

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Connection Slough City/County: Bacon Island, San Joaquin Sampling Date: 9/29/08
 Applicant/Owner: CONTRA COSTA WATER DISTRICT State: CA Sampling Point: 36a
 Investigator(s): T. Mahoney Section, Township, Range: T2N, R4E, S22
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): concave ditch Slope (%): 1
 Subregion (LRR): C - Mediterranean California Lat: 38° 0' 10" N Long: 121° 31' 44" W Datum: NAD83
 Soil Map Unit Name: RIDGE MUCK, PART. DRAINAGE, 0-27 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.) SEASONAL NOT

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"/> | Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Hydric Soil Present? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| Wetland Hydrology Present? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| Remarks: <u>located in a man-made ditch, 4' wide</u> <u>* Ditch has been recently dredged and is mostly devoid of</u> <u>veg. Plants easily identified in dredge spoils.</u> | | |

VEGETATION

| Tree Stratum (Use scientific names.) | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> % (A/B) Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td>x 1 =</td> <td>0</td> </tr> <tr> <td>FACW species</td> <td>x 2 =</td> <td>0</td> </tr> <tr> <td>FAC species</td> <td>x 3 =</td> <td>0</td> </tr> <tr> <td>FACU species</td> <td>x 4 =</td> <td>0</td> </tr> <tr> <td>UPL species</td> <td>x 5 =</td> <td>0</td> </tr> <tr> <td>Column Totals:</td> <td>(A)</td> <td>0 (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = _____ | Total % Cover of: | Multiply by: | OBL species | x 1 = | 0 | FACW species | x 2 = | 0 | FAC species | x 3 = | 0 | FACU species | x 4 = | 0 | UPL species | x 5 = | 0 | Column Totals: | (A) | 0 (B) |
|---|------------------------------------|-------------------|------------------|---|-------------------|--------------|-------------|-------|---|--------------|-------|---|-------------|-------|---|--------------|-------|---|-------------|-------|---|----------------|-----|-------|
| Total % Cover of: | Multiply by: | | | | | | | | | | | | | | | | | | | | | | | |
| OBL species | x 1 = | 0 | | | | | | | | | | | | | | | | | | | | | | |
| FACW species | x 2 = | 0 | | | | | | | | | | | | | | | | | | | | | | |
| FAC species | x 3 = | 0 | | | | | | | | | | | | | | | | | | | | | | |
| FACU species | x 4 = | 0 | | | | | | | | | | | | | | | | | | | | | | |
| UPL species | x 5 = | 0 | | | | | | | | | | | | | | | | | | | | | | |
| Column Totals: | (A) | 0 (B) | | | | | | | | | | | | | | | | | | | | | | |
| 1. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| Sapling/Shrub Stratum | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: _____ % | | | | | | | | | | | | | | | | | | | | | | | | |
| Herb Stratum | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. <u>Cynodon dactylon</u> | <u>20</u> | <u>Y</u> | <u>FAC</u> | | | | | | | | | | | | | | | | | | | | | |
| 2. <u>Typha latifolia</u> | <u>10*</u> | <u>Y</u> | <u>OBL</u> | | | | | | | | | | | | | | | | | | | | | |
| 3. <u>Festuca arundinacea</u> | <u>5</u> | <u>N</u> | <u>FAC-</u> | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: <u>35</u> % | | | | | | | | | | | | | | | | | | | | | | | | |
| Woody Vine Stratum | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: <u>35</u> % | | | | | | | | | | | | | | | | | | | | | | | | |
| % Bare Ground in Herb Stratum <u>65</u> % | % Cover of Biotic Crust <u>0</u> % | | | | | | | | | | | | | | | | | | | | | | | |

Remarks: * Ditch has been dredged, and Typha latifolia is a significant
part of spoils. It was a dominant species prior to dredging
and is considered dominant here, even though

present cover is only 10%

SOIL

Sampling Point: 36A

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | | |
|---|---------------|----|----------------|---|--|-------------------|------------------|----------------------|---------|
| Depth (inches) | Matrix | | Redox Features | | | Type ¹ | Loc ² | Texture ³ | Remarks |
| | Color (moist) | % | Color (moist) | % | | | | | |
| 0-20 | 10YR2/1 | 95 | 10YR7/6 | 5 | | C | M | clay/muck | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

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

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

| | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | Indicators for Problematic Hydric Soils⁴ <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) |
| <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) | | |

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
 Type: None
 Depth (inches): ↓

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

| Wetland Hydrology Indicators: | | | | Secondary Indicators (2 or more required) | |
|---|--|--|--|--|--|
| Primary Indicators (any one indicator is sufficient) | | | | | |
| <input checked="" 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 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 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 checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Thin Muck Surface (C7) | | | |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) | <input type="checkbox"/> Crayfish Burrows (C8) | | | |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) | <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) | | | |
| Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> | | | | 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: <u>None</u> | | | | | |
| Remarks: <u>located in man-made drainage ditch.</u> | | | | | |

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Connection Slough City/County: BACON ISLAND, SAN JOAQUIN Sampling Date: 9/27/08
Applicant/Owner: CONTRA COSTA WATER DISTRICT State: CA Sampling Point: 36B
Investigator(s): T. Mahon Section, Township, Range: T2N, 24E, S22
Landform (hillslope, terrace, etc.): TERACE Local relief (concave, convex, none): FLAT Slope (%): 0
Subregion (LRR): C - Mediterranean California Lat: 38° 0' 10" W Long: 121° 31' 44" W Datum: NAD83
Soil Map Unit Name: PINDGE MUCK, PART. DAMAGED, 0-2' 70 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.) SEASONAL WETLAND

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

VEGETATION

| Tree Stratum (Use scientific names.) | Absolute % Cover | Dominant Species? | Indicator Status |
|--|------------------------------------|-------------------|------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| Total Cover: % | | | |
| Sapling/Shrub Stratum | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| Total Cover: % | | | |
| Herb Stratum | | | |
| 1. <u>Cynodon dactylon</u> | <u>75</u> | <u>Y</u> | <u>FAC</u> |
| 2. <u>Cirsium vulgare</u> | <u>10</u> | <u>N</u> | <u>FACU</u> |
| 3. <u>Festuca arundinacea</u> | <u>10</u> | <u>N</u> | <u>FAC-</u> |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| Total Cover: <u>95</u> % | | | |
| Woody Vine Stratum | | | |
| 1. | | | |
| 2. | | | |
| Total Cover: <u>95</u> % | | | |
| % Bare Ground in Herb Stratum <u>5</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: 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 = <u>0</u> |
| FACW species | x 2 = <u>0</u> |
| FAC species | x 3 = <u>0</u> |
| FACU species | x 4 = <u>0</u> |
| UPL species | x 5 = <u>0</u> |
| Column Totals: | (A) <u>0</u> (B) |

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
☒ Dominance Test is >50%
☒ Prevalence Index is ≤3.0¹
☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: Veg disturbed by past dredging in adjacent ditch.

SOIL

Sampling Point: 36 B

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | |
|---|---------------|-----|----------------|---|-------------------|----------------------|----------------------|
| Depth (inches) | Matrix | | Redox Features | | | Texture ³ | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | | |
| 0-20 | 10YR 2/1 | 100 | None | | | | loam loam |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |
| | | | | | | | |

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

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils ⁴ : |
|---|---|--|
| <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) | | |

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

| | |
|---|---|
| Restrictive Layer (if present): Type: <u>None</u> Depth (inches): <u>0</u> | Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> |
|---|---|

Remarks: soil appears well drained.

HYDROLOGY

| Wetland Hydrology Indicators: | | Secondary Indicators (2 or more required) |
|--|--|--|
| Primary Indicators (any one indicator is sufficient) | | |
| <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"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) | <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) |

| | | | | |
|---|--|--|--|---|
| Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <u>none</u> Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <u>1</u> Saturation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <u>0</u> (includes capillary fringe) | | | | Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> |
|---|--|--|--|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks: Located on a bench above drainage ditch. No surface or subsurface hydro indicators observed. Appears well-drained.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Connection Slough City/County: BAZON ISLAND, SAN JOAQUIN Sampling Date: 9/29/08
Applicant/Owner: CONTRA COSTA WATER DISTRICT State: CA Sampling Point: 37
Investigator(s): T. Mahoney Section, Township, Range: T2N, R4E, S22
Landform (hillslope, terrace, etc.): lower slope Local relief (concave, convex, none): convex Slope (%): 5
Subregion (LRR): C - Mediterranean California Lat: 38° 0' 11" N Long: 121° 31' 44" W Datum: NAD 83
Soil Map Unit Name: PINDGE MUCK, PART DRAINAGE, 0-270 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.) SEASONAL WETLAND

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"/> | Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Remarks: <u>Area has been disked. Veg still present and identifiable.</u> | |

VEGETATION

| Tree Stratum (Use scientific names.) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|------------------------------------|-------------------|------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| Total Cover: _____ % | | | |
| Sapling/Shrub Stratum | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| Total Cover: _____ % | | | |
| Herb Stratum | | | |
| 1. <u>Cynodon dactylon</u> | <u>70</u> | <u>Y</u> | <u>FAC</u> |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| Total Cover: <u>70</u> % | | | |
| Woody Vine Stratum | | | |
| 1. | | | |
| 2. | | | |
| Total Cover: <u>70</u> % | | | |
| % Bare Ground in Herb Stratum <u>30</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: 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 = <u>0</u> |
| FACW species | x 2 = <u>0</u> |
| FAC species | x 3 = <u>0</u> |
| FACU species | x 4 = <u>0</u> |
| UPL species | x 5 = <u>0</u> |
| Column Totals: | (A) <u>0</u> (B) <u>0</u> |

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
☒ Dominance Test is >50%
☒ Prevalence Index is $\leq 3.0^1$
☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: 37

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

| Depth (inches) | Matrix | | Redox Features | | | | Texture ³ | Remarks |
|-------------------|---------------|-----|----------------|----|-------------------|------------------|----------------------|---------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0-20 | 10YR 2/2 | 99+ | 10YR 7/6 | <1 | C | m | silty clay loam | |
| | | | | | | | | |
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| | | | | | | | | |

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

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 Soils⁴:

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

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: NoneDepth (inches): 0Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1) (Nonriverine)
☐ Sediment Deposits (B2) (Nonriverine)
☐ Drift Deposits (B3) (Nonriverine)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)
☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Plowed Soils (C6)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Thin Muck Surface (C7)
☐ 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): None
Water Table Present? Yes ☐ No ☒ Depth (inches): 0
Saturation Present? Yes ☐ No ☒ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

None

Remarks:

No surface or near-surface hydro indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Connection Slough City/County: BARON ISLAND, SAN JOAQUIN Sampling Date: 8/28/08
Applicant/Owner: CONTRA COSTA WATER DISTRICT State: CA Sampling Point: 38A
Investigator(s): T. MATHONY Section, Township, Range: T2N, R4E, S22
Landform (hillslope, terrace, etc.): level slope Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): C - Mediterranean California Lat: 38° 0' 12" N Long: 121° 31' 43" W Datum: NAD83
Soil Map Unit Name: ITAND SILTY CLAY LOAM, PARTIALLY DRAINAGE, 0-2 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.) seasonal wet

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks: <u>located on edge of Connection Slough channel. No true soil development due to riprap, but considered wetland rather than "other waters" due to dense hydrophytic veg.</u> | | | |

VEGETATION

| Tree Stratum (Use scientific names.) | Absolute % Cover | Dominant Species? | Indicator Status |
|--|------------------|-------------------|------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| Sapling/Shrub Stratum | | | |
| 1. <u>Schoenoplectus acutus</u> | <u>40</u> | <u>Y</u> | <u>OBL</u> |
| 2. <u>Schoenoplectus californicus</u> | <u>40</u> | <u>Y</u> | <u>OBL</u> |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| Total Cover: <u>80</u> % | | | |
| Herb Stratum | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| Total Cover: <u>80</u> % | | | |
| Woody Vine Stratum | | | |
| 1. | | | |
| 2. | | | |
| Total Cover: <u>80</u> % | | | |
| % Bare Ground in Herb Stratum <u>20</u> % % Cover of Biotic Crust <u>0</u> % | | | |
| Remarks: <u>(riprap)</u> | | | |

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 20 (A)
Total Number of Dominant Species Across All Strata: 20 (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 = <u>0</u> |
| FACW species | x 2 = <u>0</u> |
| FAC species | x 3 = <u>0</u> |
| FACU species | x 4 = <u>0</u> |
| UPL species | x 5 = <u>0</u> |
| Column Totals: | (A) <u>0</u> (B) |

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
☒ Dominance Test is >50%
☒ Prevalence Index is ≤3.0¹
☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ☒ No ☐

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | |
|---|---------------|---|----------------|---|-------------------|----------------------|---------|
| Depth (inches) | Matrix | | Redox Features | | | Texture ³ | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | | |
| | SEE REMARKS | | | | | | |
| | | | | | | | |
| | | | | | | | |
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¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

| | | | | | |
|--|---|---|--|--|--|
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | | Indicators for Problematic Hydric Soils: | | |
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <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"/> 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"/> 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"/> 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) | | | | | |

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

| | |
|--|---|
| Restrictive Layer (if present): Type: <u>None</u> Depth (inches): <u>↓</u> | Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> |
| Remarks: <u>Substrate is mostly riprap on/adjacent to levee. Dense Schoenoplectus growing in riprap, no true soil development.</u> | |

HYDROLOGY

| | | | | | |
|--|--|--|---|--|--|
| Wetland Hydrology Indicators: | | | Secondary Indicators (2 or more required) | | |
| Primary Indicators (any one indicator is sufficient) | | | | | |
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input checked="" type="checkbox"/> Water Marks (B1) (Nonriverine) | <input checked="" type="checkbox"/> Water Marks (B1) (Riverine) | | |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine) | | |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) | | |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Surface Soil Cracks (B6) | <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"/> Inundation Visible on Aerial Imagery (B7) | <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"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Thin Muck Surface (C7) | | |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) | | <input type="checkbox"/> Crayfish Burrows (C8) | | |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) | | <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) | | |

| | |
|---|---|
| Field Observations: | |
| Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>12</u> | Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/> |
| Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>10</u> | |
| Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>2</u> | |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: <u>None</u> | |

Remarks: located on edge of Connection Slough Channel.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Connection Slough City/County: BAZON ISLAND, SAN JOAQUIN Sampling Date: 7/29/08
 Applicant/Owner: CONTRA COSTA WATER DISTRICT State: CA Sampling Point: 38B
 Investigator(s): T. MATHON Section, Township, Range: T2N, R4E, S22
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): convex Slope (%): 25
 Subregion (LRR): C - Mediterranean California Lat: 38° 0' 12" N Long: 121° 31' 43" W Datum: NAD83
 Soil Map Unit Name: ITAND SILTY CLAY LOAM, PARTIALLY DRAINED, 0-2NW1 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.) Seasonal wet

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

| | | |
|---|---|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Hydric Soil Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Wetland Hydrology Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Remarks: <u>located on levee. Highly disturbed by rip rap. No wetland parameters met.</u> | | |

VEGETATION

| Tree Stratum (Use scientific names.) | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>10</u> (A) Total Number of Dominant Species Across All Strata: <u>20</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> % (A/B) | | | | | | | | | | | | | | | | | | | | | |
|---|------------------------------------|-------------------|------------------|---|-------------------|--------------|--|-------------|-------|----------|--------------|-------|----------|-------------|-------|------------|--------------|-------|----------|-------------|-------|------------|----------------|--|----------------|
| 1. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: <u>50</u> % | | | | Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> <th></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td>x 1 =</td><td><u>0</u></td></tr> <tr><td>FACW species</td><td>x 2 =</td><td><u>0</u></td></tr> <tr><td>FAC species</td><td>x 3 =</td><td><u>150</u></td></tr> <tr><td>FACU species</td><td>x 4 =</td><td><u>0</u></td></tr> <tr><td>UPL species</td><td>x 5 =</td><td><u>125</u></td></tr> <tr><td>Column Totals:</td><td></td><td><u>275</u> (B)</td></tr> </tbody> </table> Prevalence Index = B/A = <u>4</u> | Total % Cover of: | Multiply by: | | OBL species | x 1 = | <u>0</u> | FACW species | x 2 = | <u>0</u> | FAC species | x 3 = | <u>150</u> | FACU species | x 4 = | <u>0</u> | UPL species | x 5 = | <u>125</u> | Column Totals: | | <u>275</u> (B) |
| Total % Cover of: | Multiply by: | | | | | | | | | | | | | | | | | | | | | | | | |
| OBL species | x 1 = | <u>0</u> | | | | | | | | | | | | | | | | | | | | | | | |
| FACW species | x 2 = | <u>0</u> | | | | | | | | | | | | | | | | | | | | | | | |
| FAC species | x 3 = | <u>150</u> | | | | | | | | | | | | | | | | | | | | | | | |
| FACU species | x 4 = | <u>0</u> | | | | | | | | | | | | | | | | | | | | | | | |
| UPL species | x 5 = | <u>125</u> | | | | | | | | | | | | | | | | | | | | | | | |
| Column Totals: | | <u>275</u> (B) | | | | | | | | | | | | | | | | | | | | | | | |
| Sapling/Shrub Stratum | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: <u>50</u> % | | | | | | | | | | | | | | | | | | | | | | | | | |
| Herb Stratum | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. <u>Hirschfeldia incana</u> | <u>25</u> | <u>Y</u> | <u>UPL</u> | Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present. | | | | | | | | | | | | | | | | | | | | | |
| 2. <u>Comyza canadensis</u> | <u>25</u> | <u>Y</u> | <u>FAC</u> | | | | | | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: <u>50</u> % | | | | | | | | | | | | | | | | | | | | | | | | | |
| Woody Vine Stratum | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Cover: <u>50</u> % | | | | | | | | | | | | | | | | | | | | | | | | | |
| % Bare Ground in Herb Stratum <u>50</u> % | % Cover of Biotic Crust <u>0</u> % | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks: <u>(rip rap)</u> | | | | | | | | | | | | | | | | | | | | | | | | | |

SOIL

Sampling Point: 38B

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

| Depth (inches) | Matrix | | Redox Features | | | | Texture ³ | Remarks |
|--|---------------|---|----------------|---|-------------------|------------------|----------------------|---------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| NO SOIL DEVELOPMENT - BARB MP MAP ON LEVEL | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |

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

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

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

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

Indicators for Problematic Hydric Soils:

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

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

 Type: None
 Depth (inches): 0
Hydric Soil Present? Yes ☐ No ☒

Remarks:

no true soil development, just level rip rap

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1) (Nonriverine)
☐ Sediment Deposits (B2) (Nonriverine)
☐ Drift Deposits (B3) (Nonriverine)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)
☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Plowed Soils (C6)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Thin Muck Surface (C7)
☐ 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): None
 Water Table Present? Yes ☐ No ☒ Depth (inches): 0
 Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): 0

Wetland Hydrology Present? Yes ☐ No ☒

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

None

Remarks:

No hydro indicators observed. Level is sloped and well-drained.