DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann~~, C. Bouril, S. HARRIS
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? Yes No
Is the area a potential Problem Area? Yes No

Sample Site No.: 44
Date: 21 AUG. ~~August 5~~, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. Juncus effusus !?	100	OBL	1.		
2.			2.		
3.			3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		

100 % dominant species that are OBL, FACW or FAC (except FAC-). 0 % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: <1%
Within 100-year floodplain? Yes No
Below OHWM or High Tide Line? Yes No

Wetland hydrology indicators:

- ___ Inundated
- ___ Water marks
- ___ Sediment deposits
- ✓ Suppressed vegetation
- ✓ Matting (algal or other)
- ___ Other (explain in remarks)
- ✓ Saturated in upper 12"
- ✓ Organic duff layer
- ___ Drainage patterns in wetlands
- ? Oxidized root channels

Physiographic position of site/Remarks:

SOILS

Map unit name: ___
Taxonomy (subgroup): ___
Soil series permeability (from NRCS survey): ___
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-1		10YR 3/2		100%	Loam
1-3		10YR 3/2 +			"
		10YR 4/2			"
			10YR 3/4	0-4%	" (RHIZOSPHERES)
3-10		10YR 3/2 +			"
		10YR 4/2			

Hydric Soil Indicators:

- X Abundant rhizospheres
- ___ Reducing conditions
- ___ High organic content in surface layer
- ___ Depleted mottles or matrix
- ___ Gleying
- ___ Non-mollic, low-chroma colors
- ___ Iron or Mn mottles
- ___ Sulfidic odor
- ___ Probable aquic moisture regime
- ___ Concretions
- ___ Listed on county hydric soils list
- ___ Other (explain in remarks)

Remarks: RHIZOSPHERE COLOR IS 10YR, MAY BE CHARACTERISTIC OF SITE SOILS OR SOIL ALKALINITY

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present (Yes) No
Wetland hydrology present (Yes) No

Is this sampling point within a wetland? (Yes) No

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann~~, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? (Yes) No
Is the area a potential Problem Area? Yes (No)

Sample Site No.: 45
Date: 2008 ~~August 5~~, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. POLYPOGON MONSPELIENSIS	50	FACW	1.		
2. LOLIUM MULTIFLORUM	20	FAC	2.		
3. HORDEUM MURINUM	15	FAC	3.		
4. NOT RECORDED	15		4.		
5.			5.		
6.			6.		
7.			7.		

100 % dominant species that are OBL, FACW or FAC (except FAC-). 8 % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: <2%
Within 100-year floodplain? Yes (No)
Below OHWM or High Tide Line? Yes (No)

Wetland hydrology indicators:
- ____ Inundated
- ____ Water marks
- ____ Sediment deposits
- ____ Suppressed vegetation
- ____ Matting (algal or other)
- ____ Other (explain in remarks) CRYPTOGAMIC? CREST
- ____ Saturated in upper 12"
- ____ Organic duff layer
- ____ Drainage patterns in wetlands
- ____ Oxidized root channels

Physiographic position of site/Remarks: TOPO LOW SPOT ~ 18' x 80'

SOILS

Map unit name: ____
Taxonomy (subgroup): ____
Soil series permeability (from NRCS survey): ____
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-5		10YR 3/2		FAINT MOTTLING	(SiL) NOT VISIBLE MOIST
5-11		10YR 5/2		}	CL
		10YR 5/4		} SLIGHT MOTTLING?, MIXED SOIL?	

Hydric Soil Indicators:
- ____ Abundant rhizospheres
- ____ Reducing conditions
- ____ High organic content in surface layer
- ____ Depleted mottles or matrix
- ____ Gleying
- ____ Non-mollic, low-chroma colors
- ____ Iron or Mn mottles
- ____ Sulfidic odor
- ____ Probable aquic moisture regime
- ____ Concretions
- ____ Listed on county hydric soils list
- ____ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present Yes (No)
Wetland hydrology present Yes (No)

Is this sampling point within a wetland? Yes (No)

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann~~, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? Yes No
Is the area a potential Problem Area? Yes No

Sample Site No.: 46
Date: 26 DEC August 5, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. CYPERUS ERAGROSTIS	40	FACW	1.		
2. RUMEX CRISPUS	15	FACW	2.		
3. CHICORIUM INTYBUS	10	UPL	3.		
4. LOLIUM MULTIFLORUM	25	FAC	4.		
5. POLYPOGON MONSPELIENSIS	10	FACW	5.		
6.			6.		
7.			7.		

100 % dominant species that are OBL, FACW or FAC (except FAC-). 20 % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: <2%
Within 100-year floodplain? Yes (No)
Below OHWM or High Tide Line? Yes (No)

Wetland hydrology indicators:

- ___ Inundated
- ___ Water marks
- ? Sediment deposits
- X Suppressed vegetation
- ___ Matting (algal or other)
- ___ Other (explain in remarks)
- ___ Saturated in upper 12"
- ___ Organic duff layer
- ___ Drainage patterns in wetlands
- ___ Oxidized root channels

Physiographic position of site/Remarks: IN DITCH SEGMENT w/ CYPERUS ERAGROSTIS

SOILS

Map unit name: ___
Taxonomy (subgroup): ___
Soil series permeability (from NRCS survey): ___
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-2		10YR3/2	—		SIL
2-10		10YR5/2+	10YR5/6	25%, DISTINCT	SIL
		10YR3/2		MOTTLING, ?	

Hydric Soil Indicators:

- ___ Abundant rhizospheres
- ___ Reducing conditions
- ___ High organic content in surface layer
- ___ Depleted mottles or matrix
- ___ Gleying
- ___ Non-mollic, low-chroma colors
- X Iron or Mn mottles ?
- ___ Sulfidic odor
- ___ Probable aquic moisture regime
- ___ Concretions
- ___ Listed on county hydric soils list
- ___ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present (Yes) No
Wetland hydrology present (Yes) No

Is this sampling point within a wetland? (Yes) No

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lehmann~~, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? (Yes) No
Is the area a potential Problem Area? Yes (No)

Sample Site No.: 47
Date: 26 JUL ~~August 5~~, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. HORDEUM MARINUM	50	FAC	1.		
2. POLYPOGON MONSPELIENSIS	40	FACW	2.		
3. PICRIS ECHIOIDES	5	FAC	3.		
4. EPILOBIUM DENSIFLORUM (BOISDUVALIA)	5	OBL	4.		
5.			5.		
6.			6.		
7.			7.		

100 % dominant species that are OBL, FACW or FAC (except FAC-). _____ % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: <2%
Within 100-year floodplain? Yes (No)
Below OHWM or High Tide Line? Yes (No)

Wetland hydrology indicators:

- ____ Inundated
- ____ Water marks
- ____ Sediment deposits
- ____ Suppressed vegetation
- ____ Matting (algal or other)
- ____ Other (explain in remarks)
- ____ Saturated in upper 12"
- ____ Organic duff layer
- ____ Drainage patterns in wetlands
- X Oxidized root channels

Physiographic position of site/Remarks: GRADED TROUGH EAST SIDE OF RUNWAY 7'X150'

SOILS

Map unit name: _____
Taxonomy (subgroup): _____
Soil series permeability (from NRCS survey): _____
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-5		10YR 2/2	5YR 4/6	5-8% FAINT	L
5-10		10YR 2/1 BLACK	—		CL

Hydric Soil Indicators:

- X Abundant rhizospheres
- ____ Reducing conditions
- ____ High organic content in surface layer
- ____ Depleted mottles or matrix
- ____ Gleying
- ____ Non-mollic, low-chroma colors ?
- ____ Iron or Mn mottles
- ____ Sulfidic odor
- ____ Probable aquic moisture regime
- ____ Concretions
- ____ Listed on county hydric soils list
- ____ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present (Yes) No
Wetland hydrology present (Yes) No

Is this sampling point within a wetland? (Yes) No

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann~~, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? (Yes) No
Is the area a potential Problem Area? Yes (No)

Sample Site No.: 48
Date: 26 AUG. ~~August 3~~, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. PICRIS ECHIOIDES	15	FAC	1.		
2. LOLIUM MULTIFLORUM	25	FAC	2.		
3. LOTUS PURSHIANUS	25	UPL	3.		
4. HORDEUM MARINUM	30	FAC	4.		
5. BROMUS HORDEACEOUS	5	FACU	5.		
6.			6.		
7.			7.		

67 % dominant species that are OBL, FACW or FAC (except FAC-). 0 % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: < 2%
Within 100-year floodplain? Yes (No)
Below OHWM or High Tide Line? Yes (No)

Wetland hydrology indicators: NONE

- ____ Inundated
- ____ Water marks
- ____ Sediment deposits
- ____ Suppressed vegetation
- ____ Matting (algal or other)
- ____ Other (explain in remarks)
- ____ Saturated in upper 12"
- ____ Organic duff layer
- ____ Drainage patterns in wetlands
- ____ Oxidized root channels

Physiographic position of site/Remarks:

SOILS

Map unit name: ____
Taxonomy (subgroup): ____
Soil series permeability (from NRCS survey): ____
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-7"		10YR 3/2	—		GRCL
7+		NOT EXCAVATED			COMPACTED GRAVEL AG. BASE

Hydric Soil Indicators: NONE

- ____ Abundant rhizospheres
- ____ Reducing conditions
- ____ High organic content in surface layer
- ____ Depleted mottles or matrix
- ____ Gleying
- ____ Non-mollic, low-chroma colors
- ____ Iron or Mn mottles
- ____ Sulfidic odor
- ____ Probable aquic moisture regime
- ____ Concretions
- ____ Listed on county hydric soils list
- ____ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present Yes (No)
Wetland hydrology present Yes (No)

Is this sampling point within a wetland? Yes (No)

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann~~, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? (Yes) No
Is the area a potential Problem Area? Yes (No)

Sample Site No.: 49
Date: 26 AUG 4 ~~August 5~~, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. POLYPOGON MONSPELIENSIS	90	FACW	1.		
2. PICRIS ECHIOIDES	5	FAC	2.		
3. HORDEUM MARINUM	2	FAC	3.		
4. LOLIUM MULTIFLORUM	3	FAC	4.		
5.			5.		
6.			6.		
7.			7.		

100 % dominant species that are OBL, FACW or FAC (except FAC-). <10 % bare ground

Remarks: WRAPPED TO EDGE OF POND

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: ____
Within 100-year floodplain? Yes No
Below OHWM or High Tide Line? Yes No

Wetland hydrology indicators:

- ____ Inundated
- ____ Water marks
- ____ Sediment deposits
- ____ Suppressed vegetation
- X Matting (algal or other)
- ____ Other (explain in remarks)
- ____ Saturated in upper 12"
- ____ Organic duff layer
- ____ Drainage patterns in wetlands
- X Oxidized root channels

Physiographic position of site/Remarks: GRADED TROUGH SUBPARALLEL TO POND 4, PROBABLE DRAIN CHANNEL FROM RUNOFF & CULVERT 22' WIDE X

SOILS

Map unit name: ____
Taxonomy (subgroup): ____
Soil series permeability (from NRCS survey): ____
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-2		10YR 3/2	5YR 4/6	10-25% RUNZOS	L
2-7		10YR 2/1	—		

Hydric Soil Indicators:

- ____ Abundant rhizospheres
- ____ Reducing conditions
- ____ High organic content in surface layer
- ____ Depleted mottles or matrix
- ____ Gleying
- ____ Non-mollic, low-chroma colors
- ____ Iron or Mn mottles
- ____ Sulfidic odor
- ____ Probable aquic moisture regime
- ____ Concretions
- ____ Listed on county hydric soils list
- ____ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present (Yes) No
Wetland hydrology present (Yes) No

Is this sampling point within a wetland? (Yes) No

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann,~~ C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? (Yes) No
Is the area a potential Problem Area? Yes (No)

Sample Site No.: 50
Date: 2 6 04 ~~August~~ 5, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. BROMUS HORDEACEUS	55	FACU	1.		
2. LOLIUM MULTIFLORUM	30	FAC	2.		
3. CHICORIUM INTYBUS	15	UPL	3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		

50 % dominant species that are OBL, FACW or FAC (except FAC-). _____ % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: _____ (in.)
Depth to free water in pit: _____ (in.)
Depth to saturated soil: _____ (in.)

Approximate slope: ~4%
Within 100-year floodplain? Yes (No)
Below OHWM or High Tide Line? Yes (No)

Wetland hydrology indicators: NONE

- ____ Inundated
- ____ Water marks
- ____ Sediment deposits
- ____ Suppressed vegetation
- ____ Matting (algal or other)
- ____ Other (explain in remarks)
- ____ Saturated in upper 12"
- ____ Organic duff layer
- ____ Drainage patterns in wetlands
- ____ Oxidized root channels

Physiographic position of site/Remarks: 20' SOUTH OF SP 49

SOILS

Map unit name: _____
Taxonomy (subgroup): _____
Soil series permeability (from NRCS survey): _____
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-2		10YR 2/2	—		
2-8		10YR 4/3	—		

Hydric Soil Indicators: NONE

- ____ Abundant rhizospheres
- ____ Reducing conditions
- ____ High organic content in surface layer
- ____ Depleted mottles or matrix
- ____ Gleying
- ____ Non-mollic, low-chroma colors
- ____ Iron or Mn mottles
- ____ Sulfidic odor
- ____ Probable aquic moisture regime
- ____ Concretions
- ____ Listed on county hydric soils list
- ____ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present Yes (No)
Hydric soils present Yes (No)
Wetland hydrology present Yes (No)

Is this sampling point within a wetland? Yes (No)

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): ~~S. Lohmann~~, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? (Yes) No
Is the area a potential Problem Area? Yes (No)

Sample Site No.: 51
Date: 26 Aug. ~~August 5~~, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1. EPILOBIUM DENSIFLORUM	30	OBL	1.		
2. CRESSA TRUXILLENSIS	20	FACW	2.		
3. HEMIZONIA PUNGENS	10	FAC	3.		
4. CRIPSIS SCHOENOIDES	15	OBL	4.		
5. DISTICHLIS SPICATA	10	FACW	5.		
6. MALVELLA LEPROSA	10	FAC	6.		
7. POLYPOGON MONSPELIENSIS	5	FACW	7.		

100 % dominant species that are OBL, FACW or FAC (except FAC-). 40-100 % bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: — (in.)
Depth to free water in pit: — (in.)
Depth to saturated soil: — (in.)

Approximate slope: 0 - 8%
Within 100-year floodplain? Yes (No)
Below OHWM or High Tide Line? (Yes) No ?

Wetland hydrology indicators:

- ___ Inundated
- ___ Water marks
- ___ Sediment deposits
- X Suppressed vegetation
- ___ Matting (algal or other)
- ___ Other (explain in remarks)
- ___ Saturated in upper 12"
- ___ Organic duff layer
- ___ Drainage patterns in wetlands
- X Oxidized root channels

Physiographic position of site/Remarks: EDGE OF WALLOW? POOL W/ SUPR. VEG. AT END OF FLOWLINE/DITCH

SOILS

Map unit name: ___
Taxonomy (subgroup): ___
Soil series permeability (from NRCS survey): ___
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)
0-1		10YR3/1			
1-3		10YR3/3	25YR3/6	60% CLAY FILMS	IN PORES (PLENTIFUL)
3-6		10YR4/2	5YR4/6	2-8% RHIZOS	(FEWER PORES)

Hydric Soil Indicators:

- X Abundant rhizospheres
- ___ Reducing conditions
- ___ High organic content in surface layer
- ___ Depleted mottles or matrix
- ___ Gleying
- X Non-mollic, low-chroma colors
- ___ Iron or Mn mottles
- ___ Sulfidic odor
- ___ Probable aquic moisture regime
- ___ Concretions
- ___ Listed on county hydric soils list
- X Other (explain in remarks)

Remarks: OXIDIZED CLAY FILMS

WETLAND DETERMINATION

Hydrophytic vegetation present (Yes) No
Hydric soils present (Yes) No
Wetland hydrology present (Yes) No

Is this sampling point within a wetland? (Yes) No

Remarks:

DATA FORM: ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: Lagoon Valley
Applicant: Triad Homes
Investigator(s): S. Lohmann, C. Bouril
LSA Associates, Inc., 157 Park Place, Point Richmond, CA 94801
Have vegetation, soils, or hydrology been disturbed? Yes No
Is the area a potential Problem Area? Yes No

Sample Site No.: _____
Date: August 5, 2003
Location: Vacaville
County: Solano
State: CA

VEGETATION (Note those species observed to have morphological adaptations to wetlands with an asterisk "*")

Dominant Plant Species	% Cover	Indicator	Associated Plant Species	% Cover	Indicator
1.			1.		
2.			2.		
3.			3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		

_____% dominant species that are OBL, FACW or FAC (except FAC-). _____% bare ground

Remarks:

HYDROLOGY

Field observations:
Depth of surface water: _____ (in.)
Depth to free water in pit: _____ (in.)
Depth to saturated soil: _____ (in.)

Approximate slope: _____
Within 100-year floodplain? Yes No
Below OHWM or High Tide Line? Yes No

Wetland hydrology indicators:

_____ Inundated
_____ Water marks
_____ Sediment deposits
_____ Suppressed vegetation
_____ Matting (algal or other)
_____ Other (explain in remarks)
_____ Saturated in upper 12"
_____ Organic duff layer
_____ Drainage patterns in wetlands
_____ Oxidized root channels

Physiographic position of site/Remarks:

SOILS

Map unit name: _____
Taxonomy (subgroup): _____

Soil series permeability (from NRCS survey): _____
Field observations confirm mapped soil series? Yes No

Depth (inches)	Horizon	Matrix Color (moist)	Redoximorphic Colors (moist)	Abundance/Contrast	Additional observations (texture, concretions, porosity, etc.)

Hydric Soil Indicators:

_____ Abundant rhizospheres
_____ Reducing conditions
_____ High organic content in surface layer
_____ Depleted mottles or matrix
_____ Gleying
_____ Non-mollic, low-chroma colors
_____ Iron or Mn mottles
_____ Sulfidic odor
_____ Probable aquic moisture regime
_____ Concretions
_____ Listed on county hydric soils list
_____ Other (explain in remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic vegetation present Yes No
Hydric soils present Yes No
Wetland hydrology present Yes No

Is this sampling point within a wetland? Yes No

Remarks:

APPENDIX C

ACREAGE OF JURISDICTIONAL FEATURES

(Tables 1-4)

Table 1: Stream and Ditch Segments

Segment	Width (ft.)	Length (ft.)	Area (sq. ft.)	Wetland Characteristics?
Tributary A				
A-1	2	160	320	Yes
A-2	6	110	660	Yes
A-3	-	-	16,700	Yes
Subtotal		**270**	**17,680**	
Tributary B				
B-1	2	330	660	No
B-2	5	50	250	No
B-3	2	30	60	culvert
Subtotal		**410**	**970**	
Tributary C				
C-1	5	100	500	Yes
Subtotal		**100**	**500**	
Tributary D				
D-1	5	100	500	Yes
D-2	4	210	840	Yes
D-3	2	50	100	Yes
D-4	4	90	360	Yes
D-5	6	60	360	Yes
D-6	3	40	120	culvert
D-7	4	100	400	Yes
D-8	3	250	750	Yes

D-9	4	160	640	Yes
D-10	6	250	1,500	Yes
D-11	4	170	680	Yes
D-12	6	40	240	Yes
D-13	5	90	450	culvert
D-14	6	50	300	Yes
D-15	4	470	1,880	No
D-16	2	150	300	Yes
D-17	6	120	720	Yes
D-18	3	70	210	Yes
D-19	10	30	300	Yes
D-20	6	80	480	Yes
D-21	10	100	1,000	Yes
D-22	10	430	4,300	Yes
D-23	4	250	1,000	No
D-24	3	120	360	No
D-25	2	20	40	culvert
D-26	3	290	870	No
D-27	4	90	360	No
D-28	2	200	400	No
D-29	3	50	150	No
D1-1	2	30	60	culvert
D2-1	3	30	90	culvert
D3-1	2	40	80	culvert
D3-2	3	310	930	No
Subtotal		**4,540**	**20,770**	

Tributary E

E-1	10	60	600	culvert
E-2	5	290	1,450	Yes
E-3	6	560	3,360	Yes
E-4	3	340	1,020	No
E-5	8	160	1,280	Yes
E-6	12	130	1,560	Yes
E1-1	2	60	120	culvert
E2-1	3	40	120	No
Subtotal		**1,640**	**9,510**	

Tributary F

F-1	12	60	720	culvert
F-2	12	110	1,320	Yes
F-3	16	90	1,440	Yes
F-4	12	110	1,320	Yes
F-5	16	210	3,360	Yes
F-6	12	130	1,560	Yes
F-7	20	580	11,600	Yes
F-8	12	190	2,280	Yes
F-9	10	200	2,000	Yes
F-10	12	560	6,720	Yes
F-11	10	490	4,900	Yes
F-12	8	250	2,000	Yes
F-13	5	150	750	Yes
F-14	-	-	12,340	Yes
F-15	7	120	840	Yes
F-16	4	80	320	Yes

F-17	3	550	1,650	Yes
F-18	6	50	300	Yes
F-19	4	40	160	Yes
F-20	6	80	480	Yes
F-21	4	260	1,040	Yes
F-22	6	120	720	Yes
F-23	4	140	560	No
F-24	6	90	540	Yes
F-25	2	120	240	Yes
F-26	5	200	1,000	Yes
F-27	8	100	800	Yes
F-28	6	130	780	Yes
F-29	4	160	640	Yes
F-30	3	260	780	Yes
F-31	4	150	600	Yes
F-32	6	30	180	Yes
F1-1	1	60	60	culvert
F1-2	1	50	50	culvert
F1-3	1	280	280	No
F2-1	-	-	1,500	Yes
F2-2	6	130	780	Yes
F2-3	-	-	240	Yes
F2-4	3	60	180	Yes
F2-5	8	50	400	Yes
F2-6	3	160	480	Yes
F2-7	3	90	270	No
F2-8	3	140	420	Yes

F2-9	6	40	240	Yes
F2-10	3	480	1,440	Yes
F2-11	7	370	2,590	Yes
F2-12	-	-	470	Yes
F2-13	3	160	480	Yes
F2-14	30	100	3,000	Yes
F2-15	20	160	3,200	Yes
F2-16	10	400	4,000	Yes
F2-17	3	50	150	Yes
F2-18	6	140	840	Yes
F2-19	10	100	1,000	Yes
F2-1-1	3	80	240	Yes
F2-2-1	2	160	320	No
F3-1	4	240	960	Yes
F3-2	3	50	150	Yes
F3-3	2	30	60	Yes
F3-4	6	30	180	Yes
F3-5	4	30	120	Yes
F3-6	10	60	600	Yes
F4-1	-	-	7,640	Yes
F4-2	8	60	480	Yes
F4-3	16	20	320	Yes
F4-4	5	270	1,350	Yes
F4-5	12	80	960	Yes
F4-6	10	110	1,100	Yes
F4-7	12	100	1,200	Yes

F4-8	10	110	1,100	Yes
F4-9	5	40	200	Yes
F4-10	-	-	2,400	Yes
F4-11	24	30	720	Yes
F4-12	4	40	160	Yes
F4-13	16	140	2,240	Yes
F4-14	5	70	350	Yes
F4-15	10	140	1,400	Yes
F4-16	6	100	600	Yes
F4-17	3	100	300	Yes
F4-1-1	2	90	180	Yes
F4-1-2	-	-	2,580	Yes
F4-2-1	-	-	610	Yes
F4-2-2	6	60	360	Yes
F4-2-3	3	70	210	Yes
F4-2-4	6	40	240	Yes
F4-2-5	3	60	180	Yes
F4-2-6	3	50	150	Yes
F4-3-1	3	180	540	Yes
F5-1	2	180	360	Yes
F5-2	1	50	50	Yes
F5-3	10	40	400	Yes
F5-4	3	120	360	Yes
F5-5	12	50	600	Yes
F5-6	3	150	450	Yes
F5-7	15	20	300	Yes

F5-8	3	30	90	Yes
F5-9	15	30	450	Yes
F5-10	5	110	550	Yes
F5-11	3	50	150	Yes
F5-12	6	230	1,380	Yes
F5-13	4	330	1,320	Yes
F5-14	10	210	2,100	Yes
F5-15	8	170	1,360	Yes
F5-16	3	110	330	Yes
F5-17	8	70	560	Yes
F5-1-1	1	70	70	No
F5-2-1	2	160	320	Yes
F6-1	3	60	180	Yes
F6-2	12	50	600	Yes
F6-3	7	290	2,030	Yes
F6-4	4	50	200	Yes
F6-5	10	30	300	Yes
F6-6	3	30	90	Yes
F6-7	12	100	1,200	Yes
F6-8	6	130	780	Yes
F6-9	8	40	320	Yes
F6-10	12	150	1,800	Yes
F6-11	3	90	270	Yes
F6-12	12	70	840	Yes
F6-13	-	-	10,560	Yes
F7-1	2	70	140	Yes

F7-2	2	150	300	Yes
F7-3	1	110	110	Yes
F7-4	3	60	180	Yes
F7-5	3	30	90	Yes
F8-1	6	100	600	Yes
F8-2	6	50	300	Yes
F8-3	2	120	240	No
F8-4	6	60	360	No
F8-5	3	100	300	No
F8-6	8	250	2,000	Yes
F8-7	-	-	4,390	Yes
F8-1-1	3	130	390	Yes
F8-1-2	-	-	260	Yes
F8-2-1	3	170	510	Yes
F8-2-2	3	80	240	Yes
Subtotal		**16,220**	**156,990**	

Tributary G

G-1	13	70	910	culvert
G-2	15	170	2,550	Yes
G-3	8	160	1,280	Yes
G-4	12	190	2,280	Yes
G-5	16	120	1,920	Yes
G-6	12	140	1,680	Yes
G-7	7	110	770	Yes
G-8	5	130	650	Yes
G-9	8	170	1,360	Yes

G-10	10	230	2,300	Yes
G-11	10	830	8,300	Yes
G-12	1	210	210	Yes
G-13	5	30	150	culvert
G-14	4	170	680	No
G-15	5	100	500	Yes
G-16	5	110	550	No
G-17	4	240	960	Yes
G-18	3	760	2,280	No
G-19	4	700	2,800	No
G-20	5	410	2,050	No
G-21	4	30	120	culvert
G-22	2	60	120	No
G-23	4	30	120	Yes
G-24	4	130	520	No
G-25	3	740	2,220	No
G-26	4	150	600	No
G-27	5	30	150	Yes
G-28	4	160	640	No
G-29	5	50	250	No
G-30	6	30	180	Yes
G-31	4	90	360	No
G-32	6	140	840	No
G-33	4	70	280	No
G-34	8	60	480	Yes
G1-1	3	710	2,130	No
G1-2	2	200	400	No
G1-3	1	880	880	No

G2-1	2	150	300	Yes
G2-2	1	190	190	Yes
G2-3	1	130	130	No
G2-4	-	-	See SW-U	Yes
G2-5	6	140	840	Yes
G2-6	-	-	250	Yes
G2-7	2	190	380	No
G4-1	3	80	240	No
G4-2	1	290	290	No
G4-3	2	180	360	No
G4-4	3	420	1,260	No
G4-5	1	270	270	No
G4-6	4	260	1,040	Yes
G4-1-1	3	120	360	No
G5-1	2	70	140	No
G6-1	2	70	140	No
G6-2	-	-	43,360	Yes
G6-3	3	150	450	Yes
G7-1	2	160	320	Yes
G7-2	1	560	560	Yes
G8-1	1	120	120	No
Subtotal		**12,160**	**95,470**	

Tributary H

H-1	4	70	280	culvert
H-2	8	1,490	11,920	Yes
H-3	4	100	400	culvert
H-4	7	50	350	Yes
H1-1	2	200	400	culvert
H2-1	2	20	40	Yes
H2-2	6	20	120	Yes
Subtotal		**1,950**	**13,510**	

Tributary I

I-1	6	90	540	culvert
I-2	6	140	840	No
I-3	4	60	240	No
I-4	8	1,110	8,880	No
I-5	6	630	3,780	No
I-6	2	30	60	culvert
I-7	6	570	3,420	No
I-8	2	30	60	culvert
I-9	3	600	1,800	No
I-10	1	10	10	culvert
I-11	3	190	570	No
Subtotal		**3,460**	**20,200**	

Tributary J				
J-1	3	40	120	culvert
J-2	2	410	820	No
J-3	2	230	460	No
Subtotal		**680**	**1,400**	
Nursery Pond Culverts				
NP-1	2	120	240	culvert
NP-2	2	40	80	culvert
Subtotal		**160**	**320**	
TOTAL		**41,590**	**337,320**	

Table 2: Seasonal Wetlands

Seasonal Wetlands	Area (sq. ft.)	Wetland Characteristics?
SW-A	1,700	Yes
SW-B	120	Yes
SW-C	2,150	Yes
SW-D	1,310	Yes
SW-E	710	Yes
SW-F	2,110	Yes
SW-G	12,530	Yes
SW-H	700	Yes
SW-I	690	Yes
SW-J	660	Yes
SW-K	700	Yes
SW-L	1,020	Yes
SW-M	1,170	Yes

SW-N	370	Yes
SW-O	540	Yes
SW-P	330	Yes
SW-Q	2,590	Yes
SW-R	2,740	Yes
SW-S	12,300	Yes
SW-T	2,510	Yes
SW-U	48,810	Yes
SW-V	120	Yes
SW-W	150	Yes
SW-X	210	Yes
SW-Y	90	Yes
SW-Z	400	Yes
Subtotal Seasonal Wetlands	**96,730**	

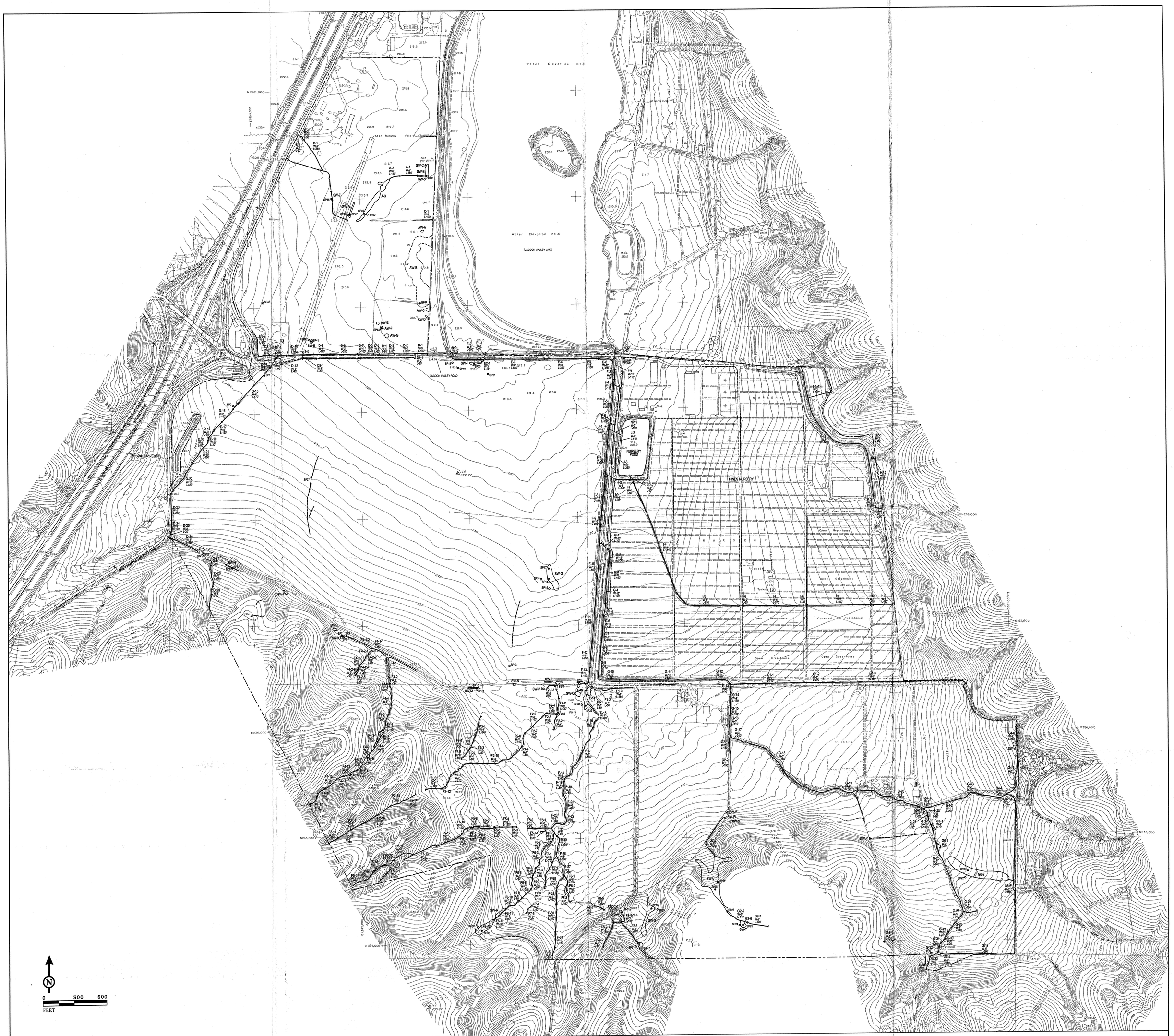
Table 3: Alkali Wetlands

Alkali Wetlands	Area (sq. ft.)	Wetland Characteristics?
AW-A	410	Yes
AW-B	77,770	Yes
AW-C	930	Yes
AW-D	520	Yes
AW-E	490	Yes
AW-F	870	Yes
AW-G	1,060	Yes
Subtotal Alkali Wetlands	**82,050**	

Table 4: Stockponds

Stock Ponds	Area (sq. ft.)	Wetland Characteristics?
Stock Pond A	5,860	No
Stock Pond B	5,840	Yes
Subtotal Stock Ponds	**11,700**	

TOTAL



LSA

WATERS OF THE UNITED STATES

- STREAM SEGMENT
- W-1' SEGMENT WIDTH
- L-10' SEGMENT LENGTH
- CULVERT
- SEASONAL WETLAND
- ALKALI WETLAND

OTHER FEATURES

- SP3 WETLAND SAMPLE POINT
- SP6 NON-WETLAND SAMPLE POINT
- NON-JURISDICTIONAL DITCH
- PROJECT SITE BOUNDARY

FIGURE 3

Lagoon Valley Residential/Commercial Project

Potential Waters of the United States

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