Item 4
Attachment 4 (CQEA)
Appendices- Wetlands Delineation Report

WETLAND DELINEATION FOR THE

±18.2-ACRE WISHING WELL WAY STUDY AREA

TOWN OF LOOMIS, PLACER COUNTY, CALIFORNIA

Prepared for:
David and Larissa Justice
5321 Brookcrest Court
Rocklin, CA 95677

Prepared by:

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APRIL 2015

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

WETLAND DELINEATION
FOR THE
±18.2-ACRE WISHING WELL WAY STUDY AREA

INTRODUCTION

Location and Setting

Salix Consulting, Inc. (Salix) prepared a wetland delineation for the ±18.2-acre Wishing Well Way Study Area (study area) located in the Town of Loomis, Placer County, California. The study area is located west of Laird Road, at the west end of Wishing Well Way, just south of Horseshoe Bar Road and east of Interstate 80. It is situated in Section 15, Township 11 North and Range 7 East on the Rocklin, California 7.5-minute USGS topographic quadrangle (Figure 1). The approximate coordinates for the center of the property are: 38° 48' 3.62"N and 121° 10' 53.38"W.

The site occurs in the lower foothills of the western Sierra Nevada at elevations ranging between 370 and 400 feet. Drainage is from east to west. One house, several out buildings, and a pond are located in the northern area, and the remainder of the parcel is undeveloped. Rural residential development and the Indian Creek Golf Course surround the study area. The site is primarily annual grassland and foothill woodland (Figure 2).

CONTACT INFORMATION

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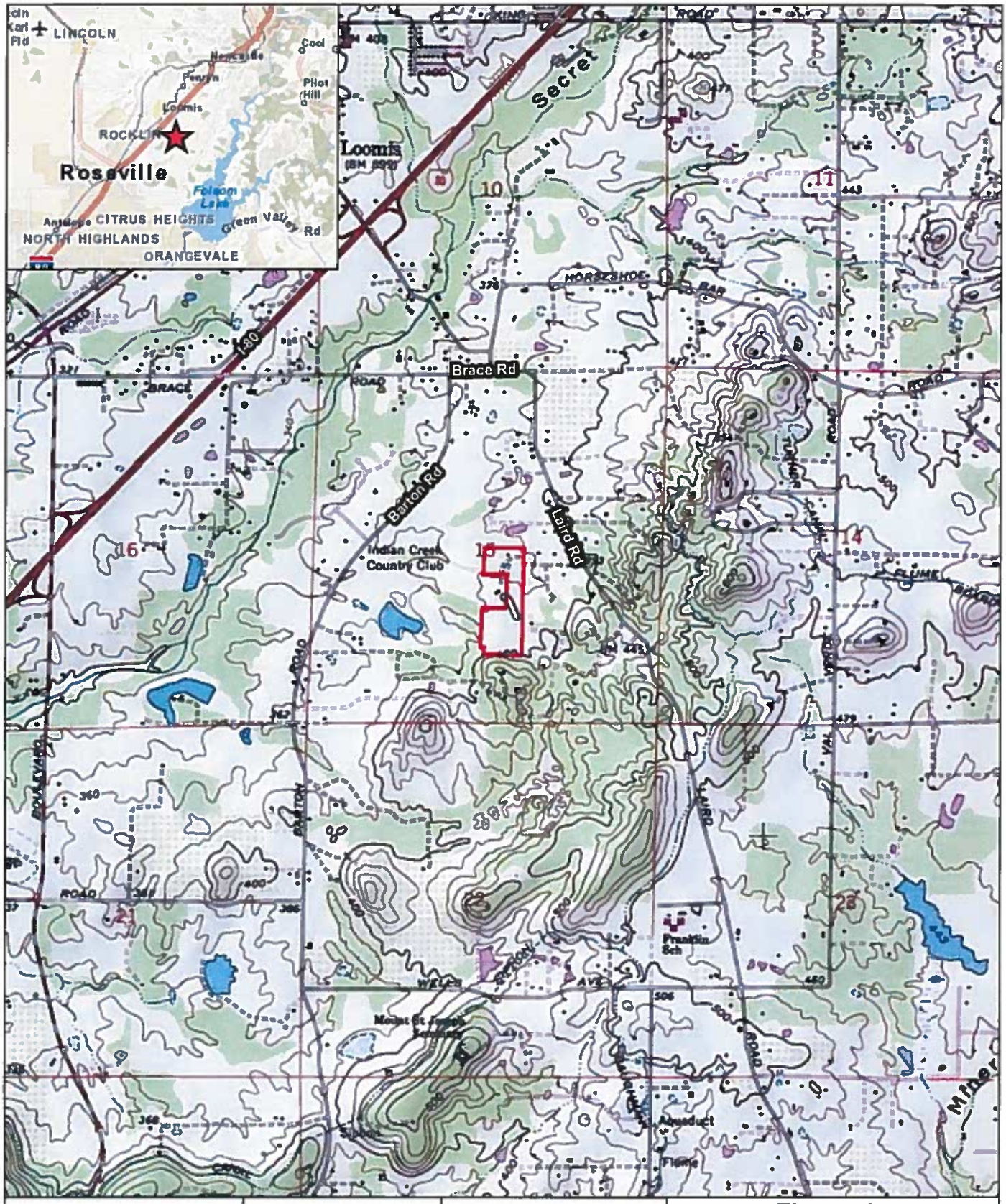
Auburn, California 95603
Phone: (530) 888-0130
Contact: Jeff Glazner

METHODOLOGY

Waters of the United States were delineated on March 3, 10, 2015, and March 13, 2015. The delineation was conducted according to the 1987 Corps Manual (Environmental Laboratory 1987) as amended by the Arid West Regional Supplement (U.S. Army Corps of Engineers 2008). The site was observed by walking, and any area that may support wetlands was evaluated closely. Where closer evaluation was necessary, information about vegetation, soils, and hydrology was recorded on standard Wetland Delineation Data Forms



Source Maps: USGO Topographic Map, Rocklin (1981), CA Quadrangle, 1:24,000

Legend

Study Area (±18.15 acres)

Figure 1

VICINITY MAP

Wishing Well Way

Loomis, Placer County, CA

Salix consulting, inc.

N

0 200 400

Feet

Legend

Study Area (±18.2 acres)

Figure 2

AERIAL PHOTO

Wishing Well Way

Loomis, Placer County, CA

(Appendix A). Potential waters of the U.S. were mapped using a Trimble GeoXT 6000 GPS (submeter).

Information on soils of the study area was obtained from the U.S. Department of Agriculture – National Resource Conservation Service's online Web Soil Survey (NRCS 2014). In the field, a Munsell Color (2000) chart was used to determine moist soil colors. Appendix B is a list of plants observed during the delineation, along with the scientific name and wetland status of each species. Where a plant species observed has a wetland indicator status (not UPL), plant nomenclature follows Lichvar et.al. (2015). Otherwise, species names are aligned with the The Jepson Manual (Baldwin et.al. 2012).

Three-parameter field data points were recorded at fourteen locations as indicated on the Wetland Delineation Map.

FINDINGS

Climate

Loomis has a Mediterranean climate with dry hot summers and mild winters. On average, the warmest month is July and the coolest is January. The average high temperature is 91.3°F in July and the average low is 37.6°F in January. Loomis averages 36 inches of rain per year in non-drought years, and approximately 90 percent of the average annual rainfall occurs from November through April (Local Information Data Server).

Soils

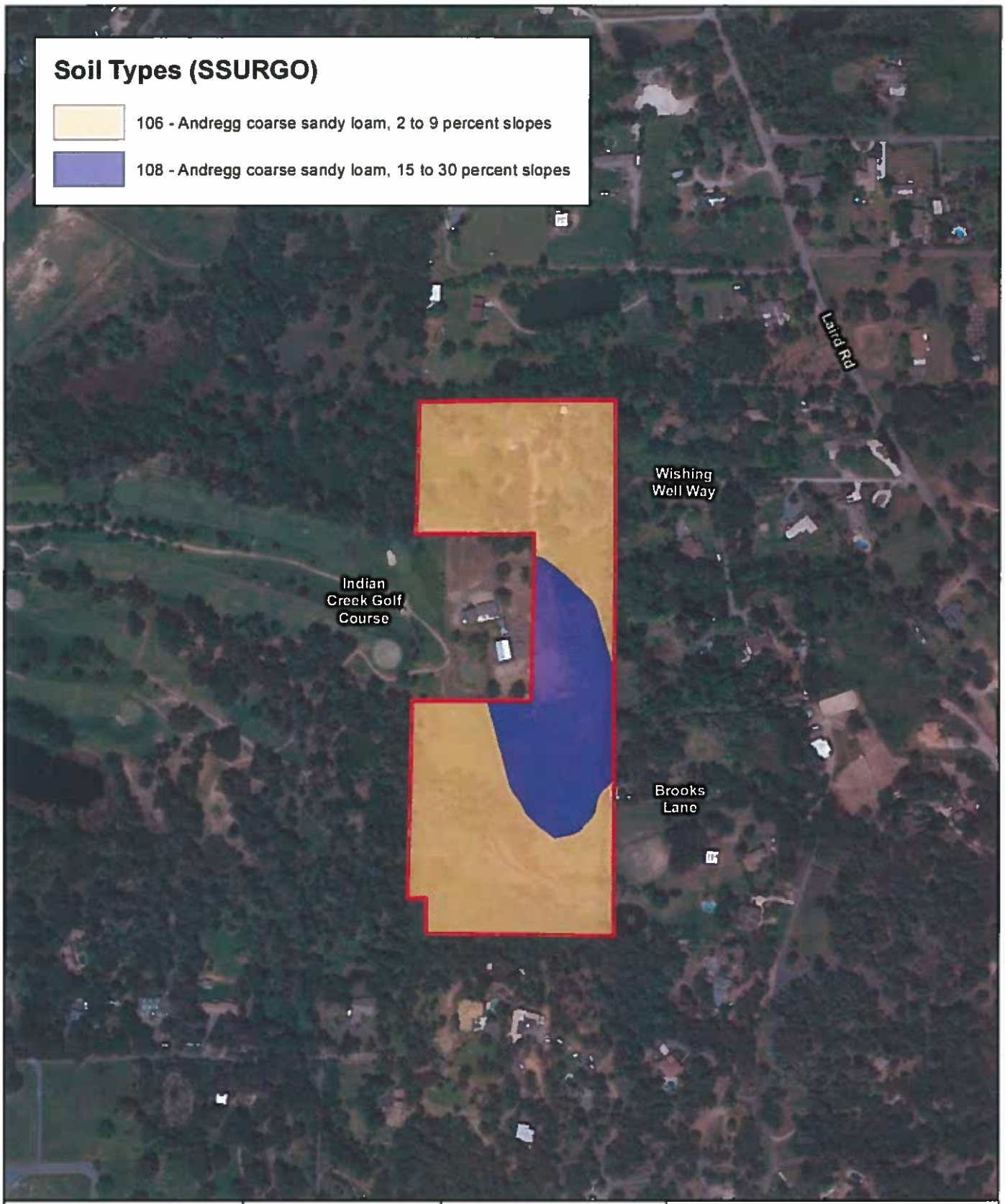
Two soil units have been mapped within the study area (Figure 3) and include the following (NRCS 2015):

Andregg coarse sandy loam, 2 to 9 percent slopes

This soil type is found on low hills in the Loomis Basin at elevations from 200 to 1,000 feet. It is a moderately deep, gently rolling, and well-drained soil underlain by weathered granitic bedrock. Permeability is moderately rapid and surface runoff is medium. The soil is not flooded and is not ponded. This soil does not meet hydric criteria. Natural vegetation is annual grasses, forbs, blue and live oak, and scattered pine.

Andregg coarse sandy loam, 15 to 30 percent slopes

This soil type is found on foothills in the Loomis Basin at elevations from 300 to 1,000 feet. It is a moderately deep, hilly, and well-drained soil underlain by weathered granitic bedrock. Permeability is moderately rapid and surface runoff is medium to rapid. The soil is not flooded and is not ponded. This soil does not meet hydric criteria. Natural vegetation is annual grasses, forbs, blue and live oak, and scattered pine.



Salix consulting, inc.

N

0 200 400

Feet

Legend

Study Area (±18.2 acres)

Figure 3

SOIL MAP

Wishing Well Way

Loomis, Placer County, CA

Hydrology

The study area occurs in the Lower American watershed (Hydrologic Unit Code 18020111). The nearest major waterway is Secret Ravine Creek, which flows northeast to southwest on the east side of interstate 80 (west of the study area) and drains into Miners Ravine, which connects with Dry Creek in Sacramento County. Dry Creek becomes the Natomas East Main Drainage Canal, which drains into the Sacramento River. There are a few other minor drainage features on the site in the eastern area, but all carry very little water.

Most of the watershed for this study area (approximately 18 acres), is developed as rural residential, and water is conveyed in ditches and channeled waterways through and around these properties. The study area contains several minor drainage features that convey runoff from adjacent properties. Locally, the site drains from the eastern side of the property toward the offsite drainage in the woodlands around the golf course.

Vegetation

Two primary biological communities occur in the study area including annual grassland and foothill woodland.

Annual Grassland

Annual Grassland is the primary habitat type within the Wishing Well Way study area and covers approximately 14 acres. Common herbaceous species within the annual grassland include wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), wild geranium (*Geranium molle*), field hedge parsley (*Torillis arvensis*), Italian thistle (*Carduus pycnocephalus*), yellow star thistle (*Centaurea solstitialis*), skeleton weed (*Chondrilla juncea*), bindweed (*Convolvulus arvensis*), broad-leaf filaree (*Erodium botrys*), vetch (*Vicia* spp.), and soaproot (*Chlorogalum pomeridianum*).

Foothill Woodland

Foothill woodland covers a portion of the northern half of the study area and around the edges of the southern half. The most common trees on the project site include valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*) and Fremont cottonwood (*Populus fremontii*). Common understory shrubs include poison oak (*Toxicodendron diversilobum*) and Himalayan blackberry (*Rubus armeniacus*).

Waters of the United States

Four categories of waters of the United States have been mapped onsite and include pond, wetland swale, seasonal wetland, and an intermittent stream. Table 1 provides an acreage summary of waters of the United States onsite, and Figures 4a and 4b present representative site photos. Figure 5 is the wetland delineation map.

Table 1.
Waters of the United States

Type	Acreage
Wetland Type:	
Pond	0.32
Wetland Swale	1.59
Seasonal Wetland	0.29
Other Waters:	
Intermittent Stream	0.03
Total Waters of the United States	**2.23**

Pond

The pond occurs in the northern portion of property. The edge of the pond is well-defined with steep banks and drops 1 to 2 feet down to the surface water. There is evidence that the pond is kept full year round and periodically overflows after a large rainfall.

The water source for the pond is primarily a 3-foot wide seasonal swale flowing from northeast. The water enters the project site from a channelized waterway along Wishing Well Way. The 36-inch culvert at the driveway allows flow in a westerly direction though the wetland swale into the pond and exiting the pond via a three 24-inch culverts. Vegetation around the pond is weedy and sparse with a relatively consistent level of water. Common plants observed around the pond included common knotweed (*Polygonum aviculare*), curly dock (*Rumex crispus*), tall flatsedge (*Cyperus eragrostis*), and hyssop loosestrife (*Lythrum hyssopifolia*). A few individual trees occur along the western portion of the ditch and include Fremont cottonwood, northern California black walnut (*Juglans hindsii*), and arroyo willow (*Salix lasiolepis*).

Wetland Swale

Several wetland swales occur within the study area totaling 1.59 acres. The water to the swales come from the east and flow to the west (Figure 5 Wetland Delineation Map).

Common wetland swale species include curly dock, Baltic rush (*Juncus balticus*), common velvet grass (*Holcus lanatus*), tall flatsedge, hairy willow-herb (*Epilobium ciliatum*), western goldenrod (*Euthamia occidentalis*) and Himalayan blackberry (*Rubus armeniacus*). Common trees and shrubs of the surrounding wetland swales, included Fremont cottonwood (*Populus fremontii*), narrow-leaved willow (*Salix exigua*), and red willow (*Salix laevigata*).

Cottonwoods and willows occur in several areas of the site but there is no continuous riparian corridor. In general, the site appears to have a relatively high groundwater table.

Seasonal Wetland

Two seasonal wetlands are identified on the project site. They are both located in the northern portion of the study area and both are associated with the foothill woodland habitat.

The northwestern seasonal wetland (SW-1) is approximately 0.18 acre in size and is most likely created from short-duration high groundwater. This wetland is located beneath a cottonwood canopy in a sparsely vegetated area. The wetland vegetation included common velvet grass, Hyssop loosestrife (*Lythrum hyssopifolia*), and curly dock (*Rumex crispus*).

The northeastern seasonal wetland (SW-2) is approximately 0.12 acre in size and is most likely created from short-duration high groundwater. The wetland vegetation included curly dock, dallis grass (*Paspalum dilatatum*), Baltic rush, iris-leaved rush (*Juncus xiphioides*), and clustered field-sedge (*Carex praegracilis*).

Intermittent Stream

The intermittent stream (IS-1) flows from the pond to an offsite drainage along the western edge of the property. The stream had a steady flow of water that flows from three 24-inch culverts out of the pond. Wetland vegetation observed in the channel included Pacific mosquitofern (*Azolla filiculoides*) and common rush (*Juncus effusus*).

Looking to the west at the intermittent stream.

Photo Date 3-3-15

Looking to the east at the pond from the culver outfall.

Photo Date 3-3-15

Looking south up wetland swale (WS-4).

Photo Date 3-13-15

Salix consulting, inc.

Figure 4a

SITE PHOTOS

Wishing Well Way

Loomis, Placer County, CA

Looking to the south over seasonal wetland (SW-2)

Photo Date 3-10-15

Looking to the south over seasonal wetland (SW-1)

Photo Date 3-10-15

Looking to the east up wetland swale (WS-6).

Photo Date 3-13-15

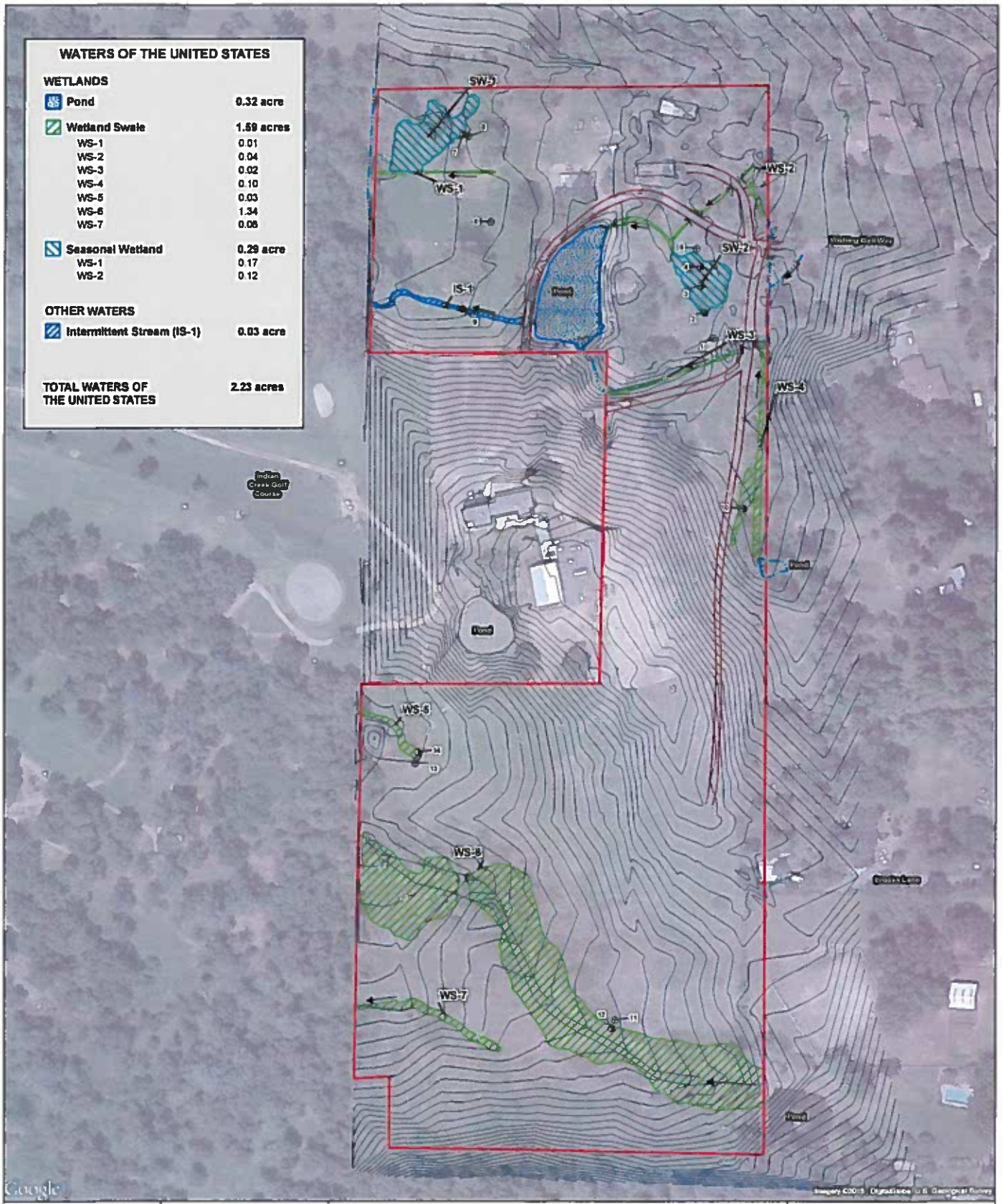
Salix consulting, Inc.

Figure 4b

SITE PHOTOS

Wishing Well Way

Loomis, Placer County, CA



Salix consulting, inc.

N

0 100 200 Feet

Legend

- Study Area (18.2 acres)
- Offsite Wetland/Waters
- Flow Direction
- Culvert
- Waters Data Point
- Wetland Data Point
- Upland Data Point

Figure 5

WETLAND DELINEATION

Wishing Well Way

Loomis, Placer County, CA

March 31, 2015

REFERENCES AND OTHER SOURCES

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U.S. Department of Agriculture, NRCS. Web Soil Survey for Placer County Online. http://websoilsurvey.nrcs.usda.gov. Accessed April 2015.

Appendix A.
Wishing Well Way Wetland Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 03/10/15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 01

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 1

Subregion (LRR): LRRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____

Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☐	No ☒		
Hydric Soil Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	Yes ☐ No ☒
Wetland Hydrology Present?	Yes ☐	No ☒		

Remarks: Upland landscape position above seasonally high water table

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Rumex crispus*	20	yes	FAC
2. *Festuca arundinacea*	15	____	FACU
3. *Cynodon dactylon*	20	yes	FACU
4. *Paspalum dilatatum*	10	____	FAC
5. *Vicia villosa*	10	____	UPL
6. *Geranium dissectum*	10	____	UPL
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	85	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 15	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

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

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x1 =	0
FACW species	0	x2 =	0
FAC species	30	x3 =	90
FACU species	35	x4 =	140
UPL species	20	x5 =	100
Column Totals:	85 (A)		330 (B)

Prevalence Index = B/A = 309

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: Facultative to upland plant community

Project Site: Wishing Well Way

SOIL Sampling Point: 01

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-10	7.5YR 3/2	100					sandy loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (If present):

Type:

Depth (Inches):

Hydric Soils Present? Yes ☐ No ☒

Remarks: Clayey soil below 10". Well drained above.

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):

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: Lack of evidence of prolonged saturation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3-10-15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 02

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 1

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: _____

Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☒	No ☐			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	Yes ☒	No ☐
Wetland Hydrology Present?	Yes ☒	No ☐			

Remarks: Edge of wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
50% = _____, 20% = _____		= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
50% = _____, 20% = _____		= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Festuca arundinacea*	50	yes	FACU
2. *Rumex crispus*	20	yes	FAC
3. *Vicia villosa*	5		UPL
4. *Gallium aparine*	5		FACU
5. *Paspalum dilataum*	20	yes	FAC
6. _____			
7. _____			
8. _____			
50% = _____, 20% = _____	100	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____			
2. _____			
50% = _____, 20% = _____		= Total Cover	
% Bare Ground in Herb Stratum 5		% Cover of Biotic Crust _____	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x1 =	0
FACW species	0	x2 =	0
FAC species	40	x3 =	120
FACU species	55	x4 =	220
UPL species	5	x5 =	25
Column Totals:	100 (A)		365 (B)

Prevalence Index = B/A = 3.65

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Marginal wetland at this flora location. Transition from upland/wetland

Project Site: Wishing Well Way

SOIL Sampling Point: 02

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-12	7.5YR 5/1	80	5YR 4/6	20	C	M	____	sandy clay loam
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soils Present? Yes ☒ No ☐

Remarks: Prominent redox.

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): 12"
Saturation Present? (includes capillary fringe)	Yes	☒	No	☐	Depth (inches): 12"

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Evidence of seasonally high ground water.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/10/15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 03

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: _____

Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☒	No ☐			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	**Yes ☒**	**No ☐**
Wetland Hydrology Present?	Yes ☒	No ☐			

Remarks: Near center of very shallow depression and is a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
50% = _____, 20% = _____		= Total Cover	
Sapling/Shrub Stratum (Plot size:_____)			
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
50% = _____, 20% = _____		= Total Cover	
Herb Stratum (Plot size:_____)			
1. *Juncus balticus*	20	yes	FACW
2. *Paspalum dilatatum*	65	yes	FAC
3. *Rumex crispus*	10		FAC
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
50% = _____, 20% = _____	95	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. _____			
2. _____			
50% = _____, 20% = _____	95	= Total Cover	
% Bare Ground in Herb Stratum 5	% Cover of Biotic Crust	_____	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of :		Multiply by:	
OBL species	_____	x1 =	_____
FACW species	_____	x2 =	_____
FAC species	_____	x3 =	_____
FACU species	_____	x4 =	_____
UPL species	_____	x5 =	_____
Column Totals:	_____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Wetland plant community.

Project Site: Wishing Well Way

SOIL

Sampling Point: 03

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-12	10YR 5/2	80	5YR 4/6	20	C	M		sandy clay loam

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (If present):

Type: ____

Depth (Inches): ____

Hydric Soils Present? Yes ☒ No ☐

Remarks: Prominent redox throughout soil column.

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): 8"
Saturation Present? (includes capillary fringe)	Yes	☒	No	☐	Depth (inches): 8"

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Standing water in soil pit at 8".

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/10/15
Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 04
Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 1
Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____
Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☒	No ☐			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	**Yes ☒**	**No ☐**
Wetland Hydrology Present?	Yes ☒	No ☐			

Remarks: Within high groundwater area

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Juncus xiphioides*	25	yes	OBL
2. *Paspalum dilatatum*	55	yes	FAC
3. *Rumex crispus*	15	____	FAC
4. ____	____	____	____
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	95	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	95	= Total Cover	
% Bare Ground in Herb Stratum 5	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Wetland vegetation

Project Site: Wishing Well Way

SOIL Sampling Point: 04

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-12	10YR 5/2	80	5YR 4/6	20	C	M		sandy clay loam

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? Yes ☒ No ☐

Remarks: Prominent redox throughout soil column.

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): 8"
Saturation Present? (includes capillary fringe)	Yes	☒	No	☐	Depth (inches): 8"

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Saturation in upper part.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/10/15
Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 05
Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 1
Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____
Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☐	No ☒			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	**Yes ☐**	**No ☒**
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: Transition between upland and wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Vicia sativa*	30	yes	FACU
2. *Bromus hordeaceus*	30	yes	FACU
3. *Carex praegracilis*	15	____	FACW
4. *Rumex crispus*	15	____	FAC
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	90	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	90	= Total Cover	
% Bare Ground in Herb Stratum 10	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: Upland and wetland species present, but upland species characterized this area.

Project Site: Wishing Well Way

SOIL Sampling Point: 05

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-10	7.5YR 4/2	90	5YR 4/6	10	C	M		sandy clay loam

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type: ____

Depth (Inches): ____

Hydric Soils Present? Yes ☒ No ☐

Remarks: Strong redox in soil column. Transition between upland and wetland

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): ____

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: Well drained and lacking saturation in upper 12".

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/10/15
Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 06
Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____
Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☐	No ☒			
Hydric Soil Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: Suspect field, lacks wetland hydrology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Geranium molle*	20	yes	UPL
2. *Rumex crispus*	20	yes	FAC
3. *Festuca perennis*	20	yes	FACU
4. *Trifolium repens*	10	____	FACU
5. *Cynodon dactylon*	10	____	FACU
6. *Bromus hordeaceus*	10	____	FACU
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	90	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	90	= Total Cover	
% Bare Ground in Herb Stratum 10	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: Facultative and upland plant community

Project Site: Wishing Well Way

SOIL Sampling Point: 06

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-12	10YR 3/2	100					sandy loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (If present):

Type:

Depth (Inches):

Hydric Soils Present? Yes ☐ No ☒

Remarks: Lacks redox in upper part. Well drained coarse soil.

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):

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: No water in soil pit above 12". Area does not exhibit evidence of seasonally prolonged saturation

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/13/15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 07

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 1

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____

Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☒	No ☐			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	Yes ☒	No ☐
Wetland Hydrology Present?	Yes ☒	No ☐			

Remarks: Edge of seasonal wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus fremontii*	50	yes	FAC
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	50	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. *Rubus armeniacus*	20	yes	FACU
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	20	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Holcus lanatus*	20	yes	FAC
2. *Lythrum hyssopifolia*	2	____	OBL
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	22	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	98	= Total Cover	
% Bare Ground in Herb Stratum 80	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index worksheet:

Total % Cover of :		Multiply by:	
OBL species	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Blackberry has been thinned. High cottonwood leaf litter.

Project Site: Wishing Well Way

SOIL Sampling Point: 07

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

Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]		
0-6	7.5YR 3/1	100	____	____	____	____	clay loam	high organic matter
6-12	10YR 4/2	75	5YR 4/6	25	C	M	sandy loam	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type: ____

Depth (Inches): ____

Hydric Soils Present? Yes ☒ No ☐

Remarks: High organic matter on soil surface. Strong redox in mineral 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) (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): 8"
Saturation Present? (includes capillary fringe)	Yes	☒	No	☐	Depth (inches): 8"

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Saturation at 8".

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/13/15
Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 08
Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E
Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 1
Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____
Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☐	No ☒		
Hydric Soil Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes ☐ No ☒**
Wetland Hydrology Present?	Yes ☐	No ☒		

Remarks: Upland comparison for sample point 7.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus fremontii*	10	____	FAC
2. *Quercus lobata*	50	yes	FACU
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Festuca arundinacea*	50	yes	FACU
2. *Galium aparine*	20	yes	FACU
3. *Rumex crispus*	1	____	FAC
4. *Anthriscus caucalis*	20	yes	UPL
5. *Geranium molle*	1	____	UPL
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	92	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 8	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: Blackberry has been thinned. High cottonwood leaf litter.

Project Site: Wishing Well Way

SOIL Sampling Point: 08

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

Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]		
0-6	10YR 3/2	100					loam	high organic matter
6-12	10YR 4/3	100					sandy DG	course parent material

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (If present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes ☐ No ☒

Remarks: Upper part is organic and not much clay. Lower profile DG. No redox.

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): _____

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: Lacks evidence of prolonged saturation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/13/15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 09

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): channel | Local relief (concave, convex, none): concave | Slope (%): 1

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____

Soil Map Unit Name: 106 Andrego Coarse sandy loam, 2 to 9 percent slopes | 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 ☐ No ☐		
Hydric Soil Present?	Yes ☐ No ☐	**Is the Sampled Area within a Wetland?**	**Yes ☐ No ☐**
Wetland Hydrology Present?	Yes ☐ No ☐		

Remarks: This sample point is within the Intermittent Stream and considered as Other Waters.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Axolla filiculoides*	20	yes	OBL
2. *Rumex crispus*	2	no	FAC
3. *Jumcus effusus*	5	no	FACW
4. ____	____	____	____
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	5	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 95	% Cover of Biotic Crust ____		

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	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☐

Remarks: Flowing water in stream channel.

Project Site: Wishing Well Way

SOIL Sampling Point: 09

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type: ____

Depth (Inches): ____

Hydric Soils Present? Yes ☐ No ☐

Remarks: Rocky channel bottom; no soil data taken.

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): ____
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: Flowing water

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/13/15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 10

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 2

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____

Soil Map Unit Name: 108 Andrego Coarse sandy loam, 15 to 30 percent slopes | 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 ☒	No ☐			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	**Yes ☒**	**No ☐**
Wetland Hydrology Present?	Yes ☒	No ☐			

Remarks: Sloped wetland adjacento to dirt road. Disturbed by mowing.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. *Rubus armeniacus*	10	____	FACU
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Holcus lanatus*	15	yes	FAC
2. *Cyperus eragrostis*	30	yes	FACW
3. *Mentha pulegium*	20	yes	OBL
4. *Medicago polymorpha*	10	____	FACU
5. *Rumex crispus*	10	____	FAC
6. *Geranium dissectum*	1	____	UPL
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	86	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 14	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	20	x1 =	20
FACW species	30	x2 =	60
FAC species	25	x3 =	75
FACU species	10	x4 =	40
UPL species	1	x5 =	5
Column Totals:	86 (A)		200 (B)

Prevalence Index = B/A = 2.33

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Dominated by wetland generalists.

Project Site: Wishing Well Way

SOIL Sampling Point: 10

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 3/1	98	5YR 4/6	2	C	M	sandy clay	
4-12	10YR 4/1	90	6YR 4/6	10	C	M	sandy loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (If present):

Type:

Depth (Inches):

Hydric Soils Present? Yes ☒ No ☐

Remarks: Saturation at 8 inches.

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):	
Saturation Present? (includes capillary fringe)	Yes	☒	No	☐	Depth (inches):	8"

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Saturated area between slope and swale flowing out of offsite pond.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3/13/15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 11

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 2

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____

Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☐	No ☒			
Hydric Soil Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	Yes ☐	No ☒
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: Higher elevation on slope. Upland comparison to 12.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. *Rubus armeniacus*	20	yes	FACU
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	20	= Total Cover	
Herb Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 80	% Cover of Biotic Crust ____		

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	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: Blackberry thinned in this area.

Project Site: Wishing Well Way

SOIL Sampling Point: 11

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	98	faint redox	2	C	M	sandy loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type:

Depth (Inches):

Hydric Soils Present? Yes ☐ No ☒

Remarks: Soil transition to upland hydrology.

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):

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: Just upslope of area of seasonal saturation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3-13-15
Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 12
Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____
Soil Map Unit Name: 106 Andrega Coarse sandy loam, 2 to 9 percent slopes | 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 ☒	No ☐		
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	Yes ☒ No ☐
Wetland Hydrology Present?	Yes ☒	No ☐		

Remarks: Edge of wetland

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. *Rubus armeniacus*	20	yes	FACU
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	20	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Paspalum dilatatum*	10	____	FAC
2. *Epilobium ciliatum*	20	yes	FACW
3. *Euthamia occidentalis*	10	____	FACW
4. ____	____	____	____
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	40	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 70	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x1 =	0
FACW species	30	x2 =	60
FAC species	10	x3 =	30
FACU species	0	x4 =	0
UPL species	0	x5 =	0
Column Totals:	40 (A)		90 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Blackberry thinned and wetland species populating.

Project Site: Wishing Well Way

SOIL

Sampling Point: 12

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/2	100	faint redox	____	C	M	sandy loam	high organic matter
6-12	10YR 4/2	80	5YR 4/6	20	C	M	sandy loam	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type: ____

Depth (Inches): ____

Hydric Soils Present? Yes ☒ No ☐

Remarks: Oxidized rhizospheres and strong redox. Sandy soils throughout drainage zone.

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): ____

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 10"

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Wide drainage zone. Adjacent to low flow channel in swale. Water trickling through the swale. Water discharged through here from western edge of property and offsite pond.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3-13-15
Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 13
Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____
Soil Map Unit Name: 106 Andregg Coarse sandy loam, 2 to 9 percent slopes | 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 ☐	No ☒			
Hydric Soil Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes ☐**	**No ☒**
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: **Upland comparison to 14.**

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____			
2. ____			
3. ____			
4. ____			
50% = ____, 20% = ____		= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____			
2. ____			
3. ____			
4. ____			
5. ____			
50% = ____, 20% = ____		= Total Cover	
Herb Stratum (Plot size:____)			
1. *Juncus balticus*	25	yes	FACW
2. *Bromus diandrus*	40	yes	UPL
3. *Cirsium vulgare*	5		FACU
4. *Geranium molle*	10		UPL
5. ____			
6. ____			
7. ____			
8. ____			
50% = ____, 20% = ____	80	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____			
2. ____			
50% = ____, 20% = ____		= Total Cover	
% Bare Ground in Herb Stratum 20		% Cover of Biotic Crust ____	

Dominance Test Worksheet:

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

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x1 =	0
FACW species	25	x2 =	50
FAC species	0	x3 =	0
FACU species	5	x4 =	20
UPL species	10	x5 =	50
Column Totals:	40 (A)		120 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

Project Site: Wishing Well Way

SOIL Sampling Point: 13

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 4/3	100					loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) **(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): _____

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: Lacks evidence of seasonal saturation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wishing Well Way | City/County: Loomis/Placer County | Sampling Date: 3-13-15

Applicant/Owner: David and Larissa Justice | State: CA | Sampling Point: 14

Investigator(s): Jeff Glazner /Caroline Hinkelman | Section, Township, Range: S15 T11N R7E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): concave | Slope (%): 1

Subregion (LRR): LLRC | Lat: 38 48' 3.62" | Long: 121 10' 53.38" | Datum: ____

Soil Map Unit Name: 106 Andrego Coarse sandy loam, 2 to 9 percent slopes | 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 ☒	No ☐			
Hydric Soil Present?	Yes ☒	No ☐	**Is the Sampled Area within a Wetland?**	Yes ☒	No ☐
Wetland Hydrology Present?	Yes ☒	No ☐			

Remarks: **In a low area**

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:____)	Absolute % Cover	Dominant Species?	Indicator Status
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Sapling/Shrub Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
3. ____	____	____	____
4. ____	____	____	____
5. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
Herb Stratum (Plot size:____)			
1. *Juncus balticus*	20	yes	FACW
2. *Cyperus eragrostis*	10	____	FACW
3. *Cirsium vulgare*	10	____	FACU
4. ____	____	____	____
5. ____	____	____	____
6. ____	____	____	____
7. ____	____	____	____
8. ____	____	____	____
50% = ____, 20% = ____	40	= Total Cover	
Woody Vine Stratum (Plot size:____)			
1. ____	____	____	____
2. ____	____	____	____
50% = ____, 20% = ____	____	= Total Cover	
% Bare Ground in Herb Stratum 60	% Cover of Biotic Crust ____		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x1 =	____
FACW species	____	x2 =	____
FAC species	____	x3 =	____
FACU species	____	x4 =	____
UPL species	____	x5 =	____
Column Totals:	____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Wetland species at head of swale.

Project Site: Wishing Well Way

SOIL

Sampling Point: 14

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 4/2	90	7.5YR 4/6	10	C	M	sandy loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

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

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

Restrictive Layer (If present):

Type: ____

Depth (Inches): ____

Hydric Soils Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (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): ____

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: Algae growth on soil surface. Moist soil column, but not saturated.

Appendix B.
Plant Species Observed on the Wishing Well Way Study Area

Wishing Well Way - Plants Observed March 2015

Taxon	Common Name	Wetland Status
Amsinckia menziesii	Rancher's fireweed	UPL
Anthriscus caucalis	Bur-chervil	UPL
Avena fatua	Wild oat	UPL
Azolla filiculoides	Fern-like mosquito fern	OBL
Baccharis pilularis	Coyote brush	UPL
Briza minor	Small quaking grass	FAC
Bromus diandrus	Ripgut grass	UPL
Bromus hordeaceus	Soft chess	FACU
Capsella bursa-pastoris	Shepherd's purse	FACU
Carduus pychnocephalus	Italian thistle	UPL
Carex praegracilis	Clustered field-sedge	FACW
Centaurea solstitialis	Yellow starthistle	UPL
Chlorogalum pomeridianum	Soaproot	UPL
Cichorium intybus	Chicory	FACU
Cirsium vulgare	Bull thistle	FACU
Claytonia perfoliata	Common miner's lettuce	FAC
Cynodon dactylon	Bermudagrass	FACU
Cynosurus echinatus	Hedgehog dogtail	UPL
Cyperus eragrostis	Tall flatsedge	FACW
Cytisus scoparius	Scotch broom	UPL
Dactylis glomerata	Orchard grass	FACU
Dichelostemma capitatum	Blue dicks	FACU
Eleocharis pachycarpa	Black sand spikerush	OBL
Epilobium brachycarpum	Summer cottonweed	UPL
Epilobium ciliatum	Hairy willow-herb	FACW
Equisetum arvense	Common horsetail	FAC
Erigeron canadensis	Canadian horseweed	FACU
Erodium botrys	Broad-leaf filaree	FACU
Erodium cicutarium	Red-stem filaree	UPL
Erythranthe guttata	Common monkeyflower	OBL
Euthamia occidentalis	Western goldenrod	FACW
Festuca arundinacea	Tall fescue	FACU
Festuca perennis	Italian ryegrass	FAC
Galium aparine	Goose grass	FACU
Geranium dissectum	Cut-leaf geranium	UPL
Geranium molle	Dove's-foot geranium	UPL
Holcus lanatus	Common velvet grass	FAC
Hordeum marinum subsp. gussoneanum	Mediterranean barley	FAC

Taxon	Common Name	Wetland Status
Hordeum murinum	Wall barley	FACU
Hypericum perforatum subsp. perforatum	Klamathweed	FACU
Juncus balticus subsp. ater	Baltic rush	FACW
Juncus bufonius	Toad rush	FACW
Juncus effusus	Soft rush	FACW
Juncus xiphioides	Iris-leaved rush	OBL
Lamium amplexicaule	Deadnettle	UPL
Ludwigia peploides	Water Primrose	OBL
Lysimachia arvensis	Scarlet pimpernel	FAC
Lythrum hyssopifolia	Hyssop loosestrife	OBL
Medicago polymorpha	California burclover	FACU
Mentha pulegium	Pennyroyal	OBL
Myriophyllum aquaticum	Parrot's feather	OBL
Nemophila menziesii	Baby blue-eyes	UPL
Paspalum dilatatum	Dallis grass	FAC
Persicaria lapathifolia	Willow weed	FACW
Phoradendron leucarpum subsp. tomentosum	Oak mistletoe	UPL
Phoradendron sp.	Leafy mistletoe	UPL
Plantago lanceolata	English plantain	FAC
Poa annua	Annual bluegrass	FACU
Polygonum aviculare	Common knotweed	FACW
Populus fremontii subsp. fremontii	Fremont cottonwood	FAC
Prunus sp.	Prunus	UPL
Quercus lobata	Valley oak	FACU
Quercus wislizeni	Interior live oak	UPL
Ranunculus muricatus	Spiny-fruit buttercup	FACU
Raphanus sativus	Wild radish	UPL
Rubus armeniacus	Himalayan blackberry	FACU
Rumex acetosella	Sheep sorrel	FACU
Rumex crispus	Curly dock	FAC
Rumex pulcher	Fiddle dock	FAC
Salix exigua	Narrow-leaved willow	FACW
Salix laevigata	Red willow	FACW
Sanicula bipinnatifida	Purple sanicle	UPL
Senecio vulgaris	Common groundsel	FACU
Silybum marianum	Milk thistle	UPL
Sisymbrium officinale	Hedge mustard	UPL
Sonchus asper subsp. asper	Prickly sow-thistle	FAC
Stellaria media	Common chickweed	FACU
Toxicodendron diversilobum	Western poison-oak	FACU

Taxon	Common Name	Wetland Status
Trifolium dubium	Little hop clover	UPL
Trifolium repens	White clover	FACU
Typha latifolia	Broad-leaved cattail	OBL
Verbascum thapsus	Woolly mullein	FACU
Vicia sativa	Common vetch	FACU
Vicia villosa	Winter vetch	UPL
Xanthium spinosum	Spiny clotbur	FACU
Zeltnera muehlenbergii	June centaury	FAC