WETLAND DETERMINATION DATA FORM - Alaska Region

| Project/S | ite: Susitna-Watana Hydroelectric Project | | Borough/City: | Matanusk | ca-Susitna Borough Sampling Date: 30-Jul-12 |
|------------|--|-----------|------------------------|---------------------|--|
| Applicant | t/Owner: Alaska Energy Authority | | | | Sampling Point: SW12_T49_01 |
| Investigat | | | Landform (hills | side, terrac | ce, hummocks etc.): Flat |
| - | ief (concave, convex, none): flat | | Slope: | % / 0.4 | |
| Subregio | n : Interior Alaska Mountains | Lat · | 62.809114797 | 5 | Long.: -148.423182393 Datum: NAD83 |
| _ | Unit Name: | Lut | 02.003114737 | <u> </u> | NWI classification: PEM1H |
| - | atic/hydrologic conditions on the site typical for this tir | no of voc | or? Ves | ● No ○ | (If no, explain in Remarks.) |
| | | - | tly disturbed? | | Iormal Circumstances" present? Yes No |
| _ | | - | problematic? | | eded, explain any answers in Remarks.) |
| • | | | | | |
| _ | ARY OF FINDINGS - Attach site map show vdrophytic Vegetation Present? Yes No No | | Inpling point | locations | s, transects, important leatures, etc. |
| | , , , | | Is | the Sam | pled Area |
| | , | | | thin a W | |
| | /etland Hydrology Present? Yes ● No ○ ss: PEM1H with shallow standing water. similar comm | | l l | | |
| | content of the conten | idinaco n | neermixed with | adjacent ph | |
| | | | | | |
| VECET | CATION | | | | |
| VEGET | ATION - Use scientific names of plants. List | st all sp | ecies in the I | olot. | Dominance Test worksheet: |
| | 74 | Absolute | | Indicator Status | Number of Dominant Species |
| 1. 1. | Stratum | 96 Cove | | Status | That are OBL, FACW, or FAC: 8 (A) |
| 2. | | | - | | Total Number of Dominant |
| 3. | | | - | | Species Across All Strata: 8 (B) |
| 4. | | | - H | | Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 5. | | 0 | - | | |
| | Total Cover: | | _ | | Prevalence Index worksheet: Total % Cover of: Multiply by: |
| Saplin | ng/Shrub Stratum 50% of Total Cover: | 0 20 | – % of Total Cover: | 0 | OBL Species 76 x 1 = 76 |
| - | <u>-</u> | | ~ | | FACW Species $0 \times 2 = 0$ |
| - | Retula nana | 3 | | FAC FAC | FAC Species 4 x 3 = 12 |
| _ | /accinium uliginosum Andromeda polifolia (IAM) | | - = | OBL | FACU Species $0 \times 4 = 0$ |
| 4. | | | | ODL | UPL Species 0 x 5 = 0 |
| 5. | | | | | |
| 6. | | | | | Column Totals: 80 (A) 88 (B) |
| 7. | | 0 | | | Prevalence Index = B/A = 1.100 |
| 8. | | 0 | | | Hydrophytic Vegetation Indicators: |
| 9. | | 0 | | | ✓ Dominance Test is > 50% |
| 10 | | 0 | | | ✓ Prevalence Index is ≤3.0 |
| | Total Cover: | | | | ☐ Morphological Adaptations ¹ (Provide supporting data in |
| - | Stratum 50% of Total Cover: | | % of Total Cover | | Remarks or on a separate sheet) |
| | Carex limosa | 10 | | OBL | Problematic Hydrophytic Vegetation ¹ (Explain) |
| _ | Carex rotundata | | | OBL | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| J | richophorum caespitosum Utricularia intermedia | 15 | _ | OBL | be present, unless disturbed of problematic. |
| — | Propers analisa | - 1 | | OBL | Plot size (radius, or length x width) |
| - | luncus stygius | 7 | _ | OBL | % Cover of Wetland Bryophytes |
| - | Carex livida | 5 | - | OBL | (Where applicable) % Bare Ground 5 |
| | Eriophorum scheuchzeri | 15 | - V | OBL | % Bare Ground |
| | Eriophorum angustifolium | 2 | | OBL | 10 <u>10</u> |
| 10. | · | 0 | | | Hydrophytic |
| | Total Cover: | 75 | _ | | Vegetation |
| | 50% of Total Cover:3 | 7.5 20 | % of Total Cover: | 15 | Present? Yes No No |
| Remark | | | | oloration d | lue to dense papillae. eriang id based on purple-red lvs and |
| | base. collected carex, eriophorum, and utricula | ta for co | nfirmation. | | |

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SOIL Sampling Point: SW12_T49_01

| Depth | Matrix | | | ument the indicator or confirm the absence of indicators) Redox Features | | | | | |
|--|---|-----------------------------|-------------------------------------|---|---|--|------------------------------|---|--|
| (inches) | Color (moi | st) | <u>%</u> | Color (moist) | _% | Type ¹ | Loc ² | Texture | Remarks |
| | | | | | | | | | _ |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | - |
| | | | | | | | | | |
| | - | | | | _ | | | | |
| Type: C=Con | | Denletion. | RM=Reduc | ed Matrix ² Location | n: PI =Por | – ——— e I inina. RO | =Root Cha | nnel. M=Matrix | - |
| ydric Soil Ir | | | | Indicators for P | | | | | |
| - - | Histel (A1) | | | Alaska Color C | | 4 | | Alaska Gleyed Without H | lue 5Y or Redder |
| Histic Epip | . , | | | Alaska Alpine | | - | | Underlying Layer | ide 31 of Redder |
| _ | Sulfide (A4) | | | Alaska Redox | With 2.5Y I | due | ✓ | Other (Explain in Remar | ks) |
| _ , _ | Surface (A12) | | | | | | | | |
| Alaska Gle | , , | | | ³ One indicator o and an appropria | | | | nary indicator of wetland | hydrology, |
| Alaska Red | | | | ани ан арргорна | ate iaiiuscaļ | be position i | nust be pre | sent | |
| Alaska Gle | yed Pores (A15 |) | | ⁴ Give details of o | color chang | e in Remark | S | | |
| strictive Laye | er (if present): | | | | | | | | |
| Type: | | | | | | | | Hydric Soil Present | t? Yes 💿 No 🔾 |
| | | | | | | | | | |
| Depth (inchemarks: o soil pit due t | | noughout si | te. Assume | hydric soils due to | standing w | ater and hy | drophytic ve | egetation. | |
| emarks: | | noughout si | ite. Assume | hydric soils due to | standing w | ater and hy | drophytic ve | egetation. | |
| emarks: soil pit due t | o inundation th | | ite. Assume | hydric soils due to | standing w | ater and hy | drophytic ve | egetation. | |
| emarks: soil pit due t | o inundation the | tors: | | hydric soils due to | standing w | ater and hy | drophytic ve | _Secondary Ind | icators (two or more are required) |
| emarks: soil pit due t /DROLO etland Hydr imary Indica | GY Tology Indicat tors (any one is | tors: | | | | | | _Secondary Ind | ined Leaves (B9) |
| **Commarks: **Soil pit due to the p | GY rology Indicat tors (any one is | tors: | | Inundation | Visible on A | erial Image | ry (B7) | Secondary Ind Water Sta Drainage | ined Leaves (B9) Patterns (B10) |
| */DROLO **POROLO **POROL | GY rology Indicat tors (any one is later (A1) er Table (A2) | tors: | | ☐ Inundation ☐ Sparsely Ve | Visible on A getated Cor | erial Image | ry (B7) | Secondary Ind Water Sta Drainage Oxidized F | ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C |
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| */ DROLO etland Hydrimary Indicate Water Mai | GY rology Indicat tors (any one is later (A1) er Table (A2) a (A3) rks (B1) | tors: | | Inundation Sparsely Ve | Visible on A getated Coi ts (B15) ulfide Odor | erial Image ncave Surfac (C1) | ry (B7) | Secondary Ind Water Sta Drainage Oxidized F Presence Salt Depo | ined Leaves (B9) Patterns (B10) Rhizospheres along Living Roots (C of Reduced Iron (C4) sits (C5) |
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