WETLAND DETERMINATION DATA FORM - Alaska Region

| Applicant/Owner: Alaska Energy Authority Sampling Point: SW12_T08_01 | Project/Site: Susitna-Watana Hydroelectric Project Borough/City: | Matanuska-Susitna Borough Sampling Date: 18-Jun-12 | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|
| Newstigator(s): _GK | | | | | | | | | | | |
| Soli Map Unit Name: NWI classification: R3USC | | | | | | | | | | | |
| Soli Map Unit Name: New Climatic Phydrologic Conditions on the site typical for this time of year? Yes No | Local relief (concave, convex, none): convex Slope: 3.5 | % / 2.0 ° Elevation: 400 | | | | | | | | | |
| New Classification: R3USC | | | | | | | | | | | |
| 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 For Hydrology on aturally 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 Welland Hydrology | | | | | | | | | | | |
| Are Vegetation | | | | | | | | | | | |
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| BUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No No Wetland Hydrology Present? Yes No | , so regiment — , so regiment of control of | | | | | | | | | | |
| Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present? Yes No No within a Wetland? Remarks: Gravel bar adjacent to Susitna River - site floods regularly (drift deposits, sediment deposits, geomorphic position). Sparse vegetation appears to be FACU colonizers between flood events. Low organic content of sandy soils appear to preclude development of redoximorphic features ### Absolute | | | | | | | | | | | |
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| Wetland Hydrology Present? Yes No within a Wetland? Yes Now worksner to within a Wetland? Yes Now worksneet: Total Wetland Yes Now worksneet: Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) Total Number of Domina | | | | | | | | | | | |
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| appears to be FACU colonizers between flood events. Low organic content of sandy soils appear to preclude development of redoximorphic features //EGETATION - Use scientific names of plants. List all species in the plot. Absolute | Wetland Hydrology Present? Yes Wind C | | | | | | | | | | |
| Tree Stratum Absolute % Cover % Cover Dominant Species 7 Status Indicator Status Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) 1. 0 □ Total Number of Dominant Species That are OBL, FACW, or FAC: 4 (A) 4 (A) 2. 0 □ □ Percent of dominant Species That Are OBL, FACW, or FAC: 44.4% (A) 44.4% (A) 5. 0 □ □ Percent of dominant Species That Are OBL, FACW, or FAC: 44.4% (A) 44.4% (A) 5. Total Cover: 0 0 □ Percent of dominant Species That Are OBL, FACW, or FAC: 44.4% (A) 8 apling/Shrub Stratum 50% of Total Cover: 0 0 □ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL Species 0 0 1 OBL Species 0 x 1 = 0 N Total % Cover of: Multiply by: OBL Species 0 A X 1 = 0 PREVAILS Species 0 X 2 = 4 PREVAILS Species 0 X 2 = 4 PREVAILS Species 0 X 3 = 21 PREVAILS Species 0 X 5 = 0 UPL Species 0 X 5 = 0 UPL Species 0 X 5 = 0 Column Totals: 18 (A) 61 (B) PREVAILS Species 0 X 5 = 0 Column Totals: 18 (A) 61 (B) | appears to be FACU colonizers between flood events. Low organic content of sandy soils appear to preclude development of redoximorphic | | | | | | | | | | |
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| Total Number of Dominant Species Across All Strata: | | Status Number of Dominant Species | | | | | | | | | |
| 2. 0 □ Species Across All Strata: 9 (B) 3. 0 □ Percent of dominant Species That Are OBL, FACW, or FAC: 44.4% (A/B) 5. 0 □ Prevalence Index worksheet: | 1. 0 | | | | | | | | | | |
| 3. 0 □ Percent of dominant Species That Are OBL, FACW, or FAC: 44.4% (A/B) 5. 0 □ Prevalence Index worksheet: Total % Cover of: Multiply by: Sapling/Shrub Stratum 50% of Total Cover: 0 20% of Total Cover: 0 1. Popullus balsamifera 5 ✓ FACU FACW Species 0 x 1 = 0 FACW Species 2 x 2 = 4 FACW Species 7 x 3 = 21 FACU Species 9 x 4 = 36 UPL Species 9 x 4 = 36 UPL Species 0 x 5 = 0 Column Totals: 18 (A) 61 (B) 6. 0 □ Column Totals: 18 (A) 61 (B) Prevalence Index = B/A = 3.389 Hydrophytic Vegetation Indicators: □ □ Dominance Test is > 50% | | | | | | | | | | | |
| 4. 0 □ That Are OBL, FACW, or FAC: 44.4% (A/B) 5. Total Cover: 0 □ Sapling/Shrub Stratum 50% of Total Cover: 0 20% of Total Cover: 0 1. Populus balsamifera 5 ✓ FACU FACW Species 0 x 1 = 0 2. Salix alaxensis 2 ✓ FAC FAC Species 7 x 3 = 21 3. 0 □ FACU Species 9 x 4 = 36 4. 0 □ UPL Species 0 x 5 = 0 5. 0 □ Column Totals: 18 (A) 61 (B) 6. 0 □ Prevalence Index worksheet: Total % Cover of: Multiply by: 7. X 3 = 21 FACU Species 2 x 2 = 4 FACU Species 9 x 4 = 36 UPL Species 0 x 5 = 0 Column Totals: 18 (A) 61 (B) Prevalence Index worksheet: Total % Cover of: Multiply by: COURSTONED 6. 0 0 | | | | | | | | | | | |
| Total Cover: | | | | | | | | | | | |
| Total Cover:0 | | Provolence Index weeksheets | | | | | | | | | |
| Sapling/Shrub Stratum 50% of Total Cover: 0 20% of Total Cover: 0 OBL Species 0 x 1 = 0 1. Populus balsamifera 5 ✓ FACU FACU Species 2 x 2 = 4 2. Salix alaxensis 2 ✓ FAC FAC Species 7 x 3 = 21 3. 4. 0 0 □ UPL Species 9 x 4 = 36 4. 0 0 □ Column Totals: 18 (A) 61 (B) 5. 0 0 □ □ Column Totals: 18 (A) 61 (B) 6. 0 0 □ □ Hydrophytic Vegetation Indicators: 9. 0 □ □ Dominance Test is > 50% | Total Cover: | | | | | | | | | | |
| 1. Populus balsamifera 5 ✓ FACU FACU Species 2 x 2 = 4 2. Salix alaxensis 2 ✓ FAC FAC Species 7 x 3 = 21 3. 0 □ FACU Species 9 x 4 = 36 4. □ 0 □ UPL Species 0 x 5 = 0 5. □ 0 □ Column Totals: 18 (A) 61 (B) 6. □ 0 □ Prevalence Index = B/A = 3.389 3.389 8. □ 0 □ Hydrophytic Vegetation Indicators: 9. □ Dominance Test is > 50% | Sapling/Shrub Stratum 50% of Total Cover: 20% of Total Cover | 0 00 0 0 0 0 0 0 0 | | | | | | | | | |
| 2. Salix alaxensis 2. Salix alaxensis 3. □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ | 4. Parvilva halaamifara | EACW Species 2 x 2 = 4 | | | | | | | | | |
| 3. | 2 Caliv alayansia | TACO | | | | | | | | | |
| 4. 0 UPL Species 0 x 5 = 0 5. 0 Column Totals: 18 (A) 61 (B) 6. 0 Prevalence Index = B/A = 3.389 8. 0 Hydrophytic Vegetation Indicators: 9. Dominance Test is > 50% | | 17.6 | | | | | | | | | |
| 5. 0 Column Totals: 18 (A) 61 (B) 6. 0 Prevalence Index = B/A = 3.389 8. 0 Hydrophytic Vegetation Indicators: 9. 0 Dominance Test is > 50% | | | | | | | | | | | |
| 6. | | | | | | | | | | | |
| 7. | | Column Totals: <u>18</u> (A) <u>61</u> (B) | | | | | | | | | |
| 8. 0 Hydrophytic Vegetation Indicators: 9. 0 Dominance Test is > 50% | | Prevalence Index = B/A = 3.389 | | | | | | | | | |
| 9 | | Hydrophytic Vogetation Indicators: | | | | | | | | | |
| | | | | | | | | | | | |
| 10 Trevalence findex is 25.0 | | | | | | | | | | | |
| | | | | | | | | | | | |
| Total Cover:7 | 700 5 1 1 0 | 1.4 Remarks or on a separate sheet) | | | | | | | | | |
| 1. Hedysarum alpinum 1 FACU Problematic Hydrophytic Vegetation ¹ (Explain) | | | | | | | | | | | |
| 2. Calamagrostis canadensis 5 ✓ FAC ¹ Indicators of hydric soil and wetland hydrology must | | | | | | | | | | | |
| 3. Artemisia tilesii 1 ✓ FACU be present, unless disturbed or problematic. | Automicia tilogii | | | | | | | | | | |
| 4. Lupinus arcticus 1 FACU | A Luminus analisus | | | | | | | | | | |
| 5 Equisetum variegatum 1 Plot size (radius, or length x width) 10m | | FACW | | | | | | | | | |
| 6. Argentina anserina W Cover of Wetland Bryophytes (Where applicable) | a Asserting appearing | | | | | | | | | | |
| 7. Solidago spathulata 1 FACU % Bare Ground 80 | = Colidana anathulata | EACH | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 Hydrophytic | | Hydronhytic | | | | | | | | | |
| Total Cover: 11 Vegetation | | | | | | | | | | | |
| 50% of Total Cover: 5.5 20% of Total Cover: 2.2 Present? Yes No | Total Cover: 11 | regetation | | | | | | | | | |
| Remarks: popbal small saplingmost species only trace cover. Problematic hydrophytic vegetation - likely FACU colonizers between flood events. | | No. (0) No. (1) | | | | | | | | | |

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| | | the depth no | eeded to docume | ent the indicator or co | nfirm the abs | | ators) | | | | |
|----------------------------------|---|--------------|-----------------|--|-------------------|---------------|--------------------|--------------------------------------|--|--|--|
| Depth (inches) Color (moist) % | | % | Color (moist) | % | Type ¹ | _Loc_2 | Texture | Remarks | | | |
| 0-5 | 5Y | 2.5/1 | 95 | | | | | Loamy Sand | 5% subang coarse gravel 1 in band at 1. | | |
| 5-11 | | 2.5/1 | 50 | | | | | Sand | 60% rounded to subang cobble and coarse | | |
| | | 2.3/1 | | | - | | | | 00 % Founded to subang couble and coarse | | |
| | | | | | - | | | | | | |
| | | | | | | | | | - | | |
| | | | | | | | | | | | |
| | | | | | | | | - | | | |
| | | | | | | | | | | | |
| ¹Type: C=Cor | ncentration. D= | Depletion | . RM=Reduced | I Matrix ² Location | n: PL=Pore | e Lining. RC | =Root Cha | nnel. M=Matrix | | | |
| Hydric Soil I | ndicators: | | 7 | Indicators for Pr | oblematio | c Hydric Sc | oils: ³ | | | | |
| Histosol or | r Histel (A1) | | [| ☐ Alaska Color Change (TA4) Alaska Gleyed Without Hue 5Y or Redder | | | | | | | |
| Histic Epip | pedon (A2) | | [| Alaska Alpine swales (TA5) Underlying Layer | | | | | | | |
| Hydrogen | Sulfide (A4) | | [| Alaska Redox V | Nith 2.5Y H | lue | ✓ | Other (Explain in Remark | s) | | |
| Thick Dark | k Surface (A12) |) | | 3.0 : | | | | | doala.a | | |
| Alaska Gle | eyed (A13) | | | and an appropriat | | | | nary indicator of wetland h esent | ydrology, | | |
| Alaska Red | . , | | | 4 Give details of co | • | • | • | | | | |
| Alaska Gle | eyed Pores (A1 | 5) | | Give details of Co | | = III Kemark | S | | | | |
| Restrictive Laye | er (if present): | | | | | | | | | | |
| Type: | | | | | | | | Hydric Soil Present | ? Yes 🕙 No 🔾 | | |
| Depth (inch | nes): | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLO | GY | | | | | | | | | | |
| Wetland Hyd | rology Indica | tors: | | | | | | Secondary Indi | cators (two or more are required) | | |
| Primary Indica | itors (any one i | s sufficien | t) | | | | | Water Stained Leaves (B9) | | | |
| Surface Water (A1) | | | | Inundation Visible on Aerial Imagery (B7) | | | | ☐ Drainage P | Patterns (B10) | | |
| ✓ High Water Table (A2) | | | | Sparsely Veg | etated Cor | ıcave Surfac | ce (B8) | Oxidized R | hizospheres along Living Roots (C3) | | |
| ✓ Saturation | . , | | | Marl Deposits | s (B15) | | | | f Reduced Iron (C4) | | |
| | Water Marks (B1) ✓ Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) ✓ Dry-Season Water Table (C2) | | | | | | | Salt Depos | | | |
| | | | | _ ′ | | • • | | | Stressed Plants (D1) | | |
| ✓ Drift Depo | , | | | U Other (Explai | n in Rema | rks) | | | ic Position (D2) | | |
| | or Crust (B4) | | | | | | | | juitard (D3) | | |
| ☐ Iron Depo | ` , | | | | | | | | graphic Relief (D4) | | |
| | oil Cracks (B6) | | | | | | | ☐ FAC-neutra | l Test (D5) | | |
| Field Observa Surface Water | | Voc | No ● | Donth (inche | | | | | | | |
| | | | | Depth (inche | • | | | | | | |
| Water Table P | | | No 🔾 | Depth (inche | :s): 7 | | Wetiai | nd Hydrology Presen | t? Yes • No O | | |
| Saturation Pre (includes capi | | Yes 🧿 | No O | Depth (inche | :s): 6 | | | | | | |
| Describe Recor | ded Data (stre | am gauge, | monitor well, | aerial photos, prev | vious inspe | ction) if ava | ilable: | | | | |
| Remarks: | | | | | | | | | | | |
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