WETLAND DETERMINATION DATA FORM - Alaska Region

| Project/Site: Susitna-Watana Hydroelectric Project | Boroug | n/City: Matanus | ka-Susitna Bo | orough Samp | ling Date: 02-Aug-13 |
|--|-----------------------------------|--------------------------|--------------------------------|--|------------------------|
| Applicant/Owner: Alaska Energy Authority | | | | Sampling Poir | nt: SW13_T162_07 |
| Investigator(s): WAD, RWM | Landfo | orm (hillside, terra | ce, hummock | s etc.): Hillsio | de |
| Local relief (concave, convex, none): planar | Slope | % / 10 | 0.0 ° Elevat | ion: 142 | |
| Subregion : Interior Alaska Mountains | Lat.: 63.116 | 4375536 | Long.: -14 | 48.106030464 | Datum: NAD83 |
| Soil Map Unit Name: | | | N | IWI classificatio | m: Upland |
| | ificantly distu Irally problem | atic? (If ne | Normal Circur eded, explain | explain in Rema nstances" prese any answers in s, important f | nt? Yes No Remarks.) |
| Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Image: Soil Present? Wetland Hydrology Present? Yes No Image: Soil Present? Barnarka: Yes No Image: Soil Present? | | Is the San within a W | npled Area Vetland? | Yes 〇 | No 🖲 |
| Remarks: VEGETATION - Use scientific names of plants. List a | all species | n the plot. | | | |
| Ab | solute Don | inant Indicator | Dominance | e Test worksheet | t: |

| - | Charles | Absolute % Cover | | Indicator Status | Number of Dominant Species |
|-----|--|---------------------|-------------------|---------------------|---|
| 1. | e Stratum | - | | Status | That are OBL, FACW, or FAC: <u>2</u> (A) |
| | | 0 | | | Total Number of Dominant |
| 2. | | 0 | | | Species Across All Strata: (B) |
| 3. | | 0 | | | Percent of dominant Species |
| 4. | | 0 | | | That Are OBL, FACW, or FAC:(A/B) |
| 5. | | 0 | | | Prevalence Index worksheet: |
| | Total Cover | : | | | Total % Cover of: Multiply by: |
| Sap | ling/Shrub Stratum 50% of Total Cover: | 0 20% | of Total Cover: | 0 | OBL Species x 1 = |
| 1. | Salix polaris | 25 | \checkmark | FACW | FACW Species <u>29</u> x 2 = <u>58</u> |
| 2. | Dryas ajanensis | | | UPL | FAC Species <u>47.2</u> x 3 = <u>141.6</u> |
| 3. | | 0 | | | FACU Species x 4 =16 |
| 4. | | | | | UPL Species <u>5.1</u> x 5 = <u>25.5</u> |
| 5. | | • | | | Column Totals: <u>85.3</u> (A) <u>241.1</u> (B) |
| 6. | | 0 | | | Prevalence Index = B/A = 2.826 |
| 7. | | 0 | | | Prevalence Index = B/A = <u>2.826</u> |
| 8. | | 0 | | | Hydrophytic Vegetation Indicators: |
| 9. | | 0 | | | ✓ Dominance Test is > 50% |
| 10. | | | | | ✓ Prevalence Index is ≤3.0 |
| | Total Cover | : <u>30</u> | | | Morphological Adaptations ¹ (Provide supporting data in |
| Her | b Stratum 50% of Total Cover: | 15 20% | % of Total Cover: | 6 | Remarks or on a separate sheet) |
| 1. | Carex bigelowii | 45 | \checkmark | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. | Artemisia norvegica | 3 | | FACU | ¹ Indicators of hydric soil and wetland hydrology must |
| 3. | Petasites frigidus | 2 | | FACW | be present, unless disturbed or problematic. |
| 4. | Swertia perennis | 2 | | FACW | Plot size (radius, or length x width) 10m |
| 5. | Arnica lessingii | 0.1 | | UPL | Plot size (radius, or length x width) <u>10m</u> % Cover of Wetland Bryophytes |
| 6. | Stellaria longifolia | 0.1 | | FAC | (Where applicable) |
| 7. | Festuca rubra | 0.1 | | FAC | % Bare Ground |
| 8. | Bistorta plumosa | 1 | | FACU | Total Cover of Bryophytes 15 |
| 9. | Polemonium acutiflorum | 1 | | FAC | , , , , , , <u>, , , , , , , , , , , , , </u> |
| 10. | Micranthes nelsoniana | 1 | | FAC | Hydrophytic |
| | Total Cover | 55.3 | | | Vegetation |
| | 50% of Total Cover: | 7.65 20% | of Total Cover: | 11.06 | Present? Yes No |
| Rem | arks: | | | | |

| (and etc) %s Color (model) %s Type: Loc.2 Text Cognics 2-3 100 Imax Cognics Imax Cognics Imax Cognics 2-5 100 Imax Cognics Imax Cognics Imax Cognics 8-14 2.57 3/1 60 7.57R 3/4 40 M 9-14 2.57 3/1 1.06 2.57R 3/1 40 M 9-14 1.560 1.562 1.57R 3/4 40 M 40 4.562 | | Color (m | nict) | 0/- | Color (** | noiet) | 0/ | Tur-1 | Loc ² | Texture | | Remarks |
|--|---|--|------------------------|--------------------|----------------------------------|--|--|------------------------------|------------------|---|--|--|
| 2:5 100 Image: Secondary Indicators (two or more are required) 8:14 2.5Y 3/1 60 7.5YR 3/4 40 M 8:14 2.5Y 3/1 60 7.5YR 3/4 40 M **** *** <th>(inches)</th> <th>Color (m</th> <th>oist)</th> <th><u>%</u></th> <th>Color (n</th> <th>10ISt)</th> <th>%</th> <th>Type¹</th> <th>Loc -</th> <th></th> <th></th> <th>Remarks</th> | (inches) | Color (m | oist) | <u>%</u> | Color (n | 10ISt) | % | Type ¹ | Loc - | | | Remarks |
| 5-8 7.5YR 2.5/3 100 | | | | | | | | | | - | | |
| 8-14 2.5Y 3/1 60 7.5YR 3/4 40 M **Type: C-Concentration. D=Depletion. RM=Reduced Matrix * Location: PL=Pore Lining. RC=Root Channel, M=Matrix * **Type: C-Concentration. D=Depletion. RM=Reduced Matrix * Location: PL=Pore Lining. RC=Root Channel, M=Matrix **Type: C-Concentration. D=Depletion. RM=Reduced Matrix * Location: PL=Pore Lining. RC=Root Channel, M=Matrix **Hatsica of triate (A1) | | | | | | | | | | - | | |
| **Type: C=Concentration. D=Depletion. RM=Reduced Matrix **Location: PL=Pore Lining, RC=Root Channel. M=Matrix **Mydric Soil Indicators: Indicators for Problematic Hydric Soils? Histos of Histel (A1) Alaska Color Change (TA4) Histos of Histel (A1) Alaska Color Change (TA4) Histos of Visitel (A1) Alaska Aplie ownie (TA5) Histos Dark Surface (A12) Alaska Redox With 2.5Y Hue Alaska Redox (A14) Other (Explain in Remarks) Alaska Redox (A14) * Give details of color change in Remarks Retrictive Layer (IP present): Type: none observed Depth (inches): Remarks Remarks: o hydric soil indicators sufficient) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Saturation (A3) Hist Deposits (B15) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Saturation (A3) Hist Deposits (B15) Barter Stations (B5) Other (Explain in Remarks) Sediment Deposits (B2) Opticater Statis (D1) Dirth Deposits (B3) Other (Explain in Remarks) Staturation (A3) Hist Deposits (B15) Histos Deposite (C3) Scherewet Reservet Yes No © Depth (inches): | 5-8 | 7.5YR | 2.5/3 | 100 | | | | | | Loamy Sand | discontinuous bou | undaries |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol or Histel (A1) Alaska Color Change (TA4) Alaska Gleyed Without Hue SY or Redder Underlying Layer Histic Epipedon (A2) Alaska Alpine swales (TA5) Underlying Layer Histic Epipedon (A2) Alaska Redox With 22 YH ue Other (Explain in Remarks) Thick Dark Surface (A12) 3 One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present Alaska Redox (A14) 4 Give details of color change in Remarks Restrictive Layer (if present): Type: none observed Depth (inches): Hydric Soil Present? Yes No Restrictive Layer (A13) Inundation Visible on Aerial Imagery (B7) Surface Water (A1) Inundation Visible on Aerial Imagery (B7) Depth (inches): Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Inundation Visible on Aerial Imagery (B7) Hydric Soil Presence Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Hydric Soil C(1) Sait Deposits (C3) Hydric Soil Hydric Soil Researd Pants (S1) Presence of Reduced Iron (C4) Water Marks (B1) Hydric Soil Maria Remarks) Geomorphic Position (D2) <td>8-14</td> <td>2.5Y</td> <td>3/1</td> <td>60</td> <td>7.5YR</td> <td>3/4</td> <td>40</td> <td></td> <td>М</td> <td></td> <td></td> <td></td> | 8-14 | 2.5Y | 3/1 | 60 | 7.5YR | 3/4 | 40 | | М | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils. ² Histosol or Histel (A1) Alaska Color Change (TA4) Alaska Gleyed Without Hue SY or Redder Underlying Layer Histic Explored (A2) Alaska Alpine swales (TA5) Underlying Layer Hydrogo Suifiel (A1) Alaska Redox With we set at the synthesis of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present Alaska Gleyed (A13) Alaska Geved (A13) • One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present Hydric Soil Present? Yes No • Alaska Geved Arens (A15) • Give details of color change in Remarks Hydric Soil Present? Yes No • Restrictive Layer (if present): Type: none observed Hydric Soil Present? Yes No • YPROLOGY Wetand Hydrology Indicators: Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Gurdee Water (A1) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Hydric Soil Presence of Reduced Iron (X4) Gurdee Water (A1) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Hydrices of Reduced Iron (X4) Guranz Undicators (B4) Hydrogos Soil (B15) | | | | | | | | | | | | |
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| Hydric Soil Indicators: Indicators for Problematic Hydric Soils. ² Histosol or Histel (A1) Histosol or Histel (A1) Histosol or Histel (A1) Histosol or Histel (A1) Alaska Alpine svales (TA5) Thick Dark Surface (A12) Alaska Gleyed (A13) Alaska Gleyed (A13) Alaska Gleyed (A13) Alaska Gleyed Pores (A15) Indextype (Comparison of the Comparison of | ¹ Type: C=Conce | entration. D | =Depletion | . RM=Redu | uced Matrix | ² Location | : PL=Pore | e Linina. RC | C=Root Cha | annel. M=Matrix | | |
| Istosol or Histel (A1) Alaska Color Change (TA4) ⁴ Alaska Cleved Without Hue SY or Redder I Histosol or Histel (A1) Alaska Alpine swales (TA5) Underlying Layer I Hydrogen Sulfide (A4) Alaska Redox With 2.SY Hue Other (Explain in Remarks) I Thick Dark Surface (A12) Alaska Redox With 2.SY Hue Other (Explain in Remarks) Alaska Gleyed (A13) and an appropriate landscape position must be present Alaska Redox (A14) 4 Give details of color change in Remarks Alaska Redox (A14) 4 Give details of color change in Remarks Alaska Redox (A14) 4 Give details of color change in Remarks Alaska Redox (A14) 4 Give details of color change in Remarks No explore Present? Yes No explore Depth (inches): Wetland Hydrology Indicators: Primary Indicators abserved Secondary Indicators (two or more are required) Immary Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (810) Sufface Water (A1) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (810) Orditzed Rhizospheres along Living Roots (C3) Sufface Water (A1) Hydrogen Sufface Odor (C1) Salt Deposits (C5) Preseason Water Table (C2) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | - | | | | |
| Histic Epipedon (A2) Alaska Alpine swales (TA5) Undertying Layer Histic Epipedon (A2) Alaska Redox With 2.5Y Hue Other (Explain in Remarks) Thick Dark Sufface (A12) Alaska Redox With 2.5Y Hue Other (Explain in Remarks) Alaska Gleyed (A13) and an appropriate landscape position must be present Alaska Gleyed Pores (A15) * Give details of color change in Remarks Restrictive Layer (if present): Type: none observed Depth (inches): Hydric Soil Present? Yes No ● Wetland Hydrology Indicators: Finany Indicators (two or more are required) Finanzy Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) Gurdation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Hydrocosits (B1) Hydrogensits (E15) Gurdation Visible Odor (C1) Saturation (A3) Gurdation Cosits (B2) Dry-Season Water Table (C2) Surface S08 (B2) Dry-Season Water Table (C2) Gurdation Crust (B4) Other (Explain in Remarks) Gurdation Crust (B4) Dry-Season Water Table (C2) Gurdation Crust (B6) Other (Explain in Remarks) Gurdation Crust (B6) Depth (inches): Water Marks (B1) Hydrogensulfid | _ | | | | | | | 4 | oiis: | | | |
| Image: Hydroger Sulfide (A4) Image: Alaska Redox With 2.5Y Hue Other (Explain in Remarks) Image: Hydroger Sulfide (A13) Image: Alaska Redox With 2.5Y Hue Other (Explain in Remarks) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Redox (A14) Depth (Inches): Type: non observed Image: Alaska Redox (A14) Image: Alaska Alaska Redox (A14) Image: Alaska Redox (A14) Image: Alaska Alaska Redox (A14) Image: Alaska Alaska Redox (A14) Image: Alaska Alask | | . , | | | | | | , | | | Hue 5Y or Redder | |
| Implying transmission (not) Implying transmission (not) Implying transmission (12) 3 One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present Implying transmission 4 Give details of color change in Remarks Restrictive Layer (If present): YpP: none observed Depth (Inches): Hydric Soil Present? Yes No ● Remarks: hydrophytic landscape position must be present Hyper Long transmission Hydric Soil Present? Yes No ● Primary Indicators observed Wetland Hydrology Indicators: Primary Indicators observed Water Stained Leaves (B9) Primary Indicators (Invo on is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) High Water Table (A2) Spansely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) High Water Table (A2) Deposits (B15) Presence of Reduced Iron (C4) Sutter Marks (B1) Hydrogen Suffice Odor (C1) Saturation (C4) Sutter Marks (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Other (Explain in Remarks) Geoenorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) Shallow Aquitard (D3) Mic | | . , | | | | • | • | , | | Other (Explain in Rem | arks) | |
| Alaska Gleyed (A13) ^a One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present. Alaska Gleyed Pores (A15) ^a Give details of color change in Remarks Restrictive Layer (if present): Type: non observed Depth (inches): Hydric Soil Present? Yes Remarks: hydric soil indicators observed HYDROLOGY Secondary Indicators: Methand Hydrology Indicators: Secondary Indicators (two or more are required) Implement Deposition (A3) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Implement Deposits (B1) Mark Restriction (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Microtopographic Reside (C3) Started Vater Marks (B1) Hydrigen Suffice Odor (C1) Started Paters (B10) Startation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Microtopographic Reside (C3) Started or Stressed Plants (01) Stressed Plants (01) Stressed Plants (01) Stressed Plants (01) Stressed Plants (02) Stressed Plants (03) Stressed Plants (03) Stressed Plants (03) Stresee Soil Cracks (B6) Stressed Plants (0 | | . , | 2 | | | | 101 2.51 1 | iuc - | | | | |
| Alaska Redox (A14) ▲ Gleved Pores (A15) ▲ Alaska Gleved Pores (A15) ▲ Gleved etails of color change in Remarks Restrictive Layer (if present): Type: none observed Depth (inches): Hydric Soil Present? Yes No ● Remarks:: • Give details of color change in Remarks Methand Hydrology Indicators observed Hydric Soil Present? Yes No ● HYDROLOGY ● Wetland Hydrology Indicators: ● Immary Indicators (any one is sufficient) ● Surface Water (A1) ● Imudation Visible on Aerial Imagery (B7) ● Saturation (A3) ● Mart Deposits (B15) ● Mart Marks (B1) ● Hydrogen Sulfide Odor (C1) ● Saturation (A3) ● Mart Marks (B1) ● Hydrogen Sulfide Odor (C1) ● Saturation (A3) ● Phy-Season Water Table (C2) ● Staturation (B4) ● I'n Deposits (B5) ● I'n Deposits (B5) ● I'n Deposits (B5) ● Surface Water Present? Yes No ● | | `` | .) | | ³ One i | ndicator of | hydrophyti | ic vegetatic | on, one prir | mary indicator of wetlan | d hydrology, | |
| ▲ Alaska Gleyed Pores (A15) ⁴ Give details of color change in Remarks Restrictive Layer (if present): TyPe: none observed Depth (inches): Remarks: no hydric soil indicators observed Hydric Soil Present? Yes No Methand Hydrology Indicators: Field Observations: Secondary Indicators (two or more are required) Pimary. Indicators (anv one is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Surface Water (A1) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Surface Water (A1) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Surface Water (A1) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Sufface Water (A1) Dury Season Water Table (C2) Saturation (A3) Dry Season Water Table (C2) Sutartato reset (B7) Grift Deposits (B3) Other (Explain in Remarks) Geomorphic Positin (D2) Shallow Aquitard (D3) Mir Deposits (B5) Depth (inches): Metiand Hydrology Present? Yes N | | | | | and an | appropriat | e landscap | e position i | must be pr | esent | | |
| Type: none observed Depth (inches): Hydric Soil Present? Yes No Remarks: no hydric soil indicators observed Indicators observed No Indicators HyDROLOGY Indicators observed Secondary Indicators (two or more are required) Water Stained Leaves (B9) Indicators (two or more are required) Image: Primary Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Sediment Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Info Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Marl Deposits: Microtopographic Relief (D4) Surface Soil Cracks (B6) Vest FAC-neutral Test (D5) FAC-neutral Test (D5) Field Observations: Depth (inches): Wetland Hydrology Present? Yes No Sutartaon Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No | _ | . , | .5) | | ⁴ Give of | details of co | olor change | e in Remarl | s | | | |
| Type: none observed Depth (inches): Hydric Soil Present? Yes No Remarks: no hydric soil indicators observed Indicators observed No Indicators HyDROLOGY Indicators observed Secondary Indicators (two or more are required) Water Stained Leaves (B9) Indicators (two or more are required) Image: Primary Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Sediment Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Info Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Marl Deposits: Microtopographic Relief (D4) Surface Soil Cracks (B6) Vest FAC-neutral Test (D5) FAC-neutral Test (D5) Field Observations: Depth (inches): Wetland Hydrology Present? Yes No Sutartaon Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No | Restrictive Laver (| (if present): | | | | | | | | | | |
| Depth (inches): Pepth (inches): Remarks: no hydric soil indicators observed Metland Hydrology Indicators: Secondary Indicators (two or more are required) Primary Indicators (any one is sufficient) Water Stained Leaves (B9) Surface Water (A1) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Weter Marks (B1) Hydrogen Sulfide Odor (C1) Saturation or Statused Plants (D1) Diff Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Diff Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Microtopographic Relief (D4) Shallow Aquitard (D3) Iron Deposits (B5) Vestar No Depth (inches): Pepth (inches): Surface Soil Cracks (B6) Pepth (inches): No Depth (inches): | _ `` | | | | | | | | | | | |
| Remarks: no hydric soil indicators observed HYDROLOGY Secondary Indicators (two or more are required) Primary Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Suffice Of (C1) Sediment Deposits (B2) Dry-Season Water Table (C2) Drift Deposits (B3) Other (Explain in Remarks) Surface Soil Cracks (B6) Wicrotopgraphic Relief (D4) Surface Soil Cracks (B6) Pepth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No | 1 YUE, DODE 0 | nhserved | | | | | | | | Hydric Soil Prese | nt? Yes 🔿 | No 🖲 |
| Wetland Hydrology Indicators: Secondary Indicators (two or more are required) Primary Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Water Marks (B1) Hydrogen Sulfide Odor (C1) Salt Deposits (C5) Sediment Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Ortif Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Microtopographic Relief (D4) Surface Water Present? Yes No Depth (inches):: Water Table Present? Yes No Depth (inches):: Saturation Present? Yes No Depth (inches): | Depth (inches Remarks: | 5): | rved | | | | | | | Hydric Soil Prese | nt? Yes 🔿 | No 🖲 |
| Wetland Hydrology Indicators: Secondary Indicators (two or more are required) Primary Indicators (any one is sufficient) Inundation Visible on Aerial Imagery (B7) Drainage Patterns (B10) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Water Marks (B1) Hydrogen Sulfide Odor (C1) Salt Deposits (C5) Sediment Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Ortif Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Microtopographic Relief (D4) Surface Water Present? Yes No Depth (inches):: Water Table Present? Yes No Depth (inches):: Saturation Present? Yes No Depth (inches): | Depth (inches Remarks: | 5): | rved | | | | | | | Hydric Soil Prese | nt? Yes ○ | No • |
| □ Surface Water (A1) □ Inundation Visible on Aerial Imagery (B7) □ Drainage Patterns (B10) □ High Water Table (A2) □ Sparsely Vegetated Concave Surface (B8) □ Oxidized Rhizospheres along Living Roots (C3) □ Saturation (A3) □ Marl Deposits (B15) □ Presence of Reduced Iron (C4) □ Water Marks (B1) □ Hydrogen Sulfide Odor (C1) □ Salt Deposits (C5) □ Sediment Deposits (B3) □ Dry-Season Water Table (C2) □ Stunted or Stressed Plants (D1) □ Drift Deposits (B3) □ Other (Explain in Remarks) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ □ Shallow Aquitard (D3) □ □ tron Deposits (B5) □ ✓ Shallow Aquitard (D3) □ □ surface Water Present? Yes No Depth (inches): ✓ FAC-neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Depth (inches): Saturation Present? Yes No Depth (inches): Depth | Depth (inches Remarks: no hydric soil india | 5): Icators obse | rved | | | | | | | Hydric Soil Prese | nt? Yes 🔿 | No 🖲 |
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| Saturation (A3) Marl Deposits (B15) Presence of Reduced Iron (C4) Water Marks (B1) Hydrogen Sulfide Odor (C1) Salt Deposits (C5) Sediment Deposits (B2) Dry-Season Water Table (C2) Stunted or Stressed Plants (D1) Drift Deposits (B3) Other (Explain in Remarks) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) Microtopographic Relief (D4) Surface Soil Cracks (B6) ✓ FAC-neutral Test (D5) Field Observations: Depth (inches): Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Depth (inches): Wetland Hydrology Present? Yes No | Depth (inches Remarks: no hydric soil indic HYDROLOG Wetland Hydrol | s): icators obse Y logy Indica | ators: | t) | | | | | | | ndicators (two or m | nore are required) |
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| □ Sediment Deposits (B2) □ Dry-Season Water Table (C2) □ Stunted or Stressed Plants (D1) □ Drift Deposits (B3) □ Other (Explain in Remarks) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Microtopographic Relief (D4) □ Surface Soil Cracks (B6) ✓ FAC-neutral Test (D5) Field Observations: □ Depth (inches): Surface Water Present? Yes No □ Depth (inches): □ Depth (inches): Water Table Present? Yes No □ Depth (inches): □ Depth (inches): Wetland Hydrology Present? Yes Saturation Present? Yes No □ Depth (inches): Wetland Hydrology Present? Yes | Depth (inches Remarks: no hydric soil indic HYDROLOG Wetland Hydrol Primary Indicator Surface Wate High Water | s): icators obse it logy Indica rs (any one ter (A1) Table (A2) | ators: | t) | | | | - | | Secondary II Water S Drainag Oxidized | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor | nore are required) |
| □ Drift Deposits (B3) □ Other (Explain in Remarks) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Microtopographic Relief (D4) □ Surface Soil Cracks (B6) ✓ FAC-neutral Test (D5) Field Observations: Surface Water Present? Yes Surface Water Present? Yes No Pepth (inches): Saturation Present? Yes No< | Depth (inches Remarks: no hydric soil indic HYDROLOG Wetland Hydrol Primary Indicator Surface Wate High Water | s): icators obse it Y logy Indica rs (any one ter (A1) Table (A2) A3) | ators: | t) | 🗌 Sp | arsely Veg arl Deposits | etated Con 6 (B15) | cave Surfa | | Secondary II Water S Drainag Oxidized Presence | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor e of Reduced Iron | nore are required) |
| Algal Mat or Crust (B4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Microtopographic Relief (D4) □ Surface Soil Cracks (B6) ✓ FAC-neutral Test (D5) Field Observations: Surface Water Present? Surface Water Present? Yes No Yes No Depth (inches): Saturation Present? Yes No Yes No Depth (inches): Saturation Present? Yes No Yes No Depth (inches): Wetland Hydrology Present? Yes No | Depth (inches Remarks: no hydric soil india HYDROLOG Wetland Hydrol Primary Indicator Surface Wate High Water Saturation (A Water Marks | s): icators obse if logy Indica rs (any one ter (A1) Table (A2) A3) s (B1) | ators: is sufficien | t) | ☐ Sp ☐ Ma ☐ Hy | oarsely Vego arl Deposits /drogen Su | etated Con s (B15) Ifide Odor (| cave Surfa | | Secondary Ii Water S Drainag Oxidized Presenc Salt Dep | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor e of Reduced Iron posits (C5) | nore are required) ing Living Roots (C3) (C4) |
| □ Iron Deposits (B5) □ Microtopographic Relief (D4) □ Surface Soil Cracks (B6) ✓ FAC-neutral Test (D5) Field Observations: Surface Water Present? Yes ○ No ● Depth (inches): Water Table Present? Yes ○ No ● Depth (inches): Wetland Hydrology Present? Yes ○ No ● Saturation Present? Yes ○ No ● Depth (inches): Depth (inches): No ● | Depth (inches Remarks: no hydric soil india HYDROLOG Wetland Hydrol Primary Indicator Surface Wate High Water Saturation (<i>A</i> Water Marks Sediment De | s): icators obse if logy Indica rs (any one ter (A1) Table (A2) A3) s (B1) eposits (B2) | ators: is sufficien | t) | Sp Ma Ma Dr Dr | oarsely Vego arl Deposits vdrogen Su vy-Season V | etated Con 5 (B15) Ifide Odor (Vater Table | cave Surfa (C1) e (C2) | | Secondary Ii Water S Drainag Oxidized Presenc Salt Dep Stunted | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor e of Reduced Iron posits (C5) or Stressed Plants | nore are required) ing Living Roots (C3) (C4) |
| □ Surface Soil Cracks (B6) Image: Constraint of the second s | Depth (inches Remarks: no hydric soil indic HYDROLOG Wetland Hydrol Primary Indicator Surface Wate High Water Saturation (<i>I</i> Water Marks Sediment De Drift Deposit | s): icators obse it Y logy Indica rs (any one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) | ators: is sufficien | t) | Sp Ma Ma Dr Dr | oarsely Vego arl Deposits vdrogen Su vy-Season V | etated Con 5 (B15) Ifide Odor (Vater Table | cave Surfa (C1) e (C2) | | Secondary In Water S Drainag Oxidized Presenc Salt Dep Stunted Geomor | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor e of Reduced Iron posits (C5) or Stressed Plants phic Position (D2) | nore are required) ing Living Roots (C3) (C4) |
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| | Depth (inches Remarks: no hydric soil india HYDROLOG Wetland Hydrol Primary Indicator Surface Water High Water Saturation (<i>A</i> Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Field Observatio Surface Water Pr | s): icators obse it Y logy Indic: rs (any one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) ts (B3) ts (B3) ts (B3) ts (B5) Cracks (B6) ions: tresent? | ators: is sufficien |) No 🖲 | Sp Ma Dr Ot | arsely Veg arl Deposits /drogen Su y-Season V .her (Explai | etated Con ; (B15) Ifide Odor (Vater Table n in Remar s): | cave Surfa (C1) e (C2) | ce (B8) | Secondary II Water S Drainag Oxidized Presenc Salt Dep Stunted Geomor Shallow Microto FAC-net | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor e of Reduced Iron posits (C5) or Stressed Plants phic Position (D2) Aquitard (D3) pographic Relief (D tral Test (D5) | nore are required) ng Living Roots (C3) (C4) (D1) 4) |
| | Depth (inches Remarks: no hydric soil india HYDROLOG Wetland Hydrol Primary Indicator Surface Water High Water Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Field Observatio Surface Water Press Saturation Presse | s): icators obse if Y logy Indica rs (any one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) · Crust (B4) ts (B5) Cracks (B6) ons: Present? esent? ent? | ators: is sufficien |) No ()) No () | Sp Ma Hy Dr Ot Ot | arsely Veg arl Deposits /drogen Su -y-Season V ther (Explai | etated Con s (B15) Ifide Odor (Vater Table n in Remar s): s): | cave Surfa (C1) e (C2) | ce (B8) | Secondary II Water S Drainag Oxidized Presenc Salt Dep Stunted Geomor Shallow Microto FAC-net | ndicators (two or m tained Leaves (B9) e Patterns (B10) I Rhizospheres alor e of Reduced Iron posits (C5) or Stressed Plants phic Position (D2) Aquitard (D3) pographic Relief (D tral Test (D5) | nore are required) ng Living Roots (C3) (C4) (D1) 4) |

only one secondary hydrology indicator observed