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**Appendix T**  
**Wetland Delineation**

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# *JURISDICTIONAL DELINEATION*

## *FIDDYMENT PROPERTY*

*PLACER COUNTY,  
CALIFORNIA*

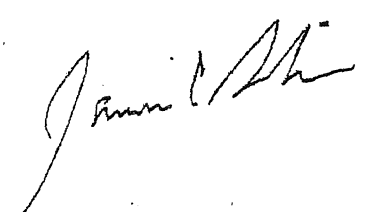
*SEPTEMBER 1998  
Revised  
November 1998*

*Prepared For:*

*SIGNATURES PROPERTIES  
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## OBJECTIVE

The purpose of this study was to delineate all waters of the United States including wetlands existing in the study area that are subject to the provisions of Section 404 of the Clean Water Act.

## LOCATION

The study area is an approximately 1,667-acre parcel located northwest of the intersection of Phillips Road and Fiddymont Road in Placer County, California (Sections 13, 18, 19 and 24, Township 11 North, Range 6 East). Figure 1 is a vicinity map showing the location of the study area.

## METHODS AND MATERIALS

Field studies were conducted on August 18 - 20, 1998 for the purpose of delineating and mapping all waters of the United States including wetlands present in the study area. The "**Corps of Engineers Wetlands Delineation Manual**"<sup>1</sup> was used as the standard for determining whether specific areas are wetlands subject to the Clean Water Act. Corps of Engineers' regulations (33 CFR 328) were used to determine the presence of waters of the United States, other than wetlands. The "**National List of Plant Species That Occur In Wetlands: California (Region O)**"<sup>2</sup> was used to determine the status of observed plants as wetland indicator species.

The boundaries of all waters including wetlands were mapped in the field onto 1" = 200' scale infra-red aerial photographs of the study area flown on April 21, 1995. Area of jurisdictional waters was determined by both digital planimeter and field measurements. Detailed data on vegetation, soils, and hydrology characteristics were taken in the field. Data sheets which document the basis for determining which areas are upland or wetland were completed for representative locations and are provided in Appendix A. Appendix B provides a partial list of plant species observed in the study area including their status as wetland indicators.

The Corps of Engineers conducted a field verification of the delineation on October 29, 1998. As a result, minor additions were made and are reflected in this report.

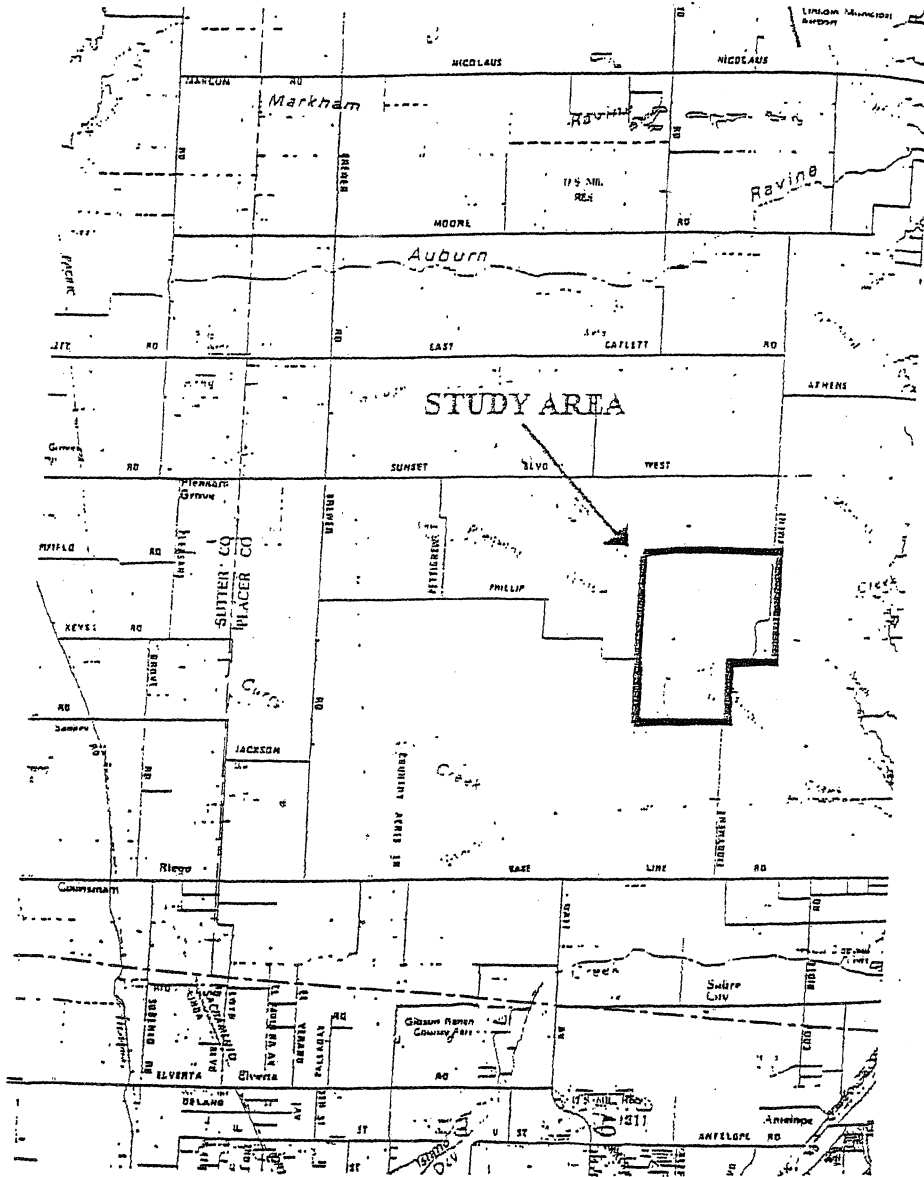
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<sup>1</sup>Environmental Laboratory. 1987. "**Corps of Engineers Wetlands Delineation Manual.**" Technical Report Y-37-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

<sup>2</sup>Reed, P.E. 1988. **National List of Plant Species That Occur In Wetlands: California (Region O).** Biological Report 88 (26.10) May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, Florida.

# FIGURE 1

## VICINITY MAP



## GENERAL SITE CONDITIONS

The study is bordered by Phillips Road to the south and southwest, Fiddyment Road to the east, and undeveloped grasslands to the north and northwest. The study area includes portions of the historic R.F. Fiddyment Ranch. Past land uses include crop cultivation, orchards, and cattle grazing. Remnants of old sprinkler irrigation and ditch irrigation systems are evident throughout the site. A majority of the study area is undeveloped land with the exception of several home sites, out-structures, and a pistachio orchard operation located on the eastern side of the property.

Topographically, the study area consists of gently undulating terrain characterized by ridgelines, swales and drainageways, and flat terraces. Several large drainages bisect the study area. Pleasant Grove Creek, a perennial stream, flows west across the center of the study area. Kaseberg Creek, an intermittent stream, flows north across the southeast corner of the study area before draining into Pleasant Grove Creek.

Primary upland habitats include non-native annual grassland and riparian oak woodland. A majority of the study area is annual grassland dominated by soft chess (*Bromus mollis*), medusa-head (*Taeniatherum caput-medusae*), star thistle (*Centaurea solstitialis*), and tarweed (*Holocarpha virgata*). Other common species include spikeweed (*Hemizonia sp.*), rip gut brome (*Bromus diandrus*), hairy hawkbit (*Leontodon leysseri*), little quaking grass (*Briza minor*), nitgrass (*Gastridium ventricosum*), and bur clover (*Medicago sp.*).

The riparian oak woodland habitat occurs primarily in association with Pleasant Grove Creek and Kaseberg Creek. Both of these creeks have steep banks and well defined channels in the study area, and the riparian woodland habitat does not generally extend below the ordinary high water mark. Typical overstory includes valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), and blue oak (*Quercus douglasii*). Understory is characterized by soft chess, star thistle, dog tail (*Cynosurus echinatus*), blue vervain (*Verbena hastata*), mustard (*Brassica sp.*), and English plantain (*Plantago lanceolata*).

Mapped soils in the study area consist of Alamo-Fiddyment complex, 0 to 5 percent slopes; Cometa sandy loam, 1 to 5 percent slopes; Cometa-Fiddyment complex, 1 to 5 percent slopes; Cometa-Ramona sandy loams, 1 to 5 percent slopes; Fiddyment loam, 1 to 8 percent slopes; Ramona sandy loam, 2 to 9 percent slopes; San Joaquin-Cometa sandy loams, 1 to 5 percent slopes; Xerofluvents, occasionally flooded; Xerofluvents, frequently flooded; and Xerofluvents, hardpan substratum.

A majority of these soil types are hardpan or claypan loamy soils that are well drained. Alamo-Fiddymment complex has inclusions of Alamo clay which are poorly drained. Xerofluvents are mapped along and adjacent to the creeks and drainageways in the study area.

## FINDINGS

We identified a total of approximately 43.83 acres of jurisdictional waters including vernal pools, wet swales, seasonal wetlands, emergent marsh and channel/emergent wetland. Table 1 below gives the area of jurisdictional waters by type.

TABLE 1

### AREA OF JURISDICTIONAL WATERS

<u>Type of Waters</u>	<u>Area (Acres)</u>
Vernal Pools	17.72 AC.
Wet Swales	5.00 AC.
Seasonal Wetlands	3.92 AC.
Emergent Marsh	0.62 AC.
Channels	<u>16.57 AC.</u>
Total:	43.83 AC.

Jurisdictional waters including wetlands are shown on the delineation maps (Map 1 - 3) provided in Appendix C. The following is a brief summary of each of these waters/wetlands.

#### Vernal Pools

Vernal pools in the study area typically occur in well defined depressions underlaid by tight compact soils. Hydrologically, these depressions pond surface water for long durations during the winter and early spring months, but they tend to draw down and desiccate with cessation of winter rains and warming temperatures later in the spring. Wetland hydrology indicators observed in the field include heavy algae matting, oxidized rhizospheres on live roots in the upper surface, and placement within a well defined basin occurring over tight restrictive soils. Additionally, we considered the presence and/or absence of deep hoof marks as a secondary hydrology indicator. Soils were generally dark grayish brown (10YR 4/2) loams and/or clay loams with mottles.

Vernal pools present in the study area can be categorized into shallow and deep pools based on a range of ponding depth and duration. Typically, the deeper vernal pools are dominated by

obligate wetland (OBL) and facultative wetland (FACW) vernal pool species including coyote thistle (*Eryngium vaseyi*), slender popcorn flower (*Plagiobothrys stipitatus*), Carter's buttercup (*Ranunculus alveolatus*), and manna grass (*Glyceria declinata*). Common associate species in the deeper pools include smooth goldfields (*Lasthenia glaberrima*), vernal pool mint (*Pogogyne zizyphoroides*), woolly marbles (*Psilocarphus brevissimus*), white-headed navarretia (*Navarretia leucocephala*), cleistogamous spike primrose (*Boisduvalia cleistogama*), least spikerush (*Eleocharis acicularis*), creeping spikerush (*Eleocharis macrostachya*), downingia (*Downingia* sp.), bractless hedge-hyssop (*Gratiola ebracteata*), american pillwort (*Pilularia americana*), and annual rabbit-foot grass (*Polypogon monspeliensis*).

By contrast, the shallow vernal pools are dominated by Mediterranean rye (*Hordeum hystrix*), perennial rye (*Lolium perenne*), and slender popcorn flower. Hairy hawkbit is a common associate in these shallow pools, but generally not a dominant.

The adjacent upland grassland community was defined by the dominance of non-hydrophytic plants, the absence of wetland hydrology indicators, and/or the absence of hydric soils. Those shallow depressions which were dominated by hairy hawkbit but which lacked other wetland dominants and wetland associate species were typically not considered wetlands. These non-wetlands typically support a number of upland species including tarweed, soft chess, and medusa head.

#### Seasonal Wet Swales

Wet swales in the study area occur in broad linear depressions which transport seasonal runoff and sheet flow, and as such, sustain saturated soil conditions for a portion of the growing season. Typically, these areas do not appreciably pond surface water. Soils are typically dark grayish brown (10YR 4/2) loams and silt loams with mottles at or near the surface. Wetland hydrology indicators observed include placement within a well defined linear depression, oxidized rhizospheres on live roots in the upper profile, algae matting, and deep hoof marks left by cattle.

Vegetation in the swales is dominated by perennial rye grass, coyote thistle and Mediterranean rye. Common associate species include Carter's buttercup, tarweed, spikeweed, purple loosestrife (*Lythrum hyssopifolia*), vernal pool mint, toad rush (*Juncus bufonius*), white-headed navarretia, hairy hawkbit, and little quaking grass.

The adjacent upland community was marked by an absence of hydrophytic vegetation and a lack of wetland hydrology and/or hydric soils indicators. It is important to note that tarweed was a common associate species in many of the wet swales identified in the study area. However, in those swales where tarweed was a dominant species and the associate species were facultative

species or drier, and given the lack of supporting wetland hydrology and hydric soils indicators, we considered these swale features as non-wetland.

### Other Seasonal Wetlands

We identified a number of seasonal wetlands which occur within shallow depressions but which are not dominated by and do not sustain characteristic vernal pool vegetation. Typically these areas were characterized by a mix of wetland vegetation including perennial ryegrass, Mediterranean rye, prostrate knotweed (*Polygonum aviculare*), annual rabbit-foot grass, curly dock (*Rumex crispus*), clustered dock (*Rumex conglomeratus*), purple loosestrife, tall flatsedge (*Cyperus eragrostis*), and spikeweed.

We also identified a large seasonal wetland (SW12) situated immediately north of Pleasant Grove Creek that is impounded by a berm. The wetland was artificially created by the construction of the berm for the purpose of creating seasonal waterfowl habitat for hunting. Water is diverted from the adjacent irrigation ditch to flood the wetland on a seasonal basis. It is unlikely that the wetland would continue to exist if the berm were removed and the seasonal flooding practices were terminated.

### Emergent Marsh

Emergent marsh habitat in the study area occurs primarily within the riparian drainage corridor of Pleasant Grove Creek, and these areas are included within the mapping unit "channels" as shown on the delineation map. We did identify one isolated emergent marsh wetland which occurs in the central eastern part of the study area (EM1).

Typical marsh habitat in the study area is characterized by species including smartweed (*Polygonum sp.*), cattail (*Typha sp.*), dallis grass (*Paspalum dilatatum*), tall flatsedge (*Cyperus eragrostis*), floating primrose (*Ludwigia peploides*), and pennyroyal (*Mentha pulegium*). These areas are generally inundated and/or saturated for most if not all of the growing season. The isolated emergent marsh located near the southeastern corner is dominated by cattails.

### Channels

Channels in the study area include several larger intermittent and/or perennial drainages which sustain flows throughout the rainy season well into the summer. Also present are a number of smaller ephemeral channels which generally only sustain flows following significant storm events and heavy rainfall periods. The ephemeral channels transport seasonal runoff from adjacent swales and slopes and they tend to dry up by late spring or early summer.

Channels were identified based on the presence of a clear and defined bed and bank indicative of regular annual flows. Other indicators of channels included the absence of topsoil, lack of vegetation, and deposition of gravels, sands and/or pebbles.

As stated earlier, there are areas of emergent marsh and/or seasonal wetland habitat which occur below the ordinary high water mark (O.H.W.) of portions of Pleasant Grove Creek. Sparse willows (*Salix sp.*) and Fremont cottonwood (*Populus fremontii*) occur within the broader sections of the creek.



# APPENDIX A

## DELINEATION DATA FORMS



ROUTINE WETLAND DETERMINATION  
DATA FORM

Project/Site: <u>FIDDYMENT PROPERTY</u> Applicant/Owner: <u>SIGNATURE PROPERTIES</u> Investigator(s): <u>D. SKORAL J. GIBSON</u>	Date: <u>8-20-98</u> City/County: <u>PLACER COUNTY</u> State: <u>CALIFORNIA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Vernal Pool (Deep)</u> Transect ID: <u>1</u> Data Point ID: <u>A</u>

VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Glyceria declinata (D)</u>		<u>OBL</u>	9. <u>Pogogyne zizyphoroides</u>		<u>OBL</u>
2. <u>Eryngium vaseyi (D)</u>		<u>FACW</u>	10. <u>Psilodaphus brevissimus</u>		<u>OBL</u>
3. <u>Ranunculus alveolatus (D)</u>		<u>OBL</u>	11. <u>Eleocharis acicularis</u>		<u>OBL</u>
4. <u>Lasthenia alaberrima</u>		<u>OBL</u>	12. <u>Gratiola ebracteata</u>		<u>OBL</u>
5. <u>Diastrobathrus stipitatus</u>		<u>OBL</u>	13. <u>Rumex conglomeratus</u>		<u>FACW</u>
6. <u>Roisduvalia cleistogama</u>		<u>OBL</u>	14. <u>Downingia sp.</u>		<u>OBL</u>
7. <u>Dolypogon Monspeliensis</u>		<u>FACW+</u>	15. _____		
8. <u>Zolium perenne</u>		<u>FAC</u>	16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input checked="" type="checkbox"/> Sediment Deposits/Organic Detritus <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations:  Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Deep depression over tight restrictive soils, heavy algae matting indicate ponding for long duration.

Map Unit Name

(Series and Phase): Alamo - Fiddymart Complex, 0-5% Slopes

Drainage Class: poorly drained well drained

Taxonomy (Subgroup): Typic Duracolls, Typic Durixerolls

Field Observations  
Confirm Mapped Type? Yes No

File Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-5"	10YR 4/2	7.5 YR 5/8		Silt loam (Clay loam)

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: Change of 2 w/ mottles and presence of aquic moisture regime indicate hydric soils.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Data Point Within a Wetland?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		

Remarks:

ROUTINE WETLAND DETERMINATION  
DATA FORM

Project/Site: <u>FIDDYMENT PROPERTY</u> Applicant/Owner: <u>SIGNATURE PROPERTIES</u> Investigator(s): <u>D. SKORAL J. GIBSON</u>	Date: <u>8-20-98</u> City/County: <u>PLACER COUNTY</u> State: <u>CALIFORNIA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Adjacent upland grassland</u> Transect ID: <u>1</u> Data Point ID: <u>B</u>

VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
1. <u>Holcus virgatus (D)</u>	_____	<u>UPL</u>	9. _____	_____	_____
2. <u>Bromus mollis (D)</u>	_____	<u>FACW</u>	10. _____	_____	_____
3. <u>Idenanthum caput-medusae (D)</u>	_____	<u>UPL</u>	11. _____	_____	_____
4. <u>Medicago sp.</u>	_____	<u>-</u>	12. _____	_____	_____
5. <u>Hemizonia sp.</u>	_____	<u>-</u>	13. _____	_____	_____
6. <u>Lolium perenne</u>	_____	<u>FAC</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): None

Remarks: Lacks hydrophytic vegetation.

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Streams, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits/Organic Detritus ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12 inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Lacking wetland hydrology indicators.</u>	

Map Unit Name Alamo-Fide Rent Complex,  
 (Series and Phase): 0-5% slopes

Drainage Class: poorly drained, well drained  
 Field Observations  
 Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Durisols, Typic Durixerols

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-4	10YR 3/2	None	—	loam (silt loam)

Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol                    | <input type="checkbox"/> Concretion in upper 3 inches                         |
| <input type="checkbox"/> Histic Epipedon             | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor               | <input type="checkbox"/> Organic Streaking in Sandy Soils                     |
| <input type="checkbox"/> Aquic Moisture Regime       | <input type="checkbox"/> Listed on Local Hydric Soils List                    |
| <input type="checkbox"/> Reducing Conditions         | <input type="checkbox"/> Listed on National Hydric Soils List                 |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks)                           |

Remarks: Lacking hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Data Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks: Non-wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>FIDDYMENT PROPERTY</u> Applicant/Owner: <u>SIGNATURE PROPERTIES</u> Investigator(s): <u>D. SKORDEL T. GIBSON</u>	Date: <u>8-20-98</u> City/Country: <u>PLACER COUNTY</u> State: <u>CALIFORNIA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Vernal Pool (Shallow-medium)</u> Transect ID: <u>2</u> Data Point ID: <u>A</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Lolium perenne (D)</u>		<u>FAC</u>	9. <u>Dudonon mansuetiensis</u>		<u>FACW</u>
2. <u>Plagiobothrys stipitatus (D)</u>		<u>OBL</u>	10. <u>Gratiola ebracteata</u>		<u>OBL</u>
3. <u>Ranunculus alveolatus</u>		<u>ORL</u>	11. <u>Lythrum hyssopifolia</u>		<u>FACW</u>
4. <u>Eryngium yveseyi</u>		<u>FACW</u>	12. _____		
5. <u>Deschmosia danthonioides</u>		<u>FACW</u>	13. _____		
6. <u>Leontodon leucoseri</u>		<u>FACW</u>	14. _____		
7. <u>Trichostema lanceolatum</u>		<u>UPL</u>	15. _____		
8. <u>Juncus bufonius</u>		<u>FACW</u>	16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks:

## HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input checked="" type="checkbox"/> Sediment Deposits/Organic Detritus <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Well defined depression over hard pan (clay pan) soils w/ algae matting indicate ponding for long duration.

# 1. ROUTINE WETLAND DETERMINATION DATA FORM

Subject/Site: <u>FIDDYMENT PROPERTY</u> Applicant/Owner: <u>SIGNATURE PROPERTIES</u> Investigator(s): <u>D. SKORDAL J. GIBSON</u>	Date: <u>8-20-98</u> City/County: <u>PLACER COUNTY</u> State: <u>CALIFORNIA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: <u>Wet Swale</u> Transect ID: <u>3</u> Data Point ID: <u>A</u>

## VEGETATION

Plant Species		Stratum	Indicator	Plant Species		Stratum	Indicator
Dominant (D) - Associate (A)				Dominant (D) - Associated (A)			
1. <u>Lolium perenne (D)</u>			<u>FAC</u>	9. <u>Hordeum hystrix</u>			<u>FAC</u>
2. <u>Eryngium vaseyi (D)</u>			<u>FACW</u>	10. <u>Lythrum hyssopifolia</u>			<u>FACW</u>
3. <u>Juncus bufonius</u>			<u>FACW</u>	11. <u>Holocarpus virgata</u>			<u>UPL</u>
4. <u>Navarretia leucocarpa</u>			<u>OBL</u>	12. <u>Hemizonia sp.</u>			<u>-</u>
5. <u>Leontodon leusseri</u>			<u>FACW</u>	13. _____			
6. <u>Polygonum zyphoroides</u>			<u>OBL</u>	14. _____			
7. <u>Biza minor</u>			<u>FACW</u>	15. _____			
8. <u>Ranunculus alveolatus</u>			<u>OBL</u>	16. _____			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks:

## HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Streams, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 inches ___ Water Marks ___ Drift Lines <input checked="" type="checkbox"/> Sediment Deposits/Organic Detritus <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: well defined linear depression, algae matting and deep hoof marks left by cattle indicate the presence of wetland hydrology.

Map Unit Name: San Joaquin - Cometa sandy loams, 1-5% slopes  
 (Series and Phase):  
 Drainage Class: Well Drained  
 Field Observations  
 Taxonomy (Subgroup): Abruptic Durixeralfs, Typic Paleixeralfs  
 Confirm Mapped Type? Yes No

File Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-4	10YR 4/2	Yes	-	loam (silt loam)

- Hydric Soil Indicators:
- Histosol
  - Histic Epipedon
  - Sulfidic Odor
  - Aquic Moisture Regime
  - Reducing Conditions
  - Gleyed or Low-Chroma Colors
  - Concretion in upper 3 inches
  - High Organic Content in Surface Layer in Sandy Soils
  - Organic Streaking in Sandy Soils
  - Listed on Local Hydric Soils List
  - Listed on National Hydric Soils List
  - Other (Explain in Remarks)

Remarks: Hydric soils present.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Data Point Within a Wetland?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		

Remarks:

R( ) TIME WETLAND DETERMINATION  
DATA FORM

Project/Site: <u>FIDDYMENT PROPERTY</u>	Date: <u>8-20-98</u>
Applicant/Owner: <u>SIGNATURE PROPERTIES</u>	City/Country: <u>PLACER COUNTY</u>
Investigator(s): <u>D. SKORDAI J. GIBSON</u>	State: <u>CALIFORNIA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No	Community ID: <u>Adjacent Upland Grassland</u>
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>3</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Data Point ID: <u>B</u>

VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associated (A)		
1. <u>Holcarrpha virgata (D)</u>		<u>UPL</u>	9.		
2. <u>Bromus malvifolius (D)</u>		<u>FACW</u>	10.		
3. <u>Hemizonia sp.</u>		<u>-</u>	11.		
4. <u>Leontodon leysneri</u>		<u>FACU</u>	12.		
5. <u>Lolium perenne</u>		<u>FAC</u>	13.		
6. <u>Centaurea solstitialis</u>		<u>UPL</u>	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). None

Remarks: Lacking hydrophytic vegetation

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Streams, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits/Organic Detritus</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depths of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks: Lacking defined depression, algae matting and/or other wetland hydrology indicators with the exception of oxidized rhizospheres.

Map Unit Name - San Joaquin - Cometa Sandy  
 (Series and Phase): loams, 5% slopes

Drainage Class: Well Drained

Taxonomy (Subgroup): Abruptic, Durixeralfs,  
 Typic Palexeralfs

Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-4	10YR 3/3	None	—	loams

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: Lacking hydric soils indicators

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Data Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks: Non-wetland



# APPENDIX B

## PLANT LIST



PARTIAL LIST OF PLANTS OBSERVED ON THE FIDDYMENT  
PROPERTY AND THEIR STATUS AS WETLAND INDICATOR SPECIES

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status<sup>1,2</sup></u>
<i>Achillea millefolium</i>	yarrow	FACU
<i>Achyrachaena mollis</i>	blow-wives	FAC*
<i>Aira caryophyllea</i>	silver hairgrass	UPL
<i>Alisma plantago-aquatica</i>	broad-leaf water plantain	OBL
<i>Alopecurus howellii</i>	Howell's foxtail	FACW+
<i>Ammannia coccinea</i>	purple ammannia	OBL
<i>Artemisia douglasiana</i>	Douglas' wormwood	FACW
<i>Avena fatua</i>	wild oats	UPL
<i>Boissduvalia cleistogama</i>	cleistogamous spike-primrose	OBL
<i>Brassica campestris</i>	field mustard	UPL
<i>Briza minor</i>	little quaking grass	FACW-
<i>Bromus diandrus</i> ( <i>B. rigidus</i> )	rip-gut grass	UPL
<i>Bromus mollis</i>	soft chess	FACU-
<i>Calandrina ciliata</i>	Red-maids	FACU*
<i>Centaurea solstitialis</i>	yellow star-thistle	UPL
<i>Cerastium viscosum</i>	stock chickweed	UPL
<i>Convolvulus arvensis</i>	bindweed	UPL
<i>Coryza canadensis</i>	Canada horseweed	FAC
<i>Crypsis schoenoides</i>	swamp timothy	OBL
<i>Cynodon dactylon</i>	bermuda grass	FAC
<i>Cynosurus echinatus</i>	dogtail	UPL
<i>Cyperus eragrostis</i>	tall flatsedge	FACW
<i>Dactylis glomerata</i>	orchard grass	FACU
<i>Deschampsia danthonioides</i>	purple hairgrass	FACW
<i>Downingia sp.</i>	downingia	OBL
<i>Echinochloa crusgalli</i>	barnyard grass	FACW
<i>Eleocharis acicularis</i>	least spikerush	OBL
<i>Eleocharis macrostachya</i>	creeping spikerush	OBL
<i>Epilobium sp.</i>	willow herb	—
<i>Eremocarpus setigerus</i>	doveweed	UPL
<i>Erodium botrys</i>	filaree	UPL
<i>Eryngium vaseyi</i>	coyote thistle	FACW
<i>Ficus sp.</i>	fig	—

<sup>1</sup>Reed, P.E. 1988. National List of Plant Species That Occur in Wetlands: California (Region O). Biological Report 88(26.10) May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, FL.

<sup>2</sup>OBL = obligate; FACW = facultative wetland; FAC = facultative; FACU = Facultative upland; UPL = upland; and NI = no indicator.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Gastriidium ventricosum</i>	nitgrass	FACU
<i>Geranium sp.</i>	geranium	UPL
<i>Glyceria declinata</i>	mannan grass	OBL
<i>Gnaphalium sp.</i>	everlasting	—
<i>Gratiola ebracteata</i>	bractless hedge-hyssop	OBL
<i>Hemizonia fitchii</i>	Fitch's spikeweed	UPL
<i>Hemizonia pungens</i>	common tarweed	FAC
<i>Hemizonia sp.</i>	spikeweed	NI
<i>Holcus lanatus</i>	common velvet grass	FAC
<i>Holocarpha virgata</i>	tarweed	UPL
<i>Hordeum hystrix</i>	Mediterranean barley	FAC
( <i>H. geniculatum</i> )		
<i>Hypochaeris glabra</i>	smooth cats tongue	UPL
<i>Juncus bufonius</i>	toad rush	FACW+
<i>Juncus capitatus</i>	capped rush	FACU
<i>Lactuca serriola</i>	prickly lettuce	FAC
<i>Lasthenia fremontii</i>	Fremont's goldfields	OBL
<i>Layia fremontii</i>	tidy-tips	UPL
<i>Lemna minor</i>	lesser duck weed	OBL
<i>Leontodon leysseri</i>	hairy hawkbit	FACU
<i>Lippia nodiflora</i>	common frog-fruit	FACW
( <i>Phyla nodiflora</i> )		
<i>Lolium perenne</i>	perennial ryegrass	FAC*
<i>Lotus purshianus</i>	spanish clover	FAC
<i>Ludwigia peploides</i>	floating primrose	OBL
<i>Lupinus bicolor</i>	two-color lupine	UPL
<i>Lythrum hyssopifolia</i>	loosestrife	FACW
<i>Medicago polymorpha</i>	bur-clover	UPL
<i>Mentha pulegium</i>	penny-royal	OBL
<i>Navarretia leucocephala</i>	white-headed Navarretia	OBL
<i>Navarretia sp.</i>	Navarretia	—
<i>Paspalum dilatatum</i>	dallis grass	FAC
<i>Phalaris lemmonii</i>	Lemmon's canary grass	FACW-
<i>Pilularia americana</i>	american pill-wort	OBL
<i>Plagiobothrys stipitatus</i>	slender popcorn flower	OBL
var. <i>micranthus</i>		
<i>Plantago sp.</i>	plantain	—
<i>Plantago lanceolata</i>	English plantain	FAC-
<i>Pogogyne zizyphoroides</i>	vernal pool mint	OBL
<i>Polygonum aviculare</i>	knotweed	FAC
<i>Polygonum sp.</i>	smartweed	—
<i>Polypogon monspeliensis</i>	annual rabbit-foot grass	FACW+
<i>Populus fremontii</i>	Fremont cottonwood	FACW
<i>Psilocarphus brevissimus</i>	wooly marbles	OBL
<i>Quercus douglasii</i>	blue oak	UPL

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Quercus lobata</i>	valley oak	FAC*
<i>Quercus wislizenii</i>	interior live oak	UPL
<i>Ranunculus alveolatus</i> ( <i>R. bonariensis</i> var. <i>triseptus</i> )	Carter's buttercup	OBL
<i>Rubus procerus</i>	himalaya blackberry	FAC
<i>Rumex</i> sp.	dock	—
<i>Rumex conglomeratus</i>	clustered dock	FACW
<i>Rumex crispus</i>	curly dock	FACW-
<i>Salix</i> sp.	willow	—
<i>Solidago canadensis</i>	canada golden-rod	FACU
<i>Taeniatherum caput-medusae</i>	medusa-head	UPL
<i>Toxicodendron diversilobum</i>	poison oak	UPL
<i>Trichostema lanceolatum</i>	vinegar weed	UPL
<i>Trifolium depauperatum</i>	dwarf sack clover	FAC-
<i>Trifolium repens</i>	white clover	FACU+
<i>Trifolium</i> sp.	clover	—
<i>Typha latifolia</i>	broad-leaf cattail	OBL
<i>Verbena hastata</i>	blue vervain	FACW
<i>Vulpia bromoides</i>	six-weeks brome	FACW
<i>Vulpia myuros</i>	rat-tail fescue	FACU
<i>Xanthium strumarium</i>	rough cocklebur	FAC+



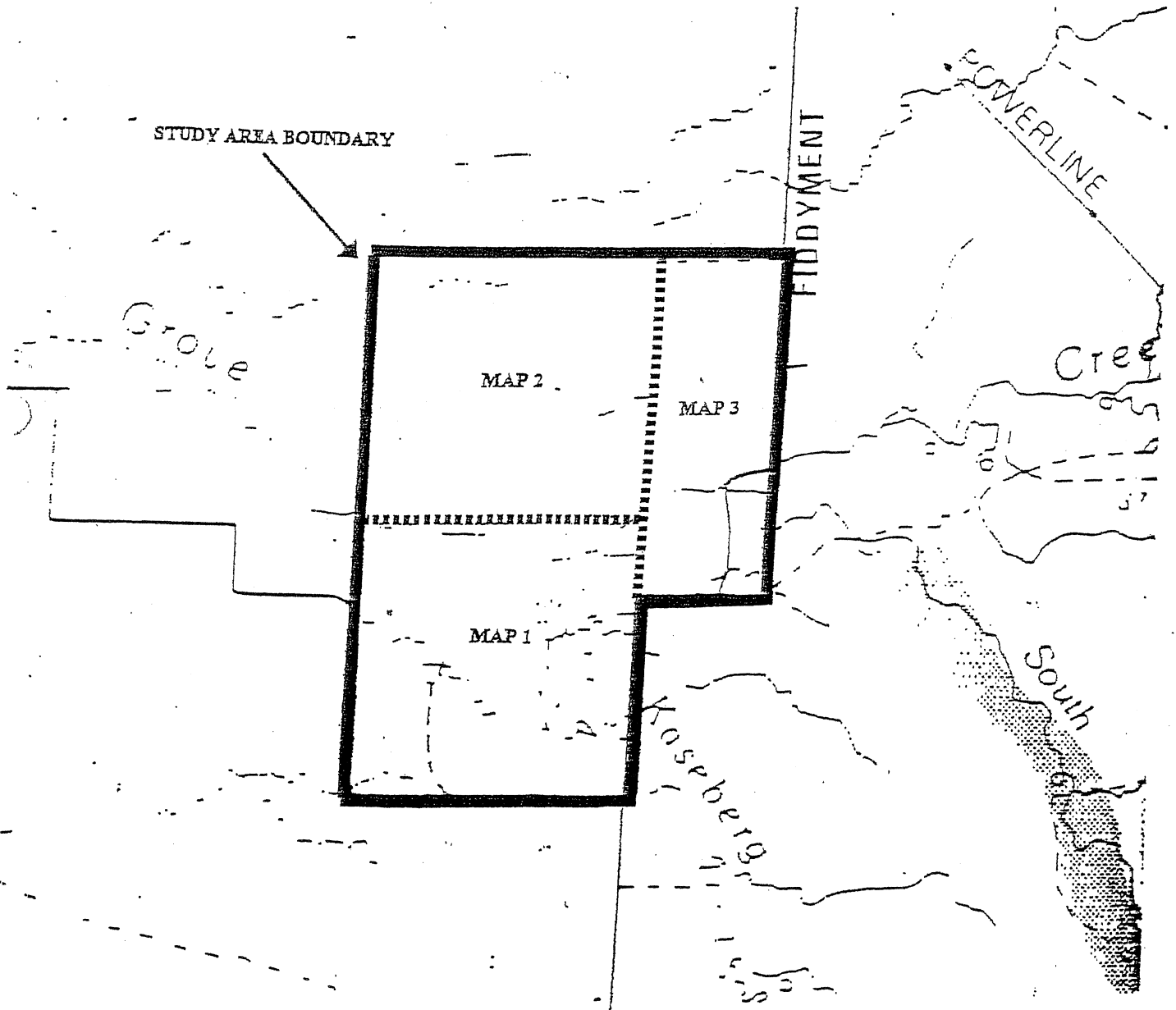
# APPENDIX C

## DELINEATION MAP



# FIDDYMENT PROPERTY DELINEATION MAP INDEX

(NOT TO SCALE)





ROUTINE WETLAND DETERMINATION  
DATA FORM

Project/Site: <u>FIDDYMENT PROPERTY</u> Applicant/Owner: <u>SIGNATURE PROPERTIES</u> Investigator(s): <u>D. SKORDAL J. GIBSON</u>	Date: <u>8-20-98</u> City/County: <u>PLACER COUNTY</u> State: <u>CALIFORNIA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Adjacent Upland Grassland</u> Transect ID: <u>2</u> Data Point ID: <u>B</u>

VEGETATION

Plant Species		Stratum	Indicator	Plant Species		Stratum	Indicator
Dominant (D) - Associate (A)				Dominant (D) - Associate (A)			
1. <u>Holocarpha virgata (D)</u>			<u>UPL</u>	9. _____			
2. <u>Leontodon leucoseri</u>			<u>FACW</u>	10. _____			
3. <u>Erodium sp.</u>			<u>UPL</u>	11. _____			
4. <u>Bromus mollis</u>			<u>FACW</u>	12. _____			
5. <u>Briza minor</u>			<u>FACW</u>	13. _____			
6. <u>Aira caryophylla</u>			<u>UPL</u>	14. _____			
7. _____				15. _____			
8. _____				16. _____			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): \_\_\_\_\_

Remarks: \_\_\_\_\_

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Lacks depression or other indicators of wetland hydrology.</u>	

Map Unit Name Cometa - Taddyment Complex,  
 (Series and Phase): 1-5 10 Slopes

Drainage Class: Well Drained

Taxonomy (Subgroup): Typic Palexeralfs,  
Typic Durixeralfs

Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
<u>1-4</u>	<u>10YR 4/3</u>	<u>Yes</u>	<u>-</u>	

Hydric Soil Indicators:

- |   |   |
|---|---|
| <input type="checkbox"/> Histosol                         | <input type="checkbox"/> Concretion in upper 3 inches                         |
| <input type="checkbox"/> Histic Epipedon                  | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor                    | <input type="checkbox"/> Organic Streaking in Sandy Soils                     |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List                    |
| <input type="checkbox"/> Reducing Conditions              | <input type="checkbox"/> Listed on National Hydric Soils List                 |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors      | <input type="checkbox"/> Other (Explain in Remarks)                           |

Remarks: Hydric soils assumed based upon presence of  
aquic moisture regime.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes No	Is this Data Point Within a Wetland?	<input checked="" type="radio"/> Yes No
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes No		

Remarks:

Map Unit Name Cometa - Eddyment Complex,  
 (Series and Phase): 1-5 Slopes

Draw Class: Well Drained

Taxonomy (Subgroup): Typic Palexeralfs,  
Typic Durixeralfs

Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-4	10YR 3/3	No	-	loam

Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol                    | <input type="checkbox"/> Concretion in upper 3 inches                         |
| <input type="checkbox"/> Histic Epipedon             | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor               | <input type="checkbox"/> Organic Streaking in Sandy Soils                     |
| <input type="checkbox"/> Aquic Moisture Regime       | <input type="checkbox"/> Listed on Local Hydric Soils List                    |
| <input type="checkbox"/> Reducing Conditions         | <input type="checkbox"/> Listed on National Hydric Soils List                 |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks)                           |

Remarks: Lacks hydric soils.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Data Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks: Non - wetland



APD 3

MAP POCKETS

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JURISDICTIONAL DELINEATION

FIDUCIARY PROPERTY

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APD

INSERT MAPS



WD-0161

**GIBSON & SKORDAL**  
Wetland Consultants

APR - 1 1999

2277 Fair Oaks Blvd., Suite 395  
Sacramento, California 95825

(916) 569-1830 Fax: (916) 569-1835

March 31, 1999

Mr. Tom Cavanaugh  
U.S. Army Corps of Engineers  
Regulatory Branch  
1325 J Street  
Sacramento, California 95814

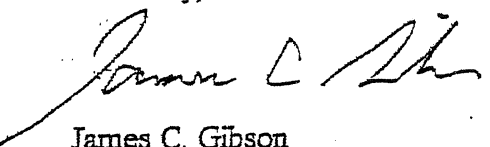
**Subject: Revised Wetland Delineation - Placer 1600 Property, Placer County,  
California**

Dear Mr. Cavanaugh:

Enclosed is a copy of our revised delineation report for the Placer 1600 property located south of Phillip Road and west of Fiddyment Road in Placer County, California. Based on the field verification conducted with you on March 2, we modified the report and map to include the addition of three vernal pools totaling 2,380 square feet and the enlargement of a previously delineated vernal pool by 1,900 square feet.

Please provide us with a letter verifying the revised delineation. If you have any questions concerning this report or you need additional information, please call me at (916) 569-1830.

Sincerely,



James C. Gibson  
Principal

DLS:bjs  
Attachment

cc: ✓ Mr. Peter Bridges  
Live Oak Enterprises  
8780 Auburn Folsom Road  
Granite Bay, California 95749



# JURISDICTIONAL DELINEATION

## PLACER 1600 PROPERTY

GIBSON & SKORDAL

Wetland Consultants

2277 Fair Oaks Blvd. Suite 298

Sacramento, California 95825



# *JURISDICTIONAL DELINEATION*

*PLACER 1600 PROPERTY*

*PLACER COUNTY,  
CALIFORNIA*

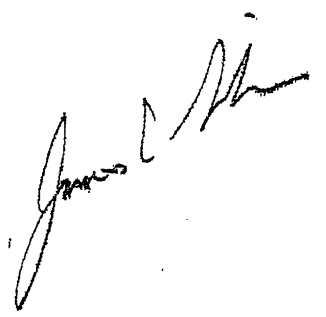
*JANUARY 1999  
Revised March 1999*

*Prepared For:*

*LIVE OAK ENTERPRISES, INC.  
8780 Auburn Folsom Road  
Granite Bay, California 95746*

*Prepared By:*

*GIBSON & SKORDAL  
Wetland Consultants  
2277 Fair Oaks Blvd., Suite 395  
Sacramento, California 95825*





## OBJECTIVE

The purpose of this study was to delineate all waters of the United States including wetlands existing in the study area that are subject to the provisions of Section 404 of the Clean Water Act.

## LOCATION

The study area is an approximately 1,500-acre parcel located south of Phillip Road and west of Fiddymment Road in Placer County, California (Sections 23, 25, and 26, Township 11 North, Range 5 East). Figure 1 is a vicinity map showing the location of the study area.

## METHODS AND MATERIALS

Field studies were conducted on January 12-14, 1999 for the purpose of delineating and mapping all waters of the United States including wetlands present in the study area. The "Corps of Engineers Wetlands Delineation Manual"<sup>1</sup> was used as the standard for determining whether specific areas are wetlands subject to the Clean Water Act. Corps of Engineers' regulations (33 CFR 328) were used to determine the presence of waters of the United States, other than wetlands. The "National List of Plant Species That Occur In Wetlands: California (Region O)"<sup>2</sup> was used to determine the status of observed plants as wetland indicator species.

The boundaries of all waters including wetlands were mapped in the field onto three 1" = 200' scale infra-red aerial photographs of the study area flown on April 21, 1995. Area of jurisdictional waters was determined by both digital planimeter and field measurements. Detailed data on vegetation, soils, and hydrology characteristics were taken in the field. Data sheets which document the basis for determining which areas are upland or wetland were completed for representative locations and are provided in Appendix A.

## GENERAL SITE CONDITIONS

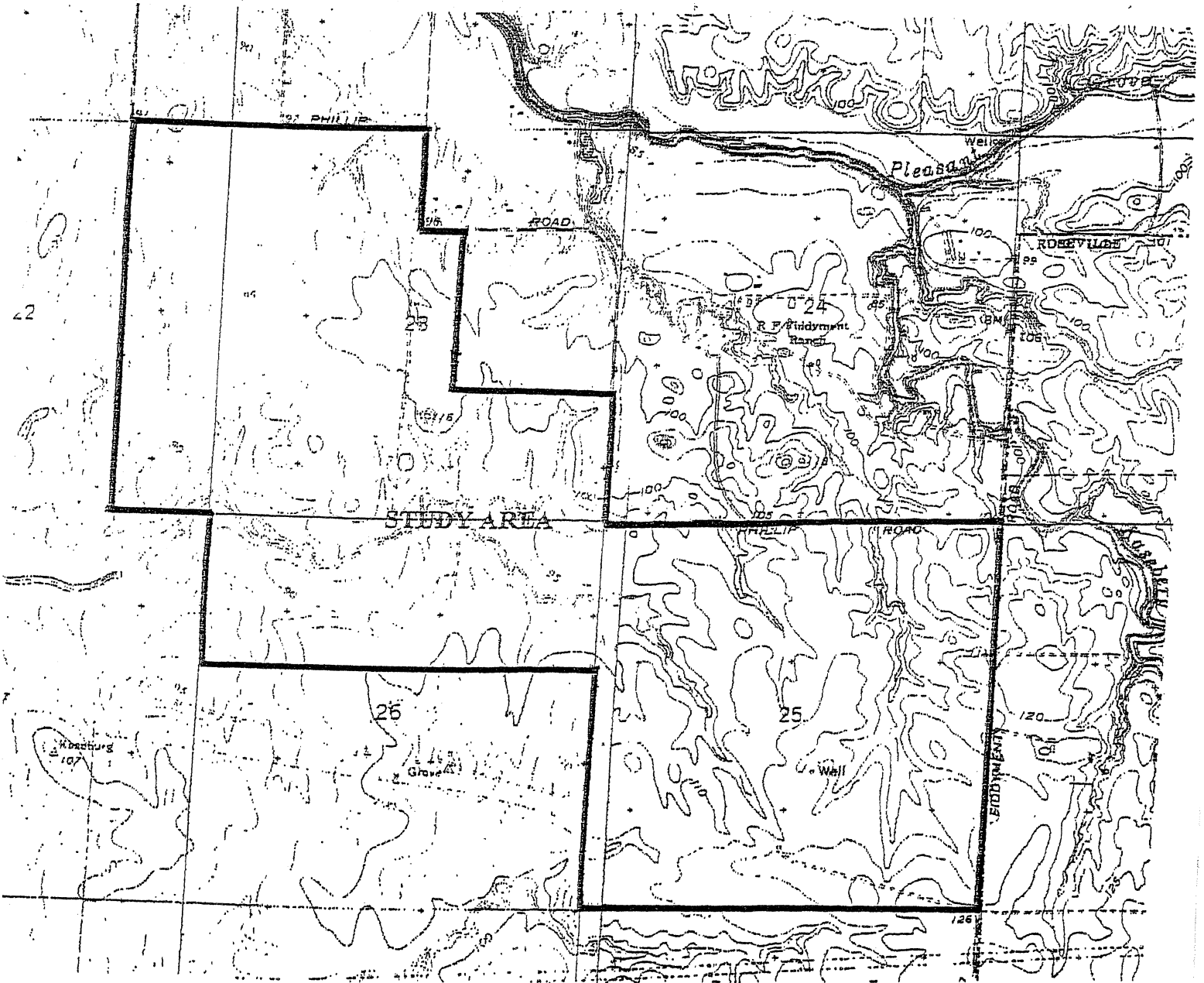
The study area is bordered by Phillips Road to the north, Fiddymment Road to the east, and undeveloped grasslands to the south. Historically, the property has been farmed and graded for crop cultivation but in recent years it has been used for cattle grazing. Past agricultural related

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<sup>1</sup>Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual." Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

<sup>2</sup>Reed, P.B. 1988. National List of Plant Species That Occur In Wetlands: California (Region O). Biological Report 88 (26.10) May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, Florida.

FIGURE 1  
VICINITY MAP



Source: Pleasant Grove and Roseville, California  
USGS 7.5 Minute Quadrangle Maps

grading and disking activities have significantly altered and impacted the natural landscape and wetland habitats.

Topography in the study area consists of flat to gently undulating terrain drained by several intermittent channels. One of these channels, situated in the southeast corner of the study area, flows north out of the study area and feeds into Pleasant Grove Creek. The remaining channels flow to the west and feed into Curry Creek outside the study area. In terms of habitat, a majority of the study area is non-native annual grassland dominated by soft chess (*Bromus mollis*), medusa-head (*Taeniatherum caput-medusae*), tarweed (*Holocarpha virgata*) and filaree (*Erodium botrys*). Other common species include star thistle (*Centaurea solstitialis*), spikeweed (*Hemizonia sp.*), rip gut brome (*Bromus diandrus*), hairy hawkbit (*Leontodon leysleri*), perennial rye grass (*Lolium perenne*), and knitgrass (*Gastridium ventricosum*).

Mapped soils in the study area consist of Cometa-Fiddymment complex, 1 to 5 percent slopes; Cometa-Ramona sandy loams, 1 to 5 percent slopes; Fiddymment-Kaseberg loam, 2 to 9 percent slopes; San Joaquin-Cometa sandy loams, 1 to 5 percent slopes; and Xerofluvents, hardpan substratum. A majority of these soil types are hardpan or claypan loamy soils that are well drained.

The dominant soil mapping unit in the southeast portion of the study area is San Joaquin-Cometa sandy loam, and the dominant soil mapping unit in the northwest portion is Cometa-Fiddymment complex. Xerofluvents are mapped along and adjacent to the creeks and drainageways in the study area. All of these soil types have hydric inclusions in drainageways and depressions, but none of them are listed as hydric. Figure 2 provides a soil map and mapping summary of the study area.

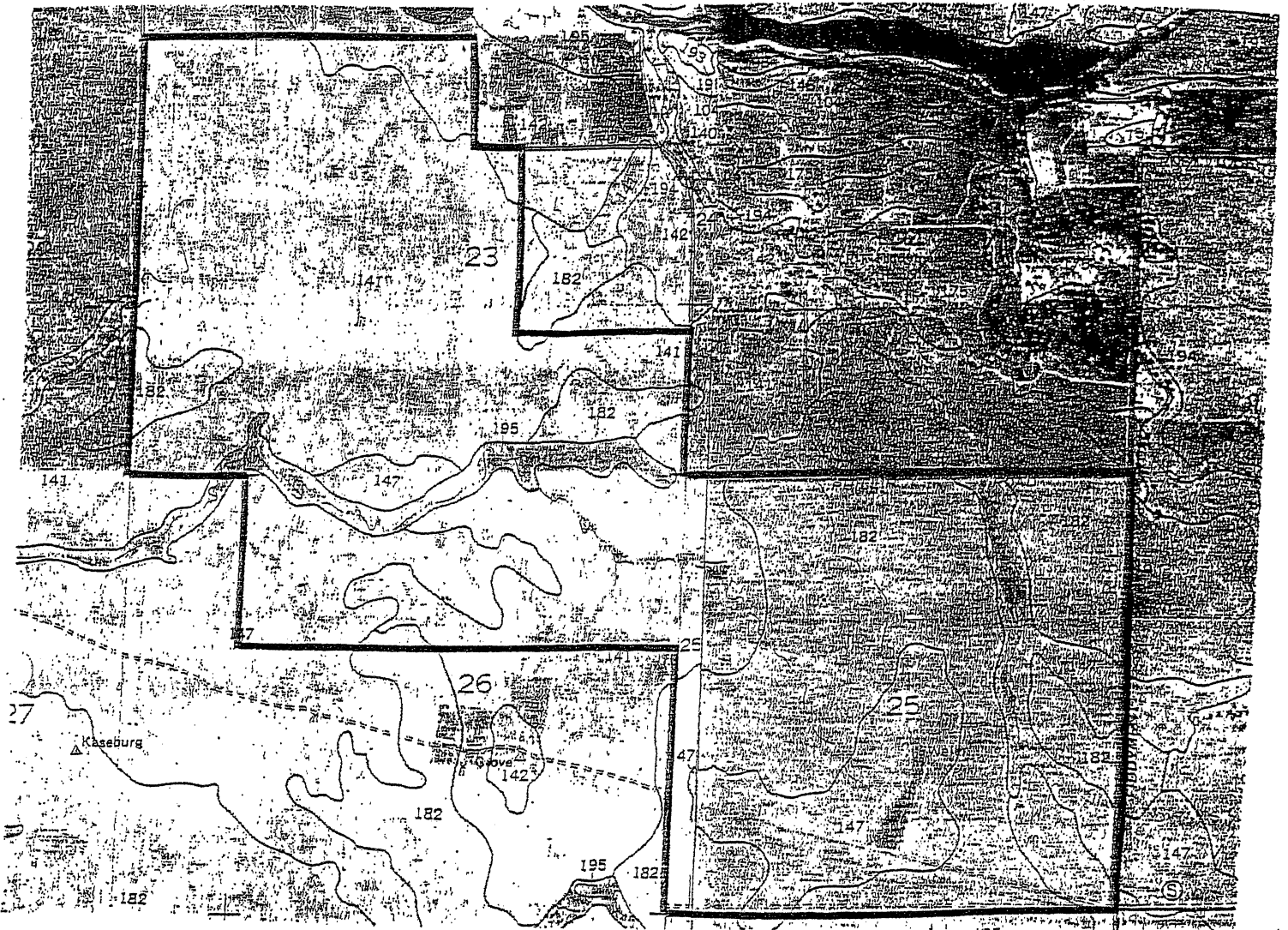
## FINDINGS

We identified a total of approximately 20.06 acres of jurisdictional waters including 16.19 acres of vernal pools, 1.22 acres of wet swales, and 2.65 acres of channels. Jurisdictional waters including wetlands are shown on the delineation maps (Sheets 1-3) provided in Appendix B. Approximate average width estimations for wet swales and channels are depicted on the delineation maps.

Table 1 is a partial list of plant species observed in the study area including their status as wetland indicators. Given that field studies were conducted during the dormant winter months when many plant species are not yet visible, this plant list is not reflective of the full range of plant species which occupy the various wetland and non-wetland habitats in the study area. As noted previously in this report, past farming and grading activities in the study area have significantly

FIGURE 2

SOIL MAP



<u>Unit No.</u>	<u>Soil Name</u>	<u>Classification</u>	<u>Drainage Class</u>
141	Cometa Fiddymment Complex, 1-5% slopes	Typic Palexeralfs, Typic Durixeralfs	well drained —
142	Cometa-Ramona sandy loams, 1-5% slopes	Typic Palexeralfs, Typic Haploxeralfs	well drained
147	Fiddymment-Kaseberg loams, 2-9% slopes	Typic Durixeralfs, Typic Durochrepts	well drained
182	San Joaquin-Cometa sandy loams, 1-5% slopes	Abruptic Durixeralfs, Typic Palexeralfs	well drained
95	Xerofluvents, hardpan substratum	Xerofluvents Thermic	somewhat poorly drained

TABLE 1

PARTIAL LIST OF PLANTS OBSERVED ON THE PLACER 1600  
PROPERTY AND THEIR STATUS AS WETLAND INDICATOR SPECIES

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status<sup>a</sup></u>
<i>Agrostis avenacea</i>	hairy flower bentgrass	FACW*
<i>Aira caryophylla</i>	silver hairgrass	UPL
<i>Anagallis arvensis</i>	scarlet pimpernel	FAC
<i>Anaphalis margaritacea</i>	pearly everlasting	UPL
<i>Aristida</i> sp.	three-on	UPL
<i>Avena fatua</i>	wild oats	UPL
<i>Boissardivalia cleistogama</i>	cleistogamous spike-primrose	OBL
<i>Briza minor</i>	little quaking grass	FACW-
<i>Brodiaea minor-nana</i>	dwarf brodiaea	UPL
<i>Brodiaea</i> sp.	brodiaea	—
<i>Bromus diandrus</i> ( <i>B. rigidus</i> )	rip-gut grass	UPL
<i>Bromus mollis</i>	soft chess	FACU-
<i>Callitriche</i> sp.	water-starwort	OBL
<i>Centaurea solstitialis</i>	yellow star-thistle	UPL
<i>Cerastium viscosum</i>	stock chickweed	UPL
<i>Convolvulus arvensis</i>	bindweed	UPL
<i>Crypsis schoenoides</i>	swamp timothy	OBL
<i>Cyperus aristatus</i>	awned flatsedge	OBL
<i>Deschampsia danthonioides</i>	purple hairgrass	FACW
<i>Downingia</i> sp.	downingia	OBL
<i>Echinochloa crusgalli</i>	barnyard grass	FACW
<i>Eleocharis macrostachya</i>	creeping spikerush	OBL
<i>Eremocarpus setigerus</i>	doveweed	UPL
<i>Erodium botrys</i>	filaree	UPL
<i>Eryngium vaseyi</i>	coyote thistle	FACW
<i>Gastridium ventricosum</i>	nitgrass	FACU
<i>Geranium dissectum</i>	cut-leaf geranium	UPL
<i>Glyceria</i> sp.	manna grass	OBL
<i>Gratiola ebracteata</i>	bractless hedge-hyssop	OBL
<i>Hemizonia fitchii</i>	Fitch's spikeweed	UPL
<i>Hemizonia</i> sp.	spikeweed	NI

<sup>a</sup>Reed, P.B. 1988. National List of Plant Species That Occur in Wetlands: California (Region O). Biological Report 88(26.10) May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, FL.

\*OBL = obligate; FACW = facultative wetland; FAC = facultative; FACU = Facultative upland; UPL = upland; and NI = no indicator.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Holocarpha virgata</i>	tarweed	UPL
<i>Hordeum hystrix</i> ( <i>H. geniculatum</i> )	Mediterranean barley	FAC
<i>Juncus bufonius</i>	toad rush	FACW+
<i>Lactuca serriola</i>	prickly lettuce	FAC
<i>Lasthenia fremontii</i>	Fremont's goldfields	OBL
<i>Leontodon leysleri</i>	hairy hawkbit	FACU
<i>Lepidium nitidum</i>	shining peppergrass	UPL
<i>Lolium perenne</i> ( <i>L. multiflorum</i> )	perennial ryegrass	FAC*
<i>Lupinus bicolor</i>	two-color lupine	UPL
<i>Lythrum hyssopifolia</i>	loosestrife	FACW
<i>Mentha pulegium</i>	penny-royal	OBL
<i>Navarretia leucocephala</i>	white-headed Navarretia	OBL
<i>Navarretia sp.</i>	Navarretia	—
<i>Paspalum dilatatum</i>	dallis grass	FAC
<i>Phalaris sp.</i>	canary grass	—
<i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>	slender popcorn flower	OBL
<i>Plantago lanceolata</i>	English plantain	FAC-
<i>Poa annua</i>	annual bluegrass	FACW-
<i>Pogogyne zizyphoroides</i>	vernal pool mint	OBL
<i>Polygonum sp.</i>	smartweed	—
<i>Polypogon monspeliensis</i>	annual rabbit-foot grass	FACW+
<i>Psilocarphus brevissimus</i>	wooly marbles	OBL
<i>Quercus lobata</i>	valley oak	FAC*
<i>Ranunculus alveolatus</i> ( <i>R. bonariensis</i> var. <i>triseptalus</i> )	Carter's buttercup	OBL
<i>Ranunculus muricatus</i>	spiney-fruited buttercup	FACW+
<i>Rumex crispus</i>	curly dock	FACW-
<i>Salix sp.</i>	willow	—
<i>Taeniatherum caput-medusae</i>	medusa-head	UPL
<i>Trichostema lanceolatum</i>	vinegar weed	UPL
<i>Trifolium variegatum</i>	white-tip clover	FACW-

altered the natural landscapes and drainage patterns in the study area. Specifically, a number of swales and vernal pools have been impacted by farm related grading, disking and plowing. The following is a summary of each type of jurisdictional water/wetland identified in the study area.

### Vernal Pools

We identified 583 vernal pools ranging in size from 80 square feet to approximately 29,000 square feet in area. Typical vernal pools in the study area occur in well defined depressions over tight compact soils. Hydrologically, these depressions pond surface water for long durations during the winter and early spring months, but they tend to draw down and desiccate with cessation of winter rains and warming temperatures later in the spring. Wetland hydrology indicators observed in the field include ponded and/or saturated soils, heavy algae matting or staining, oxidized rhizospheres on live roots in the upper surface, and placement within a well defined basin occurring over tight restrictive soils. Additionally, we considered the presence and/or absence of deep hoof marks as a secondary hydrology indicator. Soils observed in the deeper vernal pools are typically dark gray (10YR 4/1) loams, clay loams or silt loams with bright yellowish brown mottles.

Vernal pools in the study area range from shallow depth pools which pond water to depths of less than 6 inches to deep pools which may pond to depths of 12 to 14 inches or more. The deeper vernal pools support vernal pool vegetation dominated by coyote thistle (*Eryngium yaseyi*), creeping spikerush (*Eleocharis macrostachya*), Carter's buttercup (*Ranunculus alveolatus*), and slender popcorn flower (*Plagiobothrys stipitatus*). The shallow vernal pools support vegetation indicative of vernal pools and other seasonal wetlands including perennial rye grass, Mediterranean rye (*Hordeum hystrix*), spikeweed (*Hemizonia sp.*), and purple hairgrass (*Deschampsia danthonioides*). Other common associates in both shallow and deep vernal pools include bractless hedge-hyssop (*Gratiola ebracteata*), smooth goldfields (*Lasthenia fremontii*), wooly marbles (*Psilocarphus brevissimus*), white-headed navarretia (*Navarretia leucocephala*), purple loosestrife (*Lythrum hyssopifolia*), cleistogamous spike primrose (*Boisduvalia cleistogama*), and vernal pool mint (*Pogogyne zizyphoroides*).

The adjacent upland grassland community is defined by the dominance of non-hydrophytic plants, the absence of wetland hydrology indicators, and/or the absence of hydric soils indicators. In some areas, the vegetation community was dominated by FAC species but hydric soils indicators and wetland hydrology indicators were absent or lacking.

### Seasonal Wet Swales

Wet swales in the study area occur in linear depressions which transport seasonal runoff and sheet flow, and as such, sustain saturated soil conditions for a portion of the growing season. Typically, these areas do not appreciably pond surface water. Indicators of wetland hydrology observed in wet swales include location within a defined linear depression overlaying tight restrictive soils and/or hardpan, oxidized rhizospheres on live roots in upper two inches of soil profile, algae matting, and deep hoof marks left by cattle. Soils range from dark grayish brown (10YR 4/2) to dark brown (10YR 3/2) loams and sandy loams with mottles.

Vegetation in the jurisdictional wet swales is characterized by Mediterranean barley, perennial rye grass, annual rabbit-foot grass (*Polypogon monspeliensis*), hairy flower bentgrass (*Agrostis avenacea*), loosestrife, toad rush (*Juncus bufonius*), Carter's buttercup, loosestrife, and spikeweed (*Hemizonia sp.*). We identified a number of wet swales which occur along the southeastern boundary adjacent to Fiddyment Road. These swales are influenced and sustained, at least in part, by seasonal runoff from the Sun City Roseville residential development situated to the east of Fiddyment Road.

There are a number of non-jurisdictional swale features which may carry seasonal runoff to some extent, but they do not sustain saturation for long duration sufficient to support dominant hydrophytic plant communities and/or they lack hydric soils and wetland hydrology indicators. Historically, some of these swales may have sustained wetland conditions but their hydrology has been significantly altered by past farming activities to the extent that they no longer function as wetlands. Vegetation in these non-jurisdictional swales is typically dominated by a mixture of FAC, FACU, and UPL species including perennial rye, Mediterranean barley, tarweed, soft chess, hairy hawkbit, and filarée.

### Channels

Channels in the study area include ephemeral channels which sustain flows periodically through the heavy rainfall season from late December through the early spring, and smaller ephemeral channels which only sustain flows during and following major rainfall events.

Channels were identified based on the presence of a clear and defined bed and bank indicative of regular annual flows. Other indicators of channels included the absence of topsoil, lack of vegetation, and deposition of gravels, sands and/or pebbles. In mapping these channels in the field, we estimated average width from bank to bank for representative sections of each channel.

# APPENDIX A

## DATA FORMS



# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Shallow depression - upland</u> Transect ID: _____ Data Point ID: <u>1</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Hemizonia sp. - D</u>	_____	<u>NI</u>	9. _____	_____	_____
2. <u>Leontodon leucoseri - D</u>	_____	<u>FACU</u>	10. _____	_____	_____
3. <u>Erodium botrys - A</u>	_____	<u>UPL</u>	11. _____	_____	_____
4. <u>Lolium perenne - A</u>	_____	<u>FAC</u>	12. _____	_____	_____
5. <u>Brodiaea sp. - A</u>	_____	<u>UPL</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Equal to or less than 50%

Remarks: Lacking hydrophytic vegetation.

## HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Located in shallow basin, but lacking primary indicators of wetland hydrology.

Map Unit Name: San Joaquin - Cometa  
 (Series and Phase): Sandy loams, 1-5% slopes  
 Taxonomy (Subgroup): Abruptic Durixeralfs, Typic Paleixeralfs  
 Drainage Class: well Drained  
 Field Observations: \_\_\_\_\_  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	7.5 YR 4/4	none		sandy loams

- Hydric Soil Indicators:
- Histosol
  - Histic Epipedon
  - Sulfidic Odor
  - Aquic Moisture Regime
  - Reducing Conditions
  - Gleyed or Low-Chroma Colors
  - Concretion in upper 3 inches
  - High Organic Content in Surface Layer in Sandy Soils
  - Organic Streaking in Sandy Soils
  - Listed on Local Hydric Soils List
  - Listed on National Hydric Soils List
  - Other (Explain in Remarks)

Remarks: Lacking hydric soil indicators.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Data Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks: Non-wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> Yes <input checked="" type="radio"/> No	Community ID: <u>Swale - upland</u> Transect ID: _____ Data Point ID: <u>2</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Hordeum hystrix (D)</u>	_____	<u>FAC</u>	9. _____	_____	_____
2. <u>Leontodon leusseri (D)</u>	_____	<u>FACU</u>	10. _____	_____	_____
3. <u>Lolium perenne (D)</u>	_____	<u>FAC</u>	11. _____	_____	_____
4. <u>Bromus mollis (A)</u>	_____	<u>FACU</u>	12. _____	_____	_____
5. <u>Hemizonia sp. (A)</u>	_____	<u>NI</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 66% FAC community

Remarks: Borderline hydrophytic.

## HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Located in shallow swale feature but lacking other wetland hydrology indicators.

Map Unit Name: Fiddymont - Kaseberg  
 (Series and Phase): loams, 2-9% slopes  
 Taxonomy (Subgroup): Typic Durixeralfs, Typic Durochrepts  
 Drainage Class: well drained  
 Field Observations: \_\_\_\_\_  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	7.5YR 3/2	None	_____	silt loam
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: Lacking hydric soils indicators.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Data Point Within a Wetland?	Yes	<input checked="" type="radio"/> No
Wetland Hydrology Present?	Yes <input checked="" type="radio"/> No			
Hydric Soils Present?	Yes <input checked="" type="radio"/> No			

Remarks: Non-wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No <input type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: <u>Vernal Pool</u> Transect ID: <u>3</u> Data Point ID: <u>A</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Eryngium yveseyi (D)</u>		<u>FACW</u>	9. <u>Hordeum hystrix (A)</u>		<u>FAC</u>
2. <u>Ranunculus alveolatus (D)</u>		<u>OBL</u>	10. <u>Lasthenia fremontii (A)</u>		<u>OBL</u>
3. <u>Lytium hyssopifolia (A)</u>		<u>FACW</u>	11. <u>Trichostema lanceolatum (A)</u>		<u>OBL</u>
4. <u>Leontodon leusseri (A)</u>		<u>FACW</u>	12. _____		
5. <u>Lolium perenne (A)</u>		<u>FAC</u>	13. _____		
6. <u>Downingia sp. (A)</u>		<u>OBL</u>	14. _____		
7. <u>Gratiola ebracteata (A)</u>		<u>OBL</u>	15. _____		
8. <u>Dryobothrys stipitatus (A)</u>		<u>OBL</u>	16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

## HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input checked="" type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Well defined basin with algae matting, oxidized rhizospheres on live roots, and deep hoof marks.

Map Unit Name: Fiddymont - Kaseberg  
 (Series and Phase): loams, 2-9% slopes  
 Taxonomy (Subgroup): Typic Durixeralfs, Typic Durochrepts

Drainage Class: well drained  
 Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR 4/1	7.5YR 4/6		Silt loam

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks:

Hydric soils present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Data Point Within a Wetland?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		

Remarks:

Vernal Pool Wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input checked="" type="radio"/> No	Community ID: <u>Adjacent upland</u> Transect ID: <u>3</u> Data Point ID: <u>B</u>

## VEGETATION

Plant Species		Stratum	Indicator	Plant Species		Stratum	Indicator
Dominant (D) - Associate (A)				Dominant (D) - Associated (A)			
1. <u>Bromus mollis (D)</u>			<u>FACW</u>	9.			
2. <u>Halocarpa virgata (D)</u>			<u>UDL</u>	10.			
3. <u>Leontodon caput-medusae (A)</u>			<u>UDL</u>	11.			
4. <u>Lolium perenne (A)</u>			<u>FAC</u>	12.			
5. <u>Erodium botrys (A)</u>			<u>UDL</u>	13.			
6. <u>Leontodon leyseri (A)</u>			<u>FACU</u>	14.			
7.				15.			
8.				16.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): None

Remarks: Lacks hydrophytic vegetation

## HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Lacking wetland hydrology indicators.

Map Unit Name: tidal wetland - phase 1  
 (Series and Phase): loams, 2-9% slopes

Drainage Class: well drained

Taxonomy (Subgroup): Typic Durochrepts,  
Typic Durochrepts

Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR 3/3	slight		oam

- Hydric Soil Indicators:
- Histosol
  - Histic Epipedon
  - Sulfidic Odor
  - Aquic Moisture Regime
  - Reducing Conditions
  - Gleyed or Low-Chroma Colors
  - Concretion in upper 3 inches
  - High Organic Content in Surface Layer in Sandy Soils
  - Organic Streaking in Sandy Soils
  - Listed on Local Hydric Soils List
  - Listed on National Hydric Soils List
  - Other (Explain in Remarks)

Remarks: Lacking hydric soil indicators.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Is this Data Point Within a Wetland?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Wetland Hydrology Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>		
Hydric Soils Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>		

Remarks: Non-wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No <input type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: <u>Vernal Pool (deep)</u> Transect ID: <u>4</u> Data Point ID: <u>A</u>

## VEGETATION

Plant Species	Plant Species
Dominant (D) - Associate (A)	Dominant (D) - Associate (A)
Stratum	Stratum
Indicator	Indicator
1. <u>Eleocharis macrostachya (D)</u>	9. _____
2. <u>Ranunculus alveolatus (D)</u>	10. _____
3. <u>Pleurothorus stipitatus (A)</u>	11. _____
4. <u>Lythrum hyssopifolia (A)</u>	12. _____
5. <u>Eragrostis vagans (A)</u>	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: \_\_\_\_\_

## HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Well defined basin, oxidized rhizospheres on live roots, and deep hoof marks indicate ponding for long duration.

Map Unit Name: Fiddymont - Kaseberg  
 (Series and Phase): loams, 2-9% slopes  
 Taxonomy (Subgroup): Typic Durixeralfs, Typic Dyrochrepts

Drainage Class: well drained  
 Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-10"	10YR 4/1	7.5YR 4/6		clay loam

Hydric Soil Indicators:

- |   |   |
|---|---|
| <input type="checkbox"/> Histosol                               | <input type="checkbox"/> Concretion in upper 3 inches                         |
| <input type="checkbox"/> Histic Epipedon                        | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor                          | <input type="checkbox"/> Organic Streaking in Sandy Soils                     |
| <input checked="" type="checkbox"/> Aquic Moisture Regime       | <input type="checkbox"/> Listed on Local Hydric Soils List                    |
| <input checked="" type="checkbox"/> Reducing Conditions         | <input type="checkbox"/> Listed on National Hydric Soils List                 |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks)                           |

Remarks: Hydric soils present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes No	Is this Data Point Within a Wetland?	<input checked="" type="radio"/> Yes No
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes No		

Remarks: Vernal Pool Wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Adjacent Upland (Grassland)</u> Transect ID: <u>4</u> Data Point ID: <u>B</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Bromus mollis (D)</u>		<u>FACU</u>	9. _____		
2. <u>Hemizonia sp. (D)</u>		<u>NI</u>	10. _____		
3. <u>Erodium cicutarium (D)</u>		<u>UPL</u>	11. _____		
4. <u>Hordeum hystrix (D)</u>		<u>FAC</u>	12. _____		
5. <u>Lolium perenne (A)</u>		<u>FAC</u>	13. _____		
6. <u>Taraxacum officinale (A)</u>		<u>UPL</u>	14. _____		
7. <u>Leontodon leucoseri (A)</u>		<u>FACU</u>	15. _____		
8. <u>Eriogonum fasciculatum (A)</u>		<u>UPL</u>	16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Less than 50%

Remarks: Lacking hydrophytic vegetation

## HYDROLOGY

<p>___ Recorded Data (Describe in Remarks):*</p> <p style="margin-left: 20px;">___ Streams, Lake, or Tide Gauge</p> <p style="margin-left: 20px;">___ Aerial Photographs</p> <p style="margin-left: 20px;">___ Other</p> <p>___ No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits/Organic Detritus</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12 inches</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depths of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks: Lacking defined basin, oxidized rhizospheres on live roots, algae matting, or hoof marks.

Map Unit Name: Friday ment - 7  
 (Series and Phase): loams, 2-9% slopes  
 Taxonomy (Subgroup): Typic Durixerolls, Typic Dyrochrepts

Drainage Class: WEN  
 Field Observations: Yes No  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR 4/2	10YR 4/4		Silt loam

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: A chroma of 2 with mottles satisfies the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Data Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks: Non-wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Wet Swale (Jurisdictional)</u> Transect ID: <u>5</u> Data Point ID: <u>A</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
<u>Dominant (D) - Associate (A)</u>			<u>Dominant (D) - Associate (A)</u>		
1. <u>Polygonum monspeliensis (D)</u>		<u>FACW+</u>	9. _____	_____	_____
2. <u>Hurdium hystrix (D)</u>		<u>FAC</u>	10. _____	_____	_____
3. <u>Hemizonia sp. (A)</u>		<u>NI</u>	11. _____	_____	_____
4. <u>Leontodon leucocera (A)</u>		<u>FACU</u>	12. _____	_____	_____
5. <u>Agrostis ovinaecea (A)</u>		<u>FACW</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks:

## HYDROLOGY

Recorded Data (Describe in Remarks):  
 Streams, Lake, or Tide Gauge  
 Aerial Photographs  
 Other  
 No Recorded Data Available

Field Observations:

Depths of Surface Water: \_\_\_\_\_ (in.)  
 Depth to Free Water in Pit: \_\_\_\_\_ (in.)  
 Depth to Saturated Soil: \_\_\_\_\_ (in.)

- Wetland Hydrology Indicators:
- Primary Indicators:
- Inundated
  - Saturated in Upper 12 inches
  - Water Marks
  - Drift Lines
  - Sediment Deposits/Organic Detritus
  - Drainage Patterns in Wetlands
- Secondary Indicators (2 or more required):
- Oxidized Root Channels in Upper 12 inches
  - Water-Stained Leaves
  - Local Soil Survey Data
  - FAC-Neutral Test
  - Other (Explain in Remarks)

Remarks: Defined swale topography with oxidized rhizospheres on live roots, and deep hoof marks.

Map Unit Name: Cometa - Field MSHU  
 (Series and Phase): 1 to 5% slopes  
 Taxonomy (Subgroup): Typic Palexeralfs, Typic Durixeralfs

Drainage Class: well drained  
 Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR YR 3/3	10YR 4/6		loam

- Hydric Soil Indicators:
- Histosol
  - Histic Epipedon
  - Sulfidic Odor
  - Aquic Moisture Regime
  - Reducing Conditions
  - Gleyed or Low-Chroma Colors
  - Concretion in upper 3 inches
  - High Organic Content in Surface Layer in Sandy Soils
  - Organic Streaking in Sandy Soils
  - Listed on Local Hydric Soils List
  - Listed on National Hydric Soils List
  - Other (Explain in Remarks)

Remarks: Hydric soils assumed present based upon evidence of aquic moisture regime.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Data Point Within a Wetland?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No		

Remarks: Wet Suckle wetland

**ROUTINE WETLAND DETERMINATION  
DATA FORM**

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Adjacent upland Grassland</u> Transect ID: <u>5</u> Data Point ID: <u>B</u>

**VEGETATION**

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associate (A)		
1. <u>Tarriatherum racemiflorum (D)</u>		<u>UPL</u>	9. _____		
2. <u>Erodium cicutarium (D)</u>		<u>UPL</u>	10. _____		
3. <u>Hemizonia sp. (D)</u>		<u>NIL</u>	11. _____		
4. <u>Bromus mollis (A)</u>		<u>FACU</u>	12. _____		
5. <u>Junco bufonius (A)</u>		<u>FACW</u>	13. _____		
6. <u>Lythrum hyssopifolia (A)</u>		<u>FACW</u>	14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Less than 33%

Remarks: Lacking hydrophytic vegetation

**HYDROLOGY**

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Lacking wetland hydrology indicators

Map Unit Name: Cometa - High Water  
 (Series and Phase): 1-5 % Slopes  
 Taxonomy (Subgroup): Typic Palixeralfs, Typic Durixeralfs  
 Drainage Class: well drained  
 Field Observations: \_\_\_\_\_  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
<u>1-8</u>	<u>7.5 YR3/3</u>	<u>None</u>	<u>—</u>	<u>loam</u>

- Hydric Soil Indicators:
- Histosol
  - Histic Epipedon
  - Sulfidic Odor
  - Aquic Moisture Regime
  - Reducing Conditions
  - Gleyed or Low-Chroma Colors
  - Concretion in upper 3 inches
  - High Organic Content in Surface Layer in Sandy Soils
  - Organic Streaking in Sandy Soils
  - Listed on Local Hydric Soils List
  - Listed on National Hydric Soils List
  - Other (Explain in Remarks)

Remarks: Lacking hydric soil indicators.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Is this Data Point Within a Wetland?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Wetland Hydrology Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>		
Hydric Soils Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>		

Remarks: Non-wetland

ROUTINE WETLAND DETERMINATION  
DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/Country: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Wet Swale - <sup>UPSTREAM of</sup> Point #5A</u> Transect ID: <u>6</u> Data Point ID: <u>A</u>

VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
Dominant (D) - Associate (A)			Dominant (D) - Associated (A)		
1. <u>Polypogon monspeliensis - D</u>		<u>FACW</u>	9. _____		
2. <u>Leontodon leysleri - D</u>		<u>FACU</u>	10. _____		
3. <u>Hordeum hystrix - D</u>		<u>FAC</u>	11. _____		
4. <u>Lolium perenne - A</u>		<u>FAC</u>	12. _____		
5. <u>Agrostis avenacea - A</u>		<u>FACW</u>	13. _____		
6. <u>Ranunculus alveolatus - A</u>		<u>OBL</u>	14. _____		
7. <u>Juncus bufonius - A</u>		<u>FACW</u>	15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66 %

Remarks: Hydrophytic vegetation present.

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Streams, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input checked="" type="checkbox"/> Sediment Deposits/Organic Detritus</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depths of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks: Wetland hydrology present.

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Non-wetland Swale</u> Transect ID: <u>6</u> Data Point ID: <u>B</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
<u>Dominant (D) - Associate (A)</u>			<u>Dominant (D) - Associate (A)</u>		
1. <u>Erodium botrys (D)</u>	_____	<u>UPL</u>	9. _____	_____	_____
2. <u>Hemizonia sp. (D)</u>	_____	<u>NI</u>	10. _____	_____	_____
3. <u>Leontodon leysleri (A)</u>	_____	<u>FACU</u>	11. _____	_____	_____
4. <u>Hordeum hystrix (A)</u>	_____	<u>FAC</u>	12. _____	_____	_____
5. <u>Polygonum monspeliensis (A)</u>	_____	<u>FACW</u>	13. _____	_____	_____
6. <u>Zolium perenne (A)</u>	_____	<u>FAC</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Less than 50%

Remarks: Lacks hydrophytic vegetation

## HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Lacking wetland hydrology indicators

Map Unit Name Cometa - Fiddlyment Complex  
 (Series and Phase): 1-5 % Slopes

Drainage Class: well drained

Taxonomy (Subgroup): Typic Paleixeralfs,  
Typic Durixeralfs

Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR 4/2	10YR 4/6		

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: Hydric soil indicators present

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Data Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks: Non-wetland

**ROUTINE WETLAND DETERMINATION  
DATA FORM**

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/Country: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Wet Swale</u> Transect ID: <u>7</u> Data Point ID: <u>A</u>

**VEGETATION**

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
<u>Dominant (D) - Associate (A)</u>			<u>Dominant (D) - Associate (A)</u>		
1. <u>Colium perenne (D)</u>		<u>FAC</u>	9. _____		
2. <u>Hordeum hystrix (D)</u>		<u>FAC</u>	10. _____		
3. <u>Lathrum hyssopifolia (A)</u>		<u>FACW</u>	11. _____		
4. <u>Lemmonia sp. (A)</u>		<u>NT</u>	12. _____		
5. <u>Ranunculus ovelatus (A)</u>			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100% FAC dominated

Remarks:

**HYDROLOGY**

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: wetland hydrology present;

Map Unit Name: Comer  
 (Series and Phase): loams, 1-5% slopes  
 Taxonomy (Subgroup): Typic Palexeralfs, Typic Haploxeralfs

Drainage Class: well drained  
 Field Observations  
 Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR 4/2	7.5YR 4/6		sandy loam

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: Hydric soil indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soils Present?  Yes  No  
 Is this Data Point Within a Wetland?  Yes  No

Remarks: Wet Swale wetland

# ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Placer 1600</u> Applicant/Owner: <u>Live Oak Enterprises</u> Investigator(s): <u>D. Skordal</u>	Date: <u>1-13-99</u> City/County: <u>Placer County</u> State: <u>California</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: <u>Adjacent upland (Grassland)</u> Transect ID: <u>7</u> Data Point ID: <u>B</u>

## VEGETATION

Plant Species	Stratum	Indicator	Plant Species	Stratum	Indicator
<u>Dominant (D) - Associate (A)</u>			<u>Dominant (D) - Associate (A)</u>		
1. <u>Holocarpus virgata (D)</u>		<u>UPL</u>	9. _____		
2. <u>Geniatherum caput-medusae (D)</u>		<u>UPL</u>	10. _____		
3. <u>Eriodum botrys (D)</u>		<u>UPL</u>	11. _____		
4. <u>Lolium perenne (A)</u>		<u>FAC</u>	12. _____		
5. <u>Novaezella sp. (A)</u>		<u>NI</u>	13. _____		
6. <u>Juncus bufonius (A)</u>		<u>FACW</u>	14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). None

Remarks: Lacking hydrophytic vegetation

## HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Streams, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits/Organic Detritus <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depths of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: Located on slope adjacent to swale. Lacking wetland hydrology indicators.

Map Unit Name Cometa - Ramona

(Series and Phase): loams, 1-5% slopes

Drainage Class: well drained

Field Observations

Taxonomy (Subgroup): Typic Palexeralfs,  
Typic Haloxeralfs

Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-8	10YR 3/3	7.5 YR 4/6		Sandy loam

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretion in upper 3 inches
- High Organic Content in Surface Layer in Sandy Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks: Lacking hydric soil indicators

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes  No

Wetland Hydrology Present? Yes  No

Hydric Soils Present? Yes  No

Is this Data Point Within a Wetland? Yes  No

Remarks: Non-wetland

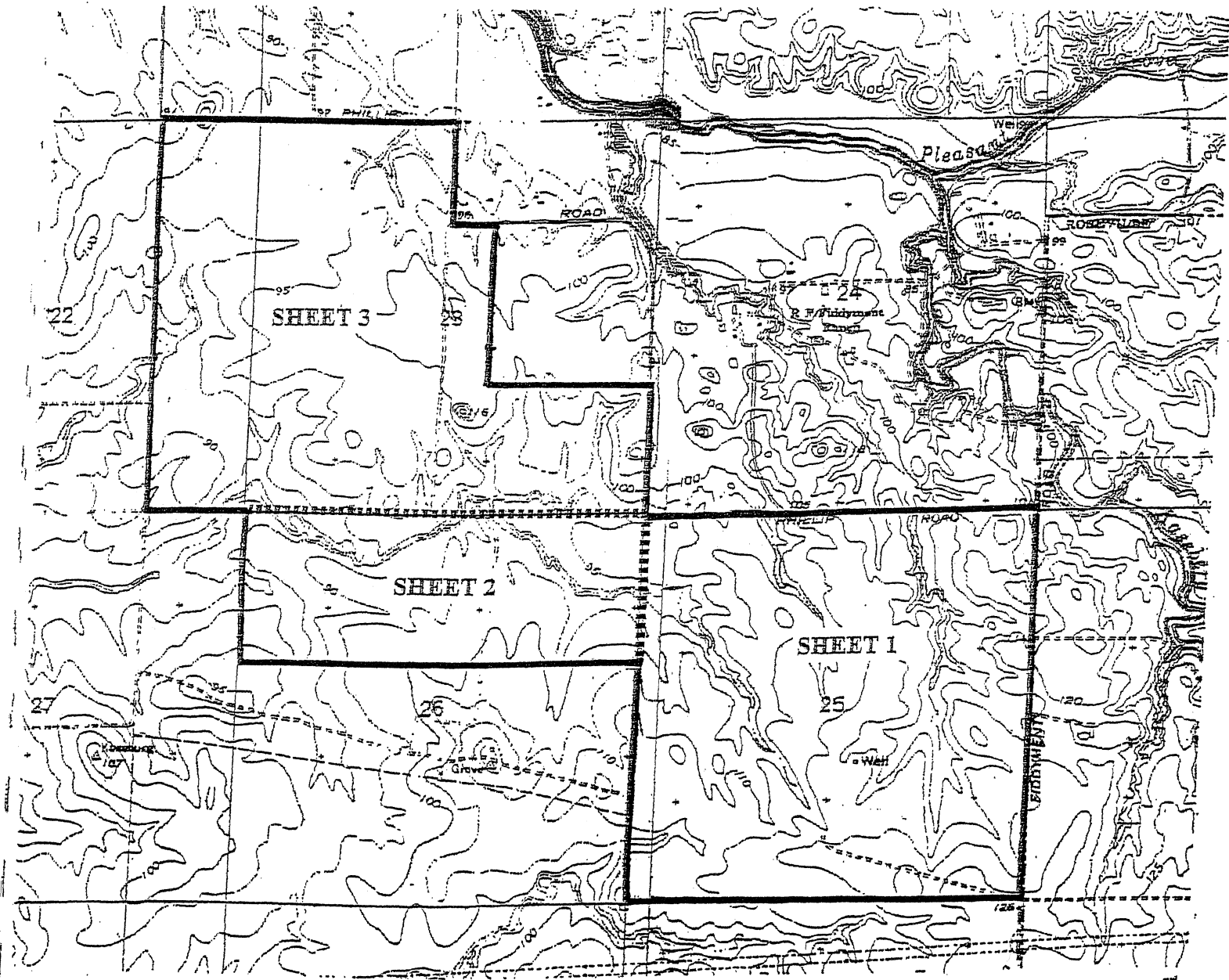


# APPENDIX B

## DELINEATION MAPS (Sheets 1 - 3)



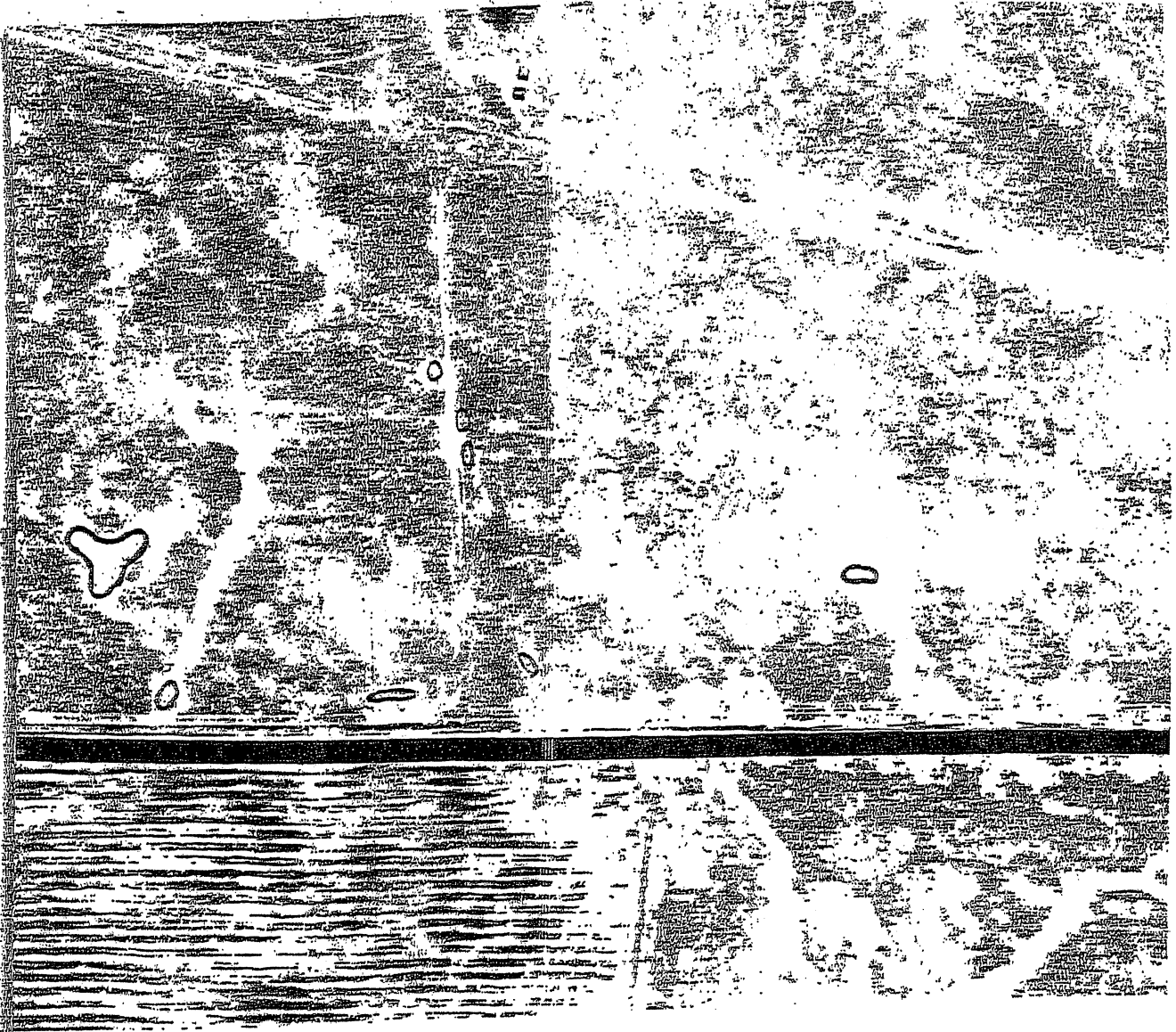
**DELINEATION MAP INDEX  
PLACER 1600 PROPERTY**



(Scale: 1 Inch = 2000 Feet)

Source: Pleasant Grove and Roseville, California  
USGS 7.5 Minute Quadrangle Maps

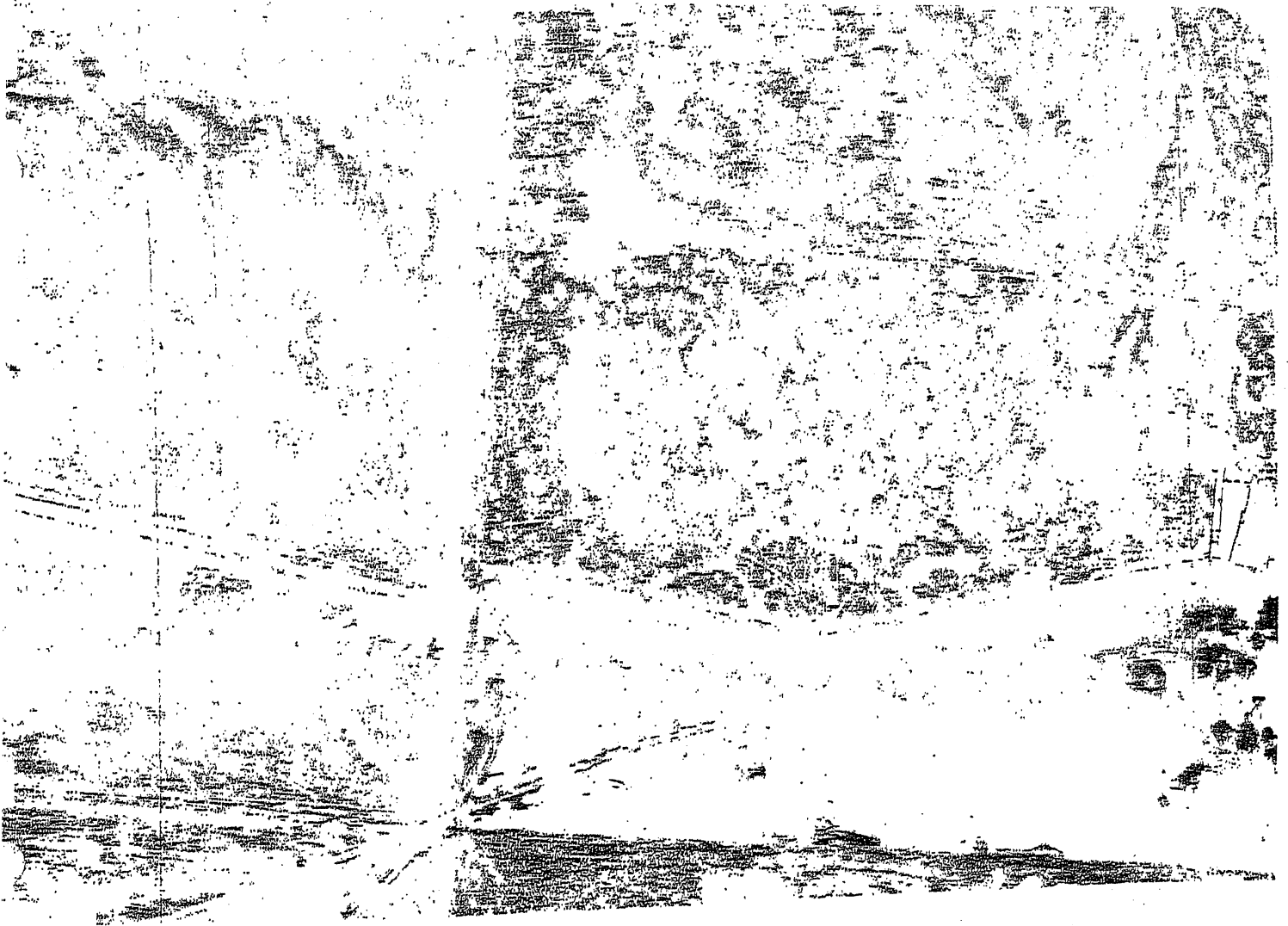




**JURISDICTIONAL DELINEATION  
PLACER 1600 PROPERTY**

**SHEET 1**





**JURISDICTIONAL DELINEATION  
PLACER 1600 PROPERTY**

**SHEET 2**





**JURISDICTIONAL DELINEATION  
PLACER 1600 PROPERTY**

**SHEET 3**



3  
MAP POCKETS

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JURISDICTIONAL DELINEATION

PLACER 1600 PROPERTY

~~SHEET 24~~

