</u>	

**VEGETATION - Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				
<b>Herb Stratum</b> (Plot size: _____)				
1. <u>Asteria PLANTAGO-AQUATICA</u>	_____	_____	<u>obl</u>	
2. <u>Juncus multiflorus? mexicanus?</u>	_____	_____	<u>obl</u>	
3. <u>Plantago pulegioides</u>	_____	_____	<u>obl</u>	
4. <u>Scirpus</u>	_____	_____	<u>obl</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>- dense stands of SCIRPUS in places @ IN UNIT</u> <u>- GRAZING UNLIKELY TO effect existing PLANT COMMUNITY</u>				

TOO WET TO SUPPORT PASTURE GRAZING  
ALL FOLIAGE

SOIL

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10"	10YR 4/1	60	7.5YR 4/2	10	C	PL/SM	slty/clay	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>1</sup>:

- 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)
- Other (Explain in Remarks)

<sup>1</sup>Indicators 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: F3 Depleted Matrix

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)
- 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)

- 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): 1-8"  
 Water Table Present? Yes  No  Depth (inches): 0"  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0"

Wetland Hydrology Present? Yes  No

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

Remarks: PARCEL WITH UNDERWATER - ULD SSS, ULD BINDING.

# UNIT B

PARCEL/UNIT: <i>FORD 108-010-06. 4.25 acres</i>		FIELD INSP DATE: <i>20 Jan 2014</i>	TOTAL PARCEL AC:	
TOTAL WETLAND AC:	OTHER WATER AC:	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine emergent, seasonally flooded marsh,</i>		LANDSCAPE POSITION: <i>Floodplain terrace</i>	
	HYDROLOGY TYPE & DURATION: <i>- very long duration ponding and subsurface saturation</i> <i>- flooding</i>			
	HYDRIC SOIL INDICATOR: <i>- F3 Depleted matrix</i> <i>- very long duration ponding/flooding</i>	SOIL SURVEY MAP UNIT: <i>Hydlaquptsol</i> <i>Fluvaquptsol</i> <i>Gleba Sl or Sp.</i>	WETLAND/UPLAND BOUNDARY: <i>trans.</i>	SLOPE & DRAINAGE: <i>0-1%</i> <i>horizontal</i> <i>no N</i>
Dominant Species * Common Species+ <i>Alisma p-a</i> <i>Juncus bathy. sp. in common</i> <i>Scirpus pulegius</i> <i>Sagittaria</i>		NOXIOUS SPECIES: <i>NONE</i>		
GROWTH FORM: <i>Herbaceous</i>				

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - ag. pasture  
E - creek, riparian trees, agricultural pasture  
W - wet riparian woodland, ag. pasture  
S - ag. pasture

OBSERVED/INFERRED MODIFICATIONS:

S - NONE

H - NONE

V - NONE, exposed to grazing but probably no effect.

CHARACTERIZATION:

muskrat emergent, seasonally flooded marsh  
variable elevation ponding, subsurface saturation  
limited effect of grazing on veg. composition due  
to seasonal ponding

COMMENTS:

- Parcel UNIT may encompass some identified populations of Li BA
- Some of Parcel UNIT identified as potential habitat for Li BA
- No Populations of PL ho have been identified @IN Parcel UNIT.
- No Protect IMPACTS @IN Parcel UNIT

UNIT B

EXCLOSURE DESCRIPTION/ REFERENCE SITE	FORD 10X-010-06 MARSA 26 JAN 201 NONE	SOIL SURVEY MAP UNIT: HAPLAQUEPTS 0-1% FLUVAQUENTS 0-1% CIELWVSL 0-5%
DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:	SOIL: NONE	
	HYDROLOGY: NONE	
	VEGETATION CLASS: palustrine emergent, very low duration Buried and sub surface saturated	
	ESTIMATED SPECIES COMPOSITION CHANGE: NONE - Already supporting obs marsh species	
	MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - removal of grazing probably would have very little change to veg. but would increase marsh	
OTHER POTENTIAL ACTIONS: - Remove fences		

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Ford

108-020-04

143.8 AC

✓✓

#3



# CHARACTERIZATION FORD

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

Project Site: FORD 10R-070-09 City/County: HEUBERCING Sampling Date: 25 JAN 20  
 Applicant/Owner: CATRANS State: CA Sampling Point: \_\_\_\_\_  
 Investigator(s): DM K. G. T. H. DW/ R. S. Z Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood Plain Terrace Local relief (concave, convex, none): FUT Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FLUVA SOILS 10-1% GLEYS 0-5% NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel characterization. V/S/H observations reflect generalized components of wetland @ in Parcel</u>	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)																
2. _____				Total Number of Dominant Species Across All Strata: _____ (B)																
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
4. _____																				
_____ = Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>																				
1. _____				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
_____ = Total Cover																				
<b>Herb Stratum (Plot size: _____)</b>																				
1. <u>Phalaris aquatica</u>			<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Ranunculus sp</u>			<u>FACW</u>																	
3. <u>Juncus patens</u>			<u>FAC</u>																	
4. <u>Alopecurus sp</u>			<u>OBL</u>																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
_____ = Total Cover																				
<b>Woody Vine Stratum (Plot size: _____)</b>																				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____																
2. _____																				
_____ = Total Cover																				
<b>% Bare Ground in Herb Stratum _____</b>																				
Remarks: <u>GRAZED PASTURE – Parcel does NOT appear to be hydro.</u>																				



PARCEL/UNIT: <i>FORD 108-020-01</i>		FIELD INSP DATE: <i>25 JAN 2004</i>	TOTAL PARCEL AC: <i>143.8 ac</i>	
TOTAL WETLAND AC:	OTHER WATER AC: <i>1.7 ac</i>	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine emergent - seasonally saturated GRAZED BY PASTURE</i>	LANDSCAPE POSITION: <i>floodplain terrace</i>		
	HYDROLOGY TYPE & DURATION: <i>very long duration, subsurface saturation standing water in depressions + swales. - occasional flooding may be localized in swales/ ABANDONED high flow channels</i>			
HYDRIC SOIL INDICATOR: <i>E3 Depleted matrix NO evidence of Ap</i>		SOIL SURVEY MAP UNIT: <i>FLUVAQUENTS 0-1% Co low sd 0-5%</i>	WETLAND/ UPLAND BOUNDARY: <i>TRANS.</i>	SLOPE & DRAINAGE: <i>1-2% N-NW Sheet flow</i>
Dominant Species * Common Species+ <i>Phalaris epensata Ruzicoides Juncus spartea Alopecurus</i>		<i>- scirpus - Flavius albug fucellina - Triplaris - repens + wimmiscolli</i>  <i>centric (P)us/ flavus/ (A)us</i>	NOXIOUS SPECIES: <i>Desmodium 1 individual</i>	
		GROWTH FORM: <i>herbaceous</i>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - agricultural pasture  
E - riparian woodland, creek, then agricultural pasture  
S - agricultural pasture  
W - riparian woodland, creek, then woodland.

OBSERVED/INFERRED MODIFICATIONS:

✓ - grazed  
S - none  
N - none

CHARACTERIZATION:

grazed pasture emergent, seasonally saturated  
agr. pasture old-SSS, surface ponding in  
creeks + depressions, occasional flooding

COMMENTS:

- No project impacts @ in Parcel
- Scattered populations of L1 BA observed on Parcel
- Wetland on Parcel identified as potential habitat for L1 BA
- No PL ha observed on Parcel

FOLD 104-020-09 05 JAN 2011

EXCLOSURE DESCRIPTION/ REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:  
FLUVAQUENTS 0-1X  
Gvilow SL 0-5%

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS:  
pasture overgrown, grazed area pasture

ESTIMATED SPECIES COMPOSITION CHANGE:  
increase in forbs, wetter soil grasses and forbs  
possible increase in Quercus + Flourens

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  
removal of grazing to allow veg. succession  
improvement drainage ditches running S-N (hand-drawn @ this level)

OTHER POTENTIAL ACTIONS:  
fence removal

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Ford

108-030-02

#4

60.0 AC



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

Project/Site: FORD 108-030-02 City/County: MENDOCINO Sampling Date: 25 JAN 2001  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Palmer Bar Line  
 Investigator(s): D.M.K.G., D.W., J.H./R.P., S.B. Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood Plain/Tolerace Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Gelowse 0-5% Fluvisols 0-1% NWI classification: Pem  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <i>Palmer characterization. V/S/H observations reflect generalized wetland characters @ in Palmer</i>			

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b>	
= Total Cover				Total % Cover of: _____ Multiply by: _____	
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species _____ x 3 = _____	
3. _____	_____	_____	_____	FACU species _____ x 4 = _____	
4. _____	_____	_____	_____	UPL species _____ x 5 = _____	
5. _____	_____	_____	_____	Column Totals: _____ (A) _____ (B)	
= Total Cover				Prevalence Index = B/A = _____	
<b>Herb Stratum (Plot size: _____)</b>				<b>Hydrophytic Vegetation Indicators:</b>	
1. <i>Alonecurus</i> sp	_____	_____	OBL	___ 1 - Rapid Test for Hydrophytic Vegetation	
2. <i>Juncus patens</i>	_____	_____	FAC	___ 2 - Dominance Test is >50%	
3. <i>Ranunculus</i> sp	_____	_____	FACW	___ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
4. <i>Montia perfoliata</i>	_____	_____	OBL	___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
5. <i>Agrostis stolonifera</i>	_____	_____	FACW	___ 5 - Wetland Non-Vascular Plants <sup>1</sup>	
6. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
7. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
= Total Cover					
<b>Woody Vine Stratum (Plot size: _____)</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
<b>% Bare Ground in Herb Stratum _____</b>					

Remarks: *Tree line w/ Fraxinus and Quercus - cleared pasture. climatic trees in Palmer*

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR4/1	75	2.5YR4/6	25	C	10/5M	silt loam	wood deposits - 12-14" fine

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)                  |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     | <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 | <input type="checkbox"/> Other (Explain in Remarks)       |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" 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)                   |   |

<sup>3</sup>Indicators 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: F3 Depleted Matrix  
No observed RL

**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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Salt Crust (B11)   | <input type="checkbox"/> Drainage Patterns (B10)                           |
| <input checked="" type="checkbox"/> Saturation (A3)                | <input type="checkbox"/> Aquatic Invertebrates (B13)                              | <input type="checkbox"/> Dry-Season Water Table (C2)                       |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                               | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)         |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input type="checkbox"/> Geomorphic Position (D2)                          |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input type="checkbox"/> Shallow Aquitard (D3)                             |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)               | <input type="checkbox"/> FAC-Neutral Test (D5)                             |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)                  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Other (Explain in Remarks)                               | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |   |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No \_\_\_\_\_ Depth (inches): 5"  
 Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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

Remarks: moist but not saturated @ surface; saturation within reach  
 standing water in depressions, seeps build up  
 VLD - SSS

PARCEL/UNIT: FORD	108-030-02 20-030-80	FIELD INSP DATE: 25 JAN 2011	TOTAL PARCEL AC: 50.0 AC
----------------------	-------------------------	---------------------------------	-----------------------------

TOTAL WETLAND AC: Pen-35.8 Pf/SS 1.1 AC	OTHER WATER AC: 0.5 AC UPLAND AC 13.6	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 35.8 AC	PRESERVATION AC: .5 AC Owl 13.6 AC UPL 1.1 AC Pf/SS
---	--	--------------------------------	----------------------------	--

CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent-seasonally saturated GRAZED BY PASTURE	LANDSCAPE POSITION: floodplain terrace
----------------------------------	--	---

HYDROLOGY TYPE & DURATION:

- very long duration; subsurface saturation
- with occasional flooding; depression standing water
- ineffective ditch draining toward LWA  
NO FLOW @ STANDING WATER  
NO SLOPE -

HYDRIC SOIL INDICATOR: E3 depleted muller No observed Ap	SOIL SURVEY MAP UNIT: Gulow 18 0-5% FLUVAQUENTS 5-1%	WETLAND/ UPLAND BOUNDARY: transitional	SLOPE & DRAINAGE: 1-2% sheet flow towards N-NW
--	--	---	--

Dominant Species * Common Species+ Alopecurus Glabriated-leaved junus Junus patens Ranunculus Mentha Myosotis	Hordeum bistris Panicum sp. other Pleurapogon? Scleria Carex Quercus + Prunus along the fence line ? cottonwoods	NOXIOUS SPECIES: None
---	---	--------------------------

GROWTH FORM:  
herbaceous

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - agr. pasture  
E - agr. pasture  
S - creek with riparian woodland, agr. pasture beyond  
W - creek with riparian woodland

OBSERVED/INFERRED MODIFICATIONS:

V - grazing w/ agr. management  
H - None  
S - None

CHARACTERIZATION:

disturbance emergent/wet meadow with grazed pasture  
grasses and recruited forbs/juncos

COMMENTS:

- No PROTET impacts on Parcel
- few small populations of LI BA observed on Parcel
- Wetland on Parcel identified as LI BA HABITAT
- No PL ho identified on Parcel

25 JAN 2011

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

FORD 08-030-02

None

SOIL SURVEY MAP UNIT:

Galton s-l 0-5%  
FLUVAQUENTS 0-1%

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS:

emergent palustrine -> emergent palustrine/forested  
w/ spongy peat  
woody vegetation

ESTIMATED SPECIES COMPOSITION CHANGE:

increase in juncos and water reed grasses and forbes  
increase in Quercus + Prunus

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

-removal of grazing, agr. management.

OTHER POTENTIAL ACTIONS:

- debris removal
- debris removal
- removal of unnecessary fencing

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

FORD

108-030-05  
#5

80.4AC

✓



FORD

Characterization

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

Project/Site: FORD 102-030-05 City/County: MENDOCINO Sampling Date: 25 June 20
Applicant/Owner: CALTRANS State: CA Sampling Point: Palcaz Baseline
Investigator(s): DM, RA, JV, RA, SA Section, Township, Range:
Landform (hillslope, terrace, etc.): Floodplain/Terrace Local relief (concave, convex, none): Flat/G slope Slope (%): 0-2%
Subregion (LRR): A Lat: Long: Datum:
Soil Map Unit Name: GLENDON 0-5% FLOODPLAINS 0-1% NWI classification: Pem

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

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

Hydrophytic Vegetation Present? Yes [X] No
Hydric Soil Present? Yes [X] No
Wetland Hydrology Present? Yes [X] No
Is the Sampled Area within a Wetland? Yes [X] No
Remarks: Palcaz characterization. V/S/H observations reflect generalized characters of wetland component of unit

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ) Absolute % Cover Dominant Species? Indicator Status
1. ENATIC POPULUS
2.
3.
4.
= Total Cover
Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Total Number of Dominant Species Across All Strata: (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Prevalence Index worksheet:
Total % Cover of: Multiply by:
OBL species x 1 =
FACW species x 2 =
FAC species x 3 =
FACU species x 4 =
UPL species x 5 =
Column Totals: (A) (B)
Prevalence Index = B/A =
Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation.
2 - Dominance Test is >50%
3 - Prevalence Index is <= 3.0
4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
5 - Wetland Non-Vascular Plants
Problematic Hydrophytic Vegetation (Explain)
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
Hydrophytic Vegetation Present? Yes [X] No
Herb Stratum (Plot size: )
1. Juncus patens FAC
2. Lolium perenne FAC
3. Alopecurus sp OBL
4. Trifolium repens FACU
= Total Cover
Woody Vine Stratum (Plot size: )
1.
2.
= Total Cover
% Bare Ground in Herb Stratum

Remarks: Grazed Pasture - PORTIONS OF UNIT @ dense Juncus clumps
Does not appear to be hayed

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20"	10YR 3/2	90	7.5YR 4/6	10	C	10/SM	sil	10YR 3/2 depletion - 15%

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" 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)	

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_  
 Hydric Soil Present? Yes  No

Remarks: *redox concentrations on ped faces - 10%*  
*F6 - Redox DARK SURFACE*

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<b>Primary Indicators (minimum of one required: check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**  
 Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): 14"  
 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: *- saturated @ top 2" then soil moist to 14"*  
*- long duration sub surface saturation*  
*- occasional flooding*  
*- local MBS on vegetation in depressions*  
*- Period flooded this M season.*

PARCEL/UNIT: FORD 108-030-05		FIELD INSP DATE: 25 JAN 201	TOTAL PARCEL AC: 80.4 AC	
TOTAL WETLAND AC:	OTHER WATER AC: 2.1 AC	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent seasonally saturated Grazed Ag PASTURE		LANDSCAPE POSITION: floodplain terrace	
	HYDROLOGY TYPE & DURATION: - long duration, subsurface saturation fluctuating water table $\approx 1/4''$ - occasional flooding			
HYDRIC SOIL INDICATOR: FG - leach dull surface		SOIL SURVEY MAP UNIT: Gleadow 0-57 Fluvisols 0-17	WETLAND/ UPLAND BOUNDARY: none	SLOPE & DRAINAGE: 1-2% shallow to none
Dominant Species * Common Species+ Trifolium repens Juncus patens Alopecurus Lolium perenne		- Mentha - Calluna - Quercus - Fagopyrum - Rumex ? patches - grasses - Juncus		NOXIOUS SPECIES: None
		GROWTH FORM: Herbaceous		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

2 - agricultural parcel  
2 - fence line adjacent, agricultural parcel  
3 - waste water treatment  
no riparian woodland creek agricultural pasture

OBSERVED/INFERRED MODIFICATIONS:

V - grazed agr pasture

H - None - Aves ADT to check may be subject  
to FLORISTING ▼

S - None

CHARACTERIZATION:

- palustrine emergent, seasonally saturated, grazed agr pasture with long term riparian pasture, subsurface saturation

COMMENTS:

- No populations of Pt ho observed on parcel
- No populations of Li ba observed on parcel
- Wetland component of parcel identified as potential Li ba habitat
- No protect impacts in parcel
- ELATC Cottonwoods in parcel

FORD 108-03005

EXCLOSURE DESCRIPTION/  
REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:

Gleadow soil 0.5/1  
PLUVAQUENTS 0.1/1

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL:

NONE

HYDROLOGY:

NONE

VEGETATION CLASS:

disturbance emergent, seasonally saturated  
shrub No pasture

ESTIMATED SPECIES COMPOSITION CHANGE:

increase in forbs & grasses  
- increase in forbs, possible increase in *Amorpha* and *Fraxinus*

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- Removal of grazing, vegetation management

OTHER POTENTIAL ACTIONS:

- debris removal
- removal of fencing, posts
- stumps removal

GRAM SCORE:

RELATED REFERENCE:

HYDROLOGY STUDIES: DESCRIPTION:

VEGETATION STUDIES:

DESCRIPTION:

COMMENTS:

FUNCTIONAL EQUIVALENT INDEX:

UNIT ENHANCEMENT:

Frost 108-070-04

46.6 AC



# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM – Arid West Region

FROST

Project/Site: FROST 108-070-04 City/County: Merced Sampling Date: 1/14/2011  
 Applicant/Owner: CACTANS State: CA Sampling Point: PARCEL BASELINE  
 Investigator(s): P. Martel / KG / SZ / RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): TERRACE Local relief (concave, convex, none): convex slope Slope (%): 1/2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: cole chyl loam 0-2% / Gic low sand loam 0-5% NWI classification: Pcm  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>PARCEL CHARACTERIZATION. V/S/H observations reflect GENERALIZATION of wetland component of Parcel current circumstance.</u>	

**VEGETATION – Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Notes
<b>Tree Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
				= Total Cover
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
				= Total Cover
<b>Herb Stratum</b> (Plot size: _____) <i>in order of abundance</i>				
1.			<u>FAC</u>	
2.			<u>FACW</u>	
3.			<u>FAC</u>	
4.			<u>FACW</u>	
5.			<u>FAC</u>	
6.			<u>FACW</u>	
7.			<u>OBL</u>	
8.			<u>FACU</u>	
				= Total Cover
<b>Woody Vine Stratum</b> (Plot size: _____)				
1.				
2.				
				= Total Cover
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		
Remarks: <u>Plants are dominated by FAC + FACW species with an absence of OBL and FACU species. GRAZED PASTURE - Recent build up of vegetation. Few Head on Parcel in last year. Plant species listed were MAJOR DOMINANTS across Parcel.</u>				

**Dominance Test worksheet:**

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

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

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

---

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

\_\_\_ Dominance Test is >50%

\_\_\_ Prevalence Index is ≤3.0<sup>1</sup>

\_\_\_ Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

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

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No \_\_\_\_\_

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		
0-14"	7.5YR3/1	80	7.5YR4/6	20	C	PL/MATRIX	surface saturated standing H <sub>2</sub> O in micro-depressions
14" +	10YR 4/2	80	7.5YR4/6	20%	C	CL	depleted MATRIX probably ARGILLIC horizon

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<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 checked="" 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)		

<sup>3</sup>Indicators 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: clay aquitard @ 14" - [redox], slightly lighter → 1/2 depleted matrix  
→ soil has not been disturbed, no improvement possible

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>	<b>Secondary Indicators (2 or more required)</b>
<input checked="" 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 checked="" type="checkbox"/> Saturation (A3) - to surface	<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 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): 0-1"

Water Table Present? Yes  No \_\_\_\_\_ Depth (inches): 0"

Saturation Present? Yes  No \_\_\_\_\_ Depth (inches): 0"

(includes capillary fringe)

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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

Remarks: water seeping in at surface of soil pit  
- very long duration subsurface saturation \*  
- no impediments to hydrology → already mixed out  
- Patch is attenuating water movement off of ground  
↳ reduces flashiness of streams

PARCEL/UNIT: <b>FROST</b>		FIELD INSP DATE: JAN. 4, 2011	TOTAL PARCEL AC: <b>46.6 ac</b>		
TOTAL WETLAND AC: <b>41.5 AC</b>	OTHER WATER AC: <b>0.3 AC</b> <hr/> UPLAND AC <b>4.8 AC</b>	IMPACTS IN WETLAND AC: <b>0 AC</b>	ENHANCEMENT AC: <b>41.5 AC</b>	PRESERVATION AC: <b>4.8 AC UPLAND</b>	
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>Palustrine emergent, agricultural pasture</i> NATIVE SPECIES REMOVED AND REPLACED/MANAGED FOR FORAGE		LANDSCAPE POSITION: <i>wet meadow, flat-sloping to flood terrace</i> <sup>down</sup> NW, 1-2% slope. • FLAT TERRACE		
HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>• very long duration, subsurface saturation, flatland microdepression storage</li> <li>• Localized surface sheet flow during ppt events after system is SATURATED</li> <li>• Probably NOT SUBJECT TO FLOODING DURING MAJOR EVENTS</li> </ul>					
HYDRIC SOIL INDICATOR: <ul style="list-style-type: none"> <li>• E6 - Dark redox, 1 chroma soils w/80% redox concentrations</li> <li>• ARGILLIC horizon close to SURFACE (~14")</li> </ul>		SOIL SURVEY MAP UNIT: cole cl 0-2% Giclw sl 0-5%	WETLAND/ UPLAND BOUNDARY: <i>transitional - small upland patches and raised ridges, too low to table.</i>	SLOPE & DRAINAGE: 1-2%	
Dominant Species * Common Species+ <i>Festuca, Ranunculus, Lolium, Juncus tenuis, J. patens</i> <i>add from other list</i> <i>Aster, Pseudoxylon, Limnathes, Helcus, Bromus, Hordeum, hystrix, Acolostis</i>  <b>100% cover</b>			NOXIOUS SPECIES: <b>NONE observed</b>		
			GROWTH FORM: <b>HERBACEOUS</b>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

east - open agricultural field w/ scattered trees, roads w/ residences  
North - less scattered trees. UNNAMED TRIBUTARY off Parcel edge  
west - scattered trees w/ similar landform. PARCELS separated by shallow DITCH

OBSERVED/INFERRED MODIFICATIONS:

- Agricultural pasture management to support grazing. Vegetation dominated by introduced Pasture Grasses. GRAZING MANAGEMENT hinders successional development.

Soil - No obvious modification under current circumstance  
NO Ap

Hydrology - No obvious modifications under current circumstance.  
Direct MT, sheet flow over surface, sub surface through flow

CHARACTERIZATION:

Grazed Pasture @ managed vegetation on intact  
Hydric soil and VLD, SSS wetland Hydrology.

COMMENTS:

- NE corner has channelized tributary, flow along northern edge of property. Historic channel is still evident on surface and aerial photos
- observed populations of PL ho and Li ba
- No Project impacts on Parcel
- appears to be hand dug very narrow & shallow drainage ditch running S to N @ W edge of field
- Channelized tributary in NE corner

FROST

JAN 4, 2011

EXCLOSURE DESCRIPTION/ REFERENCE SITE

None

• on similar soil unit scattered trees to the west. APPEARS TO BE ON SAME SOIL UNITS (COLE + GEILOW)

• Upland parcels have what appears to be ungrazed/lightly grazed condition @ more Jupa cover and Qu Lo patches

SOIL SURVEY MAP UNIT:

Cole cl 0-2%  
Gei low sl 0-5%

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL:

None - soil appears to be hydric @ no recent Np or evidence of leveling or modification

HYDROLOGY:

None - historically Altered by roads, channelized tributaries. currently exhibiting wetland hydrology under current circumstances. No obvious modification to type or extent.

VEGETATION CLASS:

Pem A9 - palustrine emergent -> palustrine forested/emergent  
-> successional climax community  
Likely to support P f Lem seasonally saturated wet meadow/woodland @ successional development

ESTIMATED SPECIES COMPOSITION CHANGE:

Shift from managed Np grasses and pasture weeds to likely include a large % cover or dominance by PERENNIAL JUNCUS, CAREX, Quercus .... other perennial grasses?

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- REMOVE GRAZING  
- MAYBE PLANTING  
• Remove GRAZING + VEGETATION MANAGEMENT or other modifications that interfere @ VEGETATION successional development

OTHER POTENTIAL ACTIONS:

- erosion fixes on stream  
• Remove debris - may need to put fence to limit neighboring grazing  
• Riparian PLANTING IN WETLAND ADJ TO TRIBUTARY  
• UPLAND Riparian PLANTING ADJ TO CREEK

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
<p>COMMENTS:</p> <p>DM - This parcel was mapped twice during wetland delineation. In APR/MAY 10? parcel had been heavily grazed. Parcel appears to have been lightly grazed since 10' growing season. Vegetation cover has greatly increased.</p>		
FUNCTIONAL EQUIVALENT INDEX:	UNIT ENHANCEMENT:	

Goss 103-230-02

10.0 ac



*CHARACTERIZATION*  
**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: COSS 103-230-02 UNIT A City/County: MEMPHIS MO Sampling Date: 6 JAN 2006  
 Applicant/Owner: CALTRANS State: CA Sampling Point: PARCEL BOUNDARY  
 Investigator(s): DM K.G / RD JM Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLATPLAIN TERRACE Local relief (concave, convex, none): FLAT Slope (%): 0-2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: clear lake clay 0-2%, gravelly sl 0-5% NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>PARCEL UNIT CHARACTERIZATION. V/S/H OBSERVATIONS REFLECT GENERALIZATION OF WETLAND UNIT @ W PARCEL</u>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Festuca arvensis</u>	_____	_____	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. <u>Alopecurus (graminoides?)</u>	_____	_____	<u>FACW</u>	
3. <u>Mentha pulegium</u>	_____	_____	<u>OBL</u>	
4. <u>Ranunculus sp</u>	_____	_____	<u>FACW</u>	
5. <u>Neovaccinium hederifolium</u>	_____	_____	<u>OBL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____

Remarks: HAYED/GRAZED PASTURE UNIT OF PARCEL. SPECIES COMPOSITION APPEARS TO BE INFLUENCED BY MANAGEMENT.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12"	7.0 YR 2/1	95	7.5 YR 2/6	5	C	(R/SM)	clayey loam	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy 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 checked="" 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)			

<sup>3</sup>Indicators 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: F6 Redox Dark Surface - at edge of clear lake unit. dark vertic intergrade. No obvious Ap.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>	<b>Secondary Indicators (2 or more required)</b>
<input checked="" 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 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): 0-1"

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

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): top 5"

Wetland Hydrology Present? Yes  No

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

Exp. -oxic saturation

Remarks: High clay content causing surface ponding @ in depressions. Very long duration saturation in upper soil profile.

# Goss A

PARCEL/UNIT: Goss - UNIT A 103-230-02		FIELD INSP DATE: 6 JAN 2011	TOTAL PARCEL AC: 10.0 AC
TOTAL WETLAND AC: 8.0 AC	OTHER WATER AC: 0	IMPACTS IN WETLAND AC: 0	Pf - 2.6 AC
	UPLAND AC: 2.0 AC		Pem - 5.4 AC
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine-emergent (grazed) Hayed Pasture @ Seasonal SATURATED SOIL	LANDSCAPE POSITION: Floodplain Terrace - Foot MOUND @ base of hillside	ENHANCEMENT AC: 5.4 AC * much of ALIEN IS PL to population
HYDROLOGY TYPE & DURATION: - long to very long duration subsurface saturation epi-aquic -> due to clay soil  - shallow depressionnal storage 0-1" below surface L-VL.D - unlikely to flood but may have prolonged surface sheet flow - SB Retic			
HYDRIC SOIL INDICATOR: No obvious Ap dark soil - VERTIC INTGRADE		SOIL SURVEY MAP UNIT: chert like clay 0-2-1 Gric low SL 0-5-1	WETLAND/UPLAND BOUNDARY: transitional SLOPE & DRAINAGE: 0-2% SW -> NW gullies being that of low
Dominant Species * Common Species+ ↓ Festuca Vulpia Ranunculus Aster Panicum		Lotus corniculatus - Trifolium - Vicia	NOXIOUS SPECIES: None
			GROWTH FORM: herbaceous

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

with

SURROUNDING PARCELS:

East - open pasture  
South + west - open pasture (overgrown)  
North - mature riparian woodland

OBSERVED/INFERRED MODIFICATIONS:

V - veg. management, mowland (grazed?) introduced pasture  
GRASS LAMINATE.

S<sub>i</sub> - None - No obvious modification

H - No obvious modification - VCD-SSS, sheet flow over  
UNIT eventually collecting in swales/ditches? DRAINING  
B N W

CHARACTERIZATION:

Mowed/(grazed?) pasture @ managed vegetation  
ON INTACT hydric soil AND VCD-SSS wetland.  
Probably does not flood but has surface sheet  
flow across unit.

COMMENTS:

- Large populations of PL ko on unit
- No protect impacts @ in unit
- No Li ba identified @ in unit. Real  
unit NOT identified as Li ba habitat.

BOSS-6 JAN 2011 BOSS #A

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

The central portion which is not managed is supporting a mature riparian-woodland area in both soil series identified on UNIT.

SOIL SURVEY MAP UNIT:

clear lake clay 0-2/1.  
Gie Low SL 0-5/1.

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: none

HYDROLOGY: none

VEGETATION CLASS:

palustrine-emergent VLD-SSS on Palcos UNIT  
under current management

ESTIMATED SPECIES COMPOSITION CHANGE:

agricultural pasture → palustrine forested → *remixins*, *Quercus*  
emergent understory

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

remove vegetation management  
allow vegetation succession

OTHER POTENTIAL ACTIONS:

remove fencing.

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CROSS 103-230-02 B City/County: MENDOCINO Sampling Date: 07 JAN 2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: PARCEL BASELINE  
 Investigator(s): DM K6/DR, YA Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood Plain/Terrace Local relief (concave, convex, none): FLAT Slope (%): 0-2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Charlote Clay 0-2%, Gulch sl 0-5% NWI classification: Pf  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel UNIT characterization. V/S/H observations reflect generalized wetland UNIT @ in Parcel.</u>	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus lobata</u>			<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>Fayalax latifolia</u>			<u>FACW</u>	
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Juncus effusus?</u>			<u>OBL</u>	___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Rumex crispus</u>			<u>FACW</u>	
3. <u>Pleurapocyon hypoleucum</u>			<u>OBL</u>	
4. <u>Ranunculus orthoceras</u>			<u>FACW</u>	
5. <u>UN ID GRASS</u>			<u>-</u>	
6. <u>Rhus vrsinus</u>			<u>FACW</u>	
7. <u>Holcus lanatus</u>			<u>FAC</u>	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____

Remarks: Mature closed canopy forest.  
Leaf litter on ground

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12"	10YR 2/1	95	7.5YR 4/6	5	C	PL/SM	CL	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<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 checked="" 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)		

<sup>3</sup>Indicators 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: F6 - Redox Dark Surface - Dark surface @ no apparent Ap - clayey

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0-2"

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

Saturation Present? Yes  No  Depth (inches): 0

Wetland Hydrology Present? Yes  No

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

Remarks: ULD - SSS in upper part - shallow 0-2" standing water in relative depressions. Vertic intergrade - Peds not saturated below surface.

Goss UNIT B 103-230-02

PARCEL/UNIT:  Goss UNIT B 103-230-02		FIELD INSP DATE:  6 JAN 11	TOTAL PARCEL AC:  10.0 ac
TOTAL WETLAND AC:	OTHER WATER AC:  0	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:  PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE:  emergent - forested / VLD SSS soil Ⓢ shallow surface ponding	LANDSCAPE POSITION:  Pond in low terrace - instatic headward of tributary?	
	HYDROLOGY TYPE & DURATION:  very long ponding in shallow depression positions across surface sub surface saturation - VLD - clay soil NOT SATURATED Ⓢ in beds below the surface		
HYDRIC SOIL INDICATOR:  R6 Redox Dark Surface	SOIL SURVEY MAP UNIT:  close lake clay 0-21  Gidlow sl 0-51	WETLAND/UPLAND BOUNDARY:  transitional, gradual flow beginning to channelize in central position. (sample)	SLOPE & DRAINAGE:  surface transitional, gradual flow beginning to channelize in central position. (sample)
Dominant Species * Common Species+  ↓ Junco (affinis) Pleurapogon Quercus lobota Fraxinus latifolia Ranunculus abortivus		UNIDGLASS Hobbs Rubus Rumex Toxicaria	NOXIOUS SPECIES:  None
		GROWTH FORM:  Forested w/ herbaceous understory	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

East - open Pasture - Hayland  
West - open Pasture/Forest  
North - open Pasture Hayland  
South - open Pasture Hayland

OBSERVED/INFERRED MODIFICATIONS:

None - UNIT appears to be UNOCCUPIED/UNMANAGED  
MATURE closed canopy Woodlot.

CHARACTERIZATION:

Palustrine forested wetland @ herbaceous  
understory. Very long duration sub surface SATURATION  
ON clayey soil. Shallow depressions on surface  
@ Ponded water. No evidence of GRazing or other  
MANAGEMENT. Swales begin to ACCUMULATE SURFACE  
WATER and discharge TOWARD NW.

COMMENTS:

- Large Population of P. h. @ in UNIT.
- No Project IMPACTS Proposed @ in UNIT.
- Appears to be example of a MATURE NON-MANAGED  
Successional PLANT COMMUNITY wetland.

COSS UNIT B 103-230-02

EXCLOSURE DESCRIPTION/ REFERENCE SITE	NONE  <div style="border: 1px solid black; padding: 5px;">SOIL SURVEY MAP UNIT: clear lake clay 0-2'. Gleadow sl 0-5'.</div>
DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:	SOIL: NONE
	HYDROLOGY: NONE
	VEGETATION CLASS: palustrine forested @ VLD-SSS + shallow depressional ponding.
	ESTIMATED SPECIES COMPOSITION CHANGE: NONE
	MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: NONE
	OTHER POTENTIAL ACTIONS: Fire removal.

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

HUFF 037-240-RW

12.6 AC



# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

037-240-RW

Project/Site: HUFF • EMERGENT WETLAND City/County: Mendocino Sampling Date: 10/24/2010  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Parcel Boundary  
 Investigator(s): DM KG / SZ / RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood Plains Terrace Local relief (concave, convex, none): FLAT TO CONVEX Slope (%): 0-5%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FELIZ 20-5 FLUVAQUENTS / CASSABONE - WHOLELY 30% NWI classification: Pem  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Parcel Unit Characterization. V/S/H observations reflect generalized condition of wetland unit of parcel.</u>			

### VEGETATION - Use scientific names of plants. Pem unit in lower ground at base of fill

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
= Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. <u>Salix sp?</u>	_____	_____	<u>FACW?</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
= Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Lolium sp</u>	_____	_____	<u>FAC</u>	
2. <u>Juncus tenuis</u>	_____	_____	<u>FACW</u>	
3. <u>Dipsacus (fulcominus)</u>	_____	_____	<u>NI</u>	
4. <u>Cyperus sp</u>	_____	_____	<u>OBL?</u>	
5. <u>Cyperus (Tetradostis?)</u>	_____	_____	<u>FACW?</u>	
6. <u>Rhynchospora</u>	_____	_____	<u>FAC</u>	
7. <u>Juncus pilans</u>	_____	_____	<u>FAC</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
<b>% Bare Ground in Herb Stratum _____ = Total Cover</b>				

Hydrophytic Vegetation Present? Yes  No \_\_\_\_\_

Remarks: Fallow/abandoned emergent wetland @ in parcel. Some vehicle tracks/depressions on surface of wetland. Salix in riparian ditch.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2"	10YR 3/1	95	7.5YR 4/6	5	C	PL/OM	SL	some fine gravel in top few inches

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" 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)	

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: Redox dark surface  
 no obvious soil manipulations / some vehicle tracks (not significant)

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0-2"	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 2"	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0	

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

Remarks: - surface water in positive depressions. 0"-2"  
 - VUD = SSS  
 - open to occasional flooding - ADS to artist check

PARCEL/UNIT: <i>Hoff emergent wetlands / scrub wet meadow component of JD map. Riparian scrub</i>  <i>037-240-RW</i>		FIELD INSP DATE: <i>10/20/2011</i>	TOTAL PARCEL AC: <i>12.6 ac</i>	
TOTAL WETLAND AC: <i>1.1 ac</i> <i>Permpss</i> <i>3.1 ac</i> <i>Pf</i>	OTHER WATER AC: <i>2.0 ac -</i> <i>No impacts proposed</i>	IMPACTS IN WETLAND AC: <i>0 ac</i>	ENHANCEMENT AC: <i>0 ac</i>	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine emergent / scrub</i> <i>Fallows/abandoned Pom and cleared Pss drainage</i>		LANDSCAPE POSITION: <i>- floodplain terrace</i> <i>- drainable feature</i>	
	HYDROLOGY TYPE & DURATION: <i>- very long duration and no periods</i> <i>- subsurface saturation - VLD</i> <i>- occasional flooding</i>			
HYDRIC SOIL INDICATOR: <i>F6 - Redox Dark Surface</i>		SOIL SURVEY MAP UNIT: <i>Feliz P0-59</i> <i>FLVAQUENTS</i> <i>Cassabaw</i> <i>wholly 30%*</i>	WETLAND/UPLAND BOUNDARY: <i>way to watercourse</i> <i>between</i> <i>field</i> <i>1.5m</i> <i>with</i> <i>obscure</i>	SLOPE & DRAINAGE: <i>1.5%</i> <i>North</i> <i>west</i>
Dominant Species * Common Species+ <i>gladiolus</i> <i>lotus</i> <i>Junco</i> <i>Turdus</i> <i>Turdus</i> <i>Phalaris</i> <i>Salix sp</i>			NOXIOUS SPECIES: <i>None</i>	GROWTH FORM: <i>Scrub shrub</i>

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

E-101  
N - Railroad, riparian wetlands, lot  
W - Riparian wetlands, old orchard  
S - Riparian wetland, outlet creek

OBSERVED/INFERRED MODIFICATIONS:

SOME FILL MATERIAL (GRAVEL) IN SOIL BUT SOIL  
IS BASICALLY UNDISTURBED.

CHARACTERIZATION:

palustrine emergent - no grasses, some disturbance  
from offroad vehicles and slash/shrub in  
Perennial herb.

COMMENTS:

- No proposed activity on Parcel -
- Creation opportunities on High Ground (N.Y.O.B.C) are limited because of access problems.  
- probably no SUITABILITY studies/TESTS done to date.
- Possible small population of Li BA found in Pem (GIS color code confusing). Does not appear Parcel identified as suitable habitat for Li BA or R ho.
- No project impacts on Parcel

<p>EXCLOSURE DESCRIPTION/ REFERENCE SITE</p>	<p>HPT - EMERGENCY WETLAND/SS</p> <p>NONE - EMERGENCY/ABANDONED</p> <div style="border: 1px solid black; padding: 5px;"> <p>SOIL SURVEY MAP UNIT:</p> <p>FeGzlo-5X FLUX &amp; VENTS CASSIOWAY/WILLY 30X+</p> </div>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>SOIL: NONE</p> <p>HYDROLOGY: NONE</p> <p>VEGETATION CLASS: PALUSTRINE EMERGENT/SS</p> <p>ESTIMATED SPECIES COMPOSITION CHANGE: NONE - Parked appears to have been abandoned LONG AGO - successional development already APPARANT on Parked.</p> <p>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - assess restoration for upland wetlands</p> <p>OTHER POTENTIAL ACTIONS: <i>debris</i></p>

DRAM SCORE:		RELATED REFERENCE:
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HYDROLOGY STUDIES:	DESCRIPTION:
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VEGETATION STUDIES:	DESCRIPTION:
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COMMENTS:
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FUNCTIONAL EQUIVALENT INDEX:	
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	UNIT ENHANCEMENT:
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# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

037-240-RW

Project/Site: HUFF - RIPARIAN WOODLAND City/County: NEVADOCIND Sampling Date: 11/20/2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: PARCEL BASELINE  
 Investigator(s): DM/KG/ST/SP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain Terrace Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FEL22 / PLUMQUINT / CASSABON / UNKOW 30% NWI classification: P+  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>PARCEL UNIT CHARACTERIZATION. V/S/H OBSERVATIONS REFLECT GENERALIZED STATE OF WETLAND FORESTED COMPONENT OF PARCEL.</u>			

### VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>STYRACIS LOBATA</u>			<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)	
2. <u>QUERCUS LOBATA</u>			<u>FAC</u>	Total Number of Dominant Species Across All Strata: _____ (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
4. _____				Prevalence Index worksheet:	
= Total Cover				Total % Cover of: _____ Multiply by:	
Sapling/Shrub Stratum (Plot size: _____)				OBL species _____ x 1 = _____	
1. <u>RIBES VASINOS</u>			<u>FAC</u>	FACW species _____ x 2 = _____	
2. <u>TAXUS DIVERSICOLORATA</u>			<u>UPL</u>	FAC species _____ x 3 = _____	
3. <u>QUERCUS DICOLORE</u>			<u>FACW</u>	FACU species _____ x 4 = _____	
4. _____				UPL species _____ x 5 = _____	
5. _____				Column Totals: _____ (A) _____ (B)	
= Total Cover				Prevalence Index = B/A = _____	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>CORONILLA MACULATA</u>			<u>FACW</u>	<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 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
= Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
Woody Vine Stratum (Plot size: _____)					
1. _____					
2. _____					
= Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks: UNMANAGED RIPARIAN FOREST - ADJ TO ARTIST CREEK

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12"	3.5YR3/1	100	3.5YR4/6	5	C	RM/M	silt loam	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" 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)	

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: F-6 Redox Dark Surface

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>	<b>Secondary Indicators (2 or more required)</b>
<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"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Iron Deposits (B5)	<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"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
	<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  Depth (inches): 0-3"

Water Table Present? Yes  No  Depth (inches): 5"

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0

Wetland Hydrology Present? Yes  No

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

Remarks: surface water in relative depressions; surface sheet flow in swales toward a tree NW of parcel to water creek  
- subject to occasional flooding

PARCEL/UNIT: *037-240-RW* FIELD INSP DATE: *10/11/08* TOTAL PARCEL AC: *12.6 AC*

TOTAL WETLAND AC: *3.1 AC* OTHER WATER AC: *2.0 AC* IMPACTS IN WETLAND AC: *0 AC* ENHANCEMENT AC: *0 AC* PRESERVATION AC: *0 AC*

*\* Pf*  
*Pem/SS*  
*No Impacts Proposed*

CURRENT CIRCUMSTANCE DESCRIPTION: *Abandoned parcel* WETLAND TYPE: *substrata forest* LANDSCAPE POSITION: *shrub plain Tundra*

HYDROLOGY TYPE & DURATION: *very long duration, irregular, subsurface water table - UED, infrequent/occasional flooding*

HYDRIC SOIL INDICATOR: *SS* SOIL SURVEY MAP UNIT: *Relic d. s. / G. s. / G. s. / whole 32%* WETLAND/UPLAND BOUNDARY: *subscript / slight / in field / plain / up and down* SLOPE & DRAINAGE: *1-2% / 1-2% / 1-2%*

Dominant Species \* Common Species: *...* NOXIOUS SPECIES: *None*

GROWTH FORM: *shrub / weed / grass / herb*

CURRENT CIRCUMSTANCE DESCRIPTION

SURROUNDING PARCELS:

no other activities in surrounding parcels  
all species present in this unit, not surrounding  
no roads, etc  
5 - other nearby surrounding parcels

OBSERVED/INFERRED MODIFICATIONS:

None - Habitat appears abandoned

CHARACTERIZATION:

secondary forest

partial colonization of grassland species in this unit  
includes species woodland area, small grassy area

COMMENTS:

- No LI 68 or PL ha identified on this unit or parcel. It's proposed as habitat for other species
- No impacts proposed
- Wetland indicator in sparse forest
- No further enhancement opportunities on this unit

037-240-RW  
19 JAN 2004

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

HOFF  
NONE

SOIL SURVEY MAP UNIT:  
FELIZ 1 0-57  
FLUVA GRNTS  
CO2 SO3 SWC / HWY 307

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS:  
primary forested

ESTIMATED SPECIES COMPOSITION CHANGE:  
NONE - already at climax successional stage of  
emergent forested

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  
NONE

OTHER POTENTIAL ACTIONS:  
- removal of debris  
- herbivore

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Lusher 108-030-03

108-060-08

23.9 AC

18.7 AC



# CHARACTERIZATION

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

Project/Site: Lusher - 108-030-03/108-16-08 City/County: MENDOCINO Sampling Date: 17 JAN 201  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Barrel BaseLine  
 Investigator(s): DM, HG, DW / ST RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain terrace Local relief (concave, convex, none): flat Slope (%): 1-2  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FLUVAQUENTS COLE LR 0-2% NWI classification: Pen

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation 7-, 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 _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____			
Remarks: <u>currently grazed agr. pasture - Parcel Characterization of Wetland</u> <u>Lusher - 038-06-08 is adjacent parcel with same wetland characterization; Host is in impact area of by pass</u>					

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>FRAXINUS LOTIFOLIA</u>			<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>SEQUOIA SEMPERVIRENS</u>			<u>UPL</u>	
3. <u>QUERCUS LOBATA</u>			<u>FAC</u>	
4. _____				
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: _____)				
1. <u>Festuca arundinacea</u>			<u>FAC</u>	
2. <u>Lolium pikeorum</u>			<u>FAC</u>	
3. <u>Ranunculus sp</u>			<u>FACW</u>	
4. <u>Juncus PATENS</u>			<u>FAC</u>	
5. <u>Trifolium (leaves)</u>			<u>FACU</u>	
6. <u>Pratis arundinacea</u>			<u>OBL</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ = Total Cover				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks: <u>few scattered trees</u> <u>grazed pasture</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3"	10 YR 3/1	100	—	—	—	—	cl	No Redox dense roots
3-14"	7.5 YR 3/1	100	7.5 YR 4/6	40	C	PL/SM	90% 100% 100%	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" 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)	

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: DARK Redox surface -  
no evidence of Ap  
NO OBVIOUS SOIL MANIPULATIONS.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0-6" *in relative depressions*

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

Saturation Present? Yes  No  Depth (inches): surface

(includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks: - surface water in swales and depressional features 0" - 6"  
- occasional flooding, especially in northern section  
- VLD -SSC

PARCEL/UNIT: LUSTER - 108-030-03 108-060-08		FIELD INSP DATE: 12 JAN 2011	TOTAL PARCEL AC: 03-23.9 AC 08-18.7 AC
TOTAL WETLAND AC: 24.1 AC	OTHER WATER AC: 0.9 AC Upland 17.8 AC	IMPACTS IN WETLAND AC: 4 AC Pf 2 AC DW 10.4 AC Penn 9.0 AC PL	ENHANCEMENT AC: 11.8 AC Penn
	P + 1.9 AC Penn 22.2 AC		PRESERVATION AC: 1.5 AC Pf 8.7 AC PL 4.4 AC DW
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: • palustrine emergent @ scattered thru @ wetland. • grazed pasture		LANDSCAPE POSITION: flood plain terrace
HYDROLOGY TYPE & DURATION: - very long duration surface ponding and subsurface saturation - occasional ponding/flooding through to northern portion of parcel. • flooding appears to be from mill creek			
HYDRIC SOIL INDICATOR: F6 - Dark Redox Surface		SOIL SURVEY MAP UNIT: FLUVAQUENTS cole cl 0-2h	WETLAND/UPLAND BOUNDARY: transitional • upland levee to E SLOPE & DRAINAGE: 1-2% surface water drains to N-W ditch in central drains S-W
Dominant Species * Common Species+ Lolium Festuca Ranuncidos Juncos Trifolium(s) phalaris arundinacea		Martha Rumex Limonium gladiolus-leafed juncos Lotus	NOXIOUS SPECIES: NONE
		GROWTH FORM: herbaceous w/some Quercus in central swale.	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

- S - abandoned agricultural pasture
- N - forested woodland, Quercus/Fraxinus mature closed canopy
- W - lot and two 45% sloped hillside with oak/fir
- E - creek and railroad, followed by agr. pasture

OBSERVED/INFERRED MODIFICATIONS:

- J - veg. management and grazing; veg. is already succeeding into junco, ranunculus plant community; still see evidence of veg. management in presence of Trifolium sp.
- H - +/- functioning DRAINAGE DITCH CAPABLE OF REMOVING FLOOD WATER. PROBABLY NO EFFECT ON SS WATERABLE OR LOG/LESS WATER STORAGE.
- S - NONE

CHARACTERIZATION:

Palustrine emergent with some scattered Quercus/Fraxinus in what may have been historic channel (currently ponded with surface water). Seasonally saturated with ponding in relative depressions and swales and has subsurface saturation.

COMMENTS:

- cattle and horses are still present on parcel
  - Large populations of L1 ba observed on Parcel
  - No PL ho
  - Most of parcels identified as potential L1 ba habitat.
  - Residential + out building on Parcel
  - Upp creek contained by constructed levee
  - Parcel to N closed canopy Ash forest
- Most of 038-060-08 is in Permanent Impact Area  
Some of 108-030-03 is in Impact Area

LUSHER 108-030-03 12 JAN 2011

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

related to or on same soil unit (FLUMQUENTS) and  
is mostly a closed canopy ash forest (Pf) [B/Booker]

SOIL SURVEY MAP UNIT:

FLUMQUENTS  
core of 0-2%

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY:

NONE - most of central ditch is in impact area of bypass  
ditch helps drain non-depression or surface water, UNLIKELY TO  
effectively lower SS water table

VEGETATION CLASS:

palustrine emergent; wet meadow to palustrine forested/emergent

ESTIMATED SPECIES COMPOSITION CHANGE:

↓ fescue, lolium → ↑ juncus, ranunculus w/auricus and Froxius  
Phalaris arundinacea.

likely to support ash/oak forest or woodland  
(ash saplings observed in vicinity of scattered trees)

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- removal of grazing; allow veg. succession

OTHER POTENTIAL ACTIONS:

- removal of unnecessary fencing
- removal of abandoned farming equipment
- removal of rubus
- filling drainable ditch

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Lusher 108-030-04 66.1 AC



# CHARACTERIZATION

Lusher

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site: LUSHER <sup>Wet meadow UNIT A</sup> 108-035-04 City/County: Humboldt State: CA Sampling Date: 25 June  
 Applicant/Owner: CAITRANS Sampling Point: Blue Baseline  
 Investigator(s): DM, VG, DM, TH/PA, SZ Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain Terrace Local relief (concave, convex, none): FLAT/Sloped Slope (%): 17.2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: GELOW SLOP-87. FLUVIAL QUAYS 0-1% NWI classification: Pem  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation 4/5, 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>PARCEL UNIT CHARACTERIZATION. V/S/H OBSERVATIONS REFLECT GENERALIZED COMPONENT OF WETLAND UNIT IN PARCEL</u>	

### VEGETATION - Use scientific names of plants.

Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: _____)				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. _____				Total Number of Dominant Species Across All Strata: _____ (B)
2. _____				
3. _____				
4. _____				
	= Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A)      _____ (B) Prevalence Index = B/A = _____
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	= Total Cover			<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Wetland Non-Vascular Plants <sup>1</sup> ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: _____)				
1. <u>Juncus patens</u>			<u>FAC</u>	
2. <u>Alpaca</u>			<u>OBL</u>	
3. <u>carex sp (PNEUGALIS?)</u>			<u>FACW</u>	
4. <u>lotus grandiflorus</u>			<u>FAC</u>	
5. <u>salix (blanckii?)</u>			<u>FACW</u>	
6. <u>trifolium (lupinus?)</u>			<u>FACU</u>	
7. <u>WILD GRASS</u>				
8. <u>Juncus (cymosus?)</u>			<u>FACW</u>	
9. _____				
10. _____				
11. _____				
	= Total Cover			<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
<u>Woody/Vine Stratum</u> (Plot size: _____)				
1. _____				
2. _____				
	= Total Cover			
% Bare Ground in Herb Stratum _____				
Remarks: <u>GRAZED PASTURE.</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 2/2	80	7.5YR 4/6	20	C	0.5m silt loam	10YR 2/2 - 10%	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)  |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks)   |
| <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 checked="" type="checkbox"/> Redox Dark Surface (F6)       | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <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)                   |   |

Restrictive Layer (if present):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_  
 Hydric Soil Present? Yes  No

Remarks: *crust on top of sand layer 2-8" F-6 Redox Dark Surface*  
*No observed Ap No obvious soil manipulations -*

**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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2)          | <input type="checkbox"/> Salt Crust (B11)   | <input type="checkbox"/> Drainage Patterns (B10)                           |
| <input checked="" type="checkbox"/> Saturation (A3)                | <input type="checkbox"/> Aquatic Invertebrates (B13)                              | <input type="checkbox"/> Dry-Season Water Table (C2)                       |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                               | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)         |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input type="checkbox"/> Geomorphic Position (D2)                          |
| <input checked="" type="checkbox"/> Drift Deposits (B3)            | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input type="checkbox"/> Shallow Aquitard (D3)                             |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4)        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)               | <input type="checkbox"/> FAC-Neutral Test (D5)                             |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)                  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Other (Explain in Remarks)                               | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |   |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): 6"  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0"  
 Wetland Hydrology Present? Yes  No

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

Remarks: *▽6" - soil saturated to surface -*  
*sporadic ALGAL MATS on vegetation in low areas indications*  
*Recent LINE DIRECTION PAVING in depressions*  
*- OCCASIONAL FLOODING*

PARCEL/UNIT: LUSHBA - WET MEADOW 108-030-04  Parcel UNIT A		FIELD INSP DATE: 25 JAN 2007	TOTAL PARCEL AC:  66.1 Ac 37.7	
TOTAL WETLAND AC: PFS - 16.4 AC  Pem - 19.4 AC	OTHER WATER AC: 1.9 AC  UPLAND AC  28.4 AC	IMPACTS IN WETLAND AC:  0 AC	ENHANCEMENT AC: P-em 19.4 AC	PRESERVATION AC: PFS 16.4 AC UPLAND 28.4 AC
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent - wet meadow SEASONALLY SATURATED Ag PASTURE - GRAZED		LANDSCAPE POSITION: floodplain terrace	
	HYDROLOGY TYPE & DURATION:  <ul style="list-style-type: none"> <li>• very long duration</li> <li>• sub surface saturation</li> <li>• occasional flooding</li> </ul>			
	HYDRIC SOIL INDICATOR:  F6 Redox DARK Surface  No observed Ap  -sl @ 8" +		SOIL SURVEY MAP UNIT: Gellow SE 0-5 ft. FLUQUENTS 0-1 ft.	WETLAND/ UPLAND BOUNDARY:  Trous
Dominant Species * Common Species+ Juncus patens Trifolium Carex Alopecurus Vulpine Lotus corniculatus Juncus (onymoides?)		geranium Daisy patch Cirsium Juncus acutiflorus Conium Aster sp. Sedum sp.  Vicia Rubus Polygonum		NOXIOUS SPECIES:  None
				GROWTH FORM: Herbaceous

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

- N - agricultural / pasture
- E - creek, riparian habitat, ag. pasture
- W - riparian woodlands, shrubs, ag. pasture
- S - riparian woodlands, upland, ag. pasture

OBSERVED/INFERRED MODIFICATIONS:

- V - grazed, ag. pasture mostly reworked grasses  
no indication of intensive PASTURE MANAGEMENT
- S - NONE - may be SUBJECT TO FLOODING @ DEPOSITION  
sand layers below sil
- H - None - OCCASIONAL FLOODING -

CHARACTERIZATION:

riparian habitat, severely saturated  
ag. pasture, riparian. Occasional flooding  
@ evidence of large creek blow out on  
aerial photo.

COMMENTS:

- observed population of PL ho on Parcel  
but NOT IN UNIT
- No observed LI BA. Parcel NOT identified  
as LI BA habitat
- No Protect impacts @ IN UNIT or Parcel
- old creek Bed crossed Parcel, creek  
re-routed around Parcel. Creek has  
blown out levee and flooded Parcel  
in recent PAST.

<p>EXCLOSURE DESCRIPTION/ REFERENCE SITE</p>	<p>LUSDBZ - WET MEADOW 10E-030-04 25 JAN 204 UNIT A NONE</p> <div style="border: 1px solid black; padding: 5px;"> <p>SOIL SURVEY MAP UNIT: Gleadow SL 0-5% FLUVAQUATS 0-1%</p> </div>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>SOIL: NONE</p> <p>HYDROLOGY: NONE</p> <p>VEGETATION CLASS: emergent palustrine → 2 palustrine forested increase in water, grasses and forbs</p> <p>ESTIMATED SPECIES COMPOSITION CHANGE: increase in Juncus, Carex species some Quercus, Flammula</p> <p>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - removal of grazing, etc. management</p> <p>OTHER POTENTIAL ACTIONS: - debris removal - removal of fencing</p>

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

# Characterization

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

UNIT **B**

Project Site: LUSHER - FORESTED 108-030-04 City/County: Merced State: CA Sampling Date: 05/20/04

Applicant/Owner: CAITRAUS Section, Township, Range: \_\_\_\_\_

Investigator(s): DMC, H. D. W. (P.A., S.P.) Landform (hillslope, terrace, etc.): Floodplain terrace Local relief (concave, convex, none): Flat Slope (%): 1%

Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_

Soil Map Unit Name: Gelons 0-07 Fluvaquents 0-14 NWI classification: Pf/SS

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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel unit characterization. V/S/H observations reflect generalized components of wetland parcel unit</u>	

**VEGETATION - Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	_____	_____	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>Salix sp. (lasiolepis?)</u>	_____	_____	<u>FACW</u>	
3. <u>Quercus lobata</u>	_____	_____	<u>FAC</u>	
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
= Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. <u>Rubus</u>	_____	_____	<u>FACW</u>	
2. <u>Toxicodendron</u>	_____	_____	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is <3.0 <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
= Total Cover				
<b>Herb Stratum</b> (Plot size: _____)				
1. <u>Alopecurus</u>	_____	_____	_____	
2. <u>Rumex crispus</u>	_____	_____	<u>FAC</u>	
3. <u>Mentha pulegium</u>	_____	_____	<u>OBL</u>	
4. <u>Juncus patens</u>	_____	_____	<u>FAC</u>	
5. <u>Juncus oxymeris?</u>	_____	_____	<u>FACW</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
= Total Cover				
<b>Open Ground in Herb Stratum</b> _____				

<sup>5</sup> UNIT MAY be open to GLAZING BUT LITTLE INDICATION IT HAS GLEET ON VEGETATIVE STRUCTURE/SPECIES COMPOSITION

SOIL

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16"	10YR 4/1	70	7.5YR 4/6	50	C	PL/SM	Silt loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)            |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks) |
| <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 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: F-3 Depleted Matrix

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"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2)          | <input type="checkbox"/> Salt Crust (B11)   | <input type="checkbox"/> Drainage Patterns (B10)                           |
| <input checked="" type="checkbox"/> Saturation (A3)                | <input type="checkbox"/> Aquatic Invertebrates (B13)                              | <input type="checkbox"/> Dry-Season Water Table (C2)                       |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                               | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)         |
| <input checked="" type="checkbox"/> Sediment Deposits (B2)         | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input type="checkbox"/> Geomorphic Position (D2)                          |
| <input checked="" type="checkbox"/> Drift Deposits (B3)            | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input type="checkbox"/> Shallow Aquitard (D3)                             |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)               | <input type="checkbox"/> FAC-Neutral Test (D5)                             |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)                  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Other (Explain in Remarks)                               | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |   |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

Field Observations:

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): 6"  
 Saturation Present? Yes  No  Depth (inches): surface

Wetland Hydrology Present? Yes  No

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

Remarks:  
 - Standing water in swales and depressions  
 - VLD-SSS  
 - Area was subject to recent flooding

PARCEL/UNIT: <i>LUSTER - FORESTED 108-030-04</i> <b>UNIT B</b>	FIELD INSP DATE: <i>PS CAN 6/11</i>	TOTAL PARCEL AC: <b>66.1 AC</b>
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TOTAL WETLAND AC:	OTHER WATER AC:	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
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CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine forested, seasonally saturated @ occasional flooding.</i>	LANDSCAPE POSITION: <i>foodplain terrace</i>
----------------------------------	--	---

HYDROLOGY TYPE & DURATION:

- very long duration ponding
- *VD* subsurface saturation
- occasional flooding
- Area includes historic channel of outer creek  
Creek was re-aligned/diverted. Appears to occasionally jump level.

HYDRIC SOIL INDICATOR: <b>F3 - Deflated matrix</b>	SOIL SURVEY MAP UNIT: <i>Gleadow SL 0-5% FERRUGENOUS 0-1%</i>	WETLAND/UPLAND BOUNDARY: <i>trans.</i>	SLOPE & DRAINAGE: <i>1-2% N. 1/4 S. 1/4</i>
---	--	---	--

Dominant Species * Common Species+ <i>FRAXINUS Salix (various?) Tyrindobrya Rumex</i>	<i>possibly associated with small ACROSTIS sp</i>	NOXIOUS SPECIES: <b>NONE</b>
--	---	---------------------------------

GROWTH FORM:  
*Tree mixed with shrubs  
some understorey  
etc.*

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - creek with riparian woody, sparse agricultural parcels  
E - creek with riparian wooded, ag. parcels  
S - riparian woody, ag. parcels  
W - ag. parcel, railroad, creek, ag. parcel

OBSERVED/INFERRED MODIFICATIONS:

NONE - open for grazing?

CHARACTERIZATION:

potentially formed with seasonal flooding  
very long duration, low flow, low turbidity

COMMENTS:

- PL no population observed in unit.
- NO LI BA observed in Parcel. Parcel NOT identified as potential habitat.
- NO PROTECT IMPACTS IN Parcel

UNIT B

<p>EXCLOSURE DESCRIPTION/ REFERENCE SITE</p>	<p>Lusher Forest 102-031-04 25 day 2011</p> <p>NONE</p> <table border="1"><tr><td>SOIL SURVEY MAP UNIT:</td></tr><tr><td>Gibson SE 0-17</td></tr><tr><td>POUNDERS 0-17</td></tr></table>	SOIL SURVEY MAP UNIT:	Gibson SE 0-17	POUNDERS 0-17
SOIL SURVEY MAP UNIT:				
Gibson SE 0-17				
POUNDERS 0-17				
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>SOIL: NONE</p>			
	<p>HYDROLOGY: NONE</p>			
	<p>VEGETATION CLASS: <i>placidy at successional, mature stage.</i></p>			
	<p>ESTIMATED SPECIES COMPOSITION CHANGE: <i>? - very little change</i></p>			
	<p>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:</p> <p>-NONE</p>			
	<p>OTHER POTENTIAL ACTIONS: <i>remove fence</i></p>			

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

MGC PLASMA Middle - 103-250-14 27.0 AC



# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: MGC Plasma Middle City/County: Maricopa Sampling Date: Jan 4, 2010  
 Applicant/Owner: CALTRANS State: AZ Sampling Point: PARCEL BASELINE  
 Investigator(s): D. Mando KG/SZ/RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLAT BASE of Slope Local relief (concave, convex, none): FLAT Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: PAM

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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	
Remarks: <u>PARCEL CHARACTERIZATION. V/S/H OBSERVATIONS REFLECT GENERALIZATION OF WETLAND COMPONENT OF PARCEL</u>		

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Prevalence Index worksheet:</b>				
Total % Cover of: _____ Multiply by: _____				
OBL species _____ x 1 = _____				
FACW species _____ x 2 = _____				
FAC species _____ x 3 = _____				
FACU species _____ x 4 = _____				
UPL species _____ x 5 = _____				
Column Totals: _____ (A) _____ (B)				
Prevalence Index = B/A = _____				
<b>Hydrophytic Vegetation Indicators:</b>				
___ Dominance Test is >50%				
___ Prevalence Index is ≤3.0 <sup>1</sup>				
___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)				
___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks: Appears to be lightly used to abandoned pasture. Portions of wetlands begin as seeps on hillside and becomes shallow standing water on flat ground. Depressional areas have VLD ponding. Horses in ADS pasture.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR3/1	95	7.5YR4/6	5	C	PL	silty clay loam with 15% gravel	

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

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p><b>Restrictive Layer (if present):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>

Hydric Soil Present? Yes  No

Remarks: DARK Redox surface @ Redox. Gravelly inclusions on upper profile. Soil may have be leveled/Gleaded? No recent sp.

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><b>Primary Indicators (minimum of one required; check all that apply)</b></p> <p><input checked="" type="checkbox"/> Surface Water (A1)</p> <p><input checked="" type="checkbox"/> High Water Table (A2) @ 6" - rising to 3"</p> <p><input checked="" type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><b>Secondary Indicators (2 or more required)</b></p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	
<p><b>Field Observations:</b></p> <p>Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0"-2"</p> <p>Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0"</p> <p>Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0"</p>		<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	

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

Remarks: surface - depression storage  
 FLAT SOILS AT BASE OF slope has surface water. An ineffective ditch channelized surface water towards NW AT BASE of slope. L to UL duration surface water @ SATURATION @ SURFACE

PARCEL/UNIT: <i>MGC PLASMA - Middle</i>			FIELD INSP DATE: <i>January 4, 2011</i>	TOTAL PARCEL AC: <i>27.0 ac</i>	
TOTAL WETLAND AC: <i>2.5 ac</i>	OTHER WATER AC: <i>0</i> <i>UPLAND</i> <i>24.5 ac</i>	<i>Pem - 2.5 ac</i>	IMPACTS IN WETLAND AC: <i>0 ac</i>	ENHANCEMENT AC: <i>2.5 ac</i>	PRESERVATION AC: <i>24.5 ac</i> <i>UPL</i>
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>- Palustrine emergent, wet meadow/ seep</i> <i>- Veg on this parcel may reflect extreme long dry season effects</i>		LANDSCAPE POSITION: <i>flats at low of slope;</i> <i>rely blind water/overland flow</i>		
HYDROLOGY TYPE & DURATION: <i>- Long to very long duration</i> <i>- shallow surface ponding, sheet flow across wetland from seep</i> <i>- subsurface saturation: 0-3'</i>					
HYDRIC SOIL INDICATOR: <i>F6 - redox dark surface</i> <i>chroma 570 [redox]</i> <i>w/ granule inclusions</i>		SOIL SURVEY MAP UNIT:	WETLAND/ UPLAND BOUNDARY: <i>abrupt</i> <i>episymples</i> <i>change on</i> <i>and from</i> <i>gradual.</i>	SLOPE & DRAINAGE: <i>40-120</i> <i>PARTIALLY</i> <i>DESIGNED</i> <i>by</i> <i>ditch -</i> <i>water spread</i> <i>out over</i> <i>low surface</i> <i>(comments)</i>	
Dominant Species * Common Species+ <i>Heteropogon hystrix*</i> <i>Phalaris Navataca</i> <i>Hypochaeris Radicata</i> <i>Thlasium sp</i> <i>MADIA (STUNTED)</i> <i>Lolium pectinif</i> <i>Juncus patens</i> <i>Mentha pulegium</i>			+ <i>Limnanthes sp</i> <i>Ranunculus</i> <i>Agrostis</i> <i>GRAMIN</i> <i>Phytolacca</i>  <i>- wetter end species found in deep pond (abandoned stock pond?)</i>		
			NOXIOUS SPECIES: <i>NONE</i> <i>Identified</i>		
			GROWTH FORM: <i>herbaceous</i>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

washed 45% slopes to east  
open field to south, west, north

OBSERVED/INFERRED MODIFICATIONS:

drainage ditch that has been placed on west of the roadway  
Ditch provides ineffective drainage and turns into sheet flow/  
shallow ponding across wetland area adjacent to  
horse pasture.

Abandoned or lightly grazed (<sup>CATTLE</sup> horses?) pasture. Pasture grows  
on upland portion of parcel

CHARACTERIZATION:

Disturbed fallow field - evidence of ineffective  
drainage. Broad areas of surface sheet flow  
portions of which were identified as wetlands  
during delineation. An abandoned excavation (stock  
pond?) has deep extended ponding.

COMMENTS:

- WATER ACCUMULATES from this side seeps + subsurface  
through flow? AT BASE of slope AND RUNS OVER LOW  
AREAS of surface. Some of the water surface flows  
into adj. horse pasture. Lack of slope and broad  
low areas allow L-VL direction shallow ponding.

- duration of saturation and available water may NOT  
extend into the dry season. soil may be extremely  
dry and exposed to summer sun / desiccation.

- Plant development may be restricted to annuals,  
shallow rooted perennials may NOT be able to  
tolerate dry season.

- This parcel has a small percentage of wetlands.  
A large upland field (fallow?) may NOT have  
suitable soil conditions for wetland creation.

MS6 Plasma Middle

EXCLOSURE DESCRIPTION/ REFERENCE SITE

NONE - ADJACENT HORSE PASTURE HAS MORE THATCH BUT IS HEAVILY DISTURBED.

SOIL SURVEY MAP UNIT:

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: INTACT - GRAVELLY CLAY LOAM - MAY HAVE BEEN SOME HISTORIC GRADING? DOES NOT APPEAR TO POLE WELL

HYDROLOGY: SEEPAGE, SUBSURFACE FLOW AT BASE OF HILL, TURNING INTO SURFACE SHED FLOW ACROSS BROAD SHALLOWLY PAVED SWALE INTACT.

VEGETATION CLASS: PALUSTRINE emergent seasonally saturated Ag field may NOT change to another wetland type @ REMOVAL OF VEG/AG MANAGEMENT. MAY ALREADY HAVE HAD MANAGEMENT REMOVED.

ESTIMATED SPECIES COMPOSITION CHANGE: Little to no change @ Ag removal.

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: PASSIVE MANAGEMENT ACTIONS (REMOVAL OF GRAZING) MAY NOT CHANGE EXISTING WETLAND TYPE. ACTIVE MODIFICATIONS MAY BE POSSIBLE INCLUDING DRAINAGE OF DEPRESSIONS CAPABLE OF STORING WATER PROMOTING VLD PONDING/SATURATION AND POTENTIAL HABITAT FOR PLETHORUS AND LIMNANTHUS. LIMITED OPTIONS.

OTHER POTENTIAL ACTIONS: - MAY BE GOOD AREA FOR LIMNANTHUS ESTABLISHMENT; WOULD NOT HAVE ISSUE W/ SEDIMENTATION OF POOLS - DOES NOT FLOOD, - FENCE REMOVAL

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

MGC PRASMA NORTH 103-230-06

18.2 AC



# Characterization

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: MCC Pleasanton North 103-230-06 City/County: Merced Sampling Date: Jan. 4, 2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: PARCEL BASELINE  
 Investigator(s): DM KG/SZ/RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Base of hillslope/ Local relief (concave, convex, none): Slope Slope (%): 0-2%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: gallup silt-clay, clear with clay 0-2% / calc clay 0-2% NWI classification: Pem-sb-a1  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel characterization. V/S/H observations reflect generalized wetland component of parcel</u>	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus lobata</u>	_____	_____	<u>Fac</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. <u>Juncus perenne</u>	_____	_____	<u>FAC</u>	___ Dominance Test is >50%
2. <u>Juncus tenuis</u>	_____	_____	<u>FACW</u>	___ Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Mentha arvensis</u>	_____	_____	<u>OBL</u>	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>Panicum sp (syrphoides?)</u>	_____	_____	<u>FACW</u>	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>Lycium hyssopifolium</u>	_____	_____	<u>FACW?</u>	
6. <u>Ranunculus</u>	_____	_____	<u>FACW?</u>	
7. <u>Trifolium sp</u>	_____	_____	<u>FAC?</u>	
8. <u>Astragalus dominicanus</u>	_____	_____	<u>FAC</u>	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		

Remarks: Grazed Pasture - wetter portions of parcel are associated @ shallow drainage borders. check vegetation changes across UPL/wetland boundaries

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12"	10YR3/1	90	7.5YR2 1/2	10	C	PL/PF	clayey	- clay loam w/ no granules

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

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

<p><b>Restrictive Layer (if present):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Remarks: 10-90 10YR4/1 depletions  
 - soil saturated 0-3"  
 - water is moving down ped faces due to added w/c saturation

ARGILLIC HORIZON @ 14+ " IN SOIL SAMPLED IN UPLAND

**HYDROLOGY**

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

<p><b>Field Observations:</b></p> <p>Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0-1"</p> <p>Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0"</p> <p>Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0"</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: water is seeping in at soil pt; VLD-SSS and shallow ponding in relative depressions and surface sheet flow downslope. Water collects in shallow drainage ditches and flows into Goss. Ditch runs along S at edge of parcel.

PARCEL/UNIT: MSL Plasma North 103-230-06	FIELD INSP DATE: Sunday 9/20/04	TOTAL PARCEL AC: 18.2 AC
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TOTAL WETLAND AC: 4.0 AC	OTHER WATER AC: 0 AC JPL 14.2 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 4.2 AC	PRESERVATION AC: 14.2 AC JPL
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CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: Disturbance emergent, wet meadow CREATIC THES	LANDSCAPE POSITION: slope 0-5% edge of steep(er) ALLUVIUM TO E (9%15%)
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HYDROLOGY TYPE & DURATION:

- very long duration, subsurface saturation
- 0-2" surface depression storage
- Two cut ditches draining water @ S edge and near center. water entering from up slope and distributes some of the water over the parcel
- Series of ditches/swales across property, mostly parallel and moving SW SITE

HYDRIC SOIL INDICATOR: F6 - Redox dark surface - distinct Argillic horizon found in upland part adjacent to mapped wetland	SOIL SURVEY MAP UNIT: Gessow cl 0-5" clay loam clay 0-2" Coke cl 0-2"	WETLAND/UPLAND BOUNDARY: transitional wooded to forest	SLOPE & DRAINAGE: 0-2%
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Dominant Species * Common Species+ Lolium perenne, Juncus tenuis, Najas Gadalia juncea sp. Juncus bispinosus, Thyphlocha Festuca strobilacea Noltemia lutea Mylodon Plantago	NOXIOUS SPECIES: NONE
	GROWTH FORM: herbaceous certain trees

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

east - pasture, ag. field  
north - open ag. fields  
west - combi. wood lot/pasture  
south - open ag. fields

OBSERVED/INFERRED MODIFICATIONS:

S - (good potential for oxidation  
aquifer close to surface of upland area - 10")  
no observed  $A_p$

H - dug drainage ditches at middle / to enhance surface drainage & prevent  
- VLD SSS and shallow ponded / flooded areas in depressions / swales

V - GRAZED PASTURE - winter and non-grasses in swales / depressions

CHARACTERIZATION:

GRAZED PASTURE @ very low duration sub surface  
SATURATION on unmodified hydrolic SSS. Two formed  
Flowing ditches enter property from the E (upslope). Numerous  
ditches / swales cut of parcel surface to distribute  
WATER OF SURFACE sheet flow probably for GRASS  
MANAGEMENT.

COMMENTS:

- Small population of Li BA identified on Parcel.
- Parcel identified as potential Li BA HABITAT
- No <sup>project</sup> IMPACTS on Parcel
- CHEMICAL POTENTIAL on Parcel
- P<sub>1</sub> ho populations identified on  
Parcels to W (Goss), small population on MGC-N

Appears historic attempts to redirect water for  
surface sheet IRRIGATION on shallow slopes.  
ditches / swales in various states of  
ABANDONMENT.

M3C Plasma North

EXCLOSURE DESCRIPTION/ REFERENCE SITE	<p>southern parcel up near (PLASMA) on clear lake clay same soil as SW corner of MGC-N.</p> <p>ERATIC Pines on Geilow s-l on MGC-N AND Pf AREA on Goss on same soil UNIT.</p> <p>SOIL SURVEY MAP UNIT: Geilow s-l 0-5% clear lake clay 0-2% cole cl 0-2%</p>
DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:	SOIL: NONE -
	HYDROLOGY: ? drainage ditches removing potential to retain/predict surface water
	VEGETATION CLASS: • Disturbance emergent → wet meadow • ERATIC Pines
	ESTIMATED SPECIES COMPOSITION CHANGE: GRASS/FORB Herbaceous likely to shift to a wooded overstory @ Qu la + Fr la and Robus, Junus, Alex etc as understorey.
	MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: • Remove GRazing and VEGETATION/Hydrology MANAGEMENT • ALLOW VEGETATION SUCCESSION.  • water in ditches could be Redirected to sheet flow over site / extend hydroperiod for Ponding/flooding
	OTHER POTENTIAL ACTIONS: • Remove fencing • Potential cleatun - available water in Inches / ARSIC horizon close to surface in uplands.

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

Nance 108-050-06

73.9 ac



CHARACTERIZATION

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

108-050-06

Project/Site: WADCE - Wet Meadow - A City/County: VENTUCLAW Sampling Date: 14 JAN 2011  
 Applicant/Owner: CACTEADS State: CA Sampling Point: PARCEL BASELINE  
 Investigator(s): DU, KG, ... / S2 RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): BASIN / FloodPLAIN Local relief (concave, convex, none): slope Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: HALCAmpts / Cole cl NWI classification: Pen  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>PARCEL UNIT CHARACTERIZATION. V/S/H observations reflect generalization of wetland component of Parcel Unit</u>			

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>carex (muhlenbergii)?</u>	_____	_____	<u>OBL</u>	
2. <u>Junco (caeruleus)?</u>	_____	_____	<u>OBL</u>	
3. <u>Linum catharticum</u>	_____	_____	<u>OBL</u>	
4. <u>Limnolobos bakii</u>	_____	_____	<u>OBL</u>	
5. <u>Mentha arvensis</u>	_____	_____	<u>OBL</u>	
6. <u>Lythrum hyssagifolium</u>	_____	_____	<u>FACW</u>	
7. <u>Rumex crispus</u>	_____	_____	<u>FACW</u>	
8. <u>Festuca arundinacea</u>	_____	_____	<u>FAC</u>	
9. <u>Ranunculus sp</u>	_____	_____	<u>FACW?</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				

Remarks: PARCEL UNIT GRAZED BUT DOES NOT SUPPORT PASTURE GRASSES.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10"	10 YR 7/1	70	9.5 YR 4/2	30	C	PL/SM	loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<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)		

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: Redox DARK SURFACE - No Ap  
 No obvious or recent soil manipulations

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 10-30"

Water Table Present? Yes  No  Depth (inches): surface

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

Wetland Hydrology Present? Yes  No

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

Remarks: slightly uneven ground from the parked area, influence of subsurface water table, & surface parking.  
 - surface mounds in relative depressions  
 - may be sub-surface seep zone from upslope area

PARCEL/UNIT: <i>Wetland Wet meadow UNIT A</i>  <i>108-050-06</i>		FIELD INSP DATE: <i>14 JAN 2011</i>	TOTAL PARCEL AC:  <i>73.9 AC</i>	
TOTAL WETLAND AC:  <i>70.1 AC</i>	OTHER WATER AC:  <i>• 2</i> <i>JPL</i> <i>3.2 AC</i>	IMPACTS IN WETLAND AC:  <i>One</i>	ENHANCEMENT AC:  <i>9.4 AC</i> <i>Sludge</i>	PRESERVATION AC:  <i>3.2 AC UP</i> <i>• 2 AC DOWN</i> <i>4.3 AC P</i> <i>meadow</i>
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine emergent P-em</i> <i>seasonally saturated -</i> <i>UNIT GRAZED BUT PLANTS UNMANAGED</i> <i>OR MANAGEMENT INEFFECTIVE</i>		LANDSCAPE POSITION: <i>BASIN</i> <i>Flood Plain Terrace</i>	
HYDROLOGY TYPE & DURATION:  <i>• very long duration, surface ponding / sheet flow over surface</i> <i>• subsurface saturation - VLD</i> <i>• occasional flooding - ADJACENT TO LARGE POND AREA</i>				
HYDRIC SOIL INDICATOR:  <i>F6 - Redox DARK SURFACE</i>  <i>• NO Ap . NO APPARENT SOIL MANIPULATION.</i> <i>• May be Seep Zone @ subsurface WATER SURFACING AND FLOWING OVER SURFACE</i>		SOIL SURVEY MAP UNIT:  <i>cole cl</i> <i>0-2%</i>  <i>Hapludox II</i> <i>0-1%</i>	WETLAND/ UPLAND BOUNDARY:  <i>transitory</i> <i>TO</i> <i>UPslope</i> <i>ADJ-WETLAND</i>  <i>ADJACENT AT</i> <i>TRI-STATELY</i> <i>BEAM</i>	SLOPE & DRAINAGE:  <i>1-2%</i> <i>downflow</i> <i>to west</i>
Dominant Species * Common Species+  <i>Carex (noveboracensis)?</i> <i>Juncus balticus</i> <i>L. maculosa</i>  <i>Mentha filiformis</i> <i>L. sp. 1</i> <i>Rumex crispus</i> <i>Festuca ALUNDINACEA</i>  <i>L. canadensis</i> <i>Ranunculus sp</i>			NOXIOUS SPECIES:  <i>ADNE</i>	
			GROWTH FORM:  <i>meadow</i>	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

E - ag. pasture  
W - seasonally ponded, emergent, ag. pasture  
NW - Riparian woodland, ag. pasture  
S - ag. pasture.

OBSERVED/INFERRED MODIFICATIONS:

- V → grazing, EXISTING PLANT COMMUNITY IS EITHER NOT MANAGED BY PLANTING OR EFFORTS ARE INEFFECTIVE.
- S → No obvious modification
- H → No obvious modification

CHARACTERIZATION:

palustrine emergent - wet meadow that has some grazing but too wet for veg. management.  
- probably good for vernal pool management  
- extended surface water + SSS may keep site from supporting FAC type PASTURE GRASSES.

COMMENTS:

- observed Populations of Li BA  
No observed PL ho.
- Portions of UNIT NOT IDENTIFIED AS OBSERVED OCCURRENCE WAS IDENTIFIED AS POTENTIAL HABITAT
- extended wetness of site may make this parcel UNIT AN IMPORTANT Li BA UNIT.
- No PROTECT IMPACTS @IN parcel.

name wet meadow A 14 JUN 201 108-050-06

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

ADJACENT PAVED TO N of Paved unit has woodland cover  
but may have management - FR la.

SOIL SURVEY MAP UNIT:

cole cl 0-27.  
Hopl rpts 0-1%

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY:

NONE. surface of UNIT @ shallow standing  
water probably from subsurface seepage.

VEGETATION CLASS:

currently Pem seasonally saturated agricultural  
pasture (GRAZED). Mostly dominated by obl species  
@ little evidence of locally common AG  
GRASSES.

ESTIMATED SPECIES COMPOSITION CHANGE:

removal of grazing may influence some shift in  
species (↑ Fraxinus). However already too wet  
for ag. veg. management.  
ADJACENT PAVED TO N ON SIMILAR SIC UNIT @ FR la.

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- removal of grazing
- Allow successional plant development

OTHER POTENTIAL ACTIONS:

- debris removal
- Riparian plantings adjacent to belly Creek (plantings would be  
in wetlands)

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

# CHARACTERIZATION

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

108-050-06 *seasonally/intermittent*

Project/Site: Nance - (Mixed Marsh) Parcel - B City/County: Menard Sampling Date: 11/14/07  
 Applicant/Owner: CACTRAUS State: CA Sampling Point: Parcel Baseline  
 Investigator(s): DM/KG/BJ RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): BASIN/FLOODPLAIN Local relief (concave, convex, none): CONCAVE Slope (%): 0-1  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: colb cl o-2y. HAPLAQUATS 0-1x. NWI classification: Pem

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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Parcel Unit Characterization. V/S/H observations reflect generalization of wetland component of Parcel Unit.</u>			

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation. ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants <sup>1</sup> ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Juncus balticus?</u>	_____	_____	<u>OBL</u>	
2. <u>Alliaria parviflora-ADULTA</u>	_____	_____	<u>OBL</u>	
3. <u>Thymus latifolia</u>	_____	_____	<u>OBL</u>	
4. <u>Rubus crispus</u>	_____	_____	<u>FACW</u>	
5. <u>Mentha arvensis</u>	_____	_____	<u>OBL</u>	
6. <u>Carex vulpina</u>	_____	_____	<u>OBL</u>	
7. <u>Desmodium illinoense</u>	_____	_____	<u>OBL</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ = Total Cover				

Remarks: Parcel Unit grazed but does not support pasture grass.

SOIL

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-	10 YR 7/1	70	7.5 YR 8/6	30	C	CO/SM	clay loam	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> <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 checked="" 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)		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <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)
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<sup>3</sup>Indicators 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: Redox dark surface

HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<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  Depth (inches): 3" - 24" +

Water Table Present? Yes  No  Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0

Wetland Hydrology Present? Yes  No

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

Remarks: very long duration ponding w/algae  
 • may be perennially saturated - sub surface seepage.

PARCEL/UNIT: <b>NAVCE - seasonally ponded area B</b> <b>108-050-06</b>	FIELD INSP DATE: <b>14 JAN 2011</b>	TOTAL PARCEL AC:
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TOTAL WETLAND AC:	OTHER WATER AC:	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
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CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <b>Palustrine emergent Seasonal (Relennial?) SATURATION / ponded. - UNMGT GRAZED @ UNMANAGED OR INEFFECTIVE PASTURE GRASS MANAGEMENT</b>	LANDSCAPE POSITION: <b>floodplain terrace basin - relative depression @ VLD ponding.</b>
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HYDROLOGY TYPE & DURATION:

- Very long duration surface ponding / perennially ponded
- subsurface saturation VLD to Relennial
- part of lake - currently flooded 3-24" +
- STORAGE of upslope on-farm AND SURFACE sheet flow ALONG seepage zone.

HYDRIC SOIL INDICATOR: <b>P6 - Redox DARK Surface</b>	SOIL SURVEY MAP UNIT: <b>Cole c1 0-2%</b> <b>Hapludusts 0-1%</b>	WETLAND/ UPLAND BOUNDARY: <b>transition</b>	SLOPE & DRAINAGE: <b>0-1% shalt flats North (Bany creek)</b>
--	--	--	---

Dominant Species * Common Species+ ↓ <b>Juncos Allium Typha Ranunc M. sp. Carex vrb.</b>	→ <b>Trifolium Limonium Camassia</b>	NOXIOUS SPECIES:  <b>None</b>
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GROWTH FORM: <b>Herbaceous</b>
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CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

S - Agr. Pasture  
N - Riparian woodland, agr. pasture, ponding  
W - creek w/ riparian trees, agr. pasture  
E - Agr. Pasture

OBSERVED/INFERRED MODIFICATIONS:

- ✓ - grazing. Existing Plant Community is established  
not managed by PLANTING or efforts are ineffective.
- S - No obvious modification.
  - H - No obvious modification - possible a historic channel  
at base of slope to capture seepage.

CHARACTERIZATION:

- palustrine emergent - currently ponded, sheet flow  
surface to the North. Grazed area but too wet  
for veg. management.
- may be perennial ponded/sub surface saturation - very wet.

COMMENTS:

- Most of this unit was not observed to have  
populations of Li BA or Pl ho. (maybe too wet)
- Unit identified as Li BA potential habitat.
- No Protect impacts @ in parcel
- extended ponded condition supporting aquatic  
species (Alisma, Typha)

<p>EXCLOSURE DESCRIPTION/ REFERENCE SITE</p>	<p>NANCE - seasonally flooded B 14 JAW 2011 108-050-06</p> <p>NONE</p> <div style="border: 1px solid black; padding: 5px;"> <p>SOIL SURVEY MAP UNIT:</p> <p>Col d 0-21.</p> <p>Haplaxypis 0-17.</p> </div>
<p>DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:</p>	<p>SOIL: NONE</p>
	<p>HYDROLOGY: NONE</p>
	<p>VEGETATION CLASS: palustrine emergent seasonally flooded/drowned - supports obl aquatic species.</p>
	<p>ESTIMATED SPECIES COMPOSITION CHANGE:</p> <p>? None - wet enough to have mostly Juncos dominated plant community, ALISMA, TY/VA.</p>
	<p>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:</p> <ul style="list-style-type: none"> <li>• remove grazing</li> <li>• allow successional plant development however, hydroperiod is sufficiently long enough to support obl aquatics. Not likely to change.</li> </ul>
	<p>OTHER POTENTIAL ACTIONS:</p> <ul style="list-style-type: none"> <li>• removal of unnecessary structures</li> </ul>

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

# Characterization

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

Project/Site: NANCE 108-050-06 UNIT C City/County: MEUNOCUINO Sampling Date: 13 JAN 2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Parcel unit baseline  
 Investigator(s): DM KG/SZ/RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Food Court Terrace Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: cole c2 0-2% Hydromorps 0-1% NWI classification: Pem  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	
Remarks: <u>Parcel unit characterization. V/S/H observations inferred from adjacent parcel. unable to access parcel unit.</u>		

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
= Total Cover				
<b>Herb Stratum</b> (Plot size: _____)				
1. <u>ALYSSUM PROSTRATUM</u>	_____	_____	<u>OBL</u>	
2. <u>RANUNCULUS ALBOLAPIDATUS</u>	_____	_____	<u>FACW</u>	
3. <u>COMASSIA QUAMASH</u>	_____	_____	<u>OBL</u>	
4. <u>POA PALUSTRIS</u>	_____	_____	<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
<b>% Bare Ground in Herb Stratum</b> _____ = Total Cover				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____				

Remarks: Vegetation estimated from adjacent parcels, delineation done and aerials. Site not accessible. Likely mowed and grazed.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16"	10YR4/2	80	2.5YR4/8	20%	C	SM	scd	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)                  |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     | <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 | <input type="checkbox"/> Other (Explain in Remarks)       |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" 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)                   |   |
- <sup>3</sup>Indicators 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: SPA9 JAN 08 JD SUBMITAL

**HYDROLOGY**

**Wetland Hydrology Indicators:**

- |   |   |  |
|---|---|--|
| <b>Primary Indicators (minimum of one required; check all that apply)</b> |   | <b>Secondary Indicators (2 or more required)</b>                           |
| <input type="checkbox"/> Surface Water (A1)                               | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2)                 | <input type="checkbox"/> Salt Crust (B11)   | <input type="checkbox"/> Drainage Patterns (B10)                           |
| <input checked="" type="checkbox"/> Saturation (A3)                       | <input type="checkbox"/> Aquatic Invertebrates (B13)                              | <input type="checkbox"/> Dry-Season Water Table (C2)                       |
| <input type="checkbox"/> Water Marks (B1)                                 | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                               | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)         |
| <input type="checkbox"/> Sediment Deposits (B2)                           | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input type="checkbox"/> Geomorphic Position (D2)                          |
| <input type="checkbox"/> Drift Deposits (B3)                              | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input type="checkbox"/> Shallow Aquitard (D3)                             |
| <input type="checkbox"/> Algal Mat or Crust (B4)                          | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)               | <input type="checkbox"/> FAC-Neutral Test (D5)                             |
| <input type="checkbox"/> Iron Deposits (B5)                               | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)                  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                         | <input type="checkbox"/> Other (Explain in Remarks)                               | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)        |   |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)          |   |  |

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): 4"  
 Saturation Present? Yes  No  Depth (inches): 1"  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks: SPA9 JAN 08 JD SUBMITAL

UNIT C

PARCEL/UNIT: Nance 108-050-06 UNIT C		FIELD INSP DATE: 26 JAN 11	TOTAL PARCEL AC: 73.9 AC	
TOTAL WETLAND AC:	OTHER WATER AC: - 2 AC	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: P em seasonally saturated AG PASTURE (Hayed + Grazed)		LANDSCAPE POSITION: Food Plain Terrace	
	HYDROLOGY TYPE & DURATION: • Very long duration sub surface saturation • occasional flooding			
HYDRIC SOIL INDICATOR: F3 - Depleted Matrix		SOIL SURVEY MAP UNIT: Co. cl 0-2% Hyplaqupts 0-1%	WETLAND/UPLAND BOUNDARY: TRANSITIONAL	SLOPE & DRAINAGE: 0-1%
Dominant Species * Common Species+ Alphaculus Rumex Poa CAMASSIA			NOXIOUS SPECIES: None	
			GROWTH FORM: herbaceous	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N, S, E, W - open AG PASTURES

OBSERVED/INFERRED MODIFICATIONS:

V - No grass for Hay + Grazing

S - None

A - None

CHARACTERIZATION:

Per Seasonally saturated Ag pasture @  
Haying + grazing on intact hydric soil  
and historically modified hydrology

COMMENTS:

- Also Area of Li bx identified on  
Parcel UNT. Remainder of unit  
identified as potential habitat
- No PL ha populations identified on site
- No PHOTOT impacts identified on site

UNIT C

EXCLOSURE DESCRIPTION/ REFERENCE SITE	None							
DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:	<table border="1"><tr><td>SOIL SURVEY MAP UNIT: colu cl 0-2% Hapludops 0-1%</td></tr><tr><td>SOIL: None</td></tr><tr><td>HYDROLOGY: None</td></tr><tr><td>VEGETATION CLASS: P em Ag pasture HAY + GRAZING</td></tr><tr><td>ESTIMATED SPECIES COMPOSITION CHANGE: - Preliminary GRASS species composition change - Possible FLOXINUS/Orders</td></tr><tr><td>MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - Remove Ag management HAY + GRAZING - ALL VEGETATION successional development</td></tr><tr><td>OTHER POTENTIAL ACTIONS: - Remove fencing</td></tr></table>	SOIL SURVEY MAP UNIT: colu cl 0-2% Hapludops 0-1%	SOIL: None	HYDROLOGY: None	VEGETATION CLASS: P em Ag pasture HAY + GRAZING	ESTIMATED SPECIES COMPOSITION CHANGE: - Preliminary GRASS species composition change - Possible FLOXINUS/Orders	MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - Remove Ag management HAY + GRAZING - ALL VEGETATION successional development	OTHER POTENTIAL ACTIONS: - Remove fencing
SOIL SURVEY MAP UNIT: colu cl 0-2% Hapludops 0-1%								
SOIL: None								
HYDROLOGY: None								
VEGETATION CLASS: P em Ag pasture HAY + GRAZING								
ESTIMATED SPECIES COMPOSITION CHANGE: - Preliminary GRASS species composition change - Possible FLOXINUS/Orders								
MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - Remove Ag management HAY + GRAZING - ALL VEGETATION successional development								
OTHER POTENTIAL ACTIONS: - Remove fencing								

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

NIESEN 108-040-02

27.4 AC



# CHARACTERIZATION

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

Project/Site: NIESEN 108-040-02 City/County: MENDOCINO Sampling Date: 12 JAN 2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: REGUL BASELINE  
 Investigator(s): A.M.G. DW/SZ, RP-JIMMIE Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain terrace Local relief (concave, convex, none): flat Slope (%): 1-2  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: cole clay loam 0% - 2% caliche 0-5% NWI classification: Pen  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Partial characterization. V/S/H observations reflect generalization of wetland component of parcel</u>			

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
= Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
= Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Nardococcus sp</u>	_____	_____	<u>OBL</u>	
2. <u>Mentha pulchrum</u>	_____	_____	<u>OBL</u>	
3. <u>Ranunculus sp</u>	_____	_____	<u>FACW</u>	
4. <u>Lytocarpus hirsutus</u>	_____	_____	<u>FACW</u>	
5. <u>Poa annua</u>	_____	_____	<u>FAC</u>	
6. <u>Lolium complanatum</u>	_____	_____	<u>FAC</u>	
7. <u>Trifolium repens</u>	_____	_____	<u>FACW</u>	
8. <u>Phalaris amabilis</u>	_____	_____	<u>OBL</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum _____				
= Total Cover				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				

Remarks: GRAZED PASTURE - parcel NOT GRAZED SINCE LAST GROWING SEASON.

SOIL

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/1	80	7.5 YR 9/6	20	C	PL/SM	clay loam	pore frags, soft masses

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

<b>Hydric Soil Indicators:</b> (Applicable to all LRRs, unless otherwise noted.)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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 checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" 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)

<sup>3</sup>Indicators 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: Redox DARK SURFACE - No developed A or APPARENT Ap.  
 No INDICATIONS of EXTENSIVE SOIL MANIPULATIONS.

HYDROLOGY

**Wetland Hydrology Indicators:**

<b>Primary Indicators</b> (minimum of one required; check all that apply)	<b>Secondary Indicators</b> (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

**Field Observations:**

Surface Water Present? Yes  No \_\_\_\_\_ Depth (inches): 0-6"

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

Saturation Present? Yes  No \_\_\_\_\_ Depth (inches): surface

(Includes capillary fringe)

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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

Remarks: saturated through ped faces due to P clay coated in soil.  
 Relative depressions and swales @ shallow water 0-6" deep.  
 Surface sheet flow to N.  
 Parent NOT likely to experience generalized flooding

PARCEL/UNIT: Niesen 108-040-02	FIELD INSP DATE: 12 JAN 2011	TOTAL PARCEL AC: 27.4 ac
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TOTAL WETLAND AC: 19.4 ac	OTHER WATER AC: .5 ac Pen 18.8 ac 7.5 ac	IMPACTS IN WETLAND AC: 11.4 ac Pen 107.0 ac 1.1 ac/R	ENHANCEMENT AC: 7.4 Pen	PRESERVATION AC: Pt - .6 ac .5 ac OW 6.4 ac R
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CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent; wet meadow SEASONALLY SATURATED  historic managed agricultural pasture with grazing	LANDSCAPE POSITION: floodplain terrace -
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HYDROLOGY TYPE & DURATION: <sup>sub surface SATURATION</sup>  
 major state is very long duration with depression areas and swales having standing water up to 4-6" in deeper areas -  
 excess water sheet flows to W  
 direct ppt + run on - NOT likely to flood

HYDRIC SOIL INDICATOR: E6 DARK brown surface No developed A or evidence of Ap	SOIL SURVEY MAP UNIT: Cole clay loam 0-2% Geylow sl 0-5%	WETLAND/UPLAND BOUNDARY: Transitional ON FLAT chance ABlypt ADJACENT TO FILL Pond	SLOPE & DRAINAGE: 1-2% drainage to N-NW surface water sheet flow in swale-central portion of parcel
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Dominant Species * Common Species+ Alopecurus Mentha Ranunculus Lythrum Festuca Lotus Trifolium Junco (eximus?)  Relative to other more managed parcels this parcel has more species diversity.	<ul style="list-style-type: none"> <li>- Juncus</li> <li>- Acrostis</li> <li>- Bidens</li> <li>- Cirsium</li> <li>- Galium</li> <li>- Geranium</li> <li>- Glehnia</li> <li>- Juncus</li> <li>- Senecio</li> <li>- Pteropogon</li> <li>- Eryngium</li> <li>- Helianthus</li> <li>- Malva</li> <li>- Phalaris arundinacea</li> <li>- Rubus</li> <li>- Taraxacum</li> <li>- Allium</li> <li>- Mentha</li> <li>- Ranunculus</li> <li>- Rumex</li> <li>- Lactuca scariola</li> <li>- Galium</li> <li>- Taraxacum</li> <li>- Hordeum hybrid</li> <li>- Limnolobos</li> </ul>
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NOXIOUS SPECIES:  
None

GROWTH FORM:  
Herbaceous

CURRENT CIRCUMSTANCE DESCRIPTION

SURROUNDING PARCELS:

N: agriculture pasture  
E: railroad tracks, creek, then open pasture  
W: 101 and 4570 slope oak/fir Hill  
S: agricultural pasture

OBSERVED/INFERRED MODIFICATIONS:

S: NONE

H: NONE

V: Historically grazed, veg. management that has been removed. Since last growing season. PASTURE GRASSES disappearing in wetter swales/depressions.

IN SWALES + DEPRESSIONS

CHARACTERIZATION:

Formally grazed pasture, very long duration surface ponding, and subsurface saturation with intact soils (clay loam). Observed increased species richness of vegetation probably due to removal of grazing and veg. management.

COMMENTS:

- Parcel has abandoned <sup>house and</sup> ~~three~~ <sup>and numerous sheds</sup> outbuilding, <sup>associated gravel</sup> driveway, barn pad.
- Parcel is already expressing vegetative shift associated with removal of veg. management and horse and cattle grazing - probably removed by summer of 2009.
- Parcel is within impact area of proposed bypass.
- ★ - Need to confirm that are using most updated JD map.
- Li ba observed on site - most of parcel identified as POTENTIAL HABITAT. No PL ho

N10500 - 129600 000

EXCLOSURE DESCRIPTION/ REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:  
Coke cl 0-2%  
Callow sl 0-5%

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY:  
NONE

VEGETATION CLASS: palustrine emergent possible succession to palustrine forested/em

ESTIMATED SPECIES COMPOSITION CHANGE:  
Little vegetation change possibly increase of *Borricos* and *Fraxinus*. Grazing has already been removed.

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  
Permanent Removal of GRASSES. Allow Veg community TO NATURE by successional development.

OTHER POTENTIAL ACTIONS:  
- Remove unnecessary fencing  
- Remove *Rubus*  
- Removal of road to original grade.  
- removal of gravel/pad in south central area (impact area?)  
- Upland areas in southwestern area appears appropriate for wetland creation by removal of fill and regrading; will need performance criteria; limited area constrained by current wetlands, and placement of new bypass

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WATSON 037-221-30 115.6 AC



WATSON

# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: WATSON - 037-221-30 City/County: HEWLETT Sampling Date: 13 JAN 2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Parcel baseline  
 Investigator(s): DM, K.G, DW/SZ, RP Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): ALLUVIAL FAN/FLOOD PLAIN Local relief (concave, convex, none): Gentle slope Slope (%): 0-3%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Colo cl 0-2 / Feliz cl 0-2 NWI classification: Pem  
 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 _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>PARCEL UNIT CHARACTERIZATION. V/S/H observations reflect general condition of wetland unit @ in Parcel.</u>			

### VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	1. <u>Lolium pedunculatum</u>	_____	<u>FAC</u>	
2. <u>monarda pulegioides</u>	_____	<u>OBL</u>		
3. <u>Trifolium (sp)</u>	_____	<u>FACU</u>		
4. <u>gynoxys polytrich</u>	_____	<u>FAC</u>		
5. <u>arundo donax hybrid</u>	_____	<u>FAC</u>		
6. _____	_____	_____		
7. _____	_____	_____		
8. _____	_____	_____		
9. _____	_____	_____		
10. <u>Limnanthes barkeri</u>	_____	_____		
11. _____	_____	_____		
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____				

Remarks: Heavily grazed @ Poor Pasture growth - weedy.  
Li ba common in swales @ standing water

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14"	10YR 7/1	10	7.5YR 4/1	10			31% clay in soil	

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

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
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**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

- gravel inclusion from wellside on east and possibly stream, gravelly @ 12"; pockets of sand as well

- No A horizon

PORTIONS OF UNIT HEAVILY TRAMPLED @ DISRUPTED SOIL SURFACE!

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<p><b>Primary Indicators (minimum of one required; check all that apply)</b></p> <p><input checked="" type="checkbox"/> Surface Water (A1)</p> <p><input checked="" type="checkbox"/> High Water Table (A2)</p> <p><input checked="" type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><b>Secondary Indicators (2 or more required)</b></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>
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**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 2-4"

Water Table Present? Yes  No  Depth (inches): surface

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

Wetland Hydrology Present? Yes  No

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

Remarks:

many cracks in relative depressions; only about 10m in 3 miles

PARCEL/UNIT: WATSON - 037-21-30 Wetland UNIT A		FIELD INSP DATE: 17 JAN 2014	TOTAL PARCEL AC: 115.6 AC	
TOTAL WETLAND AC: P <sub>5</sub> - 15.1 AC P <sub>em</sub> -MADON - 42.7 AC P <sub>em</sub> -MASH - 23.3 AC	OTHER WATER AC: 3 AC UPLAND AC 34.2 AC → SOME CREATION IN UPLAND	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 42.7 madow ANIMAL WAYS	PRESERVATION AC: P <sub>5</sub> - 15.1 AC P <sub>em</sub> MASH 23.3 AC 34.2 AC 30W
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: polystratic emergent - P <sub>em</sub> HEAVILY GRAZED PASTURE / FEED LOT VOC 113	LANDSCAPE POSITION: UPPER PORTIONS OF UNIT ALLUVIAL FAN (SHALLOW) AND FLOODPLAIN		
HYDROLOGY TYPE & DURATION: very long time in surface puddles; subsurface saturation occasional flooding; well-beds in several depressions and swales @ shallow puddles/floodings 0"-3"				
HYDRIC SOIL INDICATOR: F3-depleted MTRIX		SOIL SURVEY MAP UNIT: Cole cl + Feliz cl	WETLAND/ UPLAND BOUNDARY: TRANSITION	SLOPE & DRAINAGE: 1-2% flat
Dominant Species * Common Species+ Lolium Mentha Trifolium Junco, bobolink		- grasses - leafed junco - Linum - chickweed - Hardon - P - grass - Ranunculus - plant - plant - Taraxacum - Hypochaeris		NOXIOUS SPECIES: NONE - some CENTAURUS IN UPLANDS
			GROWTH FORM: Herbaceous	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

N - agriculture pasture, grazed  
S - agricultural pasture  
E - road, visible @ 300m distance

W - riparian woodland, pond  
water, agricultural pasture

OBSERVED/INFERRED MODIFICATIONS:

- parcel has had a series of shallow swales, excavated in  
channel ridges for over banking sheet flow (TOPOGRAPHY CONTOUR)
- portions of site are heavily trampled and  
devoid of VEGETATION. VEGETATION reduced to  
STUBBLE

CHARACTERIZATION:

Managed agricultural pasture, palustrine emergent  
near meadow with occasional flooding during  
extreme events. Heavily grazed feedlot.

COMMENTS:

- Agricultural pasture that has several swales excavated to  
direct runoff into the parcel.
- Good site for Linnæus, established, site species, mixed.
- Upslope Run on channelized in two formed  
tributaries that spread to surface sheet  
flow on flatter portions of property.
- Ag uses increase chances/occurrence of  
sediments being mobilized, organics.
- Several areas of slightly higher ground  
not mapped as wetland. Opportunities  
for wetland creation on this parcel.

WATSON 037-221-03 wetland UNIT A

EXCLOSURE DESCRIPTION/ REFERENCE SITE

None

SOIL SURVEY MAP UNIT:

colle d 0-27.  
peliz d 0-27.

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NO MAJOR IMPACTS. Some areas trampled & devoid of VEGETATION.

HYDROLOGY: redirecting of drainage <sup>swale</sup> ~~swale~~ -> works may be to incorporate with wetland area.

VEGETATION CLASS:   
• 1. heavily grazed weedy species

ESTIMATED SPECIES COMPOSITION CHANGE:   
agr. pasture blottum, Indean hybrid -> ↑ Juncus, Sarracenia, Carex, ↑ Scirpus, Carex

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:   
- removal of veg management: goats   
- stabilize soil @ veg cover

OTHER POTENTIAL ACTIONS:   
• removal of soil   
• southern island across steps, excellent spot for removing soil, regarding to wetland area.

ORE:

RELATED REFERENCE:

SOIL SCIENCE STUDIES: DESCRIPTION:

VEGETATION STUDIES:

DESCRIPTION:

COMMENTS:

FUNCTIONAL EQUIVALENT INDEX:

UNIT ENHANCEMENT:

# CHARACTERIZATION

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

UNIT B

Project/Site: Waterway Riparian Habitat City/County: LA Sampling Date: 13 JAN 11  
 Applicant/Owner: DM, KG / SZ, RP, KL State: CA Sampling Point: Parcel Baseline  
 Investigator(s): \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Basin/Flood Plain Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Colo cl 0-27. Felr cl 0-27. NWI classification: Pf  
 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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Parcel with characterization V/S/H observations reflect general condition of wetland UNIT @ in Parcel</u>			

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>FRAXINUS LATIFOLIA</u>			<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____				Total Number of Dominant Species Across All Strata: _____ (B)
3. _____				
4. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
= Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum (Plot size: _____)</b> 1. <u>FRAXINUS LATIFOLIA</u>				
2. _____			<u>FACW</u>	
3. _____				
4. _____				
= Total Cover				
<b>Herb Stratum (Plot size: _____)</b> 1. <u>COENOCYCLUS COENOCYTOSA</u>				
2. <u>RUMEX</u>			<u>OBL FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
= Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b> 1. _____ 2. _____				
= Total Cover				
<b>% Bare Ground in Herb Stratum</b> _____ = Total Cover				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____				

Remarks: Unit is expanding forested fringe mostly @ in Parcel. Forested area is exposed to grazing.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	11YR3/1		7.5YR4/1	90			clayey	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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 checked="" 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)	

<sup>3</sup>Indicators 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: *No gravel, some fine sands. Redox dark surface. Some areas of concentrated leaf litter.*

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present? Yes  No \_\_\_\_\_ Depth (inches): 1-3"

Water Table Present? Yes  No \_\_\_\_\_ Depth (inches): 0"

Saturation Present? Yes  No \_\_\_\_\_ Depth (inches): 0"

(includes capillary fringe)

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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

Remarks: *ponded water in short run in stream. WATER FLOWING OVER PORTIONS OF FORESTED UNIT. OCCASIONAL deep FLOODING*

PARCEL/UNIT: *UNIT B*  
*riparian wetland*

FIELD INSP DATE: *13 JAN 11*

TOTAL PARCEL AC:

TOTAL WETLAND AC:

OTHER WATER AC:

IMPACTS IN WETLAND AC:

ENHANCEMENT AC:

PRESERVATION AC:

CURRENT CIRCUMSTANCE DESCRIPTION

WETLAND TYPE: *AG GRAZED*  
*deciduous forested Pf*

LANDSCAPE POSITION: *BASIN edge / flood plain*

HYDROLOGY TYPE & DURATION:  
*very low water in ponds  
 VLD Sub surface saturation  
 occasional deep flooding*

HYDRIC SOIL INDICATOR: *F6 - Redox Dark Surface*

SOIL SURVEY MAP UNIT: *colc cl 0-2' / feliz cl 0-2'*

WETLAND/UPLAND BOUNDARY: *mostly subdivided by wetland*

SLOPE & DRAINAGE: *0-17% slope*

Dominant Species \* Common Species+  
*Fraxinus, Rumex, oenothera*

NOXIOUS SPECIES: *Cornus*

GROWTH FORM:  
*closed canopy forest @ herbaceous understory*

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

east - ag. pasture  
North - wooded, ag. pasture  
west - ponded ag. field  
south - ag. pasture

OBSERVED/INFERRED MODIFICATIONS:

W/ some shallow areas, no sheet flow BUT @ VLD - SSS  
and occasional flooding  
S/ some areas of extensive heart sheak  
W/ woody trees dropping out into field

CHARACTERIZATION:

~~woody trees~~ palustrine forest of ponded water,  
sheet flow to west. Ag. pasture.

COMMENTS:

• Trees do NOT CONTINUE INTO ponded sheet  
where vegetation is mowed. They do persist  
ALONG fence line TO S. MATURE trees  
ALONG fence line @ recruits extending  
INTO field.

UNIT B

EXCLOSURE DESCRIPTION/ REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:

Colle d 0-24.  
Paliz d 0-24.

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL:

NONE

HYDROLOGY:

NONE

VEGETATION CLASS:

NONE - is already at climax succession 1st stage of transition -  
may be changes to understory @ GRASSING REMOVAL

ESTIMATED SPECIES COMPOSITION CHANGE:

?

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

may eliminate grazing to foster understory plants in emergence and return colonization of grasses

OTHER POTENTIAL ACTIONS:

- Remove fencing
- Debris Removal



# CHARACTERIZATION UNIT C

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

Project/Site: Wetland - seasonal pond City/County: Maricopa Sampling Date: 12/11/11  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Parcel base line  
 Investigator(s): DANIEL G. / S. R. P. / W. P. W. Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): BASIN Local relief (concave, convex, none): FLAT Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: HAPLAQUEPTS NWI classification: P em  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>seasonal pond PARCEL UNIT CHARACTERIZATION. V/S/H observations reflect general condition of wetland unit in parcel</u>			

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Prevalence Index = B/A = _____ <b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <small><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small>
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Juncus</u>	_____	_____	<u>FACW-obl</u>	
2. <u>Festuca</u>	_____	_____	<u>FAC</u>	
3. <u>Lolium</u>	_____	_____	<u>FAC</u>	
4. <u>Rumex</u>	_____	_____	<u>FACW</u>	
5. <u>Carex</u>	_____	_____	<u>obl</u>	
6. <u>Ranunculus</u>	_____	_____	<u>FACW</u>	
7. <u>Commersonia</u>	_____	_____	<u>obl</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. <u>BECKMANNIA ?</u>	_____	_____	_____	
11. <u>Polybarnum ?</u>	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
<b>% Bare Ground in Herb Stratum _____ = Total Cover</b>				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks: <u>Hayed/Grazed AG LAND - species composition affected by management. Includes wetland recruited species.</u>				



UNIT C

PARCEL/UNIT: WATSON - Seasonally Flooded UNIT		FIELD INSP DATE: 13 JAN 11	TOTAL PARCEL AC: 115.6 AC	
TOTAL WETLAND AC:	OTHER WATER AC: .3 AC	IMPACTS IN WETLAND AC:	ENHANCEMENT AC:	PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: Pem - Ag. Hayland AND GRAZED PASTURE SEASONALLY FLOODED - VLD		LANDSCAPE POSITION: FloodPLAIN - BASIN / SEASONAL LAKE	
	HYDROLOGY TYPE & DURATION: - very low duration, surface ponding - s.b. surface saturation - VLD - occasionally deeply flooded for long duration			
HYDRIC SOIL INDICATOR: F6		SOIL SURVEY MAP UNIT: Haplaquepts	WETLAND/ UPLAND BOUNDARY: UNST of PARCEL surrounded by wetland	SLOPE & DRAINAGE: 0-1% DRAINS TO NW
Dominant Species * Common Species+ Juncus P. triv. L. sp. S. sp. Rumex sp. C. sp.			NOXIOUS SPECIES: None	
			GROWTH FORM: Herbaceous	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

W - Riparian woodland, ag pasture  
S - ag. pasture, wooded  
N - ag. pasture, wooded  
E - agriculture pastures, mud

OBSERVED/INFERRED MODIFICATIONS:

V/AREA Hayed AFTER WATER RETREATS. GRAZED AFTER MOWING  
Species composition appears to be Recruited GRASSES +  
FORBS.  
H/ VLD SEASONAL LAKE @ VLD-SSS, OCCASSIONAL deep FLOODING  
NONE  
S/ NONE

CHARACTERIZATION:

solonchale fragment - wet meadow ag. pasture  
dominated wetter end Recruited species @  
some Lolium / FESTUCA @ edge.  
- unit is edge of seasonally lake surface AND  
occasionally deeply flooded  
\* Hay bales TAKEN from UNIT INCLUDED ALISMA, BECKMANNIA,  
POLYGONUM

COMMENTS:

- stands of SCIRPUS / Typha just beyond edge of UNIT.
- WATER Levels and durations may be affected by debris Piled up AT CONSTRUCTION of OUTLET creek

UNIT C

EXCLOSURE DESCRIPTION/ REFERENCE SITE

isolated paddock  
NONE

SOIL SURVEY MAP UNIT:  
Haplaquepts -

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS:  
pasture  
AG - Hayland + Pasture

ESTIMATED SPECIES COMPOSITION CHANGE:  
currently dominated by perennial Juncus, Carex, Rumex @ Festuca/loose at edges  
likely to succeed to perennial Carex, wet native grasses, Ryegrass, Scrips, Typha

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  
- eliminate haying + grazing

OTHER POTENTIAL ACTIONS:  
- reseed

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WATSON 037-250-05

51.1 Ac



WATSON

characterization

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

Project/Site: Watson 037-250-05 City/County: Mendocino State: CA Sampling Date: 26 JAN 11
Applicant/Owner: CALTRANS Sampling Point: Parcel boundary
Investigator(s): DM, KG, DW/SZ/RP Section, Township, Range:
Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): flat/concave Slope (%): 0%
Subregion (LRR): A Lat: Long: Datum:
Soil Map Unit Name: HAPIND, 0-1% clay like clay 0-2% NWI classification: Pem

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No
Are Vegetation 7/8, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes X No
Wetland Hydrology Present? Yes X No
Is the Sampled Area within a Wetland? Yes X No
Remarks: Parcel characterization. V/S/H observations and recovery of data from delineation reflect generalized site wetland character.

VEGETATION - Use scientific names of plants. Small woodland area included but broken out

Tree Stratum (Plot size: ) Absolute % Cover Dominant Species? Indicator Status
1. PARROTIA LATEFOLIA FACW
2. Salix sp FACW?
3.
4.
= Total Cover
Sapling/Shrub Stratum (Plot size: )
1.
2.
3.
4.
5.
= Total Cover
Herb Stratum (Plot size: )
1. Phalaris amabilis obl
2. Arundo donax obl
3. Rumex crispus FACW
4. Scirpus obl
5. Beckmannia obl
6. Juncus (phaecephalus?) FACW
7. Elymus sp obl
8.
9.
10.
11. observed
= Total Cover
Woody Vine Stratum (Plot size: )
1.
2.
= Total Cover
% Bare Ground in Herb Stratum
Dominance Test worksheet: for AVERAGE CALCULATIONS
Number of Dominant Species That Are OBL, FACW, or FAC:
Total Number of Dominant Species Across All Strata: (B)
Prevalence Index worksheet:
Total % Cover of: Multiply by:
OBL species x 1 =
FACW species x 2 =
FAC species x 3 =
FACU species x 4 =
UPL species x 5 =
Column Totals: (A) (B)
Prevalence Index = B/A =
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.
Hydrophytic Vegetation Present? Yes X No

Remarks: Portions of wetland may be recruited as hay (conversion @ ranch hands) and seasonally grazed(?)
Observations made from edge of parcel - parcel inaccessible flooded

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR3/1	70	5YR4/6	30	C	PL/SM	cl	
6-16	10YR3/1	80	5YR4/6	20	C	SM		

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Sandy Redox (S5)                         | <input type="checkbox"/> 2 cm Muck (A10)  |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Stripped Matrix (S6)                     | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input checked="" type="checkbox"/> Depleted Matrix (F3)          |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input checked="" type="checkbox"/> Redox Dark Surface (F6)       | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          | <input type="checkbox"/> Depleted Dark Surface (F7)               |   |
|  | <input type="checkbox"/> Redox Depressions (F8)                   |   |

Restrictive Layer (if present):

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No \_\_\_\_\_

Remarks: Information recorded from WA-01 7-22-09

**HYDROLOGY**

Wetland Hydrology Indicators:

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

Secondary Indicators (2 or more required)

- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Surface Water (A1)             | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Salt Crust (B11)   | <input type="checkbox"/> Drainage Patterns (B10)                           |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Aquatic Invertebrates (B13)                              | <input type="checkbox"/> Dry-Season Water Table (C2)                       |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                               | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)         |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)            | <input type="checkbox"/> Geomorphic Position (D2)                          |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Presence of Reduced Iron (C4)                            | <input type="checkbox"/> Shallow Aquitard (D3)                             |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4)        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)               | <input type="checkbox"/> FAC-Neutral Test (D5)                             |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)                  | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Other (Explain in Remarks)                               | <input type="checkbox"/> Frost-Heave Hummocks (D7)                         |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |   |  |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |  |

Field Observations:

Surface Water Present? Yes  No \_\_\_\_\_ Depth (inches): 0"-6" +  
 Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 (Includes capillary fringe)

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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

Remarks: Site mostly flooded + banded  
 ALGAL MATS observed in 7/09

PARCEL/UNIT: <b>WATSON-037-250-05 -</b> • Parcel mostly inaccessible • Forested unit relatively small and scattered around Parcel - will be removed from Enhancement opportunity		FIELD INSP DATE: 12/21/2014	TOTAL PARCEL AC: 51.1 AC	
TOTAL WETLAND AC: 49.2 AC Pem - 39.7 AC Pf - 9.5 AC	OTHER WATER AC: • 2 AC UPLAND 1.9 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 39.7 AC	PRESERVATION AC: Pf - 9.5 AC • 2 AC OW 1.9 AC UPL
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: mostly Palustrine emergent seasonally ponded/saturated partially hayed and grazed NO PASTURE		LANDSCAPE POSITION: Floodplain terrace/BAYN	
	HYDROLOGY TYPE & DURATION: • Very long duration seasonal ponding/sub surface saturation • frequently flooded/ponded			
	HYDRIC SOIL INDICATOR: F6 - Redox Dark surface F3 Depleted matrix	SOIL SURVEY MAP UNIT: Hydromorpts 0-21	WETLAND/ UPLAND BOUNDARY: Abrupt edge on w. boundary surrounded by 	SLOPE & DRAINAGE: 0-1%
Dominant Species * Common Species+ Phalaris Scirpus Beckmannia Ruziknia Elynum Juncus  FRAXINUS QUERCUS SALIX		NOXIOUS SPECIES: None	GROWTH FORM: • Herbaceous marsh • small wetland + riparian canopy	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

E, N, S → seasonally ponded marsh / Hayed + Grazed  
AG PASTURE  
W → Hy 1; abrupt steep decline

OBSERVED/INFERRED MODIFICATIONS:

✓ - Portions may be seasonally Hayed for  
Recruited Grasses + Forbs  
- may be grazed after cutting  
S - None  
H - None

CHARACTERIZATION:

very long duration ponded / saturated wet MARSH  
Probably UNABLE to support FORAGE GRASSES. Recruited  
Vegetation for hay and grazed after cutting.  
Soil and Hydrology INTACT.

COMMENTS:

- No observed populations of Li BA or PL ho identified on parcel
- All wetlands on Parcel identified as POTENTIAL Li BA HABITAT
- No Project impacts on parcel
- Very long duration ponding (may be > 1' deep)  
Likely PERENNIAL MARSH

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

WATSON 024-250-05

13 JAN 2011

SOIL SURVEY MAP UNIT:

hydrompts 014

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: None

HYDROLOGY:

None

VEGETATION CLASS:

mostly Perm seasonally ponded/saturated open marsh

small unit PF/SS woodland

ESTIMATED SPECIES COMPOSITION CHANGE:

Possible increase <sup>IN</sup> SCIRPUS, FLAXINUS?

Likely little to No change - Already too wet to support positive grasses (HAY BALES TAKEN from area had Beckmannia/Polypodium/Elyngium)

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

Remove any management HAYING ... GRAZING.

OTHER POTENTIAL ACTIONS:

Remove fences

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WILDLANDS 108-020-07

7.8 AC

#1



*CHARACTERIZATION*  
**WETLAND DETERMINATION DATA FORM – Arid West Region**

*WILDLANDS*

Project/Site: WILDLANDS 10R-070-06 City/County: NEVADA Sampling Date: 6 JAN 2004  
 Applicant/Owner: CALTRANS State: CA Sampling Point: 6  
 Investigator(s): DMK/G/RR/JM Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLORISSAIN Terrace Local relief (concave, convex, none): FLAT/SHOULDER Slope (%): 0-2%  
 Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: GELOW SL 0-5% / FLUVAQUENTS NWI classification: P 0m  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <i>Partial characterization. V/S/H observations reflect generalized wetland component of Parcel.</i>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>SALIX sp</u>			<u>FACW OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____				Total Number of Dominant Species Across All Strata: _____ (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>ERU</u>				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Eragrostis adnigrata</u>			<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Trisetum arvense</u>			<u>FAC</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Stipa sp</u>			<u>FACW</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Remarks: <i>few scattered trees some willows out of bank. GRAZED PASTURE.</i>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
2-8"	10 YR 4/1	90	7.5 YR 4/6	10	C	PL/M	clay loam	
8-14"	10 YR 4/1	70	7.5 YR 4/6	10	C	PL/M	clay loam	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- 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)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

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

<sup>3</sup>Indicators 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: Depleted Matrix - No observable Ap

**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) (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)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: subsurface saturation - depressions have standing water

PARCEL/UNIT: WILDLANDS 108-020-0602		FIELD INSP DATE: 6 JAN 201	TOTAL PARCEL AC: 7.8 AC
TOTAL WETLAND AC: P-em 2.9	OTHER WATER AC: 1.2 AC UPLAND AC 4.7 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 2.9 AC P-em PRESERVATION AC: .2 AC OW 4.7 AC UPLAND
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent - wet meadow seasonally saturated @ occasional flooding	LANDSCAPE POSITION: floodplain terrace moisty flat - gently sloping	
	HYDROLOGY TYPE & DURATION: - very long durations - subsurface saturation ULD - occasional flooding		
	HYDRIC SOIL INDICATOR: FB depleted matrix - no sp	SOIL SURVEY MAP UNIT: Gellow sl 0-5-1. FLUVAQUENS	WETLAND/ UPLAND BOUNDARY: transitional of upland riparian woodland
Dominant Species * Common Species+ Juncus palustris Festuca Hypochaeris - Ranunculus GRAMINIA CONIUM		NOXIOUS SPECIES: NONE	
		GROWTH FORM: - herbaceous scattered trees/shrubs	

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

West - agr. pasture  
South - agr. pasture  
East - agr. pasture with Dool's Creek and riparian woodland  
North - agr. pasture

OBSERVED/INFERRED MODIFICATIONS:

V - vegetation management/grazing, in places heavily grazed

S - None

H - None

CHARACTERIZATION:

Grazed Pasture @ managed vegetation on  
intact hydric soil and very long duration  
sub surface SATURATED SOIL. Area may be  
SUBJECT TO OCCASIONAL FLOODING.

COMMENTS:

- Some observed L1 BA population and mostly  
designated as potential habitat for L1 BA.  
No PL ho.
- No protect impacts @ in parcel
- Bobcat observed running across edge  
of parcel.

WILDLANDS - 08-020-0407

EXCLOSURE DESCRIPTION/ REFERENCE SITE	NONE  <div style="border: 1px solid black; padding: 5px;">SOIL SURVEY MAP UNIT:</div>
DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:	SOIL: NONE
	HYDROLOGY: NONE
	VEGETATION CLASS: palustrine emergent -
	ESTIMATED SPECIES COMPOSITION CHANGE: succession to aquatic/terrestrial emergent → forested emergent
	MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: - remove vrs, managed grazing
	OTHER POTENTIAL ACTIONS: - plantings - removal of fences

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WILDLANDS

108-030-08

8 acres

#2

4.0 AC wet meadow

2.3 AC wet marsh

0.1 AC wet riparian

1.6 AC upland



# Characterization

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WILDLANDS 108-070-08 City/County: MENDOCINO Sampling Date: 6 JAN 2011  
 Applicant/Owner: CACTRANS State: CA Sampling Point: 0  
 Investigator(s): DM, KG/JM/RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLAT Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: YELLOW SL 0-5/1 NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Partial characterization. S/V/H observations reflect generalization of wetland component of parcel</u>	

### VEGETATION – Use scientific names of plants.

Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: _____)				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. <u>Trees along fence line/sunlit</u>				Total Number of Dominant Species Across All Strata: _____ (B)
2. <u>FLAMINGO</u>				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				
4. _____				
_____ = Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
<b>Herb Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Festuca ALUNDINACEA</u>			<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Vulpia (bromoides)?</u>			<u>FACW</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Tritolium sp (bipart)?</u>			<u>FACU</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>Panicum sp</u>			<u>FACW</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Heavily grazed pasture. Parcel mowed for forage by grazing.</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3"	2.5 YR 4/10-4/2	50	7.5 YR 4/6	10	C	PL/SM	Silt loam	
3-15"	10 YR 4/1	50	7.5 YR 4/6	50	C	PL/SM	silt loam	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy 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 checked="" 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)		

<sup>3</sup>Indicators 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: *Depleted Matrix*

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" 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"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): *0-2"*

Water Table Present? Yes  No  Depth (inches): *Surface*

Saturation Present? Yes  No  Depth (inches): *Surface*

(includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks: *surface water in depressions, very long duration SSS*

PARCEL/UNIT: WILDANIS-102-030-06		FIELD INSP DATE: 6 JAN 2011		TOTAL PARCEL AC: 8.0	
TOTAL WETLAND AC: 6.4 AC	OTHER WATER AC: 0 AC UPLAND AC: 1.6 AC	WET MEADOW: 6.4 AC WET RIPARIAN: 0.1 AC	IMPACTS IN WETLAND AC: 0	ENHANCEMENT AC: 4.0 AC Pem 2.3 AC Pem marsh	PRESERVATION AC: 0.1 AC Riparian 1.6 AC Upland
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent - wet meadow Pem SS - A9 - GRAZED		LANDSCAPE POSITION: floodplain terrace		
	HYDROLOGY TYPE & DURATION: very long duration, subsurface saturation, OCCASIONAL flooding micro depressions/swales Pondered 0"-2" Surface sheet flow during events				
HYDRIC SOIL INDICATOR: F3 Depleted matrix no developed channels A or Ap			SOIL SURVEY MAP UNIT: Ge, Low sl 0-5%	WETLAND/UPLAND BOUNDARY: transitional w/ riparian upland	SLOPE & DRAINAGE: 2-1% numerous swales, drainage surface, sheet flow
Dominant Species * Common Species+ Rostrea ALUNDINACEA Vilpina (blanckes)? Trifolium (lyell)? Ranunculus 5/1			→ - cyprus - chicorium - pleurpaga - gladiolus leaf junco - Juncus patens - romex - cyanus - lotis - Mentha pulegium		NOXIOUS SPECIES: None
			GROWTH FORM: Herbaceous; w/ some succulents and Forbs		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

North - Pasture / Dous Creek  
West - pasture  
East - creek w/ riparian woodland and pasture  
South - pasture; heavily grazed

OBSERVED/INFERRED MODIFICATIONS:

- ✓ - veg. management; heavy grazing
- S - no obvious modifications some hoof shear
- H - No obvious modifications - ineffective ditch remnants along W edge of parcel

CHARACTERIZATION:

Heavily grazed managed pasture on intact  
clayitic soil @ VLD - SSS and micro/swale  
depressional shallow ponding. Occasional  
flooding likely during extreme events.

COMMENTS:

- small observer population of Li ba, most  
of parcel identified as Li ba potential  
habitat, No PL ha
- No project impacts on parcel

6 Jul 2011

EXCLOSURE DESCRIPTION/ REFERENCE SITE

WILDLANDS 108-030-08

NONE

SOIL SURVEY MAP UNIT:

Geiow sl 0-5/1.

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NONE - some TrampLums @ hoof shear

HYDROLOGY: NONE

VEGETATION CLASS: existing palustrine emergent; agricultural pasture

ESTIMATED SPECIES COMPOSITION CHANGE: successional change to junco/cary; likely avocet, and trawlers. (scattered trees exist in amongst patches @ same soil unit, unit likely to support trees @ out management)

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE: -removal of grazing + veg. management

OTHER POTENTIAL ACTIONS: -removal of fencing, debris

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WILDLANDS 108-060-01

#3

63.4 AC



*CHARACTERIZATION*  
**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: WILDLANDS - 108-060-01 City/County: MEHENDINO Sampling Date: 5 JAN 2011  
 Applicant/Owner: CALTRANS State: CA Sampling Point: Palmdale Baseline  
 Investigator(s): DM KGI / JM / RR Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLUSHPLAIN TERRACE Local relief (concave, convex, none): FLAT Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FLUVIAL SANDS 0-1%, HIGH SANDS 0-1% NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <i>Palmdale characterization. V/S/H observations reflect generalization of wetland component of Palmdale</i>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <i>Eriogonum fasciculatum</i>	_____	_____	FAC	<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <i>Lupinus albus</i>	_____	_____	FAC	
3. <i>Ranunculus sp.</i>	_____	_____	FACW	
4. <i>(Aluminum - common)</i>	_____	_____	OBL	
5. <i>(Anemone)</i>	_____	_____	OBL	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____		

Remarks: *Moist/Glazed pasture - Palmdale mounded for forage species. Wood species mixed @ Grasses esp. in series + depressions areas.*

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2"	10YR 3/1		none				S loam	
2-16"	10YR 4/1	80	7.5YR 4/6	20	C	PL/M	silt loam with some clay	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- 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)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

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

<sup>3</sup>Indicators 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: Depleted Matrix - No obvious Ap

**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) (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)

Secondary Indicators (2 or more required)

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

**Field Observations:**

Surface Water Present? Yes  No \_\_\_\_\_ Depth (inches): 0-4"  
Water Table Present? Yes  No \_\_\_\_\_ Depth (inches): 2"  
Saturation Present? (includes capillary fringe) Yes  No \_\_\_\_\_ Depth (inches): surface

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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

Remarks:  
• Swales/depression areas @ Banded water  
• General ground surface @ VLD -SSS  
• Occasional flooding

PARCEL/UNIT: WILDLANDS - 108-060-01		FIELD INSP DATE: JAN 11		TOTAL PARCEL AC: 63.4 AC	
TOTAL WETLAND AC: Pen- 40.7 AC	OTHER WATER AC: 1.4 AC UPLAND AC 21.3 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: 40.7 AC	PRESERVATION AC: 1.4 AC OW 21.3 AC UPL	
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent - <sup>hayland &amp; ag.</sup> pasture		LANDSCAPE POSITION: floodplain terrace.		
HYDROLOGY TYPE & DURATION: - very long duration, subsurface saturation - shallow surface depressional ponding. - Davis creek flowed w/ recession associated flooding.					
HYDRIC SOIL INDICATOR: F3 depleted <sup>NO</sup> <del>NO</del> <sup>NO</sup> - No obvious Ap		SOIL SURVEY MAP UNIT: PLUVAQWVTS 0-1X Apluvic MTS 0-1X	WETLAND/ UPLAND BOUNDARY: transitional wetland upland area	SLOPE & DRAINAGE: <1% W/ sloping area - surface runoff to swales	
Dominant Species * Common Species+ Festuca Juncus roemerianus Spartina Cyperus			NOXIOUS SPECIES: NONE		
			GROWTH FORM: herbaceous		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

North - ag. pasture - wooded pasture  
East - commercial line of grasses and ag. pasture -  
South - fence line / fur row / ag. pasture  
West - riparian wood - marsh, creek ag. pasture

OBSERVED/INFERRED MODIFICATIONS:

✓ - Agr. management to grazing, mowed, weeded and species in  
swales / depressions @ STANDING WATER, Tules clumps  
SCATTERED THROUGHOUT  
S - INTACT - IN OBSERVABLE AG

id - No obvious modifications  
- VLD - SSS @ STANDING WATER in depressions  
occasional flooding. [Found channel traces on  
aerial photos - in FLOXINS]

CHARACTERIZATION:

Intact and grazed pasture dominated by Ag  
grasses. Parcel has VLD - SSS wetland hydrology  
@ depressional ponding and occasional flooding.  
Basically, Intact hydro. SW and wetland hydrology  
under current conditions @ managed introduced  
wetland plant community

COMMENTS:

- few populations of Li/ba observed on  
Parcel, No R ho.
- entire Parcel identified as potential Li/ba  
habitat
- Dons check class parcel for STON,  
much of creek was some riparian  
creek (FLOXINS / SSS)
- No project impacts @ Parcel

WILDLANDS - 108-00-01

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:

FLUVAQUENT 0-17  
LAPPAQUENT 0-17

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE -

HYDROLOGY: NONE -

VEGETATION CLASS:

Polustine emergent likely to support *Quercus* + *Fragaria*  
possibly *Carex*  
Polustine emergent - mixed

ESTIMATED SPECIES COMPOSITION CHANGE:

Low water stresses would likely shift from  
No grass to *Polemonium* wetland and *Sphagnum* as dominant  
likely to *pot*, *Carex*, *Rhynchospora*, *Cyperus*, *Hydrocotyle*  
*Ranunculus*

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- eliminate grazing and reg. management allow successional plant  
development. Accumulate thick cover.

OTHER POTENTIAL ACTIONS:

staying in riparian buffer  
water removal  
plant removal

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WICDUNDE 108-060-02  
#4

106.8 Ac



*CHARACTERIZATION*  
**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: WILDLANDS 100-060-02 UNIT A City/County: HERNDON State: CA Sampling Date: 5 JAN 2011  
 Applicant/Owner: east of Berry creek Sampling Point: UNIT Baseline  
 Investigator(s): LU, VG/PA, JA Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): BASIN Local relief (concave, convex, none): CONCAVE Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: CHAPLAWATS 01X NWI classification: P 2EM  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>PARCEL UNIT CHARACTERIZATION V/S/H OBSERVATIONS reflect Generalized STATE of wetland UNIT.</u>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Elymus trichocarpus</u>	_____	_____	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Ranunculus sp</u>	_____	_____	<u>FACW</u>	
3. <u>Juncus sp</u>	_____	_____	<u>FAC</u>	
4. <u>Ambrosia trifida</u>	_____	_____	<u>OBL</u>	
5. <u>Limnolobos holosericeus</u>	_____	_____	<u>OBL</u>	
6. <u>Caryophyllus</u>	_____	_____	<u>OBL</u>	
7. <u>Alfalfa</u>	_____	_____	<u>FACW</u>	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks: PARCEL UNIT APPEARS TO BE GRAZED BUT APPEARS TO SUPPORT MOSTLY WETLAND AND MESH/MORPHO SPECIES RATHER THAN AG GRASSES.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6"	10 YR 3/1	100	7.5 YR 4/6	5	C	PL/SM	clay loam	
6-12"	10 YR 4/2	80	7.5 YR 4/6	20	C	PL/SM	clay loam	

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

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy 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 checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" 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)			

<sup>3</sup>Indicators 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: FG + F3 - VCD Ponded / sub surface saturated 1/12/2000

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 3' +	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0	

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

Remarks: SITE APPEARS TO FLOOD AND HOLD IN WATER AS 1/12/2000 SURVEY. A channelized ditch has formed from SE corner and 3rd/4th check has overtopped in 4 or 5 places. Likely no longer managed to prevent frequent flooding.

UNIT A

PARCEL/UNIT: <i>wildlands 106-060-02 east of entry road</i>	FIELD INSP DATE: <i>5 JAN 2011</i>	TOTAL PARCEL AC:  <i>106.8 AC</i>
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TOTAL WETLAND AC: <i>101.5 AC</i>	OTHER WATER AC: <i>1.2 AC</i>	UNIT A → <i>39.3 AC</i> <i>marsh</i>	IMPACTS IN WETLAND AC: <i>0 AC</i>	ENHANCEMENT AC: <i>61.0 AC</i> <i>meadow</i>	PRESERVATION AC: <i>1.2 AC OWIS</i> <i>4.1 AC UPLAND</i> <i>0.6 AC Pf</i> <i>39.3 AC marsh</i>
	UPLAND AC <i>4.1 AC</i>	UNIT B → <i>61.0 AC</i> <i>meadow</i>			
		<i>Pf 0.6 AC</i>			

CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>emergent palustrine - depression pond</i> <i>appears to be an abandoned Hayland / sloughs</i> <i>from dry grasses to wet meadow species</i>	LANDSCAPE POSITION: <i>Basin</i> <i>Food plain</i>
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HYDROLOGY TYPE & DURATION: <i>very long duration ponding, very long subsurface saturation</i> <i>frequent flooding</i>
--

HYDRIC SOIL INDICATOR: <i>FST F6 -</i> <i>Degraded Marsh or Reedy Dale Surface</i> <i>No identifiable Ap or soil modifications</i>	SOIL SURVEY MAP UNIT: <i>Hapludox</i> <i>0-17</i>	WETLAND/ UPLAND BOUNDARY: <i>transition w/ riparian</i> <i>Quercus on western edge</i>	SLOPE & DRAINAGE: <i>21%</i>
---	---	--	---------------------------------

Dominant Species * Common Species+ <i>-Rumex</i> <i>-Alisma</i> <i>-Phacelia aquatica</i> <i>-glabrate juncus</i>  <i>-Festuca</i> <i>Ranunculus</i> <i>Juncus</i> <i>Hydrilla</i> <i>Limnolobos - douglassia, water</i> <i>Compositae</i> <i>Pleuraphis davis</i> <i>Alspen</i>	NOXIOUS SPECIES:  <i>NONE</i>
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GROWTH FORM: <i>Herbaceous</i>
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CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

North - agricultural pasture  
South - agricultural pasture  
West - creek w/ riparian woods and agricultural pasture  
East - agricultural pasture, channelized ditch w/ water in age field edge.

OBSERVED/INFERRED MODIFICATIONS:

V - UNIT may have support by Grasses for Hay or Grazing  
but appears to have been abandoned. Culturally  
frequently flooded and support wet meadow species.  
H - frequently flooded / ponded basin - none  
S - none

CHARACTERIZATION:

GRAZED wet meadow dominated by FAC/W/OBL  
species @ V ⊕ ponding + subsurface saturations.  
Culturally frequently flooded.

COMMENTS:

- Parcel UNIT is almost totally an identified population of Li BA. No PL ho.
- No protect impacts are located @ in UNIT
- Belly creek was overtopped and flooded Parcel UNIT at 4 or 5 places @ on Parcel. An unnamed creek/ditch was flooded Parcel at SE corner.
- Numerous Junco clumps @ in standing water
- Water 8" + deep in middle of UNIT.

Wetlands 108-00-02 east of Bay Point.

UNIT A

EXCLOSURE DESCRIPTION/ REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:  
HYLOCOMPS 0-17.

DEPARTURE FROM NORMAL CIRCUMSTANCE BEST ATTAINABLE STATE:

SOIL: NONE

HYDROLOGY: NONE

VEGETATION CLASS: NONE - SITE IS WET ENOUGH TO EXCLUDE COMMON AG-GRASSES.  
- APPEARS TO BE GRAZED AFTER PONDING RECEDES/SUMMER MAY HAVE BEEN ABANDONED TO HAYING.

ESTIMATED SPECIES COMPOSITION CHANGE: NONE - EXTREME WETNESS OF SITE AND PROLONGED PONDING APPEARS TO BE PROVISIONAL CONDITIONS FOR WETTER AND PERENNIAL GRASSES/FOLDS.  
Possible *Fragaria*/*Quercus*

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:  
potential to remove grazing if needed.

OTHER POTENTIAL ACTIONS: oak/asp  
- some riparian planting? along edge of creek along western edge  
- remove fence

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

*CHARACTERIZATION*  
**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: WILDLANDS 108-060-02-B City/County: HEWDOCIANO Sampling Date: 5 JAN 2004  
 Applicant/Owner: West of Barry Lake CAUTIONS State: CA Sampling Point: Parcel Baseline  
 Investigator(s): DN, KG/RR, IN Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood Plain Terrace Local relief (concave, convex, none): FLAT Slope (%): 0-1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: SEILON SLO-SP. HAPLOQUEPTS 0-1% NWI classification: P-em  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation X, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: <u>PARCEL UNIT CHARACTERIZATION. V/S/H observations reflect generalized wetland component of Parcel UNIT</u>	

Parcel Divided INTO 2 UNITS

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Festuca arvensis</u>	_____	_____	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Panicum sp</u>	_____	_____	<u>FACW</u>	
3. <u>Vulpia (graminoides?)</u>	_____	_____	<u>FACW</u>	
4. <u>Lolium paleare</u>	_____	_____	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks: Mowed/Grazed Pasture - managed for forage grasses  
- few scattered trees @ in field probably along abandoned fence line. Trees on fence line @ W edge of Parcel UNIT.

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3"	2.5YR 4/2	100					sil	Remnant Ap?
3-80"	10YR 4/2	80	7.5YR 4/6	80	C	PLSM	sil	Redox Pore Ques/soft masses

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<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 checked="" 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)		

<sup>3</sup>Indicators 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: F-3 Depleted Matrix - may be remnant indication of Ap. Series of very shallow swales/Remnant blow outs mostly in S-N orientation.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

Water Table Present? Yes  No  Depth (inches): surface

Saturation Present? Yes  No  Depth (inches): surface

(includes capillary fringe)

**Wetland Hydrology Present?** Yes  No

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

Remarks: on slight ridge - water in swales - 0" to 2" very low duration subsurface saturation occasional flooding

PARCEL/UNIT: WILDLANDS 108-060-02 - west of Berry Creek  UNIT B		FIELD INSP DATE: 5/20/00	TOTAL PARCEL AC:
TOTAL WETLAND AC:	OTHER WATER AC:	IMPACTS IN WETLAND AC:	ENHANCEMENT AC: PRESERVATION AC:
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine emergent, wet meadows w/ depressionnal pools  - remnant high flow channels maybe some of the pools	LANDSCAPE POSITION: floodplain terrace	
HYDROLOGY TYPE & DURATION: very long duration, subsurface saturation standing water in depressionnal swales occasional flooding			
HYDRIC SOIL INDICATOR: #3 - Dyplid matrix - may be remnant A <sub>2</sub>		SOIL SURVEY MAP UNIT: Gertow s <sub>1</sub> 0-5 ft.	WETLAND/UPLAND BOUNDARY: transitory at neck site, riparian upland.  SLOPE & DRAINAGE: 7190 slight slope to NW.  swales drain and carry sheet flow
Dominant Species * Common Species+ - erratic places - may be old furrows L. Fagopyrum, Urtica, Ranunculus, Lolium  Common: Trifolium, Plantago, Limnanthus erectus, prostratus, glabrate leaf junco, carmine. mallow,  Fragaria and other in center of parcel and at edges  Wetland and species mostly on shallow depressionnal swales.		NOXIOUS SPECIES:  None	
		GROWTH FORM: Herbaceous with riparian edges of swales and etc.	

# UNIT B

**CURRENT CIRCUMSTANCE DESCRIPTION**

**SURROUNDING PARCELS:**

North - agricultural pasture  
 East - riparian area up creek and agr. pasture  
 South - agricultural pasture  
 West - riparian area up creek and ash woodlands

**OBSERVED/INFERRED MODIFICATIONS:**

V - introduced feral species through disc/PASTURE, MOWING/  
 GRAZING

S - None - Remnant evidence of Ag

H - None - current H source appears to be direct ppt @ Run-on through shales / infiltration + VLD SSS. Occasional flooding

**CHARACTERIZATION:**

Hayed/Grazed pasture @ managed Ag classes  
 Dominating plant community @ VLD - SSS and  
 occasional flooding. Swales appear to be remnant  
 scars from tributary floods.

**COMMENTS:**

- UNIT B includes multiple small populations of Li BA. Remainder of unit identified as potential habitat for Li BA.
- No protect impact area @ in unit.
- UNITS support erratic trees that may have survived Ag activities because of historic fence line

WILDCRANES 108-060-02 west of Bay Creek UNIT B

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:

Goikow s.l 0-5%

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL:

NONE

HYDROLOGY:

NONE - historically wetted but currently in  
normal circumstances - VLD-SSS @ occasional flooding

VEGETATION CLASS:

currently Pen seasonally saturated AS pasture.  
Likely support woodland, forest or polemic wet  
meadows/marsh

ESTIMATED SPECIES COMPOSITION CHANGE:

successional change to herbaceous community  
including Berms/Flaxms

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- remove grazing, veg. management allow veg. succession

OTHER POTENTIAL ACTIONS:

- possibly planting of oak/ash

- fence removal

CRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WILDLANDS 108-070-08  
#5

64.1 AC



# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WILDLANDS 108-070-08 City/County: MEADDOLE Sampling Date: 5/24/08  
 Applicant/Owner: CASTRANS State: IA Sampling Point: PARCEL BASELINE  
 Investigator(s): DU, K.S./P.R. J.M. Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLOOD PLAIN/TERRACE Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: FELZ/FULCRANT/COLE NWI classification: Pem  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel characterization - S/V/H observations reflect generalization of wetland component of parcel under current circumstances.</u>	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b>
2. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
3. _____	_____	_____	_____	OBL species _____ x 1 = _____
4. _____	_____	_____	_____	FACW species _____ x 2 = _____
5. _____	_____	_____	_____	FAC species _____ x 3 = _____
_____ = Total Cover				FACU species _____ x 4 = _____
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Lolium adenense</u>	_____	_____	<u>FAC</u>	UPL species _____ x 5 = _____
2. <u>Ranunculus sp.</u>	_____	_____	<u>FACW</u>	Column Totals: _____ (A) _____ (B)
3. <u>Mentha sylegicum</u>	_____	_____	<u>OBL</u>	Prevalence Index = B/A = _____
4. <u>Plantago sp.</u>	_____	_____	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>
5. <u>Limonium douglasii + bakerii</u>	_____	_____	<u>OBL</u>	___ Dominance Test is >50%
6. <u>Festuca abundantissima</u>	_____	_____	<u>FAC</u>	___ Prevalence Index is ≤3.0 <sup>1</sup>
7. _____	_____	_____	_____	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
_____ = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks: <u>Heavily Grazed Pasture - Parcel managed for forage species</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2"	10YR 3/1	100	2.5YR 4/6	5	C	PL/SM	with roots	dense roots
3-14"	10YR 4/2	80	2.5YR 4/6	20	C	PL/SM	S	discrete redox in Profile 12/16/2000

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 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)

<sup>3</sup>Indicators 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:

depleted matrix  
no obvious or recent soil manipulations (no Ap)

**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) (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)

**Secondary Indicators (2 or more required)**

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0-2"  
 Water Table Present? Yes  No  Depth (inches): surface  
 Saturation Present? Yes  No  Depth (inches): surface  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks:

standing water in depressions. ▽ - surface. standing water in depressions + swales - 0-3".  
 VLD - SSS, OCCASIONAL FLOODING. LD Ponding in swale/depressions

PARCEL/UNIT: <i>wildlands 108-070-08</i>		FIELD INSP DATE: <i>5 JAN 2014</i>		TOTAL PARCEL AC: <i>64.1 AC</i>	
TOTAL WETLAND AC: <i>Pf 50.8 AC</i>	OTHER WATER AC: <i>1.5 AC</i> <hr/> <i>UPLAND AC</i> <i>11.8 AC</i>	<i>Pem marsh - 4.3 AC</i> <i>Pf - 3.3 AC</i> <i>Pem-wetlands</i> <i>43.2 AC</i>	IMPACTS IN WETLAND AC: <i>0 AC</i>	ENHANCEMENT AC: <i>43.2 AC</i> <i>4.3 AC</i> <i>6.6 AC</i>	PRESERVATION AC: <i>Pf 3.3 AC</i> <i>6.5 AC OW</i> <i>11.8 AC UPLAND</i>
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: <i>palustrine - emergent, wet meadows</i> <i>seasonally saturated</i>		LANDSCAPE POSITION: <i>foothill terrace</i>		
	HYDROLOGY TYPE & DURATION: <i>very long duration, subsurface saturation</i> <i>shallow</i> <i>soil ponding in surface depression</i>  <i>-occasional flooding</i>				
HYDRIC SOIL INDICATOR: <i>F-3</i> <i>depleted MANK</i>		SOIL SURVEY MAP UNIT: <i>FeLIZ LOAM</i> <i>0-2%</i> <i>FLUVAQUENTS</i> <i>0-1%</i> <i>cole clay LOAM</i> <i>0-2%</i>	WETLAND/ UPLAND BOUNDARY: <i>transitional</i> <i>side slopes</i> <i>of tributaries</i>	SLOPE & DRAINAGE: <i>2%</i> <i>-flowing</i> <i>towards N</i>	
Dominant Species * Common Species+ <i>Lolium perenne</i> <i>Ranunculus sp</i> <i>Mentha pulegium</i> <i>Alopecurus sp</i> <i>Limonium douglasii + bakali</i> <i>Festuca arvensis</i>			NOXIOUS SPECIES: <i>NONE</i>		
			GROWTH FORM: <i>herbaceous upland</i> <i>scattered trees</i>		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

North - trees, gravel road w/ creek and open pasture  
East -> riparian trees, road, ag. pastures  
South -> ag pasture and farm buildings  
West -> riparian woodland, Pais creek

OBSERVED/INFERRED MODIFICATIONS:

- veg management, heavy grazing -
- STAGING / FEEDING PASTURE FOR STOCK
- SOIL DEGRADED BY HOOF SHEAR IN PORTIONS OF PASTURE

CHARACTERIZATION:

GRAZED PASTURE @ MANAGED VEGETATION ON INTACT  
HYDRIC SOIL @ VERY LONG DURATION SUB SURFACE  
SATURATION WETLAND HYDROLOGY. PASTURE SUBJECT  
TO OCCASIONAL FLOODING @ FREQUENT LONG  
DURATION PONDING IN SWALES / DEPRESSIONS.

COMMENTS:

- observed L1 BA ON PONDING SWALE / DEPRESSIONS
- MOST OF PASTURE IDENTIFIED AS POTENTIAL L1 BA HABITAT
- 
- NO PROJECT IMPACTS ON THIS PASTURE
- DAVIS CREEK BISECTS PASTURE. RIPARIAN COMMUNITY EXISTS ALONG CREEK EDGES ON THIS PASTURE.  
(QUERCUS, FLAXIUMS, SOLEX, RUBUS)

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

NONE

SOIL SURVEY MAP UNIT:

Feliz  
FLUVAQUENT  
Cole

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL: NONE - soil appears intact - some areas of  
intensive hoof scuff

HYDROLOGY: NONE - direct ppt / occasional flooding -  
VLD - SSS

VEGETATION CLASS:

disturbance agent -> potential forested / emergent.  
VUG highly disturbed by grazing / management  
scattered mature trees  
likely to succeed to Pf-em seasonally saturated wet meadow

ESTIMATED SPECIES COMPOSITION CHANGE:

shift to -> junco / carex / arisema / fraxinus from managed ag pasture

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- Remove GRAZING AND VEGETATION MANAGEMENT OR OTHER  
modifications that interfere @ vegetation successional  
development.

OTHER POTENTIAL ACTIONS:

- - sap plantings of oaks, pines
- - fuel removal
- - trash removal

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	

WICOLANDS 108-070-09

121.9AC

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# CHARACTERIZATION

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WILDLANDS - 105-0309 City/County: MENDOCINO Sampling Date: 5 JAN 2011  
 Applicant/Owner: CACTRANS State: CA Sampling Point: ① Parcel boundary  
 Investigator(s): DM, KG/RA/SMEIGS Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood plain Terrace Local relief (concave, convex, none): FLAT Slope (%): 1%  
 Subregion (LRR): A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: GELOW 32 0-5% FLUVAQUENTS NWI classification: Pen  
 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 _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Parcel characterization w/ S/H observations reflect general nature of wetland component of parcel current circumstances.</u>	

### VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u>				Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
1. _____				Total Number of Dominant Species Across All Strata: _____ (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
3. _____				
4. _____				
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u>				<b>Prevalence Index worksheet:</b>
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
<u>Herb Stratum</u>				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>FESTUCA abundantior</u>			<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>VOLPIA (bromoides?)</u>			<u>FACW</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>RANUNCULUS sp</u>			<u>FACW?</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>ALOPECURUS sp</u>			<u>FACW?</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>PLEROPOGON sp</u>			<u>OBL</u>	
6. <u>MENTHA pubescens</u>			<u>OBL</u>	
7. <u>CAMASSONIA sp</u>			<u>OBL</u>	
8. _____				
_____ = Total Cover				
<u>Woody Vine Stratum</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>GRAZED PASTURE - Parcel managed for forage species, appears to be Hayed.</u>				

**SOIL**

Sampling Point: \_\_\_\_\_

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

*Ap*

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6"	10YR 4/6	20	7.5YR 4/6	20	C	PL/SM	clay loam	dense roots
6-16"	10YR 4/1	80	7.5YR 4/6	20	C	PL/SM	clay loam	

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

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 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)

<sup>3</sup>Indicators 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: *Content in pore linings Depleted matrix  
no obvious or recent soil manipulation that would affect conditions.  
no dark R. Ap 0-6"*

**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): 0-2"  
 Water Table Present? Yes  No  Depth (inches): surface  
 Saturation Present? Yes  No  Depth (inches): surface  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks: *very long duration subsurface saturation -  
shallow standing water in depressions / swales 0"-2"  
Parcel appears to be subject to occasional flooding.*

PARCEL/UNIT: WILDLANDS: 108-070-09		FIELD INSP DATE: JAN 11		TOTAL PARCEL AC: 121.9 AC	
TOTAL WETLAND AC: 47.3 AC	OTHER WATER AC: 2.7 AC UPLAND AC 21.9 AC	Pf - 2.0 AC Pem - marsh .4 AC Pem - meadow 94.9 AC	IMPACTS IN WETLAND AC: 0 AC	ENHANCEMENT AC: Pem marsh .4 AC Pem - meadow 94.9 AC	PRESERVATION AC: Pf - 2.0 AC 2.7 AC OW 21.9 AC UPL
CURRENT CIRCUMSTANCE DESCRIPTION	WETLAND TYPE: palustrine, emergent; wet meadow - Pem seasonally SATURATED Ag field - Hay @ GRADING		LANDSCAPE POSITION: floodplain terrace -		
HYDROLOGY TYPE & DURATION: <ul style="list-style-type: none"> <li>very long duration, above surface saturation</li> <li>may be subject to OCCASSIONAL flooding</li> <li>surface sheet flow in accumulating in depressions</li> <li>surface sheet flow during events</li> </ul>					
HYDRIC SOIL INDICATOR: soil has been plowed/discard in past Ap still identifiable - basically INTACT f-3 depleted matrix - no dark sulfate horizon		SOIL SURVEY MAP UNIT: Gellow sl 0-5 ft FLUVAQUENT	WETLAND/ UPLAND BOUNDARY: transitional @ Davis creek	SLOPE & DRAINAGE: 10% 17% drainage to NW	
Dominant Species * Common Species+			NOXIOUS SPECIES:		
Dominant Species: Festuca, Urtica, Ranunculus probably orchard Common: Mentha, mesquites, acacia, trifolium, alfalfa Alopecurus			None ?		
Quercus/florinus in historical channel trace and along fence line & riparian			GROWTH FORM: herbaceous		

CURRENT  
CIRCUMSTANCE  
DESCRIPTION

SURROUNDING PARCELS:

East - Davis creek and open pasture  
South - Ditch w/ riparian and open pasture  
West - upland riparian adjacent to Davis creek open pasture  
North - continuation of open pasture.

OBSERVED/INFERRED MODIFICATIONS:

S - NO MAJOR SOIL MODIFICATIONS - AP VISIBLE  
V - veg. management, grazed/mowed; not recently grazed  
dominated by pasture grasses *FESTUCA* @  
*TRIFOLIUM* and common wetland species  
*QUERCUS* along fence line and riparian  
*PHAXINS*  
H - VLD - SSS @ shallow ponding swales/depressions

CHARACTERIZATION:

Hay lands probably also grazed after cutting.  
Soil and hydrology intact under current  
circumstances. Pasture may be subject to  
occasional flooding.

COMMENTS:

- Li BA observed on pasture and most of  
pasture identified as potential habitat.
- No Project impacts on Pasture
- Pasture dissected by Davis Creek

WILDLANDS-108-070-09

EXCLOSURE  
DESCRIPTION/  
REFERENCE SITE

- Fenceline - is growing, avenues (holes) on western side of parcel.

SOIL SURVEY MAP UNIT:

Yellow sl 0-5%  
FLUVAQUENT

DEPARTURE FROM  
NORMAL  
CIRCUMSTANCE BEST  
ATTAINABLE STATE:

SOIL:

Discrd in appanal AP  
But NO fundamental change in F3 condition - Depleted MATRICK

HYDROLOGY:

- no major departure - normal wetland condition of very long duration  
subsurface saturation; subject to occasional flooding; surface sheet flow  
- ponding in microdepressions.

VEGETATION CLASS:

- palustrine emergent, agricultural land  
- to palustrine forest -> successional climax  
likely species to include *PERENNIAL JUNCO*, *ALICE*  
*QUERCUS*, *FLOXINUS*

ESTIMATED SPECIES COMPOSITION CHANGE:

successional climax species.  
reduced *ALICE* -> emergence with *QUERCUS* on edge. *FLORINUS*

MANAGEMENT/MODIFICATIONS TO ACHIEVE BEST ATTAINABLE STATE:

- eliminate grazing, mowing, mowing  
- allow successional plant development

OTHER POTENTIAL ACTIONS:

- removal of old barrels
- remove fencing
- Riparian plantings if appropriate

GRAM SCORE:		RELATED REFERENCE:
HYDROLOGY STUDIES:	DESCRIPTION:	
VEGETATION STUDIES:	DESCRIPTION:	
COMMENTS:		
FUNCTIONAL EQUIVALENT INDEX:		
	UNIT ENHANCEMENT:	