

Attachment 3  
**Wetland Data Forms**

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# Hidden Valley Wetlands Site Wetland Data Forms

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**SOIL**

Sampling Point: SP HV-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	2.5Y 4/2	100					Sandy loam	
4-8	2.5Y 4/2	98	7.5 YR 5/6	2	C	M	Sandy loam	
8-18+	2.5Y 4/2	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside County Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-2  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Pond depression Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'51.39"N Long: 117°29'7.77"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <i>Typha domingensis</i>	40	Yes	OBL	
2. <i>Schoenoplectus californicus</i>	20	Yes	OBL	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <b>60</b> %				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100.0 %** (A/B)

**Prevalence Index worksheet:**

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	60	(A)	60 (B)
Prevalence Index = B/A =			1.00

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: Vegetation along banks of pond feature.

**SOIL**

Sampling Point: SP HV-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

Sample point in pond, hydric soils assumed due to presence of standing water.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Sample point in pond.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside County Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-3  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'51.60"N Long: 117°29'7.84"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Sample point upslope of pond.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix laevigata</i>	30	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7 %</u> (A/B)																																
2. <i>Populus deltoides</i>	5	No	FAC																																	
3.																																				
4.																																				
Total Cover: <u>35 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>30</u></td> <td align="center">x 2 =</td> <td align="center"><u>60</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>15</u></td> <td align="center">x 3 =</td> <td align="center"><u>45</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>5</u></td> <td align="center">x 4 =</td> <td align="center"><u>20</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>25</u></td> <td align="center">x 5 =</td> <td align="center"><u>125</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>75</u></td> <td align="center">(A)</td> <td align="center"><u>250</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>3.33</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>30</u>	x 2 =	<u>60</u>	FAC species	<u>15</u>	x 3 =	<u>45</u>	FACU species	<u>5</u>	x 4 =	<u>20</u>	UPL species	<u>25</u>	x 5 =	<u>125</u>	Column Totals:	<u>75</u>	(A)	<u>250</u> (B)	Prevalence Index = B/A = <u>3.33</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>  </u>	x 1 =	<u>0</u>																																	
FACW species	<u>30</u>	x 2 =	<u>60</u>																																	
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UPL species	<u>25</u>	x 5 =	<u>125</u>																																	
Column Totals:	<u>75</u>	(A)	<u>250</u> (B)																																	
Prevalence Index = B/A = <u>3.33</u>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicifolia</i>	10	Yes	FAC																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <u>10 %</u>																																				
<b>Herb Stratum</b>																																				
1. <i>Heterotheca grandiflora</i>	25	Yes	Not Listed	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. <i>Melilotus albus</i>	5	No	FACU																																	
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <u>30 %</u>																																				
<b>Woody Vine Stratum</b>																																				
1.																																				
2.																																				
Total Cover: <u>  </u> %																																				
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																		

Remarks:

**SOIL**

Sampling Point: SP HV-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20+	2.5 Y 4/2	100					Loamy sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks:

No hydric soils present, upslope of pond feature.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: Sample point upslope of pond feature. No hydrology indicators observed.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Hidden Valley City/County: Riverside County Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-4  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'46.63"N Long: 117°29'6.75"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. <i>Salix gooddingii</i>	70	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">2</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">2</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">100.0 %</span> (A/B)																																								
2. <i>Populus deltoides</i>	10	No	FAC																																									
3. _____																																												
4. _____																																												
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">80 %</span>				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 1 =</td> <td style="background-color: #e0e0e0;"></td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">70</td> <td>x 2 =</td> <td style="background-color: #e0e0e0;"></td> <td style="background-color: #e0e0e0; text-align: center;">140</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">30</td> <td>x 3 =</td> <td style="background-color: #e0e0e0;"></td> <td style="background-color: #e0e0e0; text-align: center;">90</td> </tr> <tr> <td>FACU species</td> <td style="background-color: #e0e0e0;"></td> <td>x 4 =</td> <td style="background-color: #e0e0e0;"></td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>UPL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 5 =</td> <td style="background-color: #e0e0e0;"></td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">100</td> <td></td> <td style="text-align: center;">(A)</td> <td style="background-color: #e0e0e0; text-align: center;">230 (B)</td> </tr> <tr> <td colspan="4" style="text-align: right;">Prevalence Index = B/A =</td> <td style="background-color: #e0e0e0; text-align: center;">2.30</td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:			OBL species		x 1 =		0	FACW species	70	x 2 =		140	FAC species	30	x 3 =		90	FACU species		x 4 =		0	UPL species		x 5 =		0	Column Totals:	100		(A)	230 (B)	Prevalence Index = B/A =				2.30
Total % Cover of:		Multiply by:																																										
OBL species		x 1 =			0																																							
FACW species	70	x 2 =			140																																							
FAC species	30	x 3 =			90																																							
FACU species		x 4 =		0																																								
UPL species		x 5 =		0																																								
Column Totals:	100		(A)	230 (B)																																								
Prevalence Index = B/A =				2.30																																								
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">20 %</span>																																												
<b>Sapling/Shrub Stratum</b>																																												
1. <i>Baccharis salicifolia</i>	20	Yes	FAC																																									
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																												
<b>Herb Stratum</b>																																												
1. _____																																												
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Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																												
<b>Woody Vine Stratum</b>																																												
1. _____																																												
2. _____																																												
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																												
% Bare Ground in Herb Stratum <span style="background-color: #e0e0e0; padding: 2px;">%</span>		% Cover of Biotic Crust <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																										

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: All mature vegetation, no young understory.

**SOIL**

Sampling Point: SP HV-4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	2.5Y 4/2	100					Sandy loamy clay	
4-7	2.5Y 4/2	98	5 YR 4/6	2	C	M	Sandy clay	
8-10	2.5Y 4/2	100					Sandy loam	
10-18+	2.5Y 2.5/1	98	5YR 4/6	2	C	M	Sandy loamy clay	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Abundant wrack in area, appears to be fallen material, not from flow/hydrology.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside County Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-5  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'48.66"N Long: 117°28'55.60"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. <i>Salix lasiolepis</i>	80	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																								
2. <i>Washingtonia robusta</i>	20	Yes	FACW																																									
3.																																												
4.																																												
Total Cover: <u>100%</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">Total % Cover of:</td> <td style="width:10%;"></td> <td style="width:10%;">Multiply by:</td> <td style="width:10%;"></td> <td style="width:10%;"></td> </tr> <tr> <td>OBL species</td> <td></td> <td>x 1 =</td> <td></td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">100</td> <td>x 2 =</td> <td></td> <td align="center">200</td> </tr> <tr> <td>FAC species</td> <td></td> <td>x 3 =</td> <td></td> <td align="center">0</td> </tr> <tr> <td>FACU species</td> <td></td> <td>x 4 =</td> <td></td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td></td> <td>x 5 =</td> <td></td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">100</td> <td></td> <td align="center">(A)</td> <td align="center">200 (B)</td> </tr> <tr> <td colspan="4" style="text-align: right;">Prevalence Index = B/A =</td> <td align="center"><u>2.00</u></td> </tr> </table>	Total % Cover of:		Multiply by:			OBL species		x 1 =		0	FACW species	100	x 2 =		200	FAC species		x 3 =		0	FACU species		x 4 =		0	UPL species		x 5 =		0	Column Totals:	100		(A)	200 (B)	Prevalence Index = B/A =				<u>2.00</u>
Total % Cover of:		Multiply by:																																										
OBL species		x 1 =			0																																							
FACW species	100	x 2 =			200																																							
FAC species		x 3 =			0																																							
FACU species		x 4 =		0																																								
UPL species		x 5 =		0																																								
Column Totals:	100		(A)	200 (B)																																								
Prevalence Index = B/A =				<u>2.00</u>																																								
Total Cover: <u>  </u> %																																												
<u>Sapling/Shrub Stratum</u>																																												
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4.																																												
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Total Cover: <u>  </u> %																																												
<u>Herb Stratum</u>																																												
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Total Cover: <u>  </u> %																																												
<u>Woody Vine Stratum</u>																																												
1.																																												
2.																																												
Total Cover: <u>  </u> %																																												
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																										

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: No understory.

**SOIL**

Sampling Point: SP HV-5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20+	10YR 4/2	100					Loamy sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: No hydric soil indicators

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No hydrology indicators.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-6  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'47.64"N Long: 117°28'48.76"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																									
1. <i>Salix gooddingii</i>	40	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (A) Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">100.0 %</span> (A/B)																								
2.																												
3.																												
4.																												
Total Cover:	40 %																											
<b>Sapling/Shrub Stratum</b>																												
1. <i>Salix exigua</i>	20	Yes	FACW	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th colspan="2" style="width: 60%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="background-color: #e0e0e0; width: 40px;"></td> <td>x 1 = 0</td> </tr> <tr> <td>FACW species</td> <td style="background-color: #e0e0e0; text-align: center;">60</td> <td>x 2 = 120</td> </tr> <tr> <td>FAC species</td> <td style="background-color: #e0e0e0; text-align: center;">15</td> <td>x 3 = 45</td> </tr> <tr> <td>FACU species</td> <td style="background-color: #e0e0e0;"></td> <td>x 4 = 0</td> </tr> <tr> <td>UPL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 5 = 0</td> </tr> <tr> <td>Column Totals:</td> <td style="background-color: #e0e0e0; text-align: center;">75 (A)</td> <td style="background-color: #e0e0e0; text-align: center;">165 (B)</td> </tr> <tr> <td colspan="2" style="text-align: right;">Prevalence Index = B/A =</td> <td style="background-color: #e0e0e0; text-align: center;">2.20</td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:		OBL species		x 1 = 0	FACW species	60	x 2 = 120	FAC species	15	x 3 = 45	FACU species		x 4 = 0	UPL species		x 5 = 0	Column Totals:	75 (A)	165 (B)	Prevalence Index = B/A =		2.20
Total % Cover of:	Multiply by:																											
OBL species		x 1 = 0																										
FACW species	60	x 2 = 120																										
FAC species	15	x 3 = 45																										
FACU species		x 4 = 0																										
UPL species		x 5 = 0																										
Column Totals:	75 (A)	165 (B)																										
Prevalence Index = B/A =		2.20																										
2. <i>Baccharis salicifolia</i>	15	Yes	FAC																									
3.																												
4.																												
5.																												
Total Cover:	35 %																											
<b>Herb Stratum</b>																												
1.				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																								
2.																												
3.																												
4.																												
5.																												
6.																												
7.																												
8.																												
Total Cover:	%																											
<b>Woody Vine Stratum</b>																												
1.				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																								
2.																												
Total Cover:	%																											
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																										

Remarks:

**SOIL**

Sampling Point: SP HV-6

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	2.5YR 4/2	70	7.5YR 4/6	30	C	M	Sandy loamy clay	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-7  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'47.92"N Long: 117°28'48.74"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix exigua</i>	10	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0 %</u> (A/B)																																
2. <i>Sambucus nigra</i>	15	Yes	FACU																																	
3.																																				
4.																																				
Total Cover:	<u>25 %</u>																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Nicotiana glauca</i>	5	Yes	FAC	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>10</u></td> <td align="center">x 2 =</td> <td align="center"><u>20</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>15</u></td> <td align="center">x 3 =</td> <td align="center"><u>45</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>115</u></td> <td align="center">x 4 =</td> <td align="center"><u>460</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>  </u></td> <td align="center">x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>140</u></td> <td align="center">(A)</td> <td align="center"><u>525</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>3.75</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>10</u>	x 2 =	<u>20</u>	FAC species	<u>15</u>	x 3 =	<u>45</u>	FACU species	<u>115</u>	x 4 =	<u>460</u>	UPL species	<u>  </u>	x 5 =	<u>0</u>	Column Totals:	<u>140</u>	(A)	<u>525</u> (B)	Prevalence Index = B/A = <u>3.75</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>  </u>	x 1 =	<u>0</u>																																	
FACW species	<u>10</u>	x 2 =	<u>20</u>																																	
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UPL species	<u>  </u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>140</u>	(A)	<u>525</u> (B)																																	
Prevalence Index = B/A = <u>3.75</u>																																				
2. <i>Baccharis salicifolia</i>	10	Yes	FAC																																	
3.																																				
4.																																				
5.																																				
Total Cover:	<u>15 %</u>																																			
<b>Herb Stratum</b>																																				
1. <i>Helianthus annuus</i>	100	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	<u>100%</u>																																			
<b>Woody Vine Stratum</b>																																				
1.				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																
2.																																				
Total Cover:	<u>  </u> %																																			
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																		

Remarks: 5 ft. above test 24.

**SOIL**

Sampling Point: SP HV-7

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	2.5YR 3/2	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: No Hydric soil indicators.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No hydrological indicators present.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-8  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'50.11"N Long: 117°28'36.93"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Within OHWM.</u>	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	15	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">5</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">60.0 %</span> (A/B)																																
2. <i>Populus deltoides</i>	15	Yes	FAC																																	
3. _____																																				
4. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">30 %</span>																																				
Sapling/Shrub Stratum																																				
1. <i>Baccharis salicifolia</i>	40	Yes	FAC	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td></td> <td style="text-align: right;">Multiply by:</td> <td></td> </tr> <tr> <td>OBL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 1 =</td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>FACW species</td> <td style="background-color: #e0e0e0; text-align: center;">25</td> <td>x 2 =</td> <td style="background-color: #e0e0e0; text-align: center;">50</td> </tr> <tr> <td>FAC species</td> <td style="background-color: #e0e0e0; text-align: center;">55</td> <td>x 3 =</td> <td style="background-color: #e0e0e0; text-align: center;">165</td> </tr> <tr> <td>FACU species</td> <td style="background-color: #e0e0e0; text-align: center;">13</td> <td>x 4 =</td> <td style="background-color: #e0e0e0; text-align: center;">52</td> </tr> <tr> <td>UPL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 5 =</td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="background-color: #e0e0e0; text-align: center;">93</td> <td>(A)</td> <td style="background-color: #e0e0e0; text-align: center;">267 (B)</td> </tr> <tr> <td colspan="2" style="text-align: right;">Prevalence Index = B/A =</td> <td></td> <td style="background-color: #e0e0e0; text-align: center;">2.87</td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species		x 1 =	0	FACW species	25	x 2 =	50	FAC species	55	x 3 =	165	FACU species	13	x 4 =	52	UPL species		x 5 =	0	Column Totals:	93	(A)	267 (B)	Prevalence Index = B/A =			2.87
Total % Cover of:		Multiply by:																																		
OBL species		x 1 =	0																																	
FACW species	25	x 2 =	50																																	
FAC species	55	x 3 =	165																																	
FACU species	13	x 4 =	52																																	
UPL species		x 5 =	0																																	
Column Totals:	93	(A)	267 (B)																																	
Prevalence Index = B/A =			2.87																																	
2. <i>Salix lasiolepis</i>	5	No	FACW																																	
3. <i>Salix exigua</i>	5	No	FACW																																	
4. _____																																				
5. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">50 %</span>																																				
Herb Stratum																																				
1. <i>Melilotus albus</i>	5	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. <i>Cynodon dactylon</i>	8	Yes	FACU																																	
3. _____																																				
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">13 %</span>																																				
Woody Vine Stratum																																				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																
2. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																				
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																																		

Remarks:

**SOIL**

Sampling Point: SP HV-8

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/2	100					Fine sandy loam	
3-4	2.5 Y /2	100					Sand	
4-5	10YR 3/2	100					Fine sandy loam	
5-20+	2.5 Y /2	100					Sand	

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

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

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)    | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)            | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Vernal Pools (F9)          |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          |   |

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: potential problem soils, recently deposited sediment

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Dug a separate exploratory pit- ground water at 32".

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-9  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): convex Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'49.74"N Long: 117°28'37.38"W Datum: WGS-84  
 Soil Map Unit Name: Terrace escarpments NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																		
1. <i>Populus deltoides</i>	20	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0 %</u> (A/B)																																	
2.																																					
3.																																					
4.																																					
Total Cover: <u>20 %</u>																																					
<b>Sapling/Shrub Stratum</b>																																					
1. <i>Baccharis salicifolia</i>	5	Yes	FAC	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>  </u></td> <td align="center">x 2 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>25</u></td> <td align="center">x 3 =</td> <td align="center"><u>75</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>11</u></td> <td align="center">x 4 =</td> <td align="center"><u>44</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>20</u></td> <td align="center">x 5 =</td> <td align="center"><u>100</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>56</u></td> <td align="center">(A)</td> <td align="center"><u>219</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A =</td> <td align="center"><u>3.91</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>  </u>	x 2 =	<u>0</u>	FAC species	<u>25</u>	x 3 =	<u>75</u>	FACU species	<u>11</u>	x 4 =	<u>44</u>	UPL species	<u>20</u>	x 5 =	<u>100</u>	Column Totals:	<u>56</u>	(A)	<u>219</u> (B)	Prevalence Index = B/A =				<u>3.91</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>  </u>	x 1 =	<u>0</u>																																		
FACW species	<u>  </u>	x 2 =	<u>0</u>																																		
FAC species	<u>25</u>	x 3 =	<u>75</u>																																		
FACU species	<u>11</u>	x 4 =	<u>44</u>																																		
UPL species	<u>20</u>	x 5 =	<u>100</u>																																		
Column Totals:	<u>56</u>	(A)	<u>219</u> (B)																																		
Prevalence Index = B/A =				<u>3.91</u>																																	
2.																																					
3.																																					
4.																																					
5.																																					
Total Cover: <u>5 %</u>																																					
<b>Herb Stratum</b>																																					
1. <i>Salsola tragus</i>	1	No	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																	
2. <i>Helianthus annuus</i>	10	Yes	FACU																																		
3. <i>Ambrosia acanthicarpa</i>	10	Yes	Not Listed																																		
4. <i>Hirschfeldia incana</i>	10	Yes	Not Listed																																		
5.																																					
6.																																					
7.																																					
8.																																					
Total Cover: <u>31 %</u>																																					
<b>Woody Vine Stratum</b>																																					
1.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																	
2.																																					
Total Cover: <u>  </u> %																																					
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>																																	

Remarks:

**SOIL**

Sampling Point: SP HV-9

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/3	100					Sand	
4-12	10YR 4/3	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

Type: compact soils  
 Depth (inches): 12 inches

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)
- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: No hydrology indicators, at 4-5 ft. higher.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-10  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'2.71"N Long: 117°28'54.79"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <i>Salix laevigata</i>	55	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">100.0 %</span> (A/B)																
2.																				
3.																				
4.																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">55 %</span>				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">Total % Cover of:</td> <td style="width: 50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td>x 1 = <span style="background-color: #e0e0e0; padding: 2px;">0</span></td> </tr> <tr> <td>FACW species</td> <td>x 2 = <span style="background-color: #e0e0e0; padding: 2px;">130</span></td> </tr> <tr> <td>FAC species</td> <td>x 3 = <span style="background-color: #e0e0e0; padding: 2px;">45</span></td> </tr> <tr> <td>FACU species</td> <td>x 4 = <span style="background-color: #e0e0e0; padding: 2px;">8</span></td> </tr> <tr> <td>UPL species</td> <td>x 5 = <span style="background-color: #e0e0e0; padding: 2px;">0</span></td> </tr> <tr> <td>Column Totals:</td> <td><span style="background-color: #e0e0e0; padding: 2px;">82</span> (A) <span style="background-color: #e0e0e0; padding: 2px;">183</span> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <span style="background-color: #e0e0e0; padding: 2px;">2.23</span></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species	x 1 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>	FACW species	x 2 = <span style="background-color: #e0e0e0; padding: 2px;">130</span>	FAC species	x 3 = <span style="background-color: #e0e0e0; padding: 2px;">45</span>	FACU species	x 4 = <span style="background-color: #e0e0e0; padding: 2px;">8</span>	UPL species	x 5 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>	Column Totals:	<span style="background-color: #e0e0e0; padding: 2px;">82</span> (A) <span style="background-color: #e0e0e0; padding: 2px;">183</span> (B)	Prevalence Index = B/A = <span style="background-color: #e0e0e0; padding: 2px;">2.23</span>	
Total % Cover of:	Multiply by:																			
OBL species	x 1 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>																			
FACW species	x 2 = <span style="background-color: #e0e0e0; padding: 2px;">130</span>																			
FAC species	x 3 = <span style="background-color: #e0e0e0; padding: 2px;">45</span>																			
FACU species	x 4 = <span style="background-color: #e0e0e0; padding: 2px;">8</span>																			
UPL species	x 5 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>																			
Column Totals:	<span style="background-color: #e0e0e0; padding: 2px;">82</span> (A) <span style="background-color: #e0e0e0; padding: 2px;">183</span> (B)																			
Prevalence Index = B/A = <span style="background-color: #e0e0e0; padding: 2px;">2.23</span>																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">10 %</span>																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">10 %</span>																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">17 %</span>																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																				
<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																				
% Bare Ground in Herb Stratum <span style="background-color: #e0e0e0; padding: 2px;">%</span> % Cover of Biotic Crust <span style="background-color: #e0e0e0; padding: 2px;">%</span>																				

Remarks:

**SOIL**

Sampling Point: SP HV-10

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	2.5Y 4/2	100					Loamy sand	
6-10	2.5Y 4/3	100					Gravel/Sand	
10-20+	2.5Y 4/3	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: Soils are sandy and naturally problematic, no redox observed however may be recently deposited sand. Hydrophytic vegetation and hydrology indicators met, therefore soils are assumed hydric as well.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-11  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'0.79"N Long: 117°28'55.49"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Point taken in old 2012 channel location. Older wrack line observed. To review historic aerials to see transition of channel location.	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <i>Eriogonum gracile</i>	20	Yes	Not Listed	
2. <i>Heterotheca grandiflora</i>	10	Yes	Not Listed	
3. <i>Ambrosia acanthicarpa</i>	10	Yes	Not Listed	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <b>40</b> %				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0.0 %** (A/B)

**Prevalence Index worksheet:**

	Total % Cover of:	Multiply by:
OBL species	_____	x 1 = <b>0</b>
FACW species	_____	x 2 = <b>0</b>
FAC species	_____	x 3 = <b>0</b>
FACU species	_____	x 4 = <b>0</b>
UPL species	<b>40</b>	x 5 = <b>200</b>
Column Totals:	<b>40</b> (A)	<b>200</b> (B)
Prevalence Index = B/A =		<b>5.00</b>

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP HV-11

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/2	100					Sand	deposited 2-3 years ago

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)
- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: no hydrology indicators observed.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Hidden Valley City/County: Riverside Sampling Date: 8/8/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HV-12  
 Investigator(s): Team 1 and 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Outer flow plain Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'58.11"N Long: 117°29'7.01"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
<b>Sapling/Shrub Stratum</b>				
1. <i>Salix exigua</i>	10	Yes	FACW	
2. <i>Baccharis salicifolia</i>	10	Yes	FAC	
3. _____				
4. _____				
5. _____				
Total Cover: 20 %				
<b>Herb Stratum</b>				
1. <i>Heterotheca grandiflora</i>	25	Yes	Not Listed	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: 25 %				
<b>Woody Vine Stratum</b>				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 % (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	
OBL species	x 1 =	<u>0</u>
FACW species	x 2 =	<u>20</u>
FAC species	x 3 =	<u>30</u>
FACU species	x 4 =	<u>0</u>
UPL species	x 5 =	<u>125</u>
Column Totals:		<u>45</u> (A) <u>175</u> (B)
Prevalence Index = B/A =		<u>3.89</u>

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP HV-12

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18+	2.5Y 4/1	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

no hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)
- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No hydrology indicators observed.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside Sampling Date: 8/31/16  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-13  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'46.61"N Long: 117°29'16.55"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Emergent Wetland

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <i>Salix lasiolepis</i>	85	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2.				Total Number of Dominant Species Across All Strata:	2 (B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:	100.0% (A/B)
4.					
Total Cover:			85 %		
Sapling/Shrub Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>	
1. <i>Baccharis salicifolia</i>	25	Yes	FACW	Total % Cover of:	Multiply by:
2.				OBL species	x 1 = 0
3.				FACW species	25 x 2 = 50
4.				FAC species	85 x 3 = 255
5.				FACU species	x 4 = 0
				UPL species	x 5 = 0
Total Cover:			25 %	Column Totals:	110 (A) 305 (B)
				Prevalence Index = B/A =	2.77
Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>	
1.				<input checked="" type="checkbox"/> Dominance Test is >50%	
2.				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
3.				<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4.				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5.					
6.					
7.					
8.					
Total Cover:			%	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.	
Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b>	
1.				Yes <input checked="" type="radio"/> No <input type="radio"/>	
2.					
Total Cover:			%		
% Bare Ground in Herb Stratum		%	% Cover of Biotic Crust		%

Remarks: Full of litter and debris.

**SOIL**

Sampling Point: HV-13

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

Depth (inches)	Matrix		Redox Features				Texture <sup>3</sup>	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18+	10YR 4/2	85	5YR 4/4	15	C	M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.  
<sup>3</sup>Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b> <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b> <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<p><b>Indicators for Problematic Hydric Soils:<sup>4</sup></b></p> <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b> <input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b> <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>4</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

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

Hydric Soil Present?    Yes     No

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

**HYDROLOGY**

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

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

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

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Constructed berm, depressional area. Has not actively ponded in several years however due to its depth may still be ponding and receiving groundwater input. near center of depression mulefat is dying off.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Upper SAR- Hidden Valley City/County: Riverside Sampling Date: 8/31/16  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-14  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'47.88"N Long: 117°29'16.25"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Emergent Wetland

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Sample point taken with a depressional area.</u>	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																		
1. <u>Salix lasiolepis</u>	80	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																	
2. _____																																					
3. _____																																					
4. _____																																					
Total Cover: <u>80 %</u>				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Total % Cover of:</td> <td style="width: 20%;">Multiply by:</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td>OBL species</td> <td>x 1 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> </tr> <tr> <td>FACW species</td> <td>x 2 =</td> <td style="text-align: center;"><u>50</u></td> <td></td> </tr> <tr> <td>FAC species</td> <td>x 3 =</td> <td style="text-align: center;"><u>240</u></td> <td></td> </tr> <tr> <td>FACU species</td> <td>x 4 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> </tr> <tr> <td>UPL species</td> <td>x 5 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> </tr> <tr> <td>Column Totals:</td> <td></td> <td style="text-align: center;"><u>105</u> (A)</td> <td style="text-align: center;"><u>290</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A =</td> <td colspan="2" style="text-align: center;"><u>2.76</u></td> </tr> </table>		Total % Cover of:	Multiply by:			OBL species	x 1 =	<u>0</u>		FACW species	x 2 =	<u>50</u>		FAC species	x 3 =	<u>240</u>		FACU species	x 4 =	<u>0</u>		UPL species	x 5 =	<u>0</u>		Column Totals:		<u>105</u> (A)	<u>290</u> (B)	Prevalence Index = B/A =		<u>2.76</u>	
Total % Cover of:	Multiply by:																																				
OBL species	x 1 =	<u>0</u>																																			
FACW species	x 2 =	<u>50</u>																																			
FAC species	x 3 =	<u>240</u>																																			
FACU species	x 4 =	<u>0</u>																																			
UPL species	x 5 =	<u>0</u>																																			
Column Totals:		<u>105</u> (A)	<u>290</u> (B)																																		
Prevalence Index = B/A =		<u>2.76</u>																																			
Total Cover: <u>80 %</u>																																					
<b>Sapling/Shrub Stratum</b>																																					
1. <u>Baccharis salicifolia</u>	25	Yes	FACW																																		
2. _____																																					
3. _____																																					
4. _____																																					
5. _____																																					
Total Cover: <u>25 %</u>																																					
<b>Herb Stratum</b>																																					
1. _____																																					
2. _____																																					
3. _____																																					
4. _____																																					
5. _____																																					
6. _____																																					
7. _____																																					
8. _____																																					
Total Cover: _____ %																																					
<b>Woody Vine Stratum</b>																																					
1. _____																																					
2. _____																																					
Total Cover: _____ %																																					
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																																			

**Hydrophytic Vegetation Indicators:**

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: HV-14

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

Depth (inches)	Matrix		Redox Features				Texture <sup>3</sup>	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20	10YR 4/2	95	10YR 5/6	5	C	M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.  
<sup>3</sup>Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<b>Indicators for Problematic Hydric Soils:<sup>4</sup></b> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>4</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____ Remarks: Hydric soils observed.	<b>Hydric Soil Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
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**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (any one indicator is sufficient) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (2 or more required)</b> <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present?    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present?    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
--	---

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

Remarks: Small sediment deposits on trees.  
 Constructed berm, depressional area. Has not actively ponded in several years however due to its depth may still be ponding and receiving groundwater input. near center of depression mulefat is dying off.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Upper SAR- Hidden Valley City/County: Riverside Sampling Date: 8/31/16  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-15  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'43.43"N Long: 117°29'14.49"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Pond

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix laevigata</i>	40	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">2</span> (A) Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">2</span> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">100.0 %</span> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover:	40 %																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicifolia</i>	50	Yes	FACW	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td></td> <td style="text-align: right;">Multiply by:</td> <td></td> </tr> <tr> <td>OBL species</td> <td style="background-color: #e0e0e0;"></td> <td style="text-align: right;">x 1 =</td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>FACW species</td> <td style="background-color: #e0e0e0; text-align: center;">50</td> <td style="text-align: right;">x 2 =</td> <td style="background-color: #e0e0e0; text-align: center;">100</td> </tr> <tr> <td>FAC species</td> <td style="background-color: #e0e0e0; text-align: center;">40</td> <td style="text-align: right;">x 3 =</td> <td style="background-color: #e0e0e0; text-align: center;">120</td> </tr> <tr> <td>FACU species</td> <td style="background-color: #e0e0e0;"></td> <td style="text-align: right;">x 4 =</td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>UPL species</td> <td style="background-color: #e0e0e0;"></td> <td style="text-align: right;">x 5 =</td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="background-color: #e0e0e0; text-align: center;">90</td> <td style="text-align: right;">(A)</td> <td style="background-color: #e0e0e0; text-align: center;">220 (B)</td> </tr> <tr> <td colspan="2" style="text-align: right;">Prevalence Index = B/A =</td> <td></td> <td style="background-color: #e0e0e0; text-align: center;">2.44</td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species		x 1 =	0	FACW species	50	x 2 =	100	FAC species	40	x 3 =	120	FACU species		x 4 =	0	UPL species		x 5 =	0	Column Totals:	90	(A)	220 (B)	Prevalence Index = B/A =			2.44
Total % Cover of:		Multiply by:																																		
OBL species		x 1 =	0																																	
FACW species	50	x 2 =	100																																	
FAC species	40	x 3 =	120																																	
FACU species		x 4 =	0																																	
UPL species		x 5 =	0																																	
Column Totals:	90	(A)	220 (B)																																	
Prevalence Index = B/A =			2.44																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	50 %																																			
<b>Herb Stratum</b>																																				
1.				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	%																																			
<b>Woody Vine Stratum</b>																																				
1.				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																
2.																																				
Total Cover:	%																																			
% Bare Ground in Herb Stratum	%	% Cover of Biotic Crust	%																																	

Remarks:

**SOIL**

Sampling Point: HV-15

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

Depth (inches)	Matrix		Redox Features				Texture <sup>3</sup>	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 4/2	95	7.5YR 5/6	5	C	M	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.  
<sup>3</sup>Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)		<b>Indicators for Problematic Hydric Soils:<sup>4</sup></b> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)	
--	--	--	--	--	--

<sup>4</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____ Remarks: Hydric soils observed.	<b>Hydric Soil Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
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**HYDROLOGY**

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

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

Remarks: Constructed berm, depressional area. Has not actively ponded in several years however due to its depth may still be ponding and receiving groundwater input. near center of depression mulefat is dying off.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside County Sampling Date: 8/22/17  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-16  
 Investigator(s): L. Cervantes, L. Woolley Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Flood plain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33.962637 Long: -117.472101 Datum: NAD 1963  
 Soil Map Unit Name: Terrace escarpments NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	60	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2. <i>Salix lasiolepis</i>	20	Yes	FACW																																	
3. <i>Populus fremontii</i>	10	No	FAC																																	
4. <i>Platanus racemosa</i>	10	No	FAC																																	
Total Cover:	100%																																			
Sapling/Shrub Stratum																																				
1. <i>Baccharis salicifolia</i>	25	Yes	FAC	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">20</td> <td align="center">x 1 =</td> <td align="center">20</td> </tr> <tr> <td>FACW species</td> <td align="center">80</td> <td align="center">x 2 =</td> <td align="center">160</td> </tr> <tr> <td>FAC species</td> <td align="center">65</td> <td align="center">x 3 =</td> <td align="center">195</td> </tr> <tr> <td>FACU species</td> <td align="center">3</td> <td align="center">x 4 =</td> <td align="center">12</td> </tr> <tr> <td>UPL species</td> <td align="center">1</td> <td align="center">x 5 =</td> <td align="center">5</td> </tr> <tr> <td>Column Totals:</td> <td align="center">169</td> <td align="center">(A)</td> <td align="center">392 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.32</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	20	x 1 =	20	FACW species	80	x 2 =	160	FAC species	65	x 3 =	195	FACU species	3	x 4 =	12	UPL species	1	x 5 =	5	Column Totals:	169	(A)	392 (B)	Prevalence Index = B/A = <u>2.32</u>			
Total % Cover of:		Multiply by:																																		
OBL species	20	x 1 =	20																																	
FACW species	80	x 2 =	160																																	
FAC species	65	x 3 =	195																																	
FACU species	3	x 4 =	12																																	
UPL species	1	x 5 =	5																																	
Column Totals:	169	(A)	392 (B)																																	
Prevalence Index = B/A = <u>2.32</u>																																				
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	25 %																																			
Herb Stratum																																				
1. <i>Xanthium strumarium</i>	20	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2. <i>Schoenoplectus americanus</i>	20	Yes	OBL																																	
3. <i>Ricinus communis</i>	2	No	FACU																																	
4. <i>Melilotus albus</i>	1	No	FACU																																	
5. <i>Stipa miliacea</i>	1	No	NI																																	
6.																																				
7.																																				
8.																																				
Total Cover:	44 %																																			
Woody Vine Stratum																																				
1.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
Total Cover:	%																																			
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																

Remarks: The sample point habitat area was dominated with with OBL, FACW and FAC vegetation.

**SOIL**

Sampling Point: HV-16

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10 YR 4/1	100					Loamy Clay	
3-5	10 YR 6/2	100					Sand	
6-18	10 YR 6/2	90	10 YR 6/8	10	C	M	Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: Redox concentration was observed in the soil and met the requirements for the depleted matrix indicator. The sandy soils texture was more prominent as you neared the main channel.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Three secondary indicators for wetland hydrology were observed within the sample area.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside County Sampling Date: 8/22/17  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-17  
 Investigator(s): L. Cervantes, L. Woolley Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Upper flood plain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33.962549 Long: -117.472058 Datum: NAD 1963  
 Soil Map Unit Name: Terrace escarpments NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>This sample point was located approximately 5 feet higher than HV-16.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																									
1. <u>Salix gooddingii</u>	60	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3 %</u> (A/B)																								
2.																												
3.																												
4.																												
Total Cover: <u>60 %</u>																												
<b>Sapling/Shrub Stratum</b>																												
1.				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center">Total % Cover of:</td> <td align="center">Multiply by:</td> <td></td> </tr> <tr> <td>OBL species</td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center">x 2 =</td> <td align="center"><u>120</u></td> </tr> <tr> <td>FAC species</td> <td align="center">x 3 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACU species</td> <td align="center">x 4 =</td> <td align="center"><u>160</u></td> </tr> <tr> <td>UPL species</td> <td align="center">x 5 =</td> <td align="center"><u>75</u></td> </tr> <tr> <td>Column Totals:</td> <td></td> <td align="center"><u>115</u> (A) <u>355</u> (B)</td> </tr> <tr> <td align="center" colspan="2">Prevalence Index = B/A =</td> <td align="center"><u>3.09</u></td> </tr> </table>	Total % Cover of:	Multiply by:		OBL species	x 1 =	<u>0</u>	FACW species	x 2 =	<u>120</u>	FAC species	x 3 =	<u>0</u>	FACU species	x 4 =	<u>160</u>	UPL species	x 5 =	<u>75</u>	Column Totals:		<u>115</u> (A) <u>355</u> (B)	Prevalence Index = B/A =		<u>3.09</u>
Total % Cover of:	Multiply by:																											
OBL species	x 1 =	<u>0</u>																										
FACW species	x 2 =	<u>120</u>																										
FAC species	x 3 =	<u>0</u>																										
FACU species	x 4 =	<u>160</u>																										
UPL species	x 5 =	<u>75</u>																										
Column Totals:		<u>115</u> (A) <u>355</u> (B)																										
Prevalence Index = B/A =		<u>3.09</u>																										
2.																												
3.																												
4.																												
5.																												
Total Cover: <u> %</u>																												
<b>Herb Stratum</b>																												
1. <u>Verbesina encelioides</u>	40	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																								
2. <u>Phacelia cicutaria</u>	15	Yes	NI																									
3.																												
4.																												
5.																												
6.																												
7.																												
8.																												
Total Cover: <u>55 %</u>																												
<b>Woody Vine Stratum</b>																												
1.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																								
2.																												
Total Cover: <u> %</u>																												
% Bare Ground in Herb Stratum <u>45 %</u>		% Cover of Biotic Crust <u> %</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>																								

Remarks: The the sample point habitat area was dominated with with FACW and upland vegetation.

**SOIL**

Sampling Point: HV-17

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 4/1	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

Type: Compact  
Depth (inches): 12 inches

Hydric Soil Present?    Yes     No

Remarks: No hydric soil indicators were observed within the sample pit.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present?    Yes     No

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

Remarks: No primary nor secondary indicators for wetland hydrology were observed within the sample area.



**SOIL**

Sampling Point: HV-18

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10 YR 2/1	100					Organic layer	
3-5	10 YR 3/2	95	10 YR 4/6	5	C	M	Sand	
6-18	10 YR 4/1	85	7.5 YR 4/6	15	C	PL	Loamy clay	Redox was also observed in the Matrix

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: The soil was still moist which suggest ponding within this area occurs. Redox concentrations were also observed in the matrix and pore linings of the soil sample.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: One primary indicator for wetland hydrology was observed within the sample area. Shelfing was also observed on either side of the bank, appears that water ponds more within this area and slowly moves downstream. No active flow indicators observed within this area.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside County Sampling Date: 8/22/17  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-19  
 Investigator(s): L. Cervantes, L. Woolley Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33.961688 Long: -117.489180 Datum: NAD 1963  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>This sample point was located approximately 10 feet higher in elevation from HV-18.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <i>Fraxinus dipetala</i>	50	Yes	NI	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2. <i>Salix lasiolepis</i>	10	Yes	FACW	Total Number of Dominant Species Across All Strata:	4 (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	50.0 % (A/B)
4. _____					
Total Cover:			60 %		
Sapling/Shrub Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>	
1. <i>Baccharis salicina</i>	5	Yes	FACW	Total % Cover of:	Multiply by:
2. _____				OBL species	x 1 = 0
3. _____				FACW species	15 x 2 = 30
4. _____				FAC species	x 3 = 0
5. _____				FACU species	50 x 4 = 200
Total Cover:			5 %	UPL species	50 x 5 = 250
				Column Totals:	115 (A) 480 (B)
				Prevalence Index = B/A = 4.17	
Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>	
1. <i>Bromus diandrus</i>	50	Yes	FACU	<input checked="" type="checkbox"/> Dominance Test is >50%	
2. _____				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
3. _____				<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____					
6. _____					
7. _____					
8. _____					
Total Cover:			50 %		
Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
Total Cover:			%		
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

Remarks: The sample point habitat area was dominated with with upland and FACW vegetation.

**SOIL**

Sampling Point: HV-19

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
N/A								

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

Type: Rock/Fill  
Depth (inches): At Surface

**Hydric Soil Present?** Yes  No

Remarks: No sample pit was dug because the soil was all rock and fill. Because the sample area was dominated with upland vegetation and no wetland hydrology indicators were observed the soil was assumed non-hydric.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No primary nor secondary indicators for wetland hydrology were observed within the sample area.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside County Sampling Date: 8/22/17  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-20  
 Investigator(s): L. Cervantes, L. Woolley Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Abandon basin Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33.962628 Long: -117.489298 Datum: NAD 1963  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Emergent Wetland

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
<b>Sapling/Shrub Stratum</b>				
1. <i>Baccharis salicina</i>	10	Yes	FACW	
2. <i>Nicotiana glauca</i>	7	Yes	FAC	
3. _____				
4. _____				
5. _____				
Total Cover: 17 %				
<b>Herb Stratum</b>				
1. <i>Cirsium vulgare</i>	10	Yes	FACU	
2. <i>Hirschfeldia incana</i>	5	Yes	Not Listed	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: 15 %				
<b>Woody Vine Stratum</b>				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum <u>80 %</u>		% Cover of Biotic Crust _____ %		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 % (A/B)

**Prevalence Index worksheet:**

	Total % Cover of:	Multiply by:	
OBL species	<u>  </u>	x 1 =	<u>0</u>
FACW species	<u>10</u>	x 2 =	<u>20</u>
FAC species	<u>7</u>	x 3 =	<u>21</u>
FACU species	<u>10</u>	x 4 =	<u>40</u>
UPL species	<u>5</u>	x 5 =	<u>25</u>
Column Totals:	<u>32</u> (A)		<u>106</u> (B)
Prevalence Index = B/A =			<u>3.31</u>

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: The sample point habitat area is mostly unvegetated as it appears the area is slowly becoming invaded by upland vegetation. Area is dominated with a mixture of wetland and upland vegetation.

**SOIL**

Sampling Point: HV-20

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10 YR 3/2	98	10 YR 4/6	2	C	M	Loamy Clay	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: The sample soil pit has potentially relic soils from historic ponding. The area does not meet for a hydric soil indicators were observed within the soil sample pit.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: No primary nor secondary indicators for wetland hydrology were observed within the sample area. The sample area is located within an old pond. Riparian vegetation occur near the edge of the ponds that are lower in elevation.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside County Sampling Date: 8/22/17  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-21  
 Investigator(s): L. Cervantes, L. Woolley Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33.963340 Long: -117.488757 Datum: NAD 1963  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Emergent Wetland

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	50	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <b>4</b> (A)  Total Number of Dominant Species Across All Strata: <b>4</b> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <b>100.0 %</b> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover:	50 %																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicifolia</i>	40	Yes	FAC	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">0</td> <td align="center">x 1 =</td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">55</td> <td align="center">x 2 =</td> <td align="center">110</td> </tr> <tr> <td>FAC species</td> <td align="center">45</td> <td align="center">x 3 =</td> <td align="center">135</td> </tr> <tr> <td>FACU species</td> <td align="center">0</td> <td align="center">x 4 =</td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td align="center">0</td> <td align="center">x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">100</td> <td align="center">(A)</td> <td align="center">245 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <b>2.45</b></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	55	x 2 =	110	FAC species	45	x 3 =	135	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	100	(A)	245 (B)	Prevalence Index = B/A = <b>2.45</b>			
Total % Cover of:		Multiply by:																																		
OBL species	0	x 1 =	0																																	
FACW species	55	x 2 =	110																																	
FAC species	45	x 3 =	135																																	
FACU species	0	x 4 =	0																																	
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Column Totals:	100	(A)	245 (B)																																	
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2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	40 %																																			
<b>Herb Stratum</b>																																				
1. <i>Conium maculatum</i>	5	Yes	FACW	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2. <i>Lepidium latifolium</i>	5	Yes	FAC																																	
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	10 %																																			
<b>Woody Vine Stratum</b>																																				
1.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
Total Cover:	%																																			
% Bare Ground in Herb Stratum _____ %    % Cover of Biotic Crust _____ %																																				

Remarks: The sample point habitat area was dominated with with FACW and FAC vegetation.

**SOIL**

Sampling Point: HV-21

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10 YR 5/1	98	7.5 YR 5/8	2	C	M	Loamy Clay	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: Redox concentrations were observed within the soil sample and the requirements for the depleted matrix indicator were met.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: One primary and one secondary indicator for wetland hydrology were observed within the sample area.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Upper SAR- Hidden Valley City/County: Riverside County Sampling Date: 8/22/17  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: HV-22  
 Investigator(s): L. Cervantes, L. Woolley Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Bank near pond Local relief (concave, convex, none): convex Slope (%): 40  
 Subregion (LRR): C - Mediterranean California Lat: 33.963340 Long: -117.488757 Datum: NAD 1963  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Emergent Wetland

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Sample point taken approximately 5 feet higher in elevation from HV-21.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100.0 %</u> (A/B)
4. _____				<b>Prevalence Index worksheet:</b>	
Total Cover: _____ %				Total % Cover of: _____ Multiply by: _____	
<u>Sapling/Shrub Stratum</u>				OBL species	<u>0</u>
1. <u>Nicotiana glauca</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	FACW species	<u>30</u> x 2 = <u>60</u>
2. _____				FAC species	<u>5</u> x 3 = <u>15</u>
3. _____				FACU species	<u>0</u> x 4 = <u>0</u>
4. _____				UPL species	<u>0</u> x 5 = <u>0</u>
5. _____				Column Totals:	<u>35</u> (A) <u>75</u> (B)
Total Cover: <u>5</u> %				Prevalence Index = B/A = <u>2.14</u>	
<u>Herb Stratum</u>				<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Conium maculatum</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50%	
2. _____				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
3. _____				<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.	
6. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	
7. _____					
8. _____					
Total Cover: <u>30</u> %					
<u>Woody Vine Stratum</u>					
1. _____					
2. _____					
Total Cover: _____ %					
% Bare Ground in Herb Stratum <u>70</u> %      % Cover of Biotic Crust _____ %					

Remarks: The sample point habitat area was dominated with with FACW and FAC vegetation. Sample taken near top of hillslope of basin area.

**SOIL**

Sampling Point: HV-22

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
N/A								

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

Type: Compact Soils  
 Depth (inches): constructed berm

Hydric Soil Present? Yes  No

Remarks: No sample pit was dug due to the compact soils on the constructed berm. Soils are fill material and no hydrology observed within this area. Therefore, this area is no assumed hydric.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: No primary nor secondary indicators for wetland hydrology were observed within the sample area.

# Lower Hole Creek Site Wetland Data Forms

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**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Lower Hole Creek City/County: Riverside Sampling Date: 10/30/2018  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HC-1  
 Investigator(s): Team 1; L. Cervantes Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'41.20"N Long: 117°28'1.36"W Datum: WGS-84  
 Soil Map Unit Name: Terrace escarpments NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Vegetation data re-taken 10/30/2018 to document current conditions as the site is a recently restored flood plain. Area is a large sandbar in delta/Santa Ana River floodplain that is now well-established with wetland vegetation.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2. _____				Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>60.0 %</u> (A/B)
4. _____					
Total Cover: <u>    </u> %					
Sapling/Shrub Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>	
1. <u>Populus fremontii (sapling)</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Total % Cover of:	Multiply by:
2. <u>Baccharis salicifolia</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	OBL species	<u>0</u>
3. <u>Salix exigua</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	FACW species	<u>20</u>
4. _____				FAC species	<u>105</u>
5. _____				FACU species	<u>140</u>
Total Cover: <u>45 %</u>				UPL species	<u>25</u>
				Column Totals:	<u>85</u> (A) <u>290</u> (B)
				Prevalence Index = B/A = <u>3.41</u>	
Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Melilotus albus</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	<input checked="" type="checkbox"/> Dominance Test is >50%	
2. <u>Erigeron canadensis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
3. <u>Ambrosia acanthacarpa</u>	<u>5</u>	<u>No</u>	<u>Not Listed</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____					
6. _____					
7. _____					
8. _____					
Total Cover: <u>40 %</u>					
Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
Total Cover: <u>    </u> %					
% Bare Ground in Herb Stratum <u>    </u> %		% Cover of Biotic Crust <u>    </u> %		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	

Remarks: Wetland vegetation sapling trees have established well within this area. Low percentage of herbaceous vegetation.

**SOIL**

Sampling Point: SP HC-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR 4/2	100					Sandy loam	
9-16	10YR 4/2	70	7YR 4/6	30	C	M	Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Lower Hole Creek City/County: Riverside Sampling Date: 8/9/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HC-2  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): River/stream bank Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'40.98"N Long: 117°28'1.30"W Datum: WGS-84  
 Soil Map Unit Name: Terrace escarpments NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Sample point at edge of OHWM.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>		
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)		
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)		
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0 %</u> (A/B)		
4. _____	_____	_____	_____	Total Cover: <u>    </u> %		
<u>Sapling/Shrub Stratum</u>				<b>Prevalence Index worksheet:</b>		
1. <i>Salix gooddingii</i>	10	Yes	FACW	Total % Cover of: _____ Multiply by: _____		
2. <i>Tamarix rasmossia</i>	5	Yes	FAC	OBL species	4	x 1 = 4
3. <i>Baccharis salicifolia</i>	5	Yes	FAC	FACW species	36	x 2 = 72
4. <i>Salix lasiondra</i>	10	Yes	FACW	FAC species	10	x 3 = 30
5. <i>Periscaria lapithfolia</i>	5	No	FACW	FACU species	15	x 4 = 60
Total Cover: <u>35 %</u>				UPL species		x 5 = 0
<u>Herb Stratum</u>				Column Totals:	65 (A)	166 (B)
1. <i>Cyperus eragrostis</i>	5	No	FACW	Prevalence Index = B/A = <u>2.55</u>		
2. <i>Polypogon monspeliensis</i>	2	No	FACW	<b>Hydrophytic Vegetation Indicators:</b>		
3. <i>Leptochloa uninerva</i>	2	No	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%		
4. <i>Veronica anagallis-aquatica</i>	4	No	OBL	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>		
5. <i>Echinochloa crus-gali</i>	2	No	FACW	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)		
6. <i>Melilotus albus</i>	15	Yes	FACU	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
7. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.		
8. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>		
Total Cover: <u>30 %</u>						
<u>Woody Vine Stratum</u>						
1. _____	_____	_____	_____			
2. _____	_____	_____	_____			
Total Cover: <u>    </u> %						
% Bare Ground in Herb Stratum <u>    </u> %		% Cover of Biotic Crust <u>    </u> %				

Remarks:

**SOIL**

Sampling Point: SP HC-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	5Y 3/1	85	7.5YR 4/6	15	C	M	Silty loam	
8-16	5Y 3/1	100					Silty loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Lower Hole Creek City/County: Riverside Sampling Date: 8/9/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HC-3  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Sandbar Local relief (concave, convex, none): convex Slope (%): <1  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'34.20"N Long: 117°27'51.23"W Datum: WGS-84  
 Soil Map Unit Name: Terrace escarpments NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	40	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">5</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">8</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">62.5 %</span> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover:	40 %																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Fraxinus dipetela</i>	10	Yes	Not Listed	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center" style="background-color: #e0e0e0;">50</td> <td align="center">x 1 =</td> <td align="center" style="background-color: #e0e0e0;">0</td> </tr> <tr> <td>FACW species</td> <td align="center" style="background-color: #e0e0e0;">50</td> <td align="center">x 2 =</td> <td align="center" style="background-color: #e0e0e0;">100</td> </tr> <tr> <td>FAC species</td> <td align="center" style="background-color: #e0e0e0;">50</td> <td align="center">x 3 =</td> <td align="center" style="background-color: #e0e0e0;">150</td> </tr> <tr> <td>FACU species</td> <td align="center" style="background-color: #e0e0e0;">15</td> <td align="center">x 4 =</td> <td align="center" style="background-color: #e0e0e0;">60</td> </tr> <tr> <td>UPL species</td> <td align="center" style="background-color: #e0e0e0;">17</td> <td align="center">x 5 =</td> <td align="center" style="background-color: #e0e0e0;">85</td> </tr> <tr> <td>Column Totals:</td> <td align="center" style="background-color: #e0e0e0;">132</td> <td align="center">(A)</td> <td align="center" style="background-color: #e0e0e0;">395 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.99</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	50	x 1 =	0	FACW species	50	x 2 =	100	FAC species	50	x 3 =	150	FACU species	15	x 4 =	60	UPL species	17	x 5 =	85	Column Totals:	132	(A)	395 (B)	Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.99</span>			
Total % Cover of:		Multiply by:																																		
OBL species	50	x 1 =	0																																	
FACW species	50	x 2 =	100																																	
FAC species	50	x 3 =	150																																	
FACU species	15	x 4 =	60																																	
UPL species	17	x 5 =	85																																	
Column Totals:	132	(A)	395 (B)																																	
Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.99</span>																																				
2. <i>Ailanthus altissima</i>	5	Yes	FACU																																	
3. <i>Baccharis salicifolia</i>	5	Yes	FAC																																	
4.																																				
5.																																				
Total Cover:	20 %																																			
<b>Herb Stratum</b>																																				
1. <i>Pipatherum miliaceum</i>	7	No	Not Listed	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. <i>Ricinus communis</i>	10	Yes	FACU																																	
3. <i>Xanthium strumarium</i>	10	Yes	FAC																																	
4. <i>Arundo donax</i>	10	Yes	FACW																																	
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	37 %																																			
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	35	Yes	FAC																																	
2.																																				
Total Cover:	35 %																																			
% Bare Ground in Herb Stratum <u>45 %</u>	% Cover of Biotic Crust <u>    %    </u>			<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																

Remarks:

**SOIL**

Sampling Point: SP HC-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/3	100					Sand	
4-9	5Y 3/1	95	7.5Y 4/6	5	C	M	Sandy loamy clay	
9-16	Gley 1 N2.5/-	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Lower Hole Creek City/County: Riverside Sampling Date: 8/9/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP HC-4  
 Investigator(s): Team 1 Section, Township, Range: Unefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 3  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'33.82"N Long: 117°27'51.39"W Datum: WGS-84  
 Soil Map Unit Name: Terrace escarpments NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <i>Salix gooddingii</i>	25	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0 %</u> (A/B)																
2. <i>Fraxinus dipetela</i>	35	Yes	Not Listed																	
3. <i>Washingtonia Robusta</i>	10	No	FACW																	
4. _____				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="right">x 1 = <u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="right">x 2 = <u>80</u></td> </tr> <tr> <td>FAC species</td> <td align="right">x 3 = <u>105</u></td> </tr> <tr> <td>FACU species</td> <td align="right">x 4 = <u>8</u></td> </tr> <tr> <td>UPL species</td> <td align="right">x 5 = <u>275</u></td> </tr> <tr> <td><b>Column Totals:</b></td> <td align="right"><b><u>132</u> (A) <u>468</u> (B)</b></td> </tr> <tr> <td align="center" colspan="2">Prevalence Index = B/A = <u>3.55</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species	x 1 = <u>0</u>	FACW species	x 2 = <u>80</u>	FAC species	x 3 = <u>105</u>	FACU species	x 4 = <u>8</u>	UPL species	x 5 = <u>275</u>	<b>Column Totals:</b>	<b><u>132</u> (A) <u>468</u> (B)</b>	Prevalence Index = B/A = <u>3.55</u>	
Total % Cover of:	Multiply by:																			
OBL species	x 1 = <u>0</u>																			
FACW species	x 2 = <u>80</u>																			
FAC species	x 3 = <u>105</u>																			
FACU species	x 4 = <u>8</u>																			
UPL species	x 5 = <u>275</u>																			
<b>Column Totals:</b>	<b><u>132</u> (A) <u>468</u> (B)</b>																			
Prevalence Index = B/A = <u>3.55</u>																				
Total Cover: <u>70 %</u>																				
<u>Sapling/Shrub Stratum</u>																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
Total Cover: _____ %																				
<u>Herb Stratum</u>																				
1. <i>Piptatherum miliaceum</i>	20	Yes	Not Listed	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																
2. <i>Ricinus communis</i>	2	No	FACU																	
3. <i>Arundo donax</i>	5	No	FACW																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
Total Cover: <u>27 %</u>																				
<u>Woody Vine Stratum</u>																				
1. <i>Vitis girdiana</i>	35	Yes	FAC																	
2. _____																				
Total Cover: <u>35 %</u>																				
% Bare Ground in Herb Stratum <u>60 %</u>	% Cover of Biotic Crust _____ %																			
<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>																				

Remarks:

**SOIL**

Sampling Point: SP HC-4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16+	10YR 3/2	100						

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: No hydric soils

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Located within OHWM.

# **Anza Drain/Old Farm Road Site Wetland Data Forms**

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## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-1  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'6.30"N Long: 117°25'49.97"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Riverine

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Populus deltoides</i>	45	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">5</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">60.0 %</span> (A/B)																																
2. <i>Salix Lasiolepis</i>	45	Yes	FACW																																	
3. _____																																				
4. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">90 %</span>																																				
Sapling/Shrub Stratum																																				
1. <i>Artemisia Californica</i>	5	Yes	Not Listed	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: right;">Total % Cover of:</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: right;">Multiply by:</td> <td style="width: 50%;"></td> </tr> <tr> <td>OBL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 1 =</td> <td style="background-color: #e0e0e0; text-align: center;">0</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">45</td> <td>x 2 =</td> <td style="background-color: #e0e0e0; text-align: center;">90</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">50</td> <td>x 3 =</td> <td style="background-color: #e0e0e0; text-align: center;">150</td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">20</td> <td>x 4 =</td> <td style="background-color: #e0e0e0; text-align: center;">80</td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">5</td> <td>x 5 =</td> <td style="background-color: #e0e0e0; text-align: center;">25</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">120</td> <td>(A)</td> <td style="background-color: #e0e0e0; text-align: center;">345 (B)</td> </tr> <tr> <td colspan="2" style="text-align: right;">Prevalence Index = B/A =</td> <td colspan="2" style="background-color: #e0e0e0; text-align: center;">2.88</td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species		x 1 =	0	FACW species	45	x 2 =	90	FAC species	50	x 3 =	150	FACU species	20	x 4 =	80	UPL species	5	x 5 =	25	Column Totals:	120	(A)	345 (B)	Prevalence Index = B/A =		2.88	
Total % Cover of:		Multiply by:																																		
OBL species		x 1 =	0																																	
FACW species	45	x 2 =	90																																	
FAC species	50	x 3 =	150																																	
FACU species	20	x 4 =	80																																	
UPL species	5	x 5 =	25																																	
Column Totals:	120	(A)	345 (B)																																	
Prevalence Index = B/A =		2.88																																		
2. <i>Baccharis Salicifolia</i>	5	Yes	FAC																																	
3. _____																																				
4. _____																																				
5. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">10 %</span>																																				
Herb Stratum																																				
1. <i>Phacelia Ramosissima</i>	20	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">20 %</span>																																				
Woody Vine Stratum																																				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																
2. _____																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																				
% Bare Ground in Herb Stratum _____ %      % Cover of Biotic Crust _____ %																																				

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-26	7.5YR 3/2	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-2  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain (outer) Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'3.05"N Long: 117°25'53.12"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Riverine

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Sample Point within OHWM of the Santa Ana River.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	60	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover:	60 %																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Salix exigua</i>	5	Yes	FACW	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">0</td> <td align="center">x 1 =</td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">65</td> <td align="center">x 2 =</td> <td align="center">130</td> </tr> <tr> <td>FAC species</td> <td align="center">70</td> <td align="center">x 3 =</td> <td align="center">210</td> </tr> <tr> <td>FACU species</td> <td align="center">0</td> <td align="center">x 4 =</td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td align="center">0</td> <td align="center">x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">135</td> <td align="center">(A)</td> <td align="center">340 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.52</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	65	x 2 =	130	FAC species	70	x 3 =	210	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	135	(A)	340 (B)	Prevalence Index = B/A = <u>2.52</u>			
Total % Cover of:		Multiply by:																																		
OBL species	0	x 1 =	0																																	
FACW species	65	x 2 =	130																																	
FAC species	70	x 3 =	210																																	
FACU species	0	x 4 =	0																																	
UPL species	0	x 5 =	0																																	
Column Totals:	135	(A)	340 (B)																																	
Prevalence Index = B/A = <u>2.52</u>																																				
2. <i>Baccharis salicifolia</i>	30	Yes	FAC																																	
3.																																				
4.																																				
5.																																				
Total Cover:	35 %																																			
<b>Herb Stratum</b>																																				
1.				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	%																																			
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis Girdiana</i>	40	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
Total Cover:	40 %																																			
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/2	95	10YR 5/6	5	C	M	Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: Can only dig to 6 in. due to root obstruction

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Wracks prevalent

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-3  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain (outer) Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'2.90"N Long: 117°25'51.88"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Riverine

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	40	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">2</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">4</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">50.0 %</span> (A/B)																																
2. <i>Populus deltoides</i>	20	Yes	FAC																																	
3.																																				
4.																																				
Total Cover: <span style="background-color: #e0e0e0;">60 %</span>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><span style="background-color: #e0e0e0;"> </span></td> <td align="center">x 1 =</td> <td align="center"><span style="background-color: #e0e0e0;">0</span></td> </tr> <tr> <td>FACW species</td> <td align="center">40</td> <td align="center">x 2 =</td> <td align="center"><span style="background-color: #e0e0e0;">80</span></td> </tr> <tr> <td>FAC species</td> <td align="center">20</td> <td align="center">x 3 =</td> <td align="center"><span style="background-color: #e0e0e0;">60</span></td> </tr> <tr> <td>FACU species</td> <td align="center">80</td> <td align="center">x 4 =</td> <td align="center"><span style="background-color: #e0e0e0;">320</span></td> </tr> <tr> <td>UPL species</td> <td align="center">20</td> <td align="center">x 5 =</td> <td align="center"><span style="background-color: #e0e0e0;">100</span></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><span style="background-color: #e0e0e0;">160</span></td> <td align="center">(A)</td> <td align="center"><span style="background-color: #e0e0e0;">560</span> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #e0e0e0;">3.50</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<span style="background-color: #e0e0e0;"> </span>	x 1 =	<span style="background-color: #e0e0e0;">0</span>	FACW species	40	x 2 =	<span style="background-color: #e0e0e0;">80</span>	FAC species	20	x 3 =	<span style="background-color: #e0e0e0;">60</span>	FACU species	80	x 4 =	<span style="background-color: #e0e0e0;">320</span>	UPL species	20	x 5 =	<span style="background-color: #e0e0e0;">100</span>	Column Totals:	<span style="background-color: #e0e0e0;">160</span>	(A)	<span style="background-color: #e0e0e0;">560</span> (B)	Prevalence Index = B/A = <span style="background-color: #e0e0e0;">3.50</span>			
Total % Cover of:		Multiply by:																																		
OBL species	<span style="background-color: #e0e0e0;"> </span>	x 1 =	<span style="background-color: #e0e0e0;">0</span>																																	
FACW species	40	x 2 =	<span style="background-color: #e0e0e0;">80</span>																																	
FAC species	20	x 3 =	<span style="background-color: #e0e0e0;">60</span>																																	
FACU species	80	x 4 =	<span style="background-color: #e0e0e0;">320</span>																																	
UPL species	20	x 5 =	<span style="background-color: #e0e0e0;">100</span>																																	
Column Totals:	<span style="background-color: #e0e0e0;">160</span>	(A)	<span style="background-color: #e0e0e0;">560</span> (B)																																	
Prevalence Index = B/A = <span style="background-color: #e0e0e0;">3.50</span>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Artemisia californica</i>	20	Yes	Not Listed																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <span style="background-color: #e0e0e0;">20 %</span>																																				
<b>Herb Stratum</b>																																				
1. <i>Phacelia ramosissima</i>	80	Yes	FACU																																	
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <span style="background-color: #e0e0e0;">80 %</span>																																				
<b>Woody Vine Stratum</b>																																				
1.																																				
2.																																				
Total Cover: <span style="background-color: #e0e0e0;"> </span> %																																				
% Bare Ground in Herb Stratum <span style="background-color: #e0e0e0;"> </span> %		% Cover of Biotic Crust <span style="background-color: #e0e0e0;"> </span> %																																		

**Hydrophytic Vegetation Indicators:**

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: Upland area, some hydrophytic veg. present, but does not meet veg.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 4/2	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: All sand, difficult to dig deeper because sand would cave into pit.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: No rack or sign of wetland hydrology.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-4  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): edge of creek Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'1.21"N Long: 117°25'50.71"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: No data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	60	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover:	60 %																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Salix lasiolepis</i>	5	Yes	FACW	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">0</td> <td align="center">x 1 =</td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">70</td> <td align="center">x 2 =</td> <td align="center">140</td> </tr> <tr> <td>FAC species</td> <td align="center">15</td> <td align="center">x 3 =</td> <td align="center">45</td> </tr> <tr> <td>FACU species</td> <td align="center">0</td> <td align="center">x 4 =</td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td align="center">0</td> <td align="center">x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">85</td> <td align="center">(A)</td> <td align="center">185 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.18</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	70	x 2 =	140	FAC species	15	x 3 =	45	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	85	(A)	185 (B)	Prevalence Index = B/A = <u>2.18</u>			
Total % Cover of:		Multiply by:																																		
OBL species	0	x 1 =	0																																	
FACW species	70	x 2 =	140																																	
FAC species	15	x 3 =	45																																	
FACU species	0	x 4 =	0																																	
UPL species	0	x 5 =	0																																	
Column Totals:	85	(A)	185 (B)																																	
Prevalence Index = B/A = <u>2.18</u>																																				
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	5 %																																			
<b>Herb Stratum</b>																																				
1. <i>Urtica dioica</i>	10	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. <i>Persicaria lapathifolia</i>	5	Yes	FACW																																	
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	15 %																																			
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	5	Yes	FAC	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																
2.																																				
Total Cover:	5 %																																			
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																																		

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 5/1	80	5YR 3/4	20	C	M	Loamy clay	
7-24	10YR 2/1	100					Loamy clay	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)
- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches): \_\_\_\_\_  
 Water Table Present?    Yes     No     Depth (inches): 7+"  
 Saturation Present?    Yes     No     Depth (inches): 7"  
 (includes capillary fringe)

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Sample plot ~5' from creek edge.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-5  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): flat Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'1.29"N Long: 117°25'51.66"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: No Data

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <u>Acacia sp.</u>	10	Yes	UPL	Number of Dominant Species That Are OBL, FACW, or FAC:	1 (A)
2. _____				Total Number of Dominant Species Across All Strata:	4 (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	25.0 % (A/B)
4. _____					
Total Cover:			10 %		
Sapling/Shrub Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>	
1. <u>Nicotiana glauca</u>	5	Yes	FAC	Total % Cover of:	Multiply by:
2. _____				OBL species	x 1 = 0
3. _____				FACW species	x 2 = 0
4. _____				FAC species	5 x 3 = 15
5. _____				FACU species	x 4 = 0
				UPL species	60 x 5 = 300
Total Cover:			5 %	Column Totals:	65 (A) 315 (B)
				Prevalence Index = B/A = 4.85	
Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Datura stramonium</u>	5	No	UPL	<input checked="" type="checkbox"/> Dominance Test is >50%	
2. <u>Bromus diandrus</u>	20	Yes	UPL	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
3. <u>Hordeum vulgare</u>	25	Yes	UPL	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____					
6. _____					
7. _____					
8. _____					
Total Cover:			50 %		
Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
Total Cover:			%		
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 3/6	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

Type: Yes (riprap)  
 Depth (inches): 16"

Hydric Soil Present? Yes  No

Remarks: Area did not support redox features or any indicators of hydric soils.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: no wetland hydrology indicators observed.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-6  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'0.15"N Long: 117°25'46.18"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Taken within drainage, steep slopes, veg. along banks</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Populus fremontii</u>	15	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0 %</u> (A/B)																																
2. <u>Washingtonia Californica</u>	5	Yes	FACW																																	
3. _____																																				
4. _____																																				
Total Cover: <u>20 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>5</u></td> <td>x 2 =</td> <td align="center"><u>10</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>55</u></td> <td>x 3 =</td> <td align="center"><u>165</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>  </u></td> <td>x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>5</u></td> <td>x 5 =</td> <td align="center"><u>25</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>65</u></td> <td>(A)</td> <td align="center"><u>200</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>3.08</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>5</u>	x 2 =	<u>10</u>	FAC species	<u>55</u>	x 3 =	<u>165</u>	FACU species	<u>  </u>	x 4 =	<u>0</u>	UPL species	<u>5</u>	x 5 =	<u>25</u>	Column Totals:	<u>65</u>	(A)	<u>200</u> (B)	Prevalence Index = B/A = <u>3.08</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>  </u>	x 1 =	<u>0</u>																																	
FACW species	<u>5</u>	x 2 =	<u>10</u>																																	
FAC species	<u>55</u>	x 3 =	<u>165</u>																																	
FACU species	<u>  </u>	x 4 =	<u>0</u>																																	
UPL species	<u>5</u>	x 5 =	<u>25</u>																																	
Column Totals:	<u>65</u>	(A)	<u>200</u> (B)																																	
Prevalence Index = B/A = <u>3.08</u>																																				
<u>Sapling/Shrub Stratum</u>																																				
1. _____																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
Total Cover: <u>  </u> %																																				
<u>Herb Stratum</u>																																				
1. <u>Artemisia californica</u>	5	Yes	Not Listed	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
Total Cover: <u>5 %</u>																																				
<u>Woody Vine Stratum</u>																																				
1. <u>Vitis Girdiana</u>	40	Yes	FAC																																	
2. _____																																				
Total Cover: <u>40 %</u>																																				
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																		

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: Flowing water 1 ft. deep, no pit taken. Soils are hydric.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches): 12 in.  
 Water Table Present?    Yes     No     Depth (inches): At surface  
 Saturation Present?    Yes     No     Depth (inches): At surface  
 (includes capillary fringe)

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-7  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'0.48"N Long: 117°25'46.20"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. <i>Phoenix dactylifera</i>	5	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">4</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">5</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">80.0 %</span> (A/B)																																								
2. <i>Washingtonia Californica</i>	5	Yes	FACW																																									
3. <i>Salix laevigata</i>	5	Yes	FACW																																									
4. _____				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%;">Total % Cover of:</td> <td style="width:10%;"></td> <td style="width:10%;">Multiply by:</td> <td style="width:10%;"></td> <td style="width:10%;"></td> </tr> <tr> <td>OBL species</td> <td></td> <td>x 1 =</td> <td></td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">10</td> <td>x 2 =</td> <td></td> <td align="center">20</td> </tr> <tr> <td>FAC species</td> <td align="center">65</td> <td>x 3 =</td> <td></td> <td align="center">195</td> </tr> <tr> <td>FACU species</td> <td></td> <td>x 4 =</td> <td></td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td align="center">5</td> <td>x 5 =</td> <td></td> <td align="center">25</td> </tr> <tr> <td>Column Totals:</td> <td align="center">80</td> <td></td> <td align="center">(A)</td> <td align="center">240 (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A =</td> <td align="center"><span style="background-color: #e0e0e0;">3.00</span></td> </tr> </table>	Total % Cover of:		Multiply by:			OBL species		x 1 =		0	FACW species	10	x 2 =		20	FAC species	65	x 3 =		195	FACU species		x 4 =		0	UPL species	5	x 5 =		25	Column Totals:	80		(A)	240 (B)	Prevalence Index = B/A =				<span style="background-color: #e0e0e0;">3.00</span>
Total % Cover of:		Multiply by:																																										
OBL species		x 1 =			0																																							
FACW species	10	x 2 =			20																																							
FAC species	65	x 3 =			195																																							
FACU species		x 4 =		0																																								
UPL species	5	x 5 =		25																																								
Column Totals:	80		(A)	240 (B)																																								
Prevalence Index = B/A =				<span style="background-color: #e0e0e0;">3.00</span>																																								
Total Cover: <span style="background-color: #e0e0e0;">15 %</span>																																												
<u>Sapling/Shrub Stratum</u>																																												
1. _____																																												
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
Total Cover: _____ %																																												
<u>Herb Stratum</u>																																												
1. <i>Conyza sp</i>	5	Yes	Not Listed	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																								
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
8. _____																																												
Total Cover: <span style="background-color: #e0e0e0;">5 %</span>																																												
<u>Woody Vine Stratum</u>																																												
1. <i>Vitis Girdiana</i>	60	Yes	FAC																																									
2. _____																																												
Total Cover: <span style="background-color: #e0e0e0;">60 %</span>																																												
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																																										

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 2/2	100					Loamy clay	

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

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

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: No redox or hydric soil indicators observed within this area.  
Sample point taken once redox was no longer observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: No wetland hydrology, sample point taken about 8ft. higher in elevation from wetland sample point.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-8  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'59.00"N Long: 117°25'31.03"W Datum: WGS-84  
 Soil Map Unit Name: Delhi fine sand NWI classification: Freshwater Emergent Wetland

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Populus deltoides</i>	5	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover: <u>5 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>5</u></td> <td align="center">x 2 =</td> <td align="center"><u>10</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>90</u></td> <td align="center">x 3 =</td> <td align="center"><u>270</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>  </u></td> <td align="center">x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>1</u></td> <td align="center">x 5 =</td> <td align="center"><u>5</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>96</u></td> <td align="center">(A)</td> <td align="center"><u>285</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.97</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>5</u>	x 2 =	<u>10</u>	FAC species	<u>90</u>	x 3 =	<u>270</u>	FACU species	<u>  </u>	x 4 =	<u>0</u>	UPL species	<u>1</u>	x 5 =	<u>5</u>	Column Totals:	<u>96</u>	(A)	<u>285</u> (B)	Prevalence Index = B/A = <u>2.97</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>  </u>	x 1 =	<u>0</u>																																	
FACW species	<u>5</u>	x 2 =	<u>10</u>																																	
FAC species	<u>90</u>	x 3 =	<u>270</u>																																	
FACU species	<u>  </u>	x 4 =	<u>0</u>																																	
UPL species	<u>1</u>	x 5 =	<u>5</u>																																	
Column Totals:	<u>96</u>	(A)	<u>285</u> (B)																																	
Prevalence Index = B/A = <u>2.97</u>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicifolia</i>	10	Yes	FAC																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <u>10 %</u>																																				
<b>Herb Stratum</b>																																				
1. <i>Distichlis spicata</i>	75	Yes	FAC																																	
2. <i>Polypogon monspeliensis</i>	5	No	FACW																																	
3. <i>Hirschfeldia incana</i>	1	No	Not Listed																																	
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <u>81 %</u>																																				
<b>Woody Vine Stratum</b>																																				
1.																																				
2.																																				
Total Cover: <u>  </u> %																																				
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																		

**Hydrophytic Vegetation Indicators:**

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/1	100					Loamy Clay	
7-18	10YR 3/1	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: No hydric soils present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No hydrological indicators; Sample point within terrace adjacent to drainage.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-9  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'56.10"N Long: 117°25'32.31"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <i>Salix gooddingii</i>	20	Yes	FACW		
2. <i>Salix lasiolepis</i>	20	Yes	FACW		
3. <i>Phoenix dactylifera</i>	5	No	Not Listed		
4. _____					
Total Cover:	45 %				
Sapling/Shrub Stratum					
1. <i>Baccharis salina</i>	30	Yes	FAC		
2. <i>Salix exigua</i>	10	No	FACW		
3. <i>Baccharis salicina</i>	30	Yes	FACW		
4. _____					
5. _____					
Total Cover:	70 %				
Herb Stratum					
1. <i>Anemopsis californica</i>	80	Yes	OBL		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
Total Cover:	80 %				
Woody Vine Stratum					
1. <i>Vitis girdiana</i>	20	Yes	FAC		
2. _____					
Total Cover:	20 %				
% Bare Ground in Herb Stratum _____ %			% Cover of Biotic Crust _____ %		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

**Prevalence Index worksheet:**

	Total % Cover of:		Multiply by:		
OBL species	80	x 1 =		80	
FACW species	80	x 2 =		160	
FAC species	50	x 3 =		150	
FACU species		x 4 =		0	
UPL species	5	x 5 =		25	
Column Totals:	215	(A)		415	(B)
Prevalence Index = B/A =				1.93	

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 3/2	95	10YR 6/8	5	D	M	Loamy Clay	
8-20	10YR 3/2	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: Redox in top layer.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Some saturation at surface soils, sample location just upslope of depression with rush.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-10  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'56.46"N Long: 117°25'32.08"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
<b>Sapling/Shrub Stratum</b>				
1. <i>Baccharis salicina</i>	90	Yes	FACW	
2. <i>Nicotina glauca</i>	10	No	FAC	
3. _____				
4. _____				
5. _____				
Total Cover: 100%				
<b>Herb Stratum</b>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: _____ %				
<b>Woody Vine Stratum</b>				
1. <i>Vitis girdiana</i>	50	Yes	FAC	
2. _____				
Total Cover: 50%				
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
 Total Number of Dominant Species Across All Strata: 2 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

	Total % Cover of:		Multiply by:	
OBL species	<u>        </u>	x 1 =	<u>0</u>	
FACW species	90	x 2 =	180	
FAC species	60	x 3 =	180	
FACU species	<u>        </u>	x 4 =	0	
UPL species	<u>        </u>	x 5 =	0	
Column Totals:	150	(A)	360	(B)
Prevalence Index = B/A =			<u>2.40</u>	

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/2	100					loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: Hit refusal at 6 in, root obstruction.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: Upslope from wetland data point.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-11  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'57.38"N Long: 117°25'12.42"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: No Data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Indicators that area has burned in past present. No paired "IN" pit due to dense veg. preventing access further into drainage.	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	40	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0 %</u> (A/B)																																
2. <i>Populus deltoides</i>	10	No	FAC																																	
3.																																				
4.																																				
Total Cover: <u>50 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>40</u></td> <td align="center">x 2 =</td> <td align="center"><u>80</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>30</u></td> <td align="center">x 3 =</td> <td align="center"><u>90</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>25</u></td> <td align="center">x 4 =</td> <td align="center"><u>100</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>  </u></td> <td align="center">x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>95</u></td> <td align="center">(A)</td> <td align="center"><u>270</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.84</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>40</u>	x 2 =	<u>80</u>	FAC species	<u>30</u>	x 3 =	<u>90</u>	FACU species	<u>25</u>	x 4 =	<u>100</u>	UPL species	<u>  </u>	x 5 =	<u>0</u>	Column Totals:	<u>95</u>	(A)	<u>270</u> (B)	Prevalence Index = B/A = <u>2.84</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>  </u>	x 1 =	<u>0</u>																																	
FACW species	<u>40</u>	x 2 =	<u>80</u>																																	
FAC species	<u>30</u>	x 3 =	<u>90</u>																																	
FACU species	<u>25</u>	x 4 =	<u>100</u>																																	
UPL species	<u>  </u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>95</u>	(A)	<u>270</u> (B)																																	
Prevalence Index = B/A = <u>2.84</u>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Rosa californica</i>	10	Yes	FAC																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <u>10 %</u>																																				
<b>Herb Stratum</b>																																				
1. <i>Ambrosia psilostachya</i>	25	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <u>25 %</u>																																				
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	10	Yes	FAC																																	
2.																																				
Total Cover: <u>10 %</u>																																				
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																		

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	10YR 4/2	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: No hydric soil indicators

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No hydrology indicators.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-12  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain- compacted land Local relief (concave, convex, none): none Slope (%): 0-1  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'56.55"N Long: 117°25'12.22"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: No Data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix exigua</i>	60	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">2</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">3</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">66.7 %</span> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover: <span style="background-color: #e0e0e0;">60 %</span>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><span style="background-color: #e0e0e0;"> </span></td> <td align="center">x 1 =</td> <td align="center"><span style="background-color: #e0e0e0;">0</span></td> </tr> <tr> <td>FACW species</td> <td align="center">60</td> <td align="center">x 2 =</td> <td align="center">120</td> </tr> <tr> <td>FAC species</td> <td align="center">20</td> <td align="center">x 3 =</td> <td align="center">60</td> </tr> <tr> <td>FACU species</td> <td align="center">50</td> <td align="center">x 4 =</td> <td align="center">200</td> </tr> <tr> <td>UPL species</td> <td align="center"><span style="background-color: #e0e0e0;"> </span></td> <td align="center">x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">130</td> <td align="center">(A)</td> <td align="center">380 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.92</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<span style="background-color: #e0e0e0;"> </span>	x 1 =	<span style="background-color: #e0e0e0;">0</span>	FACW species	60	x 2 =	120	FAC species	20	x 3 =	60	FACU species	50	x 4 =	200	UPL species	<span style="background-color: #e0e0e0;"> </span>	x 5 =	0	Column Totals:	130	(A)	380 (B)	Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.92</span>			
Total % Cover of:		Multiply by:																																		
OBL species	<span style="background-color: #e0e0e0;"> </span>	x 1 =	<span style="background-color: #e0e0e0;">0</span>																																	
FACW species	60	x 2 =	120																																	
FAC species	20	x 3 =	60																																	
FACU species	50	x 4 =	200																																	
UPL species	<span style="background-color: #e0e0e0;"> </span>	x 5 =	0																																	
Column Totals:	130	(A)	380 (B)																																	
Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.92</span>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Melilotus albus</i>	50	Yes	FACU																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <span style="background-color: #e0e0e0;">50 %</span>																																				
<b>Herb Stratum</b>																																				
1. <i>Lepidium latifolium</i>	20	Yes	FAC																																	
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <span style="background-color: #e0e0e0;">20 %</span>																																				
<b>Woody Vine Stratum</b>																																				
1.																																				
2.																																				
Total Cover: <span style="background-color: #e0e0e0;"> </span> %																																				
% Bare Ground in Herb Stratum <span style="background-color: #e0e0e0;"> </span> %		% Cover of Biotic Crust <span style="background-color: #e0e0e0;"> </span> %																																		

**Hydrophytic Vegetation Indicators:**

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 4/2	80	7.5YR 5/8	20	C	M	Loamy clay	
3-18	10YR 2/1	70	7.5YR 4/6	30	C	M	Loamy clay	

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

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

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                    |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)    | <input type="checkbox"/> Depleted Matrix (F3)                |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)            | <input type="checkbox"/> Redox Dark Surface (F6)             |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7)          |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Depressions (F8)              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Vernal Pools (F9)                   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          |  |

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: 2 layers, sample pit in road.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Some salt crust present around soil pit.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-13  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): flood plain terrace Local relief (concave, convex, none): flat Slope (%): <1  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'5.58"N Long: 117°25'1.59"W Datum: WGS-84  
 Soil Map Unit Name: Dello fine loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Out pit.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Salix exigua</u>	5	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7 %</u> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover: <u>5 %</u>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <u>Rosa californica</u>	45	Yes	FAC	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">10</td> <td>x 1 =</td> <td align="center">10</td> </tr> <tr> <td>FACW species</td> <td align="center">25</td> <td>x 2 =</td> <td align="center">50</td> </tr> <tr> <td>FAC species</td> <td align="center">45</td> <td>x 3 =</td> <td align="center">135</td> </tr> <tr> <td>FACU species</td> <td align="center">10</td> <td>x 4 =</td> <td align="center">40</td> </tr> <tr> <td>UPL species</td> <td></td> <td>x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">90</td> <td>(A)</td> <td align="center">235 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.61</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	10	x 1 =	10	FACW species	25	x 2 =	50	FAC species	45	x 3 =	135	FACU species	10	x 4 =	40	UPL species		x 5 =	0	Column Totals:	90	(A)	235 (B)	Prevalence Index = B/A = <u>2.61</u>			
Total % Cover of:		Multiply by:																																		
OBL species	10	x 1 =	10																																	
FACW species	25	x 2 =	50																																	
FAC species	45	x 3 =	135																																	
FACU species	10	x 4 =	40																																	
UPL species		x 5 =	0																																	
Column Totals:	90	(A)	235 (B)																																	
Prevalence Index = B/A = <u>2.61</u>																																				
2. <u>Baccharis salicina</u>	20	Yes	FACW																																	
3.																																				
4.																																				
5.																																				
Total Cover: <u>65 %</u>																																				
<b>Herb Stratum</b>																																				
1. <u>Ambrosia psilostachya</u>	5	Yes	FACU																																	
2. <u>Anemopsis californica</u>	10	Yes	OBL																																	
3. <u>Melilotus albus</u>	5	Yes	FACU																																	
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <u>20 %</u>																																				
<b>Woody Vine Stratum</b>																																				
1.				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
Total Cover: <u>    %</u>																																				
% Bare Ground in Herb Stratum <u>    %</u>	% Cover of Biotic Crust <u>    %</u>																																			

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 4/1	99	10YR 5/6	1	C	M	Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

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

Hydric Soil Present? Yes  No

Remarks: No hydric soil indicators above 12". More redox present below 16".

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

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

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

Wetland Hydrology Present? Yes  No

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

Remarks: No additional hydrology indicators.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-14  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): low area Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'3.89"N Long: 117°24'53.10"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: No Data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Test pit taken at edge of Baccharis/ Anemopsis stands, just within Baccharis zone.	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A)
2. _____				Total Number of Dominant Species Across All Strata:	3 (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	100.0% (A/B)
4. _____					
Total Cover: _____ %					
Sapling/Shrub Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>	
1. <i>Baccharis salicifolia</i>	40	Yes	FAC		
2. <i>Pluchea sericea</i>	10	Yes	FACW	OBL species	40 x 1 = 40
3. _____				FACW species	10 x 2 = 20
4. _____				FAC species	41 x 3 = 123
5. _____				FACU species	_____ x 4 = 0
Total Cover: 50 %				UPL species	_____ x 5 = 0
Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals:	91 (A) 183 (B)
1. <i>Anemopsis californica</i>	40	Yes	OBL	Prevalence Index = B/A = 2.01	
2. <i>Distichlis spicata</i>	1	No	FAC		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
Total Cover: 41 %					
Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>	
1. _____					
2. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.	
Total Cover: _____ %					
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	

Remarks: No additional comments.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20+	10YR 4/2	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: No hydrology indicators present.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-15  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): low area Local relief (concave, convex, none): flat Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'4.21"N Long: 117°24'53.50"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Test pit with Anemopsis stand surrounded by Baccharis stand. Lower depression than surrounding area.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <u>Anemopsis californica</u>	75	Yes	OBL	
2. <u>Ambrosia psilostachya</u>	15	No	FACU	
3. <u>Distichlis spicata</u>	5	No	FAC	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <b>95</b> %				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

**Prevalence Index worksheet:**

	Total % Cover of:		Multiply by:	
OBL species	75	x 1 =		75
FACW species		x 2 =		0
FAC species	5	x 3 =		15
FACU species	15	x 4 =		60
UPL species		x 5 =		0
Column Totals:	95	(A)		150 (B)
Prevalence Index = B/A =				1.58

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-0.5	10YR 2/1	100					Loam	
0.5-7	10YR 4/2	90	10YR 4/6	10	C	M	Sandy loam	
7-18+	10YR 4/2	90	10YR 4/6	10	C	M	Sandy clay loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: 0-0.5" layer has high component of organic material.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Drainage pattern = slight depression.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-16  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): low flow channel Local relief (concave, convex, none): convex Slope (%): 2  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'11.93"N Long: 117°24'48.16"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Within drainage, on upstream section of willow/riparian stand.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	60	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0 %</u> (A/B)																																
2. <i>Salix lasiolepis</i>	5	Yes	FACW																																	
3.																																				
4.																																				
Total Cover:	<u>65 %</u>																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Arundo donax</i>	1	Yes	FACU	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>        </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>65</u></td> <td align="center">x 2 =</td> <td align="center"><u>130</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>30</u></td> <td align="center">x 3 =</td> <td align="center"><u>90</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>2</u></td> <td align="center">x 4 =</td> <td align="center"><u>8</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>        </u></td> <td align="center">x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>97</u></td> <td align="center">(A)</td> <td align="center"><u>228</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.35</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>        </u>	x 1 =	<u>0</u>	FACW species	<u>65</u>	x 2 =	<u>130</u>	FAC species	<u>30</u>	x 3 =	<u>90</u>	FACU species	<u>2</u>	x 4 =	<u>8</u>	UPL species	<u>        </u>	x 5 =	<u>0</u>	Column Totals:	<u>97</u>	(A)	<u>228</u> (B)	Prevalence Index = B/A = <u>2.35</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>        </u>	x 1 =	<u>0</u>																																	
FACW species	<u>65</u>	x 2 =	<u>130</u>																																	
FAC species	<u>30</u>	x 3 =	<u>90</u>																																	
FACU species	<u>2</u>	x 4 =	<u>8</u>																																	
UPL species	<u>        </u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>97</u>	(A)	<u>228</u> (B)																																	
Prevalence Index = B/A = <u>2.35</u>																																				
2. <i>Ficus carica</i>	1	Yes	FACU																																	
3.																																				
4.																																				
5.																																				
Total Cover:	<u>2 %</u>																																			
<b>Herb Stratum</b>																																				
1.				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	<u>        </u> %																																			
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	30	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
Total Cover:	<u>30 %</u>																																			
% Bare Ground in Herb Stratum <u>20 %</u> % Cover of Biotic Crust <u>        </u> %																																				

Remarks: Closed canopy lacking herb stratum.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 4/2	90	7.5YR 4/6	10	C	M	Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Multiple low flow channels within wetland area.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-17  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Low flow channel Local relief (concave, convex, none): convex Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'12.07"N Long: 117°24'46.80"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: No Data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Vegetation has more tree of heaven and less canopy cover.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Ailanthus altissima</i>	30	Yes	FACU	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7 %</u> (A/B)																																
2. <i>Ficus carica</i>	10	Yes	FACU																																	
3.																																				
4.																																				
Total Cover: <u>40 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>        </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>45</u></td> <td align="center">x 2 =</td> <td align="center"><u>90</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>70</u></td> <td align="center">x 3 =</td> <td align="center"><u>210</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>40</u></td> <td align="center">x 4 =</td> <td align="center"><u>160</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>        </u></td> <td align="center">x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>155</u></td> <td align="center">(A)</td> <td align="center"><u>460</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.97</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>        </u>	x 1 =	<u>0</u>	FACW species	<u>45</u>	x 2 =	<u>90</u>	FAC species	<u>70</u>	x 3 =	<u>210</u>	FACU species	<u>40</u>	x 4 =	<u>160</u>	UPL species	<u>        </u>	x 5 =	<u>0</u>	Column Totals:	<u>155</u>	(A)	<u>460</u> (B)	Prevalence Index = B/A = <u>2.97</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>        </u>	x 1 =	<u>0</u>																																	
FACW species	<u>45</u>	x 2 =	<u>90</u>																																	
FAC species	<u>70</u>	x 3 =	<u>210</u>																																	
FACU species	<u>40</u>	x 4 =	<u>160</u>																																	
UPL species	<u>        </u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>155</u>	(A)	<u>460</u> (B)																																	
Prevalence Index = B/A = <u>2.97</u>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Salix lasiolepis</i>	15	Yes	FACW																																	
2. <i>Salix gooddingii</i>	30	Yes	FACW																																	
3.																																				
4.																																				
5.																																				
Total Cover: <u>45 %</u>																																				
<b>Herb Stratum</b>																																				
1.																																				
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <u>        </u> %																																				
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	40	Yes	FAC																																	
2. <i>Rubus armeniacus</i>	30	Yes	FAC																																	
3.																																				
Total Cover: <u>70 %</u>																																				
% Bare Ground in Herb Stratum <u>        </u> %      % Cover of Biotic Crust <u>        </u> %																																				

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: No herb stratum present.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 3/2	100					Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: No hydric soil indicators.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: No hydrology indicators observed.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-18  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): low flow channel Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'10.52"N Long: 117°24'53.85"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. <i>Salix lasiolepis</i>	20	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">6</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">6</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">100.0 %</span> (A/B)																																								
2. <i>Salix gooddingii</i>	10	Yes	FACW																																									
3.																																												
4.																																												
Total Cover: <span style="background-color: #e0e0e0;">30 %</span>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Total % Cover of:</th> <th style="width:10%;"></th> <th style="width:10%;">Multiply by:</th> <th style="width:10%;"></th> <th style="width:10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td align="center">25</td> <td>x 1 =</td> <td align="center">25</td> <td></td> </tr> <tr> <td>FACW species</td> <td align="center">50</td> <td>x 2 =</td> <td align="center">100</td> <td></td> </tr> <tr> <td>FAC species</td> <td align="center">90</td> <td>x 3 =</td> <td align="center">270</td> <td></td> </tr> <tr> <td>FACU species</td> <td></td> <td>x 4 =</td> <td align="center">0</td> <td></td> </tr> <tr> <td>UPL species</td> <td></td> <td>x 5 =</td> <td align="center">0</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td align="center">165</td> <td></td> <td align="center">(A)</td> <td align="center">395 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A =</td> <td align="center"><span style="background-color: #e0e0e0;">2.39</span></td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:			OBL species	25	x 1 =	25		FACW species	50	x 2 =	100		FAC species	90	x 3 =	270		FACU species		x 4 =	0		UPL species		x 5 =	0		Column Totals:	165		(A)	395 (B)	Prevalence Index = B/A =				<span style="background-color: #e0e0e0;">2.39</span>
Total % Cover of:		Multiply by:																																										
OBL species	25	x 1 =	25																																									
FACW species	50	x 2 =	100																																									
FAC species	90	x 3 =	270																																									
FACU species		x 4 =	0																																									
UPL species		x 5 =	0																																									
Column Totals:	165		(A)	395 (B)																																								
Prevalence Index = B/A =				<span style="background-color: #e0e0e0;">2.39</span>																																								
<b>Sapling/Shrub Stratum</b>																																												
1. <i>Baccharis salicina</i>	20	Yes	FACW																																									
2.																																												
3.																																												
4.																																												
5.																																												
Total Cover: <span style="background-color: #e0e0e0;">20 %</span>																																												
<b>Herb Stratum</b>																																												
1. <i>Distichlis spicata</i>	70	Yes	FAC																																									
2. <i>Anemopsis californica</i>	25	Yes	OBL																																									
3.																																												
4.																																												
5.																																												
6.																																												
7.																																												
8.																																												
Total Cover: <span style="background-color: #e0e0e0;">95 %</span>																																												
<b>Woody Vine Stratum</b>																																												
1. <i>Vitis girdiana</i>	20	Yes	FAC																																									
2.																																												
Total Cover: <span style="background-color: #e0e0e0;">20 %</span>																																												
% Bare Ground in Herb Stratum <u>~5 %</u> % Cover of Biotic Crust <u>    </u> %																																												

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-25	10YR 4/1	90	5YR 4/6	10	C	M	Sandy Loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: Area supported a depleted matrix. Redox found throughout matrix.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-19  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'10.15"N Long: 117°24'52.99"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Although the area supports wetland vegetation (as with the majority of the site), the area did not support wetland hydrology or hydric soils.</u>	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
Herb Stratum				
1. <i>Distichlis spicata</i>	80	Yes	FAC	
2. <i>Anemopsis californica</i>	18	No	OBL	
3. <i>Heliotropium curassavicum</i>	2	No	FACU	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <b>100%</b>				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %	%		% Cover of Biotic Crust _____ %	

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 1 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 18 x 1 = 18  
 FACW species \_\_\_\_\_ x 2 = 0  
 FAC species 80 x 3 = 240  
 FACU species 2 x 4 = 8  
 UPL species \_\_\_\_\_ x 5 = 0  
 Column Totals: 100 (A) 266 (B)  
 Prevalence Index = B/A = 2.66

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-25	10YR 4/3	100					Sandy Loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: No redox was observed within this area. Area did not support hydric soils.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: Sample point upland, no indicators.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-20  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): flat Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'10.26"N Long: 117°25'0.44"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Arrow weed stand, no drainage pattern associated with this area to indicate that this area flows.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. <u>Pluchea sericea</u>	50	Yes	FACW	
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: <u>50</u> %				
Herb Stratum				
1. <u>Croton californica</u>	10	No	Not Listed	
2. <u>Distichlis spicata</u>	80	Yes	FAC	
3. <u>Phacelia ramosissima</u>	4	No	FACU	
4. <u>Stephanomeria</u>	1	No	Not Listed	
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <u>95</u> %				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum <u>2</u> %	%		% Cover of Biotic Crust _____ %	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

**Prevalence Index worksheet:**

Total % Cover of:		Multiply by:	
OBL species	<u>  </u>	x 1 =	<u>0</u>
FACW species	<u>50</u>	x 2 =	<u>100</u>
FAC species	<u>80</u>	x 3 =	<u>240</u>
FACU species	<u>4</u>	x 4 =	<u>16</u>
UPL species	<u>11</u>	x 5 =	<u>55</u>
Column Totals:	<u>145</u>	(A)	<u>411</u> (B)
Prevalence Index = B/A =			<u>2.83</u>

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-25	10YR 4/2	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: No redox or other hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: No hydrology indicators present.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-21  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'6.95"N Long: 117°24'38.29"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: No Data

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: <u>Ditch, has some small pockets of wetland, however mostly nonwetland water.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Washingtonia robusta</u>	25	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0 %</u> (A/B)
2. _____				
3. _____				
4. _____				
Total Cover: <u>25 %</u>				
<b>Sapling/Shrub Stratum</b>				
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>62</u> x 2 = <u>124</u> FAC species _____ x 3 = <u>0</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>82</u> (A) <u>204</u> (B)  Prevalence Index = B/A = <u>2.49</u>
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____ %				
<b>Herb Stratum</b>				
1. <u>Bassia hyssopifolia</u>	15	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
2. <u>Cyperus eragrostis</u>	25	Yes	FACW	
3. <u>Melilotus albus</u>	5	No	FACU	
4. <u>Echinochloa crus-galli</u>	10	Yes	FACW	
5. <u>Polypogon monspeliensis</u>	2	No	FACW	
6. _____				
7. _____				
8. _____				
Total Cover: <u>57 %</u>				
<b>Woody Vine Stratum</b>				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		

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

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	2.5Y 4/1	100					Sandy loam	
14-16	2.5Y 5/1	70	2.5Y 5/6	30	C	M	Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Sample point in ditch, no wetland indicators observed other than FAC- neutral test.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-22  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): flat Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'9.43"N Long: 117°24'55.37"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	35	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2. <i>Populus deltoides</i>	15	Yes	FAC																																	
3.																																				
4.																																				
Total Cover:	<u>50 %</u>																																			
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicina</i>	20	Yes	FACW	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>5</u></td> <td align="center">x 1 =</td> <td align="center"><u>5</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>55</u></td> <td align="center">x 2 =</td> <td align="center"><u>110</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>75</u></td> <td align="center">x 3 =</td> <td align="center"><u>225</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>0</u></td> <td align="center">x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>7</u></td> <td align="center">x 5 =</td> <td align="center"><u>35</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>137</u></td> <td align="center">(A)</td> <td align="center"><u>370</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.70</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>5</u>	x 1 =	<u>5</u>	FACW species	<u>55</u>	x 2 =	<u>110</u>	FAC species	<u>75</u>	x 3 =	<u>225</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>7</u>	x 5 =	<u>35</u>	Column Totals:	<u>137</u>	(A)	<u>370</u> (B)	Prevalence Index = B/A = <u>2.70</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>5</u>	x 1 =	<u>5</u>																																	
FACW species	<u>55</u>	x 2 =	<u>110</u>																																	
FAC species	<u>75</u>	x 3 =	<u>225</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>7</u>	x 5 =	<u>35</u>																																	
Column Totals:	<u>137</u>	(A)	<u>370</u> (B)																																	
Prevalence Index = B/A = <u>2.70</u>																																				
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	<u>20 %</u>																																			
<b>Herb Stratum</b>																																				
1. <i>Bromus madritensis</i>	5	No	UPL	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2. <i>Distichlis spicata</i>	40	Yes	FAC																																	
3. <i>Croton californica</i>	2	No	Not Listed																																	
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	<u>47 %</u>																																			
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	20	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2.																																				
Total Cover:	<u>20 %</u>																																			
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 4/2	100					sandy loam	
10-14+	2.5Y 4/2	70	2.5Y 4/3	30	C	M	Sandy clay loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: Almost meets for F3 but redox/matrix contrast is faint. Redox is +/- diffuse throughout 10-14+ layer.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No wetland hydrology indicators observed.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-23  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): low area Local relief (concave, convex, none): flat Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'9.01"N Long: 117°24'55.52"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>No distinct OHWM however, there is a clear distinction between upland and wetland based on vegetation.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Salix lasiolepis</u>	45	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2. _____																																				
3. _____																																				
4. _____																																				
Total Cover: <u>45 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">_____</td> <td align="center">x 1 =</td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">45</td> <td align="center">x 2 =</td> <td align="center">90</td> </tr> <tr> <td>FAC species</td> <td align="center">20</td> <td align="center">x 3 =</td> <td align="center">60</td> </tr> <tr> <td>FACU species</td> <td align="center">_____</td> <td align="center">x 4 =</td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td align="center">_____</td> <td align="center">x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">65</td> <td align="center">(A)</td> <td align="center">150 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.31</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	_____	x 1 =	0	FACW species	45	x 2 =	90	FAC species	20	x 3 =	60	FACU species	_____	x 4 =	0	UPL species	_____	x 5 =	0	Column Totals:	65	(A)	150 (B)	Prevalence Index = B/A = <u>2.31</u>			
Total % Cover of:		Multiply by:																																		
OBL species	_____	x 1 =	0																																	
FACW species	45	x 2 =	90																																	
FAC species	20	x 3 =	60																																	
FACU species	_____	x 4 =	0																																	
UPL species	_____	x 5 =	0																																	
Column Totals:	65	(A)	150 (B)																																	
Prevalence Index = B/A = <u>2.31</u>																																				
<u>Sapling/Shrub Stratum</u>																																				
1. _____																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
Total Cover: _____ %																																				
<u>Herb Stratum</u>																																				
1. _____																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
Total Cover: _____ %																																				
<u>Woody Vine Stratum</u>																																				
1. <u>Vitis girdiana</u>	15	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																																
2. <u>Rubus ursinis</u>	5	Yes	FAC																																	
Total Cover: <u>20 %</u>																																				
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %																																		

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: A lot of leaf litter.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 2/1	100					Sandy loam	
4-8	10YR 3/1	100					Sandy loam	
8-16	10YR 4/2	85	7.5YR 4/6	15	C	M	Sandy loam	

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

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

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)            |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1)        |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)        |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)    | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)            | <input type="checkbox"/> Redox Dark Surface (F6)         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7)      |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Depressions (F8)          |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Vernal Pools (F9)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          |  |

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Hydrology indicators +/- weak however, hydrology assumed due to landscape position and obvious change in composition/cover.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/ Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-24  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'11.88"N Long: 117°24'59.66"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	30	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #cccccc;">6</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #cccccc;">7</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #cccccc;">85.7 %</span> (A/B)																																
2. <i>Populus deltoides</i>	30	Yes	FAC																																	
3. <i>Fraxinus velutina</i>	10	Yes	FAC																																	
4. <i>Sambucus nigra</i>	5	No	FACU																																	
Total Cover: <span style="background-color: #cccccc;">75 %</span>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><span style="background-color: #cccccc;">0</span></td> <td align="center">x 1 =</td> <td align="center"><span style="background-color: #cccccc;">0</span></td> </tr> <tr> <td>FACW species</td> <td align="center">35</td> <td align="center">x 2 =</td> <td align="center">70</td> </tr> <tr> <td>FAC species</td> <td align="center">120</td> <td align="center">x 3 =</td> <td align="center">360</td> </tr> <tr> <td>FACU species</td> <td align="center">65</td> <td align="center">x 4 =</td> <td align="center">260</td> </tr> <tr> <td>UPL species</td> <td align="center"><span style="background-color: #cccccc;">0</span></td> <td align="center">x 5 =</td> <td align="center"><span style="background-color: #cccccc;">0</span></td> </tr> <tr> <td>Column Totals:</td> <td align="center">220</td> <td align="center">(A)</td> <td align="center">690 (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #cccccc;">3.14</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<span style="background-color: #cccccc;">0</span>	x 1 =	<span style="background-color: #cccccc;">0</span>	FACW species	35	x 2 =	70	FAC species	120	x 3 =	360	FACU species	65	x 4 =	260	UPL species	<span style="background-color: #cccccc;">0</span>	x 5 =	<span style="background-color: #cccccc;">0</span>	Column Totals:	220	(A)	690 (B)	Prevalence Index = B/A = <span style="background-color: #cccccc;">3.14</span>			
Total % Cover of:		Multiply by:																																		
OBL species	<span style="background-color: #cccccc;">0</span>	x 1 =	<span style="background-color: #cccccc;">0</span>																																	
FACW species	35	x 2 =	70																																	
FAC species	120	x 3 =	360																																	
FACU species	65	x 4 =	260																																	
UPL species	<span style="background-color: #cccccc;">0</span>	x 5 =	<span style="background-color: #cccccc;">0</span>																																	
Column Totals:	220	(A)	690 (B)																																	
Prevalence Index = B/A = <span style="background-color: #cccccc;">3.14</span>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicina</i>	5	Yes	FACW																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <span style="background-color: #cccccc;">5 %</span>																																				
<b>Herb Stratum</b>																																				
1. <i>Distichlis spicata</i>	40	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. <i>Ambrosia psilostachya</i>	60	Yes	FACU																																	
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <span style="background-color: #cccccc;">100%</span>																																				
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	40	Yes	FAC																																	
2.																																				
Total Cover: <span style="background-color: #cccccc;">40 %</span>																																				
% Bare Ground in Herb Stratum _____ %      % Cover of Biotic Crust _____ %																																				

Remarks: Location upland of test 5, ~5ft. higher in elevation.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-26	10YR 4/2	100					Sand	

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

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

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: No indicators.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks: No indicators.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-25  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'12.49"N Long: 117°24'58.92"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	55	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)																																
2. <i>Populus deltoides</i>	20	Yes	FAC																																	
3.																																				
4.																																				
Total Cover: <u>75 %</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>  </u></td> <td align="center">x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>85</u></td> <td align="center">x 2 =</td> <td align="center"><u>170</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>35</u></td> <td align="center">x 3 =</td> <td align="center"><u>105</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>  </u></td> <td align="center">x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>  </u></td> <td align="center">x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>120</u></td> <td align="center">(A)</td> <td align="center"><u>275</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.29</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>  </u>	x 1 =	<u>0</u>	FACW species	<u>85</u>	x 2 =	<u>170</u>	FAC species	<u>35</u>	x 3 =	<u>105</u>	FACU species	<u>  </u>	x 4 =	<u>0</u>	UPL species	<u>  </u>	x 5 =	<u>0</u>	Column Totals:	<u>120</u>	(A)	<u>275</u> (B)	Prevalence Index = B/A = <u>2.29</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>  </u>	x 1 =	<u>0</u>																																	
FACW species	<u>85</u>	x 2 =	<u>170</u>																																	
FAC species	<u>35</u>	x 3 =	<u>105</u>																																	
FACU species	<u>  </u>	x 4 =	<u>0</u>																																	
UPL species	<u>  </u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>120</u>	(A)	<u>275</u> (B)																																	
Prevalence Index = B/A = <u>2.29</u>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Baccharis salicina</i>	30	Yes	FACW																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <u>30 %</u>																																				
<b>Herb Stratum</b>																																				
1.																																				
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <u>  </u> %																																				
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	15	Yes	FAC																																	
2.																																				
Total Cover: <u>15 %</u>																																				
% Bare Ground in Herb Stratum <u>  </u> %		% Cover of Biotic Crust <u>  </u> %																																		

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: Unknown ORN tree not included in veg. strata.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-1	10YR 2/1	100					Organics	
1-8	10YR 4/2	100					Sandy Loam	
8-17	10YR 5/2	85	10YR 5/8	15	D	M	Sandy Loam	Redox at 8"

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

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

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)            |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1)        |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)        |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)    | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)            | <input type="checkbox"/> Redox Dark Surface (F6)         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7)      |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Depressions (F8)          |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Vernal Pools (F9)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          |  |

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: Area supported a depleted matrix. Redox found at eight inches.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Hydrology assumed due to landscape position, hydric soils and wetland vegetation present.



**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 4/1	100					Sandy Loam	
8-11	10YR 3/2	97	5YR 4/6	3	C	M	Clay	
11-30	10YR 6/2	80	10YR 5/6	20	C	M	Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

**Remarks:**

Sample point in low point drainage and supported redox at 8 inches and deeper.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: Sample point within drainage at the toe of slope, obvious bank.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/1/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-27  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): River bottom Local relief (concave, convex, none): flat Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'25.59"N Long: 117°25'6.11"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Riverine

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: <u>Sample point adjacent to low flow; Sandy floodplain.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
<b>Sapling/Shrub Stratum</b>				
1. <i>Salix gooddingii</i>	20	Yes	FACW	
2. <i>Tamarix ramossima</i>	20	Yes	FAC	
3. <i>Baccharis salicifolia</i>	25	Yes	FAC	
4. _____				
5. _____				
Total Cover: <b>65 %</b>				
<b>Herb Stratum</b>				
1. <i>Melilotus albus</i>	5	Yes	FACU	
2. <i>Nasturtium officinale</i>	5	Yes	OBL	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: <b>10 %</b>				
<b>Woody Vine Stratum</b>				
1. _____				
2. _____				
Total Cover: _____ %				
% Bare Ground in Herb Stratum <u>25 %</u>		% Cover of Biotic Crust _____ %		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)  
 Total Number of Dominant Species Across All Strata: 5 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0 % (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 5 x 1 = 5  
 FACW species 20 x 2 = 40  
 FAC species 45 x 3 = 135  
 FACU species 5 x 4 = 20  
 UPL species \_\_\_\_\_ x 5 = 0  
 Column Totals: 75 (A) 200 (B)  
 Prevalence Index = B/A = 2.67

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 5/1	70	7.5YR 4/4	30	C	M	Sand	
2-16+	10YR 5/1	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: Area met for Depleted Matrix.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches): \_\_\_\_\_  
 Water Table Present?    Yes     No     Depth (inches):    6"  
 Saturation Present?    Yes     No     Depth (inches):    4"  
 (includes capillary fringe)

**Wetland Hydrology Present?**    Yes     No

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

Remarks:

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-28  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'12.02"N Long: 117°25'21.35"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy fine sand NWI classification: Riverine

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <i>Salix lasiolepis</i>	40	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">3</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">100.0 %</span> (A/B)																
2.																				
3.																				
4.																				
Total Cover:	40 %																			
<b>Sapling/Shrub Stratum</b>				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td>x 1 = <span style="background-color: #e0e0e0; padding: 2px;">0</span></td> </tr> <tr> <td>FACW species</td> <td>x 2 = <span style="background-color: #e0e0e0; padding: 2px;">80</span></td> </tr> <tr> <td>FAC species</td> <td>x 3 = <span style="background-color: #e0e0e0; padding: 2px;">270</span></td> </tr> <tr> <td>FACU species</td> <td>x 4 = <span style="background-color: #e0e0e0; padding: 2px;">0</span></td> </tr> <tr> <td>UPL species</td> <td>x 5 = <span style="background-color: #e0e0e0; padding: 2px;">0</span></td> </tr> <tr> <td>Column Totals:</td> <td><span style="background-color: #e0e0e0; padding: 2px;">130</span> (A) <span style="background-color: #e0e0e0; padding: 2px;">350</span> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <span style="background-color: #e0e0e0; padding: 2px;">2.69</span></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species	x 1 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>	FACW species	x 2 = <span style="background-color: #e0e0e0; padding: 2px;">80</span>	FAC species	x 3 = <span style="background-color: #e0e0e0; padding: 2px;">270</span>	FACU species	x 4 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>	UPL species	x 5 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>	Column Totals:	<span style="background-color: #e0e0e0; padding: 2px;">130</span> (A) <span style="background-color: #e0e0e0; padding: 2px;">350</span> (B)	Prevalence Index = B/A = <span style="background-color: #e0e0e0; padding: 2px;">2.69</span>	
Total % Cover of:	Multiply by:																			
OBL species	x 1 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>																			
FACW species	x 2 = <span style="background-color: #e0e0e0; padding: 2px;">80</span>																			
FAC species	x 3 = <span style="background-color: #e0e0e0; padding: 2px;">270</span>																			
FACU species	x 4 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>																			
UPL species	x 5 = <span style="background-color: #e0e0e0; padding: 2px;">0</span>																			
Column Totals:	<span style="background-color: #e0e0e0; padding: 2px;">130</span> (A) <span style="background-color: #e0e0e0; padding: 2px;">350</span> (B)																			
Prevalence Index = B/A = <span style="background-color: #e0e0e0; padding: 2px;">2.69</span>																				
1. <i>Nicotiana glauca</i>	10	Yes	FAC																	
2.																				
3.																				
4.																				
5.																				
Total Cover:	10 %																			
<b>Herb Stratum</b>				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																
1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				
8.																				
Total Cover:	%																			
<b>Woody Vine Stratum</b>																				
1. <i>Vitis girdiana</i>	80	Yes	FAC																	
2.																				
Total Cover:	80 %																			
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %																			

Remarks: No herb stratum present.

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
25+	10YR 4/2	100					Fine Sandy loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: No hydric soil indicators.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No hydrological indicators.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-29  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'51.52"N Long: 117°25'35.62"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: _____ %				
Sapling/Shrub Stratum				
1. <i>Baccharis salicina</i>	40	Yes	FACW	
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: 40 %				
Herb Stratum				
1. <i>Urtica dioica</i>	10	No	FAC	
2. <i>Conium maculatum</i>	90	Yes	FACW	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: 100%				
Woody Vine Stratum				
1. <i>Vitis girdiana</i>	30	Yes	FAC	
2. _____				
Total Cover: 30 %				
% Bare Ground in Herb Stratum _____ %	% Cover of Biotic Crust _____ %			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:		
OBL species	x 1 =	0	
FACW species	x 2 =	260	
FAC species	x 3 =	120	
FACU species	x 4 =	0	
UPL species	x 5 =	0	
Column Totals:		170 (A)	380 (B)
Prevalence Index = B/A =		2.24	

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 2/1	100					Loam	

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

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

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)    | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)            | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Vernal Pools (F9)          |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          |   |

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?**    Yes     No

Remarks: Could not dig past 6 in. due to rip rap and fill material.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?**    Yes     No

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

Remarks: No hydrological indicators.

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/3/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-30  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Drainage Floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°57'52.05"N Long: 117°25'35.50"W Datum: WGS-84  
 Soil Map Unit Name: Grangeville fine sandy loam NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

### VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix gooddingii</i>	40	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">5</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0; padding: 2px;">5</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0; padding: 2px;">100.0 %</span> (A/B)																																
2. <i>Salix laevigata</i>	40	Yes	FACW																																	
3.																																				
4.																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">80 %</span>																																				
<b>Sapling/Shrub Stratum</b>				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Total % Cover of:</td> <td style="width: 20%;"></td> <td style="width: 20%;">Multiply by:</td> <td style="width: 20%;"></td> </tr> <tr> <td>OBL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 1 =</td> <td style="background-color: #e0e0e0;">0</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">105</td> <td>x 2 =</td> <td style="text-align: center;">210</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">30</td> <td>x 3 =</td> <td style="text-align: center;">90</td> </tr> <tr> <td>FACU species</td> <td style="background-color: #e0e0e0;"></td> <td>x 4 =</td> <td style="background-color: #e0e0e0;">0</td> </tr> <tr> <td>UPL species</td> <td style="background-color: #e0e0e0;"></td> <td>x 5 =</td> <td style="background-color: #e0e0e0;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">135</td> <td>(A)</td> <td style="text-align: center;">300 (B)</td> </tr> <tr> <td colspan="2" style="text-align: right;">Prevalence Index = B/A =</td> <td></td> <td style="background-color: #e0e0e0; text-align: center;">2.22</td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species		x 1 =	0	FACW species	105	x 2 =	210	FAC species	30	x 3 =	90	FACU species		x 4 =	0	UPL species		x 5 =	0	Column Totals:	135	(A)	300 (B)	Prevalence Index = B/A =			2.22
Total % Cover of:		Multiply by:																																		
OBL species		x 1 =	0																																	
FACW species	105	x 2 =	210																																	
FAC species	30	x 3 =	90																																	
FACU species		x 4 =	0																																	
UPL species		x 5 =	0																																	
Column Totals:	135	(A)	300 (B)																																	
Prevalence Index = B/A =			2.22																																	
1.																																				
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																				
<b>Herb Stratum</b>				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
1. <i>Arundo donax</i>	20	Yes	FACW																																	
2. <i>Cyperus sp.</i>	5	Yes	FACW																																	
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">25 %</span>																																				
<b>Woody Vine Stratum</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>																																
1. <i>Vitis girdiana</i>	30	Yes	FAC																																	
2.																																				
Total Cover: <span style="background-color: #e0e0e0; padding: 2px;">30 %</span>																																				
% Bare Ground in Herb Stratum <span style="background-color: #e0e0e0; padding: 2px;">%</span>		% Cover of Biotic Crust <span style="background-color: #e0e0e0; padding: 2px;">%</span>																																		

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 2/1	100					Loamy clay	
8-12	10YR 2/1	100					Loam	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils:**

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: 4" saturation.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): 10"  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 4"

Wetland Hydrology Present? Yes  No

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

Remarks: 4" saturation.

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-31  
 Investigator(s): Team 1 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): In drainage Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'11.61"N Long: 117°25'12.14"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	20	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">3</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">5</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">60.0 %</span> (A/B)																																
2. <i>Salix gooddingii</i>	20	Yes	FACW																																	
3.																																				
4.																																				
Total Cover:	40 %																																			
<u>Sapling/Shrub Stratum</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center" style="background-color: #e0e0e0;">0</td> <td align="center">x 1 =</td> <td align="center" style="background-color: #e0e0e0;">0</td> </tr> <tr> <td>FACW species</td> <td align="center" style="background-color: #e0e0e0;">40</td> <td align="center">x 2 =</td> <td align="center" style="background-color: #e0e0e0;">80</td> </tr> <tr> <td>FAC species</td> <td align="center" style="background-color: #e0e0e0;">80</td> <td align="center">x 3 =</td> <td align="center" style="background-color: #e0e0e0;">240</td> </tr> <tr> <td>FACU species</td> <td align="center" style="background-color: #e0e0e0;">2</td> <td align="center">x 4 =</td> <td align="center" style="background-color: #e0e0e0;">8</td> </tr> <tr> <td>UPL species</td> <td align="center" style="background-color: #e0e0e0;">0</td> <td align="center">x 5 =</td> <td align="center" style="background-color: #e0e0e0;">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center" style="background-color: #e0e0e0;">122</td> <td align="center">(A)</td> <td align="center" style="background-color: #e0e0e0;">328</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.69</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	40	x 2 =	80	FAC species	80	x 3 =	240	FACU species	2	x 4 =	8	UPL species	0	x 5 =	0	Column Totals:	122	(A)	328	Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.69</span>			
Total % Cover of:		Multiply by:																																		
OBL species	0	x 1 =	0																																	
FACW species	40	x 2 =	80																																	
FAC species	80	x 3 =	240																																	
FACU species	2	x 4 =	8																																	
UPL species	0	x 5 =	0																																	
Column Totals:	122	(A)	328																																	
Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.69</span>																																				
1. <i>Melilotus albus</i>	2	Yes	FACU																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	2 %																																			
<u>Herb Stratum</u>				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
1. <i>Baccharis salicina</i>	5	Yes																																		
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	5 %																																			
<u>Woody Vine Stratum</u>																																				
1. <i>Vitis girdiana</i>	80	Yes	FAC																																	
2.																																				
Total Cover:	80 %																																			
% Bare Ground in Herb Stratum _____ %	%		% Cover of Biotic Crust _____ %																																	

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 2/1	100					Sandy loamy clay	
6-8	Gley 1 4/5GY	100					Sandy loam	
8-12	5Y 3/1	100					Sandy loamy clay	mixed with gley sand from 6-8"
12-24	Gley 1 4/5GY	100					Sandy loam	

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

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

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                    |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)    | <input type="checkbox"/> Depleted Matrix (F3)                |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)            | <input type="checkbox"/> Redox Dark Surface (F6)             |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7)          |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Depressions (F8)              |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Vernal Pools (F9)                   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          |  |

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

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

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

**Restrictive Layer (if present):**

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

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

**Hydric Soil Present?** Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)
- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No

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

Water Table Present? Yes  No

Depth (inches): 12"

Saturation Present? (includes capillary fringe) Yes  No

Depth (inches): 6"

**Wetland Hydrology Present?** Yes  No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-32  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'4.96"N Long: 117°25'42.05"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Salix lasiolepis</i>	35	Yes	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">4</span> (A)  Total Number of Dominant Species Across All Strata: <span style="background-color: #e0e0e0;">6</span> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #e0e0e0;">66.7 %</span> (A/B)																																
2. <i>Fraxinus sp.</i>	10	Yes	FACU																																	
3.																																				
4.																																				
Total Cover: <span style="background-color: #e0e0e0;">45 %</span>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><span style="background-color: #e0e0e0;">0</span></td> <td align="center">x 1 =</td> <td align="center"><span style="background-color: #e0e0e0;">0</span></td> </tr> <tr> <td>FACW species</td> <td align="center"><span style="background-color: #e0e0e0;">40</span></td> <td align="center">x 2 =</td> <td align="center"><span style="background-color: #e0e0e0;">80</span></td> </tr> <tr> <td>FAC species</td> <td align="center"><span style="background-color: #e0e0e0;">17</span></td> <td align="center">x 3 =</td> <td align="center"><span style="background-color: #e0e0e0;">51</span></td> </tr> <tr> <td>FACU species</td> <td align="center"><span style="background-color: #e0e0e0;">15</span></td> <td align="center">x 4 =</td> <td align="center"><span style="background-color: #e0e0e0;">60</span></td> </tr> <tr> <td>UPL species</td> <td align="center"><span style="background-color: #e0e0e0;">0</span></td> <td align="center">x 5 =</td> <td align="center"><span style="background-color: #e0e0e0;">0</span></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><span style="background-color: #e0e0e0;">72</span> (A)</td> <td></td> <td align="center"><span style="background-color: #e0e0e0;">191</span> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.65</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<span style="background-color: #e0e0e0;">0</span>	x 1 =	<span style="background-color: #e0e0e0;">0</span>	FACW species	<span style="background-color: #e0e0e0;">40</span>	x 2 =	<span style="background-color: #e0e0e0;">80</span>	FAC species	<span style="background-color: #e0e0e0;">17</span>	x 3 =	<span style="background-color: #e0e0e0;">51</span>	FACU species	<span style="background-color: #e0e0e0;">15</span>	x 4 =	<span style="background-color: #e0e0e0;">60</span>	UPL species	<span style="background-color: #e0e0e0;">0</span>	x 5 =	<span style="background-color: #e0e0e0;">0</span>	Column Totals:	<span style="background-color: #e0e0e0;">72</span> (A)		<span style="background-color: #e0e0e0;">191</span> (B)	Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.65</span>			
Total % Cover of:		Multiply by:																																		
OBL species	<span style="background-color: #e0e0e0;">0</span>	x 1 =	<span style="background-color: #e0e0e0;">0</span>																																	
FACW species	<span style="background-color: #e0e0e0;">40</span>	x 2 =	<span style="background-color: #e0e0e0;">80</span>																																	
FAC species	<span style="background-color: #e0e0e0;">17</span>	x 3 =	<span style="background-color: #e0e0e0;">51</span>																																	
FACU species	<span style="background-color: #e0e0e0;">15</span>	x 4 =	<span style="background-color: #e0e0e0;">60</span>																																	
UPL species	<span style="background-color: #e0e0e0;">0</span>	x 5 =	<span style="background-color: #e0e0e0;">0</span>																																	
Column Totals:	<span style="background-color: #e0e0e0;">72</span> (A)		<span style="background-color: #e0e0e0;">191</span> (B)																																	
Prevalence Index = B/A = <span style="background-color: #e0e0e0;">2.65</span>																																				
<b>Sapling/Shrub Stratum</b>																																				
1. <i>Salix exigua</i>	5	Yes	FACW																																	
2. <i>Ricinus communis</i>	5	Yes	FACU																																	
3.	15	Yes	FAC																																	
4.																																				
5.																																				
Total Cover: <span style="background-color: #e0e0e0;">25 %</span>																																				
<b>Herb Stratum</b>																																				
1.																																				
2.																																				
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover: <span style="background-color: #e0e0e0;">%</span>																																				
<b>Woody Vine Stratum</b>																																				
1. <i>Vitis girdiana</i>	2	Yes	FAC																																	
2.																																				
Total Cover: <span style="background-color: #e0e0e0;">2 %</span>																																				
% Bare Ground in Herb Stratum <span style="background-color: #e0e0e0;">%</span>		% Cover of Biotic Crust <span style="background-color: #e0e0e0;">%</span>																																		

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 5/1	100					Sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

Hydric Soil Present? Yes  No

Remarks: Sandbar recently deposited, problem soils sand bar

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

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

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: Anza Drain/Old Farm Road City/County: Riverside County Sampling Date: 8/2/2016  
 Applicant/Owner: San Bernardino Valley MWD State: CA Sampling Point: SP ADFR-33  
 Investigator(s): Team 2 Section, Township, Range: Undefined  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C - Mediterranean California Lat: 33°58'4.72"N Long: 117°25'41.86"W Datum: WGS-84  
 Soil Map Unit Name: Dello loamy sand NWI classification: Freshwater Forested/Shrub

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

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <i>Populus deltoides</i>	5	Yes	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #cccccc;">2</span> (A) Total Number of Dominant Species Across All Strata: <span style="background-color: #cccccc;">3</span> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <span style="background-color: #cccccc;">66.7 %</span> (A/B)																																
2.																																				
3.																																				
4.																																				
Total Cover:	5 %			<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center" style="background-color: #cccccc;"> </td> <td align="center">x 1 =</td> <td align="center" style="background-color: #cccccc;">0</td> </tr> <tr> <td>FACW species</td> <td align="center" style="background-color: #cccccc;"> </td> <td align="center">x 2 =</td> <td align="center" style="background-color: #cccccc;">0</td> </tr> <tr> <td>FAC species</td> <td align="center" style="background-color: #cccccc;">15</td> <td align="center">x 3 =</td> <td align="center" style="background-color: #cccccc;">45</td> </tr> <tr> <td>FACU species</td> <td align="center" style="background-color: #cccccc;"> </td> <td align="center">x 4 =</td> <td align="center" style="background-color: #cccccc;">0</td> </tr> <tr> <td>UPL species</td> <td align="center" style="background-color: #cccccc;">100</td> <td align="center">x 5 =</td> <td align="center" style="background-color: #cccccc;">500</td> </tr> <tr> <td>Column Totals:</td> <td align="center" style="background-color: #cccccc;">115</td> <td align="center">(A)</td> <td align="center" style="background-color: #cccccc;">545</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <span style="background-color: #cccccc;">4.74</span></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species		x 1 =	0	FACW species		x 2 =	0	FAC species	15	x 3 =	45	FACU species		x 4 =	0	UPL species	100	x 5 =	500	Column Totals:	115	(A)	545	Prevalence Index = B/A = <span style="background-color: #cccccc;">4.74</span>			
Total % Cover of:		Multiply by:																																		
OBL species		x 1 =	0																																	
FACW species		x 2 =	0																																	
FAC species	15	x 3 =	45																																	
FACU species		x 4 =	0																																	
UPL species	100	x 5 =	500																																	
Column Totals:	115	(A)	545																																	
Prevalence Index = B/A = <span style="background-color: #cccccc;">4.74</span>																																				
<u>Sapling/Shrub Stratum</u>																																				
1. <i>Baccharis salicifolia</i>	10	Yes	FAC																																	
2.																																				
3.																																				
4.																																				
5.																																				
Total Cover:	10 %																																			
<u>Herb Stratum</u>																																				
1. <i>Bromus Diandrus</i>	95	Yes	Not Listed	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.																																
2. <i>Heterotheca grandiflora</i>	5	No	Not Listed																																	
3.																																				
4.																																				
5.																																				
6.																																				
7.																																				
8.																																				
Total Cover:	100%																																			
<u>Woody Vine Stratum</u>																																				
1.																																				
2.																																				
Total Cover:																																				
% Bare Ground in Herb Stratum <u> </u> %	% Cover of Biotic Crust <u> </u> %																																			

Remarks:

**SOIL**

Sampling Point: SP ADFR

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 5/1	100					sand	

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

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

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

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

**Restrictive Layer (if present):**

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

**Hydric Soil Present?** Yes  No

Remarks: Outside of ordinary high, not deposited from stream

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (any one indicator is sufficient)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
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- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Thin Muck Surface (C7)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

**Wetland Hydrology Present?** Yes  No

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

Remarks: No indicators, upslope from ordinary high water mark