

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

Project/Site: Clinton Keith Ext City/County: Rw. Co. Sampling Date: 8/9/13  
 Applicant/Owner: RECTD State: CA Sampling Point: SP-10  
 Investigator(s): Zack West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): <1%  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Salix lasioides</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>47 = 86%</u> (A/B)	
2. <u>Tamarix ramosissima</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>		
3. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____	
4. _____					
<u>40</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Baccharis salicifolia</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Tamarix ramosissima</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
<u>25</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Juncus mexicanus</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2. <u>Polygonum monspeliensis</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>		
3. <u>Ambrosia psilostachy</u>	<u>10</u>	<u>N</u>	<u>FACU</u>		
4. <u>Hirschfeldia incana</u>	<u>40</u>	<u>Y</u>	<u>UPL</u>		
5. _____					
<u>100</u> = Total Cover					
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>					
Remarks: _____					

**SOIL**

Sampling Point: SP-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>		
0-24	10YR 8/2	100					Sndy /m	

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

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

**Restrictive Layer (if present):**

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks: *No hydric soil indicators present.*

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**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: Clinton Keith Ext City/County: Rio Co Sampling Date: 8/9/13  
 Applicant/Owner: RCTD State: CA Sampling Point: Sp-11  
 Investigator(s): Marisa Flores, Zack West Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): bank of channel Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Saxifraga lasiophylla</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</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>100%</u> (A/B)
4. _____				
<u>15</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Baccharis salicifolia</u>	<u>45</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. <u>Baccharis eriophylla</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
<u>60</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Juncus mexicanus</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Polygonum monspeliensis</u>	<u>75</u>	<u>N</u>	<u>FACW</u>	
3. <u>Conium maculatum</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
4. <u>Heliotropium curvatum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
5. <u>Arenaria californica</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	
6. _____				
7. _____				
8. _____				
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u> % Cover of Biotic Crust <u>0</u>		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____		
Remarks:				

**SOIL**

Sampling Point: SP-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>		
0-16	10Y R 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: Shovel refusal @ 16" due to large cobble

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Saturation Present? 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: Clinton Keith City/County: RIV.Co Sampling Date: 3-9-13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-12  
 Investigator(s): Zack West Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): terrace of main channel Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Salix goodingii</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	<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%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>55</u> = Total Cover				<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 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>																				
1. <u>Artemisia douglasiana</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>																	
2. <u>Baccharis salicifolia</u>	<u>45</u>	<u>Y</u>	<u>FAC</u>																	
3. <u>Conium maculatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>75</u> = Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Anemopsis californica</u>	<u>45</u>	<u>Y</u>	<u>OBL</u>																	
2. <u>Conium maculatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>50</u> = Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
<u>0</u> = Total Cover																				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>																		
Remarks: <u>50% leaf litter</u>																				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____																				

**SOIL**

Sampling Point: SP-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>		
0-2	2.5Y 3/2	100					Inv sand	
3-12	2.5Y 3/2	93	5YR 3/4	7	C	M	sandy lo	
12-14	2.5Y 3/2	100					sl	

<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 (minimum of one required; check all that apply)

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Clinton Keith Ext City/County: Rio, Co Sampling Date: 8/9/20  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-13  
 Investigator(s): Zack West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): bank of main channel Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					
1.					
2.					
3.					
4.					
_____ = Total Cover					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )					
1.		<u>60</u>	<u>Y</u>	<u>FAC</u>	
2.		<u>30</u>	<u>Y</u>	<u>FACW</u>	
3.					
4.					
5.					
_____ = Total Cover					
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1.		<u>5</u>	<u>N</u>	<u>FACW</u>	
2.		<u>15</u>	<u>Y</u>	<u>FACW</u>	
3.		<u>3</u>	<u>N</u>	<u>FACW</u>	
4.		<u>5</u>	<u>N</u>	<u>UPL</u>	
5.					
6.					
7.					
8.					
_____ = Total Cover					
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )					
1.					
2.					
_____ = Total Cover					
<b>% Bare Ground in Herb Stratum</b> <u>72</u> % Cover of Biotic Crust <u>0</u>					

**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% (A/B)

**Prevalence Index worksheet:**

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

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

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

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

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

**SOIL**

Sampling Point: SP-13

**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	2.5 Y 3/2	100					sandy clay lm	
14-24	2.5 Y 3/2	100					sandy lm	

<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 present*

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

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

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

Remarks:



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

Project/Site: Clinton Keith Ext City/County: RIV. Co Sampling Date: 3/9/13  
 Applicant/Owner: ACTD State: CA Sampling Point: SP-14  
 Investigator(s): Zack West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): edge of channel Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					
1.	<u>Salix goodingii</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	
2.					
3.					
4.					
<u>55</u> = Total Cover					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )					
1.	<u>Ambrosia psilostachya</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	
2.	<u>Baccharis salicifolia</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
3.					
4.					
5.					
<u>70</u> = Total Cover					
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1.	<u>Bromus madritensis</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
2.					
3.					
4.					
5.					
6.					
7.					
8.					
<u>20</u> = Total Cover					
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )					
1.					
2.					
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum <u>80</u>		% Cover of Biotic Crust <u>0</u>			

**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 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>55</u>	x 2 = <u>110</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>40</u>	x 4 = <u>160</u>
UPL species <u>20</u>	x 5 = <u>100</u>
Column Totals: <u>145</u> (A)	<u>460</u> (B)

Prevalence Index = B/A = 3.17

**Hydrophytic Vegetation Indicators:**

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

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

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

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

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

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

Remarks: Herb mostly leaf litter & B.G.

**SOIL**

Sampling Point: SP-14

**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 3/2	100					lmy 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.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

**Restrictive Layer (if present):**  
 Type: large cobbles  
 Depth (inches): 14

Hydric Soil Present? Yes  No

Remarks: shovel refusal @ 14" due to large cobbles. No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

Remarks:

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

Project/Site: Clinton Keith Ext City/County: Riv Co Sampling Date: 3/9/13  
 Applicant/Owner: RCTD State: CA Sampling Point: Sp-15  
 Investigator(s): Zack West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Stream bank Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix goodingii</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50</u> (A/B)
4. _____	_____	_____	_____	
<u>70</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Ambrosia pilostachya</u>	<u>75</u>	<u>Y</u>	<u>FACW</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Baccharis salicifolia</u>	<u>15</u>	<u>N</u>	<u>FAC</u>	OBL species <u>0</u> x 1 = <u>0</u>
3. <u>Baccharis emoryii</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	FACW species <u>80</u> x 2 = <u>160</u>
4. _____	_____	_____	_____	FAC species <u>15</u> x 3 = <u>45</u>
5. _____	_____	_____	_____	FACU species <u>75</u> x 4 = <u>500</u>
<u>100</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: <u>170</u> (A) <u>705</u> (B)
				Prevalence Index = B/A = <u>4.14</u>
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	___ Dominance Test is >50%
2. _____	_____	_____	_____	___ Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust _____				
				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>

Remarks: Bare ground has a lot of leaf litter

**SOIL**

Sampling Point: SP-15

**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>		
0-22	2.5 Y 3/2	100					Sndy lm	

<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 present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

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

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

Remarks:

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

Project/Site: Clinton Keith Ext. City/County: Riv. Co Sampling Date: 8/9/13  
 Applicant/Owner: ROAD State: CA Sampling Point: SP-16  
 Investigator(s): Zack West Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): low flow Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u> )				Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
1. <u>Salix goodingii</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
3. _____				
4. _____				
	<u>55</u> = Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>10'</u> )				<b>Prevalence Index worksheet:</b>
1. <u>Cornium maculatum</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Baccharis salicifolia</u>	<u>35</u>	<u>Y</u>	<u>FAC</u>	OBL species _____ x 1 = _____
3. <u>Artemisia douglasiana</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
	<u>75</u> = Total Cover			UPL species _____ x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u> )				Column Totals: _____ (A) _____ (B)
1. <u>Anemopsis californica</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index = B/A = _____
2. <u>Heliotropium curvirostrum</u>	<u>15</u>	<u>N</u>	<u>FACU</u>	
3. <u>Bromus narditensis</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	
4. <u>Eleocharis palustris</u>	<u>15</u>	<u>N</u>	<u>OBL</u>	
5. <u>Cornium maculatum</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	
6. _____				
7. _____				
8. _____				
	<u>97</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u> )				
1. _____				
2. _____				
	<u>0</u> = Total Cover			
% Bare Ground in Herb Stratum <u>3</u>	% Cover of Biotic Crust <u>0</u>			<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____

Remarks:

**SOIL**

Sampling Point: SP-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>		
0-8	10YR 3/3	90	5YR 3/4	10	U	PL/M	Sndy cly 1m	
8-16	10YR 3/2	100		8			cly 1m	

<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 checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

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

<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>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:**

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

**Field Observations:**

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

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

Remarks:

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

Project/Site: Clinton Keith Extension City/County: Riverside Co Sampling Date: 8/20/2017  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-17  
 Investigator(s): Zack West Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): top of bank Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					
1.	<u>Sambucus nigra</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	<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>73 = 67%</u> (A/B)
2.					
3.					
4.					
<u>20</u> = Total Cover					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )					
1.	<u>Conium maculatum</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2.					
3.					
4.					
5.					
<u>15</u> = Total Cover					
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1.	<u>Elymus glaucus</u>	<u>35</u>	<u>Y</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0' <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Heliotropium curvassidum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
3.	<u>Atriplex watsonii?</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
4.					
5.					
6.					
7.					
8.					
<u>100</u> = Total Cover					
<b>Woody Vine Stratum</b> (Plot size: _____)					
1.					<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2.					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>			

Remarks: sample taken

**SOIL**

Sampling Point: SP-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>		
0-24	10YR 3/2	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.

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

**Restrictive Layer (if present):**

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks: No hydric soil indicators present.

**HYDROLOGY**

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

**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: Clinton Keith Ext City/County: Rio Co Sampling Date: 3/20/13  
 Applicant/Owner: RCTD State: CA Sampling Point: P-18  
 Investigator(s): Zack West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): convex Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u> )				Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A)
1. <u><i>Salix lasiolepis</i></u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
3. _____				
4. _____				
	<u>30</u> = Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>10'</u> )				<b>Prevalence Index worksheet:</b>
1. <u><i>Baccharis salicifolia</i></u>	<u>35</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of: _____ Multiply by: _____
2. <u><i>Conium maculatum</i></u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	OBL species _____ x 1 = _____
3. <u><i>Artemisia douglasiana</i></u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
	<u>75</u> = Total Cover			UPL species _____ x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u> )				Column Totals: _____ (A) _____ (B)
1. <u><i>Heliotropium curvissicum</i></u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index = B/A = _____
2. <u><i>Conium maculatum</i></u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	
3. <u><i>Anemopsis californica</i></u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>80</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____				
2. _____				
	_____ = Total Cover			
% Bare Ground in Herb Stratum <u>20</u>	% Cover of Biotic Crust <u>0</u>			

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

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

**SOIL**

Sampling Point: SP-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>		
0-24	7.5YR3/2	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<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 present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

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

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

Remarks:

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

Project/Site: Clinton Keith Ext City/County: Murrieta/Riv. Co. Sampling Date: 3/20/13  
 Applicant/Owner: RCD State: CA Sampling Point: SP19  
 Investigator(s): Zachary West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum (Plot size)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
1. <u>Salix lasiolepis</u>	<u>45</u>	<u>Y</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
2. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>45</u> = Total Cover			
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )				<b>Prevalence Index worksheet:</b>
1. <u>Ceanothus maculatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Baccharis salicifolia</u>	<u>35</u>	<u>Y</u>	<u>FAC</u>	OBL species <u>5</u> x 1 = <u>5</u>
3. <u>Urtica dioica</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	FACW species <u>50</u> x 2 = <u>100</u>
4. <u>Artemisia douglasiana</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	FAC species <u>45</u> x 3 = <u>135</u>
5. _____	_____	_____	_____	FACU species <u>90</u> x 4 = <u>360</u>
	<u>65</u> = Total Cover			UPL species <u>0</u> x 5 = <u>0</u>
<b>Herb Stratum</b> (Plot size: <u>5'</u> )				Column Totals: <u>190</u> (A) <u>600</u> (B)
1. <u>Elymus glaucus</u>	<u>7.5</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index = B/A = <u>3.15</u>
2. <u>Anemopsis californica</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>80</u> = Total Cover			
<b>Woody Vine Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
	_____ = Total Cover			<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)
% Bare Ground in Herb Stratum <u>20</u>	% Cover of Biotic Crust <u>8</u>			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____ _____ _____				

**SOIL**

Sampling Point: SP-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>		
0-14	10YR 3/2	100					sandy lm	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Other (Explain in Remarks)
<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 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)	

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

**Restrictive Layer (if present):**  
 Type: Roots  
 Depth (inches): 14

**Hydric Soil Present?** Yes  No

Remarks: shovel refusal @ 14" due to large willow roots. No hydric soil indicators present.

**HYDROLOGY**

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

**Field Observations:**

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

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: Clinton Keith Ext City/County: Riv. Co Sampling Date: 8/20/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP20  
 Investigator(s): Zackery West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): none Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: <u>30'</u> )				<b>Dominance Test worksheet:</b>
1. <u>Salix laevigata</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____				
				<b>Prevalence Index worksheet:</b>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>10'</u> )				Total % Cover of: _____ Multiply by: _____
1. <u>Salix lasiolepis</u>	<u>7</u>	<u>N</u>	<u>FACW</u>	OBL species <u>0</u> x 1 = <u>0</u>
2. <u>Ambrosia psilostachya</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	FACW species <u>42</u> x 2 = <u>124</u>
3. <u>Urtica dioica</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	FAC species <u>0</u> x 3 = <u>0</u>
4. <u>Toxicodendron diversilobum</u>	<u>10</u>	<u>N</u>	<u>UPL</u>	FACU species <u>30</u> x 4 = <u>120</u>
5. _____				UPL species <u>10</u> x 5 = <u>50</u>
	<u>67</u>			Column Totals: <u>102</u> (A) <u>294</u> (B)
<u>Herb Stratum</u> (Plot size: <u>5'</u> )				Prevalence Index = B/A = <u>2.93</u>
1. <u>Heliotropium curvassicum</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>
2. _____				<input checked="" type="checkbox"/> Dominance Test is >50%
3. _____				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
4. _____				____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____				____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. _____				
7. _____				
8. _____				
<u>Woody Vine Stratum</u> (Plot size: _____)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2. _____				
% Bare Ground in Herb Stratum <u>95</u>		% Cover of Biotic Crust <u>0</u>		

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

**SOIL**

Sampling Point: SP-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	10YR 3/2	100	<del>_____</del>				lmy 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: rocks  
 Depth (inches): 16

Hydric Soil Present? Yes  No

Remarks: Shovel refusal @ 16" due to willow roots. No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

**Secondary Indicators (2 or more required)**

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Clinton Keith Ext. City/County: RIV. Co. Sampling Date: 02/20/13  
 Applicant/Owner: RCD State: CA Sampling Point: SP-21  
 Investigator(s): Zackry West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): streambank Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u> )				Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)	
1. <u>Salix laevigata</u>	<u>45</u>	<u>Y</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
3. _____				<b>Prevalence Index worksheet:</b>	
4. _____					Total % Cover of: _____ Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>10'</u> )	<u>45</u> = Total Cover			OBL species _____ x 1 = _____	
1. <u>Ambrosia psilostachya</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	FACW species _____ x 2 = _____	
2. <u>Stachys adingoides.</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	FAC species _____ x 3 = _____	
3. <u>Baccharis salicina</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	FACU species _____ x 4 = _____	
4. <u>Baccharis salicifolia</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	UPL species _____ x 5 = _____	
5. _____				Column Totals: _____ (A) _____ (B)	
<u>Herb Stratum</u> (Plot size: <u>5'</u> )	<u>100</u> = Total Cover			Prevalence Index = B/A = _____	
1. _____				<b>Hydrophytic Vegetation Indicators:</b>	
2. _____					<input checked="" type="checkbox"/> Dominance Test is >50%
3. _____					<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
4. _____					<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____					<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. _____					<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____					
8. _____					
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> )	<u>0</u> = Total Cover				
1. _____					
2. _____					
	<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust _____					

Remarks: 100% Bare ground + leaf litter in herb layer.

**SOIL**

Sampling Point: SP-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>		
0-11	10YR 3/2	100					sandy clay lm	
11-24	10YR 3/2	100					sandy lm	

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input 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>:**

<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:**

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

**Field Observations:**

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

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

Remarks:



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

Project/Site: Clinton Keith Ext. City/County: R.V. Co Sampling Date: 8/20/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-22  
 Investigator(s): Zachary West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): stream bank Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>/</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Ambrosia psilostachya</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Conium maculatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
3. <u>Salix laevigata</u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	
4. _____				
5. _____				
<u>90</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Elymus glaucus</u>	<u>80</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Polygonum monspeliensis</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>90</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>/</u>				
2. <u>/</u>				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust <u>0</u>				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>50</u>	x 2 = <u>100</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>120</u>	x 4 = <u>480</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>170</u> (A)	<u>580</u> (B)

Prevalence Index = B/A = 3.41

**Hydrophytic Vegetation Indicators:**

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

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

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

Remarks: 10% BG + leaf litter

**SOIL**

Sampling Point: SP-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>		
0-24	10YR 3/2	100					sandy lm	

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

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

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:  
No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

Remarks:

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

Project/Site: Clinton Keith Ext. City/County: RIV. CO Sampling Date: 8/20/13  
 Applicant/Owner: RCD State: CA Sampling Point: SP-23  
 Investigator(s): Zachary West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): stream bed Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Dug a test pit downstream + soil color + veg approx the same.</u>	

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Salix laevigata</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	<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</u> (A/B)	
2. _____					
3. _____					
4. _____					
_____					
= Total Cover					
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Sarcobatus vermiculatus</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____	
2. <u>Artemisia douglasiana</u>	<u>35</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Urtica dioica</u>	<u>15</u>	<u>N</u>	<u>FACW</u>		
4. <u>Conium maculatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>		
5. _____					
= Total Cover					
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Arischfeldia incana</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2. <u>Heliotropium curvassicum</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>		
3. <u>Phacelia cicutaria</u>	<u>8</u>	<u>Y</u>	<u>UPL</u>		
4. _____					
5. _____					
= Total Cover					
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____					
_____					
= Total Cover					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>88</u> % Cover of Biotic Crust <u>0</u>					
Remarks: _____					

**SOIL**

Sampling Point: SP-23

**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>		
0-24	2.5Y 3/3	100					lmy 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"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

**Restrictive Layer (if present):**

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks: large > 2" diameter cobbles @ 20", No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

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: Clinton Keith East City/County: Pin. Co Sampling Date: 3/20/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-24  
 Investigator(s): Zachary West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): culvert outlet Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u> )				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
1. <u>Sambucus nigra</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
3. _____				
4. _____				
<u>15</u> = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>10'</u> )				<b>Prevalence Index worksheet:</b>
1. <u>Stephanomeria</u>	<u>1</u>	<u>N</u>	<u>UPL</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Erigeron canadensis</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	OBL species <u>0</u> x 1 = _____
3. <u>Urtica dioica</u>	<u>2</u>	<u>N</u>	<u>FACW</u>	FACW species <u>37</u> x 2 = <u>74</u>
4. <u>Amaranthus albus</u>	<u>3</u>	<u>N</u>	<u>FACU</u>	FAC species <u>17</u> x 3 = <u>51</u>
5. <u>Hirschfeldia incana</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	FACU species <u>57</u> x 4 = <u>228</u>
6. <u>Sonchus asper</u>	<u>2</u>		<u>FAC</u>	UPL species <u>56</u> x 5 = <u>280</u>
<u>2</u> = Total Cover				Column Totals: <u>167</u> (A) <u>633</u> (B)
<u>Herb Stratum</u> (Plot size: <u>10'</u> )				Prevalence Index = B/A = <u>3.79</u>
1. <u>Baccharis emeryi</u>	<u>15</u>	<u>N</u>	<u>FACW</u>	
<u>15</u> = Total Cover				
2. _____				
<u>33</u> = Total Cover				
3. _____				
4. _____				
5. <u>Herb Stratum</u> (Plot size: <u>5'</u> )				<b>Hydrophytic Vegetation Indicators:</b>
6. <u>Heliotropium curvissicum</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	<input type="checkbox"/> Dominance Test is >50%
7. <u>Polypogon monspeliensis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
8. <u>Bromus madritensis</u>	<u>30</u>	<u>Y</u>	<u>UPL</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
<u>65</u> = Total Cover				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u> )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>35</u>		% Cover of Biotic Crust <u>0</u>		Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>

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

**SOIL**

Sampling Point: SP-24

**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	2.5 Y 3/3	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<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: rip rap  
 Depth (inches): 6"

Hydric Soil Present? Yes  No

Remarks: Shovel refusal @ 6" due to presumed presence of rip-rap. No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Clinton Keith Ext. City/County: Murietta/Riv. Co. Sampling Date: 8/20/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-25  
 Investigator(s): Z West, M Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix laevigata</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
<u>20</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Baccharis emarginata</u>	<u>30</u>	<u>X</u>	<u>FACW</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Urtica dioica</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	OBL species _____ x 1 = _____
3. <u>Adenostoma fasciculatum</u>	<u>7</u>	<u>N</u>	<u>UPL</u>	FACW species _____ x 2 = _____
4. <u>Hirschteldia incana</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
<u>44</u> = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Polygonum monspeliensis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	____ Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>20</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____

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

**SOIL**

Sampling Point: SP-26

**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>		
0-22	7.5 YR	2.5/2	100				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.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<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 Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

**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: Clinton Keith Road Ext. City/County: Murrieta, Riverside Sampling Date: 9/9/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-26  
 Investigator(s): Z. WEST, M. FLORES Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood plain Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u>	<u>30'</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
1. _____					Total Number of Dominant Species Across All Strata: <u>4</u> (B)
2. _____					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25</u> (A/B)
3. _____					
4. _____					
_____ = Total Cover					
<u>Sapling/Shrub Stratum</u>	<u>10'</u>				
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
_____ = Total Cover					
<u>Herb Stratum</u>	<u>5'</u>				
1. <u>Helianthus annuus</u>		<u>25</u>	<u>Y</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>15</u> x 2 = <u>30</u> FAC species _____ x 3 = _____ FACU species <u>45</u> x 4 = <u>180</u> UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>75</u> (A) <u>285</u> (B) Prevalence Index = B/A = <u>285/75 = 3.8</u>
2. <u>Eriogonum canadensis</u>		<u>20</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Bromus madritensis</u>		<u>15</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Polygonum manspeltensis</u>		<u>15</u>	<u>Y</u>	<u>FACW</u>	
5. _____					
6. _____					
7. _____					
8. _____					
<u>75</u> = Total Cover					
<u>Woody Vine Stratum</u>	<u>30'</u>				
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>25</u> % Cover of Biotic Crust <u>0</u>					<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0' ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
					<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
					<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>

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

**SOIL**

Sampling Point: SP-26

**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	7.5 YR 2.5/1	100		Ø			Sandy clay	

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

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

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

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

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

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

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

**Restrictive Layer (if present):**

Type: Clay hardpan  
Depth (inches): 4

Hydric Soil Present? Yes  No

Remarks:

No hydric soil indicators observed

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Secondary Indicators (2 or more required)**

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

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

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 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: Clinton Keith Extension City/County: Riv. Co. Sampling Date: 9/9/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-27  
 Investigator(s): Zachary West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): foodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: -

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> <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 <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>8</u></td> <td>x 2 = <u>16</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>120</u></td> <td>x 4 = <u>480</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>148</u> (A)</td> <td><u>586</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>586/148 = 3.96</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>8</u>	x 2 = <u>16</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>120</u>	x 4 = <u>480</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>148</u> (A)	<u>586</u> (B)	Prevalence Index = B/A = <u>586/148 = 3.96</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>8</u>	x 2 = <u>16</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>120</u>	x 4 = <u>480</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>148</u> (A)	<u>586</u> (B)																			
Prevalence Index = B/A = <u>586/148 = 3.96</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>																				
1. <u>Ambrosia psilostachya</u>	<u>35</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Rumex crispus</u>	<u>7</u>	<u>N</u>	<u>FAC</u>																	
3. <u>Urtica dioica</u>	<u>8</u>	<u>N</u>	<u>FACW</u>																	
4. <u>Brassica nigra</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>																	
5. <u>Erigeron canadensis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
6. <u>Ptilicharia pallidostylis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
_____ = Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Malvella leprosa</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Phalaris canariensis</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
_____ = Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>20</u> % Cover of Biotic Crust _____																				
Remarks: <u>evaporative salt, not biotic crust present</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, unless disturbed or problematic.

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

**SOIL**

Sampling Point: SP 27

**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 2/2	100	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	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: clay hardpan  
 Depth (inches): 15

Hydric Soil Present? Yes  No

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<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 Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

**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: evaporative salt on top of soil.

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

Project/Site: Clinton Keith extension City/County: Rio Co Sampling Date: 9/9/13  
 Applicant/Owner: ECTD State: CA Sampling Point: SP-28  
 Investigator(s): ZW, MF Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <del>_____</del>				
2. <del>_____</del>				
3. <del>_____</del>				
4. <del>_____</del>				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Erigeron canadensis</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Helianthus annuus</u>	<u>4</u>	<u>N</u>	<u>FACU</u>	
3. <u>Cirsium vulgare</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
4. <u>Ambrosia psilostachya</u>	<u>35</u>	<u>Y</u>	<u>FACU</u>	
5. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
<u>Urtica dioica</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Muhlenbergia leprosa</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <del>_____</del>				
2. <del>_____</del>				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>85</u>		% Cover of Biotic Crust <u>0</u>		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)  
 Total Number of Dominant Species Across All Strata: 4 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species <u>5</u>	x 3 = <u>15</u>
FACU species <u>99</u>	x 4 = <u>396</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>109</u> (A)	<u>421</u> (B)

Prevalence Index = B/A =  $\frac{421}{109} = 3.86$

**Hydrophytic Vegetation Indicators:**

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

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

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

Remarks:

**SOIL**

Sampling Point: SP-02

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>		
0-24	10YR 2/2	8B	N.B.S/N	12	?	M/P	loamy clay	soil mineral in 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.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Other (Explain in Remarks)
<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 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)	

<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 (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<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 Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

**Field Observations:**

Surface Water Present?    Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present?    Yes <input checked="" type="checkbox"/> No _____
Water Table Present?      Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present?      Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

(includes capillary fringe)

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

Remarks: no salt crust present on surface

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

Project/Site: Clinton Keith Extension City/County: Riv. Co Sampling Date: 9/9/13  
 Applicant/Owner: RCO State: CA Sampling Point: SP-29  
 Investigator(s): ZW MF Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 21  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<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</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
0 = Total Cover				<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 = _____</td> </tr> <tr> <td>FACW species <u>17</u></td> <td>x 2 = <u>34</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>32</u></td> <td>x 4 = <u>128</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>54</u> (A)</td> <td><u>177</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.27</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species <u>17</u>	x 2 = <u>34</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>32</u>	x 4 = <u>128</u>	UPL species _____	x 5 = _____	Column Totals: <u>54</u> (A)	<u>177</u> (B)	Prevalence Index = B/A = <u>3.27</u>	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species <u>17</u>	x 2 = <u>34</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>32</u>	x 4 = <u>128</u>																			
UPL species _____	x 5 = _____																			
Column Totals: <u>54</u> (A)	<u>177</u> (B)																			
Prevalence Index = B/A = <u>3.27</u>																				
24 = Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>																				
1. <u>Ambrosia psilostachya</u>	<u>12</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>																	
3. <u>Cirsium vulgare</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
4. <u>Urtica dioica</u>	<u>2</u>	<u>N</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
30 = Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Muhlenbergia leprosa</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Frankenia salina</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
30 = Total Cover																				
<b>Woody Vine Stratum (Plot size: _____)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>70</u>		% Cover of Biotic Crust <u>0</u>																		
Remarks: <u>Area has been burned, some vegetation is starting to grow back</u>																				

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

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

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

**SOIL**

Sampling Point: SP 29

**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	10Y R 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.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Vernal Pools (F9)	

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

**Restrictive Layer (if present):**  
 Type: clay hardpan  
 Depth (inches): 18

Hydric Soil Present? Yes  No

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches):     

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 9/10/13  
 Applicant/Owner: RCD State: CA Sampling Point: SP-30  
 Investigator(s): Zakry West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): depressional floodplain Local relief (concave, convex, none): CONCAVE Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u>	<u>30'</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
1. _____					Total Number of Dominant Species Across All Strata: <u>4</u> (B)
2. _____					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75</u> (A/B)
3. _____					
4. _____					
<u>0</u> = Total Cover					
<u>Sapling/Shrub Stratum</u>	<u>10'</u>				
1. <u>Helianthus annuus</u>		<u>30</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Xanthium strumarium</u>		<u>8</u>	<u>Y</u>	<u>FAC</u>	
3. _____					
4. _____					
5. _____					
<u>38</u> = Total Cover					
<u>Herb Stratum</u>	<u>5'</u>				
1. <u>Malvella leprosa</u>		<u>30</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Polygonum monspeliensis</u>		<u>55</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Arenaria californica</u>		<u>2</u>	<u>N</u>	<u>OBL</u>	
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
<u>87</u> = Total Cover					
<u>Woody Vine Stratum</u>	<u>30'</u>				
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>10</u>		% Cover of Biotic Crust <u>3</u>			

**Prevalence Index worksheet:**

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

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

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

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

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

**SOIL**

Sampling Point: SP-30

**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	2.5Y 2.5/1	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.)**

<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Vernal Pools (F9)	

<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 X

Remarks:  
No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

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

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

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

Remarks:

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

Project/Site: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 9/10/13  
 Applicant/Owner: ROTD State: CA Sampling Point: SP-31  
 Investigator(s): Z. WEST, M. FLORES Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): CONCAVE Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Tamarix ramosissima</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<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</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Tamarix ramosissima</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Xanthium strumarium</u>	<u>2</u>	<u>N</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>27</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Heliotropium curvassium</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Tamarix ramosissima</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Typha domingensis</u>	<u>30</u>	<u>Y</u>	<u>DBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>51</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>49</u> % Cover of Biotic Crust <u>0</u>				
Remarks:				

**SOIL**

Sampling Point: SP-31

**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	5Y 3/2	85	5YR 5/8	15				
1-13	2.5Y 3/2	100					coarse sand	
13-15	Gley 2 <sup>2.5/5PB</sup>	90	2.5Y 4/4	10				

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

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

- 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: Soils in area mapped as Saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

**Secondary Indicators (2 or more required)**

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: Clinton Keith Extension City/County: Riv, Co Sampling Date: 9/10/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-32  
 Investigator(s): Zack West, Marisa Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): bank of channel Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Bank of French Valley Creek</u>	

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
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>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Tamarix ramosissima</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Helianthus annuus</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	OBL species _____ x 1 = _____
3. <u>Ambrosia psilostachya</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	FACW species _____ x 2 = _____
4. <u>Erigeron canadensis</u>	<u>2</u>	<u>N</u>	<u>FACU</u>	FAC species _____ x 3 = _____
5. <u>Urtica dioica</u>	<u>2</u>	<u>N</u>	<u>FACW</u>	FACU species _____ x 4 = _____
<u>64</u> = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Typha domingensis</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	<input checked="" type="checkbox"/> Dominance Test is >50%
2. <u>Polygonum monspeliensis</u>	<u>12</u>	<u>N</u>	<u>FAC</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Heliotropium curvissicum</u>	<u>8</u>	<u>N</u>	<u>FACU</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. _____	_____	_____	_____	
<u>40</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>60</u>		% Cover of Biotic Crust <u>0</u>		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Remarks: _____				

**SOIL**

Sampling Point: SP-32

**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>		
0-24	2.5 Y 3/2	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 X

Remarks:  
No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

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

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

Remarks:

### WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Clinton Keith Extension City/County: Bl. Co Sampling Date: 9/10/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-33  
 Investigator(s): Zack west, Marisa Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): top of slope Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30' ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10ft</u> )				
1. <u>Arschfeldia incana</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Nicotiana glauca</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Ambrosia psilostachya</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
4. <u>Chenopodium album</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
5. <u>Helianthus annuus</u>	<u>8</u>	<u>N</u>	<u>FACU</u>	
<u>68</u> = Total Cover				
Herb Stratum (Plot size: <u>5ft</u> )				
1. <u>Frankenia salina</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Distichlis spicata</u>	<u>20</u>	<u>N</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>80</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>3DF'</u> )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>20</u>		% Cover of Biotic Crust <u>0</u>		

**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 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:		Multiply by:	
OBL species <u>0</u>	x 1 =	<u>0</u>	
FACW species <u>60</u>	x 2 =	<u>120</u>	
FAC species <u>45</u>	x 3 =	<u>135</u>	
FACU species <u>23</u>	x 4 =	<u>92</u>	
UPL species <u>15</u>	x 5 =	<u>75</u>	
Column Totals: <u>143</u>	(A)	<u>422</u>	(B)

Prevalence Index = B/A = 2.95

**Hydrophytic Vegetation Indicators:**

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

Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

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

Remarks:

**SOIL**

Sampling Point: SP-33

**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>		
0-34	10YR 2/2	100					clay loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Other (Explain in Remarks)
<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 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)	

<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 X

Remarks: No hydric soil indicators observed

**HYDROLOGY**

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

**Field Observations:**

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

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

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

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

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

Remarks:



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

Project/Site: Clinton Keith Ext. City/County: Murieta/Riv. Co. Sampling Date: 10/11/13  
 Applicant/Owner: ACTD State: CA Sampling Point: SP-34  
 Investigator(s): Z West, M Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Stream bank Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					
1.	<u>Salix lasiolepis</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	<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%</u> (A/B)
2.					
3.					
4.					
= Total Cover					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )					
1.	<u>Tamarix ramosissima</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2.	<u>Urtica dioica</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
3.					
4.					
5.					
= Total Cover					
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1.	<u>Typha domingensis</u>	<u>80</u>	<u>Y</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2.	<u>Asteropsis solitarius</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
3.	<u>Frankenia salina</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
4.					
5.					
6.					
7.					
8.					
= Total Cover					
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )					
1.					<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
2.					
= Total Cover					
% Bare Ground in Herb Stratum <u>10</u>		% Cover of Biotic Crust <u>0</u>			
Remarks: _____ _____ _____					

**SOIL**

Sampling Point: SP-34

**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	2.5 Y 3/2	93	5YR 4/6	7	C	M	sandy loam	
6-9	2.5 Y 3/2	73	5YR 4/6	7	C	M	sandy clay loam	20% gravel
9-16	2.5 Y 3/2	93	5YR 4/6	7	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:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

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

Wetland Hydrology Present? Yes  No

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

Remarks:

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

Project/Site: C. J. Keith Ext City/County: Murrieta/Riv. Co Sampling Date: 10/11/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-35  
 Investigator(s): Z West, M Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave Slope (%): 4  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<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</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
= Total Cover				<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 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )																				
1. <u>Tamarix canariensis</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>																	
2. <u>Urtica dioica</u>	<u>6</u>	<u>N</u>	<u>FAC</u>																	
3. <u>Melilotus indicus</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
4. <u>Helianthus annuus</u>	<u>2</u>	<u>N</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
<u>32</u> = Total Cover																				
<b>Herb Stratum</b> (Plot size: <u>5'</u> )																				
1. <u>Epilobium ciliatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>																	
2. <u>Anemopsis californicus</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>																	
3. <u>Polygonum monspeliensis</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>																	
4. <u>Frankenia salina</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>																	
5. <u>Elymus trichoides</u>	<u>15</u>	<u>N</u>	<u>UPL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>95</u> = Total Cover																				
<b>Woody Vine Stratum</b> (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>5</u>	% Cover of Biotic Crust <u>0</u>																			
<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____																				
Remarks: <u>5% duff on bare ground in herb stratum.</u>																				

**SOIL**

Sampling Point: SP-35

**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	10YR2/2	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.

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

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

**Restrictive Layer (if present):**

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

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

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 10/11/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-36  
 Investigator(s): Z. West, M. Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain depression Local relief (concave, convex, none): concave Slope (%): 21  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Tamarix ramosissima</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	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>3/5 = 60%</u> (A/B)
4. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<u>15</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>				
1. <u>Urtica dioica</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Helianthus annuus</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Ambrosia psilostachya</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
4. <u>Cirsium vulgare</u>	<u>2</u>	<u>N</u>	<u>FACU</u>	
5. <u>Hirschfeldia incana</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	
<u>54</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Frankenia salina</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Malvella leprosa</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Polypogon monspeliensis</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
4. <u>Apium</u>	<u>5</u>	<u>N</u>	<u>NI</u>	
5. <u>Helianthus annuus curvassium</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
<u>71</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>29</u> % Cover of Biotic Crust <u>1</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____		

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

**SOIL**

Sampling Point: SP-36

**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>		
0-24	10YR 3/2						loam	7% salt concentrations

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Other (Explain in Remarks)
<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 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)	

<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 in area mapped as saline-alkaline (China silt. Loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per Section 5 of the Arid West Supplement.

**HYDROLOGY**

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

**Field Observations:**

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

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: Substantial salt crust observed during follow-up field visit on 1/15/14.

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

Project/Site: Clinton Keith Extension City/County: Murietta / Riv. Co. Sampling Date: 10/21/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-37  
 Investigator(s): Z West, M Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flood plain Local relief (concave, convex, none): Concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____				<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</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
_____ = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td><b>Column Totals:</b> <u>130</u> (A)</td> <td><u>410</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.15</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>20</u>	x 5 = <u>100</u>	<b>Column Totals:</b> <u>130</u> (A)	<u>410</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
<b>Column Totals:</b> <u>130</u> (A)	<u>410</u> (B)																	
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>																		
1. <u>Brassica nigra</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>															
2. <u>Melilotus indicus</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>															
3. <u>Sanctus olivaceus</u>	<u>10</u>	<u>N</u>	<u>UPL</u>															
4. <u>Rumex crispus</u>	<u>10</u>	<u>N</u>	<u>FAC</u>															
5. <u>Helianthus annuus</u>	<u>5</u>	<u>N</u>	<u>FACU</u>															
<u>65</u> = Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																		
1. <u>Polypogon monspeliensis</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>															
2. <u>Matricaria leprosa</u>	<u>15</u>	<u>N</u>	<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>75</u> = Total Cover																		
<b>Woody Vine Stratum (Plot size: _____)</b>																		
1. _____																		
2. _____																		
_____ = Total Cover																		
% Bare Ground in Herb Stratum <u>25</u>		% Cover of Biotic Crust _____																
<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																		
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																		
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>																		
Remarks: <u>15% bare ground with buff in herb stratum.</u>																		

**SOIL**

Sampling Point: SP-37

**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 2/1	97						3% silt concentration

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

**Restrictive Layer (if present):**

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

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: Clinton Keith Road Extension City/County: Murrieta, Riverside Sampling Date: 9/9/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-38  
 Investigator(s): Z West, M Flores Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Pluchea odorata</u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Polygonum aviculare</u>	<u>4</u>	<u>N</u>	<u>FACW</u>	
3. <u>Taraxacum officinale</u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>4</u>		% Cover of Biotic Crust <u>60</u>		
Remarks: _____				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

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

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

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

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

**SOIL**

Sampling Point: SP-38

**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	7.5YR 2.5/3	100		Ø			loamy gravelly 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: Filter cloth  
Depth (inches): 8

Hydric Soil Present? Yes  No

Remarks: No hydric soil indicators observed.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

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

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

Secondary Indicators (2 or more required)

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? 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: Clinton Keith Extension City/County: Murrieta Riverside Sampling Date: 1/9/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-39  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Creek bottom Local relief (concave, convex, none): concave Slope (%): 4  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	<u>75</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50%</u> (A/B)
4. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>10'</u> ) <u>75</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>75</u> x 2 = <u>150</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>90</u> (A) <u>225</u> (B) Prevalence Index = B/A = <u>225/90 = 2.5</u>
Herb Stratum (Plot size: <u>5'</u> ) _____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% <input checked="" type="checkbox"/> 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)
Woody Vine Stratum (Plot size: <u>30'</u> ) <u>15</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum <u>85</u> % Cover of Biotic Crust <u>0</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____

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

**SOIL**

Sampling Point: SP-39

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>		
28	10YR	3/3	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.

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

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	Hydric Soil Present?    Yes _____    No <input checked="" type="checkbox"/>
--	---

Remarks:  
No hydric soil indicators observed.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		
<b>Primary Indicators (minimum of one required; check all that apply)</b> <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 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 Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (2 or more required)</b> <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input checked="" type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input checked="" type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present?    Yes _____    No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes _____    No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes _____    No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Project/Site: Clinton Keith Extension City/County: Murrieta Riverside Sampling Date: 1-9-14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-40  
 Investigator(s): Z. West, A. Parra Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50%</u> (A/B)
4. _____				
Sapling/Shrub Stratum (Plot size: <u>10'</u> ) <u>80</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>80</u> x 2 = <u>160</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>90</u> (A) <u>210</u> (B) Prevalence Index = B/A = <u>210/90 = 2.3</u>
Herb Stratum (Plot size: <u>5'</u> ) _____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0' _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: <u>30'</u> ) <u>10</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum <u>90</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Remarks: _____ _____ _____				

**SOIL**

Sampling Point: SP-40

**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>		
23	10YR 3/3	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.

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

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

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

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks: No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**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: Clinton Keith Res. Ext. City/County: Murrieta, Riverside Sampling Date: 1/15/13  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-41  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 21  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					
1.	<u>Salix lasiolepis</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	
2.					
3.					
4.					
		<u>10</u> = Total Cover			
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )					
1.	<u>Urtica dioica</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
2.	<u>Tamarix ramosissima</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
3.					
4.					
5.					
		<u>30</u> = Total Cover			
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1.	<u>Artemisia californica</u>	<u>45</u>	<u>Y</u>	<u>OBL</u>	
2.	<u>Eragrostis setacea</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	
3.					
4.					
5.					
6.					
7.					
8.					
		<u>100</u> = Total Cover			
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )					
1.					
2.					
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

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

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

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

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

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

**SOIL**

Sampling Point: SP-41

**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>		
0-32	7.5 YR <sup>3</sup> /1	100		✓			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.

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

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

<p><b>Restrictive Layer (if present):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
---	---

Remarks: Soils in area mapped as saline-alkaline (Chino Silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per Section 5 of the Arid West Supplement.

**HYDROLOGY**

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

<p><b>Field Observations:</b></p> <p>Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>&lt; 1</u></p> <p>Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>15</u></p> <p>Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>5</u></p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
---	---

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

Remarks:



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

Project/Site: Clinton Keith Road Ext. City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP42  
 Investigator(s): A Parra, Z West Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<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</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
= Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border: none;"> <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 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>																				
1. <u>Urtica dioica</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>																	
2. <u>Nicotiana glauca</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>																	
3. <u>Helianthus annuus</u>	<u>2</u>	<u>N</u>	<u>FACU</u>																	
4. <u>Hirschfeldia incana</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>																	
5. _____	_____	_____	_____																	
= Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Eragrostis ciliaris</u>	<u>50</u>	<u>Y</u>	<u>FACW</u>																	
2. <u>Distichlis spicata</u>	<u>5</u>	<u>N</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
= Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
= Total Cover																				
% Bare Ground in Herb Stratum <u>45</u>		% Cover of Biotic Crust <input checked="" type="checkbox"/>																		

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

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

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

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

**SOIL**

Sampling Point: SP-42

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

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		
0-28	10YR 3/1	99					
0-28			N8.5/N	<1			saline concretions

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

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

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

**Field Observations:**

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

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: Clinton Keith Road Exl. City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-43  
 Investigator(s): A Parra, Z West Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain depression Local relief (concave, convex, none): concave Slope (%): 21  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					
1.					
2.					
3.					
4.					
_____ = Total Cover					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>10'</u> )					
1.	<u>Rumex crispus</u>	<u>75</u>	<u>Y</u>	<u>FAC</u>	
2.	<u>Verticillium dicitia</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
3.					
4.					
5.					
<u>80</u> = Total Cover					
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
_____ = Total Cover					
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )					
1.					
2.					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>20</u>		% Cover of Biotic Crust <u>∅</u>			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

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

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

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

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

**SOIL**

Sampling Point: SP-43

**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	7.5 YR <sup>2.5</sup> /2	100					Clay loam	
8-24	7.5 YR <sup>2.5</sup> /2	60					Clay loam	
8-24	7.5 YR <sup>2.5</sup> /2	40					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.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Depleted Matrix (F3)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Vernal Pools (F9)	

<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: Soil in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per Section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6) <i>Faint</i>	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<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 Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

**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: Clinton Keith Road Ext. City/County: Murrieta/Riv. Co Sampling Date: 1/15/14

Applicant/Owner: ACTD State: CA Sampling Point: SP-44

Investigator(s): A. Perrine, Z. West Section, Township, Range: \_\_\_\_\_

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

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

Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</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>20</u> (AVB)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b>	
_____ = Total Cover				Total % Cover of:	Multiply by:
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>				OBL species	_____ x 1 = _____
1. <u>Cirsium vulgare</u>	<u>35</u>	<u>Y</u>	<u>FACU</u>	FACW species	_____ x 2 = _____
2. <u>Marrubium vulgare</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	FAC species	<u>20</u> x 3 = <u>60</u>
3. <u>Hirschfeldia incana</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	FACU species	<u>60</u> x 4 = <u>240</u>
4. <u>Ambrosia psilostachya</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	UPL species	<u>90</u> x 5 = <u>450</u>
5. _____	_____	_____	_____	Column Totals:	<u>170</u> (A) <u>750</u> (B)
_____ = Total Cover				Prevalence Index = B/A = $\frac{750}{170} = 5$	
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Schizanthus barbatus</u>	<u>70</u>	<u>Y</u>	<u>UPL</u>	___ Dominance Test is >50%	
2. <u>Rumex crispus</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	___ Prevalence Index is ≤3.0 <sup>1</sup>	
3. _____	_____	_____	_____	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____	_____	_____	_____	___ 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, unless disturbed or problematic.	
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				<b>Hydrophytic Vegetation Present?</b>	
1. _____	_____	_____	_____	Yes _____	No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>10</u>		% Cover of Biotic Crust <u>0</u>			

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

**SOIL**

Sampling Point: SP- 44

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20	10YR 3/1	100					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.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

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

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks: Limestone cobbles encountered at 16" below soil surface. No hydric soil indicators.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

(includes capillary fringe)

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-45  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
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>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>				
1. <u>Helianthus annuus</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>25</u> x 2 = <u>50</u> FAC species _____ x 3 = _____ FACU species <u>30</u> x 4 = <u>120</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>85</u> (A) <u>320</u> (B) Prevalence Index = B/A = <u>320/85 = 3.76</u>
2. <u>Hirschfeldia incana</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Cirsium vulgare</u>	<u>5</u>	<u>N</u>	<u>JPL</u>	
4. <u>Taraxacum officinale</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
<u>75</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Eragrostis setacea</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>25</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>75</u> % Cover of Biotic Crust <u>0</u>				
				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>

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

**SOIL**

Sampling Point: SP-45

**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	2.5Y 2/3	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.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

**Restrictive Layer (if present):**

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

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

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks: No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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: Clinton Keith Extension City/County: Murrieta Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-46  
 Investigator(s): A. HERRERA Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Tamarix ramosissima</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)																
2. _____				Total Number of Dominant Species Across All Strata: <u>6</u> (B)																
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>4/6 = 67</u> (A/B)																
4. _____																				
<u>5</u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:																
1. <u>Helianthus annuus</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	<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 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
2. <u>Urtica dioica</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>																	
3. _____																				
4. _____																				
5. _____																				
<u>60</u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:																
1. <u>Polygonum monspeliensis</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
2. <u>APUM</u>	<u>20</u>	<u>Y</u>	<u>-</u>																	
3. <u>Malvella leprosa</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
<u>100</u> = Total Cover																				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?																
1. _____				Yes <input checked="" type="checkbox"/> No _____																
2. _____																				
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>/</u>																				
Remarks:																				

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

**SOIL**

Sampling Point: SP-216

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 2/1	95					clay loam	
	N8.5/N	5						salt concretion

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

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

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

Remarks: Soil in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation + wetland hydrology indicators. Soils inferred as hydric per Section 5 of the Arid West Supplement.

**HYDROLOGY**

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

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>17</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

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

Remarks:

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

Project/Site: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-47  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain depression Local relief (concave, convex, none): concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Tamarix ramosissima</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
<u>50</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Helianthus annuus</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Urtica dioica</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Melilotus sp.</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
4. _____				
5. _____				
<u>40</u> = Total Cover				
Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				

**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% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>65</u>	x 3 = <u>195</u>
FACU species <u>25</u>	x 4 = <u>100</u>
UPL species _____	x 5 = _____
Column Totals: <u>90</u> (A)	<u>295</u> (B)
Prevalence Index = B/A = <u>295/90 3.27</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, unless disturbed or problematic.

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

Remarks:

**SOIL**

Sampling Point: SP-47

**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>		
0-32	10 YR 2/1	100					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.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Other (Explain in Remarks)
<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 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)	

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

**Field Observations:**

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

Water Table Present? Yes  No \_\_\_\_\_ Depth (inches): 30

Saturation Present? (includes capillary fringe) Yes  No \_\_\_\_\_ Depth (inches): 18

**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: Clinton Keith Road Ext. City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-48  
 Investigator(s): A. Parra, Z. West Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): 4  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>	<u>30'</u>				
1. _____					
2. _____					
3. _____					
4. _____					
_____ = Total Cover					
<u>Sapling/Shrub Stratum</u>	<u>10'</u>				
1. <u>Urtica dioica</u>		<u>60</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Melilotus</u>		<u>7</u>	<u>N</u>	<u>FACU</u>	
3. <u>Cirsium vulgare</u>		<u>20</u>	<u>Y</u>	<u>FACU</u>	
4. <u>Hirschfeldia incana</u>		<u>8</u>	<u>N</u>	<u>UPL</u>	
5. _____					
<u>95</u> = Total Cover					
<u>Herb Stratum</u>	<u>5'</u>				
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
_____ = Total Cover					
<u>Woody Vine Stratum</u>	<u>30'</u>				
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u>0</u>			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>60</u>	x 3 = <u>180</u>
FACU species <u>27</u>	x 4 = <u>108</u>
UPL species <u>8</u>	x 5 = <u>40</u>
Column Totals: <u>95</u> (A)	<u>338</u> (B)

Prevalence Index = B/A = 3.55

**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)

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

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

**SOIL**

Sampling Point: SP-48

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 3/3	100					loamy sand	
6-34	10 YR 2/2	100					clay loam	

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

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

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

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

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:  
No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

Water Table Present? Yes  No \_\_\_\_\_ Depth (inches): 24

Saturation Present? Yes  No \_\_\_\_\_ Depth (inches): 22

(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: Minton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RMTD State: CA Sampling Point: SP-49  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): Concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Helianthus annuus</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Melilotus</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>75</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Polypogon monspeliensis</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Franklinia salina</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		

**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% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species <u>100</u>	x 2 = <u>200</u>
FAC species _____	x 3 = _____
FACU species <u>75</u>	x 4 = <u>300</u>
UPL species _____	x 5 = _____
Column Totals: <u>175</u> (A)	<u>500</u> (B)

Prevalence Index = B/A = 2.85

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

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

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

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

**SOIL**

Sampling Point: SP-49

**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 2/2	100					clay loam	

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

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

<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 in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Other (Explain in Remarks)

**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): 23

**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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-50  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain depression Local relief (concave, convex, none): concave Slope (%): 41  
 Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Eriogonum candidensis</u>	<u>75</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Helianthus annuus</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Urtica dioica</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				
Remarks:				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>5</u>	x 3 = <u>15</u>
FACU species <u>95</u>	x 4 = <u>380</u>
UPL species _____	x 5 = _____
Column Totals: <u>100</u> (A)	<u>395</u> (B)
Prevalence Index = B/A = <u>395/100 = 3.95</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, unless disturbed or problematic.

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

**SOIL**

Sampling Point: SP-50

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 3/2	100					Sand	
10-25	10YR 2/2	100					clay loam	

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

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

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

**Field Observations:**

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

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RTD State: CA Sampling Point: SP-51  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</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: $\frac{2}{5} = 40\%$ (A/B)														
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>x 1 = _____</td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = <u>195</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>170</u> (A)</td> <td><u>510</u> (B)</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>65</u>	x 3 = <u>195</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>170</u> (A)	<u>510</u> (B)
Total % Cover of:	Multiply by:																	
OBL species _____	x 1 = _____																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>65</u>	x 3 = <u>195</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>170</u> (A)	<u>510</u> (B)																	
_____ = Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b> 1. <u>Xanthium strumarium</u> <u>65</u> <u>Y</u> <u>FAC</u> 2. <u>Helianthus annuus</u> <u>20</u> <u>Y</u> <u>FACU</u> 3. <u>Melilotus sp</u> <u>10</u> <u>N</u> <u>FACU</u> 4. _____ 5. _____	_____ = Total Cover																	
<b>Herb Stratum (Plot size: <u>5'</u>)</b> 1. <u>Frankenia salina</u> <u>20</u> <u>Y</u> <u>FACW</u> 2. <u>Polygonum monspeliense</u> <u>40</u> <u>Y</u> <u>FACW</u> 3. <u>Schismus barbatus</u> <u>15</u> <u>Y</u> <u>UPL</u> 4. _____ 5. _____ 6. _____ 7. _____ 8. _____	_____ = Total Cover																	
<b>Woody Vine Stratum (Plot size: _____)</b> 1. _____ 2. _____	_____ = Total Cover																	
% Bare Ground in Herb Stratum <u>25</u> % Cover of Biotic Crust _____				<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> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
Remarks:				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

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

**SOIL**

Sampling Point: SP-51

**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 7/2	100					clay loam	
3-8	10YR 7/2	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.

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

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

**Hydric Soil Present?** Yes  No

Remarks: *Soils in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per section 5 of the Arid West Supplement.*

**HYDROLOGY**

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

**Field Observations:**

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

Water Table Present? Yes  No  Depth (inches): 8

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

**Wetland Hydrology Present?** Yes  No

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

Remarks:

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

Project/Site: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-5.2  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): floodplain depression Local relief (concave, convex, none): concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Helianthus annuus</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Jurica dioica</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Hirschfeldia incana</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Cirsium vulgare</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
5. _____	_____	_____	_____	_____
_____ = Total Cover				
Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Frankenia salina</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Polypogon monspeliensis</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____
6. _____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>25</u>		% Cover of Biotic Crust <u>0</u>		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 5 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC:  $3/5 = 60$  (A/B)

**Prevalence Index worksheet:**

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

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

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

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

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

Remarks: 25% bare ground covered by salt crust.

**SOIL**

Sampling Point: SP-52

**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>		
0-27	10YR 3/3	100					clay loam	

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

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

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

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

Hydric Soil Present? Yes  No

Remarks:  
 Soils in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per Section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 15

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: sp 53  
 Investigator(s): A. PARPA Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): <1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Hirschfeldia icana</u>	<u>50</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Helianthus annuus</u>	<u>15</u>	<u>N</u>	<u>FACU</u>	
3. <u>Cirsium vulgare</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
4. <u>Urtica dioica</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Schismus barbatus</u>	<u>45</u>	<u>Y</u>	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>15</u> % Cover of Biotic Crust _____				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>20</u>	x 3 = <u>60</u>
FACU species <u>20</u>	x 4 = <u>80</u>
UPL species <u>135</u>	x 5 = <u>675</u>
Column Totals: <u>175</u> (A)	<u>815</u> (B)

Prevalence Index = B/A = 815/175 = 4.66

**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, unless disturbed or problematic.

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

Remarks:

**SOIL**

Sampling Point: sp-53

**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>		
0-27	10YR 5/2	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.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

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

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks:  
No hydric soil indicators present.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-54  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): 21  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rumex crispus</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Melilotus sp</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Helianthus annuus</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Polygonum mansuetanum</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>60</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 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	
OBL species <u>0</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>30</u>	x 4 =	<u>120</u>
UPL species <u>0</u>	x 5 =	<u>0</u>
Column Totals: <u>75</u> (A)		<u>225</u> (B)

Prevalence Index = B/A = 3.0

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

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

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

Remarks:

**SOIL**

Sampling Point: SP-54

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

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		
0-24	10 yr 2/2	100				clay loam	

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

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

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

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

**Hydric Soil Present?** Yes  No

Remarks:  
 Soils in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation + wetland hydrology indicators. Soils inferred as hydric per Section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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

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: CLINTON KEITH EXTENSION City/County: MURRIETA, RIVERSIDE Sampling Date: 1/15/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP 55  
 Investigator(s): A. PARRA Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Erigeron canadensis</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Achillea vulgaris</u>	<u>10</u>	<u>N</u>	<u>UPL</u>	
3. <u>Hirschfeldia incana</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
4. <u>Chenopodium album</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
5. <u>Helianthus annuus</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
				<u>65</u> = Total Cover
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Polypogon monspeliensis</u>	<u>55</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Fragaria virginiana</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
				<u>85</u> = Total Cover
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
				_____ = Total Cover
% Bare Ground in Herb Stratum <u>15</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: 5 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species <u>45</u>	x 2 = <u>170</u>
FAC species _____	x 3 = _____
FACU species <u>50</u>	x 4 = <u>200</u>
UPL species <u>15</u>	x 5 = <u>75</u>
Column Totals: <u>150</u> (A)	<u>445</u> (B)

Prevalence Index = B/A = 2.96

**Hydrophytic Vegetation Indicators:**

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

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

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

Remarks:

**SOIL**

Sampling Point: SP-55

**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 2/2	100					clay loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<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 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)	

<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 in area mapped as saline-alkaline (Chino silt loam). Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

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

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: CLINTON KEITH EXTENSION City/County: MURRIETA, RIVERSIDE Sampling Date: 1/16/11  
 Applicant/Owner: RCTD State: CA Sampling Point: SP-56  
 Investigator(s): A. PARFA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain depression Local relief (concave, convex, none): concave Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Helianthus annuus</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Hirschteldia icana</u>	<u>60</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Panicum paludosum</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Polypogon monspeliensis</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust <u>_____</u>				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC:  $\frac{1}{3} = 33\%$  (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>20</u>	x 4 = <u>80</u>
UPL species <u>10</u>	x 5 = <u>300</u>
Column Totals: <u>130</u> (A)	<u>490</u> (B)

Prevalence Index = B/A =  $\frac{490}{130} = 3.76$

**Hydrophytic Vegetation Indicators:**

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

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

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

Remarks:

**SOIL**

Sampling Point: sp-56

**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>		
0-23	10 YR 7/2	100					clay loam	

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

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

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

**Restrictive Layer (if present):**  
 Type: clay hard pan.  
 Depth (inches): 23

**Hydric Soil Present?** Yes  No

Remarks: clay hard pan at 23." No hydric soil indicators present.

**HYDROLOGY**

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

**Field Observations:**

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

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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/16/14  
 Applicant/Owner: RCTD State: CA Sampling Point: SP 57  
 Investigator(s): A. PARRA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain Depression Local relief (concave, convex, none): CONCAVE Slope (%): 21  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Salix gooddingi</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	<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>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>4/5 = 80%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>60</u> = Total Cover				<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 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>																				
1. <u>Tamarix ramosissima</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>																	
2. <u>Helianthus annuus</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
3. <u>Xanthium strumarium</u>	<u>5</u>	<u>N</u>	<u>FAC</u>																	
4. <u>Apium</u>	<u>10</u>	<u>N</u>	<u>NI</u>																	
5. <u>Ambrosia sylvestris</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>																	
<u>Urtica dioica</u>	<u>10</u>	<u>N</u>	<u>FAC</u>																	
<u>75</u> = Total Cover																				
<b>Herb Stratum (Plot size: <u>6'</u>)</b>																				
1. <u>Artemisia californicus</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>																	
2. <u>Juncus mexicanus</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>35</u> = Total Cover																				
<b>Woody Vine Stratum (Plot size: _____)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>65</u>		% Cover of Biotic Crust <u>✓</u>																		

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

**SOIL**

Sampling Point: SP-57

**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 2/1	100					clay loam	

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

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

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

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

**Hydric Soil Present?** Yes  No

Remarks: Soils in area mapped as saline-alkaline (Chino silt loam) Area meets for hydrophytic vegetation and wetland hydrology indicators. Soils inferred as hydric per section 5 of the Arid West Supplement.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

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

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 6

Water Table Present? Yes  No  Depth (inches): 16

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 1/2

**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: Clinton Keith Extension City/County: Murrieta, Riverside Sampling Date: 1/16/14  
 Applicant/Owner: RSTD State: CA Sampling Point: SP-58  
 Investigator(s): A. PARDA, Z. WEST Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): FLOODPLAIN DEPRESSION Local relief (concave, convex, none): CONCAVE Slope (%): 41  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

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

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

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

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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0%</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b>	
_____ = Total Cover				Total % Cover of:	Multiply by:
<b>Sapling/Shrub Stratum (Plot size: <u>10'</u>)</b>				OBL species	x 1 = _____
1. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	FACW species	x 2 = _____
2. <u>Ambrosia</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	FAC species	<u>5</u> x 3 = <u>15</u>
3. _____	_____	_____	_____	FACU species	<u>35</u> x 4 = <u>140</u>
4. _____	_____	_____	_____	UPL species	<u>5</u> x 5 = <u>25</u>
5. _____	_____	_____	_____	Column Totals:	<u>45</u> (A) <u>180</u> (B)
<u>35</u> = Total Cover				Prevalence Index = B/A = <u>180/45 = 4.0</u>	
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Malvella laprosa</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	___ Dominance Test is >50%	
2. <u>Hirschfeldia icana</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>	___ Prevalence Index is ≤3.0 <sup>1</sup>	
3. _____	_____	_____	_____	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____	_____	_____	_____	___ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
6. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b>	
7. _____	_____	_____	_____	Yes _____ No <input checked="" type="checkbox"/>	
8. _____	_____	_____	_____		
<u>10</u> = Total Cover					
<b>Woody Vine Stratum (Plot size: _____)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>90</u>		% Cover of Biotic Crust <u>/</u>			
Remarks:					

**SOIL**

Sampling Point: sp-58

**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>		
0-22	10YR 2/2	100					clay loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Other (Explain in Remarks)
<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 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)	

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

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <input checked="" type="checkbox"/>
--	--

Remarks: No hydric soil indicators present.

**HYDROLOGY**

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

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

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

Remarks:

Appendix D  
**Site Photographs**

---



Photo 1  
Date: 08-01-2013  
Feature: Drainage 2-  
Warm Springs Creek  
Direction: Northwest  
Description:  
Downstream view of  
SP-2.



Photo 2  
Date: 08-01-2013  
Feature: Drainage 2-  
Warm Springs Creek  
Direction: East  
Description:  
Upstream view of SP-1.