Appendix E: Vegetation and Wetlands

PART 3 of 3

Appendix B
PHOTOGRAPHS

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Photo 1. Photo of watercourse 1 within Wetland 1 near the Starrigavan Campground at Mile Post 0. Photo taken June 24, 2015.

Photo 2. Photo of swales and troughs (mosaic) in Wetland 1; view east. Photo taken June 24, 2015.

Photo 3. Photo of forested wetland habitat in Wetland 1 at Data Point 3; view south. Photo taken June 24, 2015.

Photo 4. Photo of upland forest habitat at data point 4 near flag ll2; view west. Photo taken June 24, 2015.

Photo 5. Photo of seep emanating from the hillside within Wetland 2; view east. Photo taken June 19, 2015.

Photo 6. Photo of evergreen forest wetland habitat in Wetland 3; view west. Photo taken June 19, 2015.

Photo 7. Photo of watercourse 4 flowing into Wetland 3; view north. Evergreen forest wetland habitat begins below the alignment (left side of photo). Photo taken on June 19, 2015.

Photo 8. Photo of evergreen forest habitat in Wetland 4; view west. Photo taken June 19, 2015.

Photo 9. Photo of watercourse 6 on bedrock with boulders and gravels; view north. Photo taken June 19, 2015.

Photo 10. Photo of Wetland 5 with saturated soils and dense herbaceous groundcover; view southwest. Photo taken June 19, 2015.

Photo 11. Photo of watercourse 9 within evergreen forest habitat in Wetland 6; view north. Photo taken June 24, 2015.

Photo 12. Photo of evergreen forest habitat in Wetland 7 near data points 15 and 16; view north. Photo taken June 24, 2015.

Photo 13. Photo of watercourse 16, a typical hillside wash in this section of the study area, looking down gradient. Photo taken June 19, 2015.

Photo 14. Photo of watercourse 20, a typical hillside wash along this stretch of the alignment along Katlian Bay. Photo taken June 19, 2015.

Photo 15. Photo of intermittent watercourse 21F with gravel deposits and evidence of scour. Photo taken June 17, 2105.

Photo 16. Photo of watercourse 23 confined by steep banks with dense Sitka alder (*Alnus viridus*) growth. Photo taken June 17, 2015.

Photo 17. Photo of herbaceous groundcover within Wetland 8 looking up slope; view southeast. Photo taken June 17, 2015.

Photo 18. Photo of evergreen forest habitat in Wetland 9 near data point 19; view southeast. Photo taken on June 17, 2015.

Photo 19. Photo of watercourse 29 looking down slope towards Katlian Bay; view northwest. Photo taken June 17, 2015.

Photo 20. Photo of watercourse 31 with a bedrock and boulder substrate in a ravine where a bridge is proposed. Photo taken June 18, 2015.

Photo 21. Photo of watercourse 33 and debris flow within an incised drainage. Photo taken June 18, 2015.

Photo 22. Photo of watercourse 33B on a steep gradient looking down slope. Photo taken June 18, 2015.

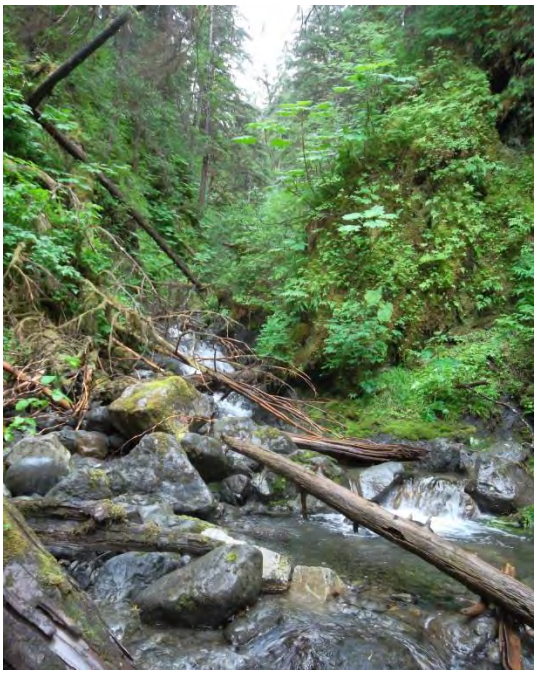

Photo 23. Photo of watercourse 34 (Clearcut Creek) within a steep gorge looking up stream. Photo taken June 18, 2015.

Photo 24. Photo of forested evergreen and emergent habitat within Wetland 10; view west. Photo taken June 23, 2015.

Photo 25. Photo of evergreen forest habitat on the northeast side of Wetland 10. Photo taken June 23, 2015.

Photo 26. Photo of watercourse 36F, a typical drainage along the steep slopes of the south side of Katlian Bay. Photo taken June 23, 2015.

Photo 27. Photo of Wetland 11 and watercourse 37C within the forested and emergent wetland habitat. Photo taken June 23, 2015.

Photo 28. Photo of boundary between upland (left side of photo) and wetland (right side of photo), documented as data points 27 and 28. Photo taken June 23, 2015.

Photo 29. Photo of evergreen forest habitat in Wetland 12. Photo taken June 23, 2015.

Photo 30. Photo of watercourse 40 looking down slope. Photo taken June 23, 2015.

Photo 31. Photo of watercourse 42 looking downslope. Photo taken June 23, 2015.

Photo 32. Photo of intermittently flowing watercourse 50E with a gravel substrate. Photo taken June 25, 2015.

Photo 33. Photo of evergreen forest habitat in Wetland 13, with an understory dominated by skunk cabbage (*Lysichton americanus*). Photo taken June 25, 2015.

Photo 34. Photo of upland habitat at the northwest boundary of Wetland 13. Photo taken June 25, 2015.

Photo 35. Photo of watercourse 50H within Wetland 13 looking downstream to the southeast. Photo taken June 25, 2015.

Photo 36. Photo of South Katlian River (watercourse 51) looking upstream. Photo taken June 22, 2015.

Photo 37. Photo of watercourse 52, and overflow channel within the South Katlian River floodplain. Photo taken June 22, 2015.

Photo 38. Photo of pond habitat in Wetland 14 (former borrow gravel pit). Photo taken June 22, 2015.

Photo 39. Photo of evergreen forest habitat at edge of Wetland 15, which transitions to emergent habitat outside of the study area. Photo taken June 22, 2015.

Photo 40. Photo of forest evergreen and emergent (muskeg) habitat in Wetland 16. Photo taken June 22, 2015.

Photo 41. Photo of Wetland 17 with thick herbaceous groundcover and organic soils. Photo taken June 22, 2015.

Photo 42. Photo of watercourse 57 on bedrock and confined by steep slopes. Photo taken June 22, 2015.

Photo 43. Photo of evergreen forest and emergent habitat (muskeg) in Wetland 18. Photo taken June 22, 2015.

Photo 44. Photo of organic soils and sundews (*Drosera rotundifolia*) typical of Wetlands 16, 17, 18, and 19. Photo taken June 22, 2015.

Photo 45. Photo of Wetland 19 that drains downslope to a large muskeg northwest of the study area. Photo taken June 22, 2015.

Photo 46. Photo of watercourse 58 looking upslope that flows into Wetland 20 to the northwest. Photo taken June 22, 2015.

Photo 47. Photo of muskeg habitat in Wetland 20 at toe of slope outside the study area. Photo taken June 21, 2015.

Photo 48. Photo of upland/wetland boundary of Wetland 20 near data points 47 and 48. Photo taken June 21, 2015.

Photo 49. Photo of watercourse 60 within Wetland 21. Photo taken June 21, 2015.

Photo 50. Photo of Sukka Héen River (watercourse 61). Photo taken June 21, 2015.

Photo 51. Photo of typical upland red alder (*Alnus rubra*) forest near Wetland 22. Photo taken June 21, 2015.

Photo 52. Photo of red alder forest in Wetland 22 near data points 55 and 56. Photo taken June 21, 2015.

Photo 53. Photo of old logging road at the end of Wetland 22 (right side of photo) near Milepost 7.5. Photo taken June 21, 2015.

Photo 54. Photo of Wetland 23 at data points 57 and 58; view southwest. Photo taken June 20, 2015.

Photo 55. Photo of evergreen forest in Wetland 23 at data points 59 and 60. Photo taken June 20, 2015.

Photo 56. Photo of Wetland 24 and understory dominated by skunk cabbage at data point 63. Photo taken June 20, 2015.

Photo 57. Photo of forested upland at data point 64 with an understory cow parsnip (*Heracleum maximum*) and wood reed grass (*Cinna latifolia*). Photo taken June 20, 2015.

Photo 58. Photo of (overflow channel) watercourse 63 in the Katlian River floodplain. Photo taken June 20, 2015.

Photo 59. Photo of Katlian River (watercourse 64A) looking upstream and to the east. Photo taken June 20, 2015.

Photo 60. Photo of upland red alder forest near intersection of new road and logging road 75797. Photo taken June 25, 2015.

Appendix C

SUMMARY OF STREAM CHARACTERISTICS AND USACE CLASSIFICATIONS

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Table C-1. Summary of Stream Characteristics and USACE Classifications

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
1	NA	Organics, gravel	Perennial	Perennial RPW	Drains into Starrigavan Bay in Sitka Sound
2	NA	Cobble, wood	Perennial	Perennial RPW	Drains into Starrigavan Bay in Sitka Sound
3	NA	Organics	Perennial	Perennial RPW	Drains into Starrigavan Bay in Sitka Sound
4	NA	Cobble, bedrock	Perennial	Perennial RPW	Drains into Starrigavan Bay in Sitka Sound
5	NA	Organics, cobble	Perennial	Perennial RPW	Drains into Starrigavan Bay in Sitka Sound
6	NA	Bedrock, boulder, gravel	Perennial	Perennial RPW	Drains into Starrigavan Bay in Sitka Sound
7	NA	Organics, wood	Intermittent	Seasonal RPW	Flows into 113-41-10148 that drains to Starrigavan Bay in Sitka Sound
8	NA	Gravel, cobble	Perennial	Perennial RPW	Flows into 113-41-10148 that drains to Starrigavan Bay in Sitka Sound
9	NA	Wood, gravel	Perennial	Perennial RPW	Flows from Wetland 6 into 113-41-10148 that drains to Starrigavan Bay in Sitka Sound
10	NA	Fines, gravel	Perennial	Perennial RPW	Flows from Wetland 6 into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
11	NA	Gravel	Perennial	Perennial RPW	Flows into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
12	NA	Organics, wood	Intermittent	Seasonal RPW	Flows from Wetland 6 into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
13	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
14	NA	Boulder, cobble, gravel	Perennial	Perennial RPW	Flows into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
15	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into 113-44-10090 that drains to

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
					Mosquito Cove in Katlian Bay
16	NA	Gravel	Intermittent	Seasonal RPW	Flows into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
17	NA	Bedrock, boulder, cobble	Perennial	Perennial RPW	Flows into 113-44-10090 that drains to Mosquito Cove in Katlian Bay
18	NA	Bedrock, cobble, wood	Perennial	Perennial RPW	Drains to Mosquito Cove in Katlian Bay
18A	NA	Bedrock, boulder	Intermittent	Seasonal RPW	Drains to Mosquito Cove in Katlian Bay
19	NA	Gravel	Perennial	Perennial RPW	Drains to Mosquito Cove in Katlian Bay
20	NA	Cobble, gravel, wood	Perennial	Perennial RPW	Drains to Mosquito Cove in Katlian Bay
21	NA	Gravel	Perennial	Perennial RPW	Drains to Mosquito Cove in Katlian Bay
21A	NA	Cobble	Intermittent	Seasonal RPW	Drains to Mosquito Cove in Katlian Bay
21B	NA	Boulder, Cobble	Intermittent	Seasonal RPW	Drains to Katlian Bay
21C	NA	Cobble, gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
21D	NA	Cobble, gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
21E	NA	Cobble, gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
21F	NA	Cobble, gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
22	NA	Bedrock, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
22A	NA	Cobble, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
22B	NA	Organics, gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
23	NA	Bedrock, gravel, wood	Perennial	Perennial RPW	Drains to Katlian Bay
23A	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
23B	NA	Organics, bedrock, wood	Perennial	Perennial RPW	Drains to Katlian Bay
23C	NA	Gravel, organics	Perennial	Perennial RPW	Drains to Katlian Bay
23D	NA	Wood, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
24	NA	Bedrock	Perennial	Perennial RPW	Drains to Katlian Bay
25	NA	Bedrock	Perennial	Perennial RPW	Drains to Katlian Bay
26	NA	Bedrock,	Perennial	Perennial RPW	Drains to Katlian Bay

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
		gravel			
27	NA	Boulder, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
27A	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
27B	NA	Cobble, gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
27C	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
28	NA	Bedrock, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
28A	NA	Wood, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
28B	NA	Gravel, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
28C	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
29	NA	Bedrock	Perennial	Perennial RPW	Drains to Katlian Bay
30	NA	Cobble	Perennial	Perennial RPW	Drains to Katlian Bay
30A	NA	Cobble	Intermittent	Seasonal RPW	Drains to Katlian Bay
31	NA	Bedrock, boulder, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
31A	NA	Gravel, organics	Intermittent	Seasonal RPW	Drains to Katlian Bay
31B	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
32	NA	Gravel, Wood	Perennial	Perennial RPW	Drains to Katlian Bay
32A	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
32B	NA	Bedrock, Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
32C	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
32D	NA	Boulder, wood	Perennial	Perennial RPW	Drains to Katlian Bay
33	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
33A	NA	Gravel, Wood	Intermittent	Seasonal RPW	Flows into Clearcut Creek that drains to Katlian Bay
33B	NA	Cobble, gravel	Intermittent	Seasonal RPW	Flows into Clearcut Creek that drains to Katlian Bay
33C	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
33D	NA	Bedrock, cobble, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
33E	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
33F	NA	Bedrock, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
34 (Clearcut Creek)	113-44-10080	Boulder, cobble, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
35	NA	Bedrock, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
35A	NA	Gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
35B	NA	Organics, cobble	Intermittent	Seasonal RPW	Flows into Stream 35, then to Clearcut Creek that drains to Katlian Bay
36	NA	Bedrock, cobble, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
36A	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into Clearcut Creek that drains to Katlian Bay
36B	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
36C	NA	Cobble	Intermittent	Seasonal RPW	Drains to Katlian Bay
36D	NA	Bedrock, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
36E	NA	Organics, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
36F	NA	Bedrock, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
37	NA	Organics, cobble, gravel, bedrock	Perennial	Perennial RPW	Drains to Katlian Bay
37A	NA	Organics	Intermittent	Seasonal RPW	Drains to Katlian Bay
37B	NA	Gravel, fines	Perennial	Perennial RPW	Drains to Katlian Bay
37C	NA	Bedrock, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
37D	NA	Organics, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
38	NA	Boulder, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
38A	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
38B	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
38C	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
39	NA	Boulder, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
40	NA	Cobble, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
40A	NA	Cobble, gravel	Perennial	Perennial RPW	Flows into 113-44-10070 that drains to Katlian Bay

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
41	NA	Bedrock, boulder, gravel	Perennial	Perennial RPW	Flows into 113-44-10070 that drains to Katlian Bay
41A	NA	Boulder, gravel	Perennial	Perennial RPW	Flows into 113-44-10070 that drains to Katlian Bay
42	113-44-10070	Bedrock, boulder, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
42A	NA	Gravel, fines	Perennial	Perennial RPW	Drains to Katlian Bay
42B	NA	Gravel, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
43	NA	Bedrock, cobble	Perennial	Perennial RPW	Drains to Katlian Bay
44	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
45	NA	Cobble, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
46	NA	Boulder, cobble, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
47	NA	Bedrock	Perennial	Perennial RPW	Drains to Katlian Bay
48	NA	Cobble, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
49	NA	Bedrock, boulder, gravel	Perennial	Perennial RPW	Drains to Katlian Bay
50	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
50A	NA	Gravel	Perennial	Perennial RPW	Drains to Katlian Bay
50B	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
50C	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
50D	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
50E	NA	Gravel	Intermittent	Seasonal RPW	Drains to Katlian Bay
50F	NA	Organics, gravel	Perennial	Perennial RPW	Flows into South Katlian River
50G	NA	Organics, gravel	Intermittent	Seasonal RPW	Flows into South Katlian River
50H	Uncatalogued Anadromous Stream	Fines, gravel	Perennial	Perennial RPW	Flows into South Katlian River
51 (South Katlian River)	113-44-10050	Gravel	Perennial	Perennial RPW	Flows into Katlian Bay
52	NA	Sand, gravel	Intermittent	Non-RPW	Overflow channel of South Katlian River
53	NA	Sand, gravel	Intermittent	Non-RPW	Overflow channel of South Katlian River
53A	NA	Cobble, organics	Perennial	Perennial RPW	Flows into Wetland 15 that is adjacent to South Katlian River

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
54	NA	Cobble, organics	Perennial	Perennial RPW	Confluences with Stream 55, then flows into Wetland 15 that is adjacent to South Katlian River
55	NA	Gravel, fines	Perennial	Perennial RPW	Confluences with Stream 54, then flows into Wetland 15 that is adjacent to South Katlian River
56	NA	Bedrock, boulder	Perennial	Perennial RPW	Flows into muskeg that is adjacent to South Katlian River
56A	NA	Organics, gravel	Intermittent	Seasonal RPW	Flows into muskeg that is adjacent to South Katlian River
57	Uncatalogued Anadromous Stream	Bedrock, gravel	Perennial	Perennial RPW	Flows into muskeg that is adjacent to South Katlian River
57A	NA	Organics, gravel	Perennial	Perennial RPW	Flows into Wetland 20 that drains to Sukka Héen
57B	NA	Organics	Intermittent (Seep)	Seasonal RPW	Flows into Wetland 20 that drains to Sukka Héen
58	NA	Organics, gravel	Perennial	Perennial RPW	Flows into Wetland 20 that drains to Sukka Héen
58A	NA	Gravel, fines	Perennial	Perennial RPW	Flows into Wetland 20 that drains to Sukka Héen
58B	NA	Organics, gravel	Perennial	Perennial RPW	Flows into Wetland 20 that drains to Sukka Héen
59	Uncatalogued Anadromous Stream	Cobble, gravel, wood	Perennial	Perennial RPW	Flows into Sukka Héen
60	Uncatalogued Anadromous Stream	Fines, gravel	Perennial	Perennial RPW	Flows into Sukka Héen
61 (Sukka Héen)	113-44-10040	Gravel	Perennial	Perennial RPW	Flows into Katlian Bay
61A	NA	Organics, gravel	Intermittent	Seasonal RPW	Flows into Katlian River
62	NA	Fines, gravel	Perennial	Perennial RPW	Flows into Katlian River
63	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River
63A	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River

Water-course ID[1]	Anadromous Waters Catalog Number	Substrate Composition	Flow Duration	USACE Classification	Flow Path to TNW (Sitka Sound, Starrigavan Bay, and Katlian Bay)
64	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River
64A (Katlian River)	113-44-10030	Gravel, cobble, sand	Perennial	Perennial RPW	Flows into Katlian Bay
64B	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River
64C	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River
65	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River
66	NA	Sand, fines	Intermittent	Non-RPW	Overflow channel of Katlian River

Note: NA = not applicable; no documented use by anadromous or resident fish; TNW = Traditional Navigable Water; Perennial RPW = Relatively Permanent Water with year-round flow except during drought years;
Seasonal RPW = Relatively Permanent Water with seasonal (typically three months) of continuous flow but not year-round; Non-RPW = non-Relatively Permanent Water that does not flow at least seasonally.

[1] A total of 136 watercourses; naming convention includes additional watercourses (A, B, C, D, etc.) that were identified after the initial 66 watercourses were identified from 2014 surveys. Watercourses were named consecutively from MP 0 to MP 9.3.

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Appendix D

WETLAND DETERMINATION DATA FORMS

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WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 1

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: PFO4B

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within a wetland; all three wetland indicators present. Data point located 10' west of flag 15-I3.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	35.00	Yes	FACU
2.	Alnus rubra	10.00	Yes	FAC
3.	Tsuga heterophylla	10.00	Yes	FAC
4.				
	Total Cover:	55		
	50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum				
1.	Alnus rubra	5	No	FAC
2.	Picea sitchensis	10	No	FACU
3.	Vaccinium ovalifolium	30	Yes	FAC
4.	Menziesia ferrunginea	15	Yes	FACU
5.	Tiarella trifoliata			
6.				
	Total Cover:	60		
	50% of total cover: 30	20% of total cover: 12		
Herb Stratum				
1.	Lysichiton americanus	45	Yes	OBL
2.	Cornus canadensis	5	No	FACU
3.	Cinna latifolia	15	Yes	FACW
4.	Athyrium filix-femina	10	Yes	FAC
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	75		
	50% of total cover: 37.5	20% of total cover: 15		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 0

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 35

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicator A2 present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 2

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: PFO4B

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No _____
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Data point not located within a wetland; all three wetland indicators absent. Data point located 10' east of flag 15-I3.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	10.00	Yes	FAC
2.	Picea sitchensis	35.00	Yes	FACU
3.	Alnus rubra	5.00	No	FAC
4.				

Total Cover: 50

50% of total cover: 25 20% of total cover: 10

Sapling/Shrub Stratum				
1.	Menziesia ferrunginea	35	Yes	FACU
2.	Vaccinium ovalifolium	5	No	FAC
3.	Picea sitchensis	10	Yes	FACU
4.				
5.				
6.				

Total Cover: 50

50% of total cover: 25 20% of total cover: 10

Herb Stratum				
1.	Blechnum spicant	4	Yes	FAC
2.	Gymnoicarpium dryopteris	6	Yes	FACU
3.	Streptopus amplexifolius	4	Yes	FACU
4.	Cornus canadensis	3	No	FACU
5.				
6.				
7.				
8.				
9.				
10.				

Total Cover: 17

50% of total cover: 8.5 20% of total cover: 3.4

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 35

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 45

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 29 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	24	x 3 =	72
FACU species	93	x 4 =	372
UPL species		x 5 =	
Column Totals:	117 (A)		444 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100					loam	
4-7	10YR 2/1	100					loam	
7-18	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 3

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Nakwasina muck | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point within a wetland; all three wetland indicators present. Data point located 10' south of flag II2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	20.00	Yes	FAC
2.	Picea sitchensis	15.00	Yes	FACU
3.				
4.				
	Total Cover:	35		
	50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum				
1.	Picea sitchensis	10	Yes	FACU
2.	Tsuga heterophylla	10	Yes	FAC
3.	Vaccinium ovalifolium	5	No	FAC
4.	Alnus viridus	25	Yes	FAC
5.				
6.				
	Total Cover:	50		
	50% of total cover: 25	20% of total cover: 10		
Herb Stratum				
1.	Lysichiton americanus	40	Yes	OBL
2.	Athyrium filix-femina	8	No	FAC
3.	Cinna latifolia	5	No	FACW
4.	Carex disperma	5	No	FACW
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	58		
	50% of total cover: 29	20% of total cover: 11.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10 (mud)

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	7.5YR 2.5/1	100					sandy silt loam	organics throughout profile

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Muck. Hydric soils determined present due to presence of wetland hydrology and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No _____ Depth (inches): 11

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0

Wetland Hydrology Present? Yes X No _____

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

-

Remarks:

Primary wetland hydrology indicators A2 and A3 present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 4

Investigator(s): Jeff Gray, Carolyn Prentice, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Nakwasina muck | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No _____
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not in a wetland; not all three wetland indicators present. Data point located 10' northwest of flag II2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	35.00	Yes	FAC
2.	Picea sitchensis	15.00	Yes	FACU
3.	Callitropsis nootkaensis	5.00	No	FAC
4.				
	Total Cover:	55		
	50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum				
1.	Menziesia ferruginea	20	Yes	FACU
2.	Vaccinium ovalifolium	15	Yes	FAC
3.	Tsuga heterophylla	15	Yes	FAC
4.	Oplopanax horridus	4	No	FACU
5.				
6.				
	Total Cover:	54		
	50% of total cover: 27	20% of total cover: 10.8		
Herb Stratum				
1.	Dryopteris expansa	4	Yes	FACU
2.	Cornus candensis	6	Yes	FACU
3.	Lysichiton americanus	2	No	OBL
4.				
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	12		
	50% of total cover: 6	20% of total cover: 2.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 40

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 47

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 43 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species		x 2 =	
FAC species	70	x 3 =	210
FACU species	49	x 4 =	196
UPL species		x 5 =	
Column Totals:	121 (A)		408 (B)

Prevalence Index = B/A = 3.37

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: 4

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					loam	
3-6	10YR 2/1	100					loam	
6-20	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 5

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: PF04

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

Data point within a wetland; all three wetland indicators present. Data point located 10' south of flag JJ12.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2. Picea sitchensis	15.00	Yes	FACU
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	5	No	FACU
2. Oplopanax horridus	10	Yes	FACU
3. Vaccinium ovalifolium	10	Yes	FAC
4. Tsuga heterophylla	5	No	FAc
5.			
6.			
Total Cover:	30		
50% of total cover: 15	20% of total cover: 6		
Herb Stratum			
1. Lystichiton americanus	25	Yes	OBL
2. Athyrium filix-femina	12	Yes	FAC
3. Adiantum aleuticum	4	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	41		
50% of total cover: 20.5	20% of total cover: 8.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 35

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 5

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					loam	mucky

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined present due to presence of hydrophytic vegetation and shallow groundwater.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 6

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): convex | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: PFO4B

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located 15' north of flag JJ12.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	15.00	Yes	FAC
2. Picea sitchensis	25.00	Yes	FACU
3.			
4.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	25	Yes	FACU
2. Tsuga heterophylla	5	No	FAC
3. Oplopanax horridus	10	Yes	FACU
4. Picea sitchensis	4	No	FACU
5.			
6.			
Total Cover:	44		
50% of total cover: 22	20% of total cover: 8.8		
Herb Stratum			
1. Cornus canadensis	6	Yes	FACU
2. Dryopteris expansa	5	Yes	FAC
3. Athyrium filix-femina	3	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	14		
50% of total cover: 7	20% of total cover: 2.8		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 65

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 43% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species 28	x 3 = 84
FACU species 70	x 4 = 280
UPL species _____	x 5 = _____
Column Totals: 98 (A)	364 (B)

Prevalence Index = B/A = 3.71

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 6

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					loam	
2-6	10YR 2/2	100					loam	
6-18	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 7

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 3; all three wetland indicators present. Data point located 15' west of flag JJ18.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga hterophylla	25.00	Yes	FAC
2. Picea sitchensis	10.00	Yes	FACU
3.			
4.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	10	Yes	FAC
2. Oplopanax horridus	8	Yes	FACU
3. Tsuga hterophylla	5	No	FAC
4. Menziesia ferruginea	5	No	FACU
5.			
6.			
Total Cover:	28		
50% of total cover: 14	20% of total cover: 5.6		
Herb Stratum			
1. Lysichiton americanus	20	Yes	OBL
2. Athyrium filix-femina	7	No	FAC
3. Cornus canadensis	4	No	FACU
4. Tolmiea menziesii	8	Yes	FACW
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	39		
50% of total cover: 19	20% of total cover: 7.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 7

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					Loam	organics in profile

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to shallow groundwater and presence of hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 11

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 8

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located 10' east of flag JJ18.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	15.00	Yes	FAC
2.	Picea sitchensis	35.00	Yes	FACU
3.				
4.				
	Total Cover:	50		
	50% of total cover: _____		20% of total cover: _____	
Sapling/Shrub Stratum				
1.	Menziesia ferruginea	20	Yes	FACU
2.	Rubus spectabilis	8	Yes	FACU
3.	Oplopanax horridus	5	No	FACU
4.	Tsuga heterophylla	5	No	FAC
5.				
6.				
	Total Cover:	38		
	50% of total cover: 19		20% of total cover:	7.6
Herb Stratum				
1.	Dropteris expansa	4	Yes	FACU
2.	Adiantum aleuticum	3	Yes	FAC
3.	Streptopus amplexifolius	3	Yes	FACU
4.	Cornus canadensis	2	No	FACU
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	12		
	50% of total cover: 6		20% of total cover:	2.4

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 78

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 29 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	23	x 3 =	69
FACU species	77	x 4 =	308
UPL species		x 5 =	
Column Totals:	100 (A)		377 (B)

Prevalence Index = B/A = 3.77

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 8

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					loam	
3-8	10YR 2/1	80					loam	
	10YR 3/3	20						
8-18	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 9

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Mitkof loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located in Wetland 4; all three wetland indicators present. Data point located 10' north of flag JA2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea sitchensis	25.00	Yes	FACU
2. Tsuga heterophylla	10.00	Yes	FAC
3.			
4.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	15	Yes	FACU
2. Vaccinium ovalifolium	10	Yes	FAC
3.			
4.			
5.			
6.			
Total Cover:	25		
50% of total cover: 12.5	20% of total cover: 5		
Herb Stratum			
1. Lysichton americanus	25	Yes	OBL
2. Athyrium filix-femina	15	Yes	FAC
3. Carex disperma	5	No	FACW
4. Cinna latifolia	4	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	49		
50% of total cover: 17	20% of total cover: 6.8		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Wetland hydrophytic vegetation indicator present.

SOIL

Sampling Point: 9

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					loam	saturated

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined present due to shallow groundwater and presence of hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 10

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillsope

Local relief (concave, convex, none): convex | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Mitkof loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not in a wetland; not all three wetland indicators present. Data point located 10' north of flag JA2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	35.00	Yes	FACU
2.	Tsuga heterophylla	20.00	Yes	FAC
3.				
4.				
	Total Cover:	55		
	50% of total cover: 27.5		20% of total cover: 11	
Sapling/Shrub Stratum				
1.	Menziesia ferruginea	45	Yes	FACU
2.	Vaccinium parvifolium	5	No	FACU
3.	Rubus spectabilis	5	No	FACU
4.				
5.				
6.				
	Total Cover:	55		
	50% of total cover: 22.5		20% of total cover: 9	
Herb Stratum				
1.	Cornus canadesis	4	Yes	FACU
2.	Gymnocarpum dryopteris	6	Yes	FACU
3.	Tiarella trifoliata	3	Yes	FAC
4.				
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	13		
	50% of total cover: 5		20% of total cover: 2	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	23	x 3 =	69
FACU species	95	x 4 =	380
UPL species		x 5 =	
Column Totals:	118 (A)		449 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 10

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	90					loam	
	10YR 2/1	10						
4-18	10YR 3/3	100					loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 11

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Mitkof loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 5; all three wetland indicators present. Data point located at flag F1.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	25.00	Yes	FACU
2.	Tsuag heterophylla	10.00	Yes	FAC
3.				
4.				
	Total Cover:	35		
	50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum				
1.	Oplapanax horridus	8	Yes	FACU
2.	Menziesia ferruginea	5	Yes	FACU
3.				
4.				
5.				
6.				
	Total Cover:	13		
	50% of total cover: _____	20% of total cover: _____		
Herb Stratum				
1.	Lysichiton americanus	25	Yes	OBL
2.	Athyrium filix-femina	15	Yes	FAC
3.	Cornus candensis	5	No	FACU
4.	Tiarella trifoliata	8	No	FAC
5.	Carex disperma	8	No	FACW
6.				
7.				
8.				
9.				
10.				
	Total Cover:	61		
	50% of total cover: 30.5	20% of total cover: 12.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 20

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 15

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	8	x 2 =	16
FAC species	33	x 3 =	99
FACU species	43	x 4 =	172
UPL species		x 5 =	
Column Totals:	109 (A)		312 (B)

Prevalence Index = B/A = 2.9

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 11

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					loam	muck

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to shallow groundwater table and presence of hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 3

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 19, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 12

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): convex | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Mitkof loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag F1.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea sitchensis	5.00	No	FACU
2. Tsuga hterophylla	35.00	Yes	FAC
3.			
4.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	35	Yes	FACU
2. Oplopanax horridus	10	Yes	FACU
3. Vaccinium ovalofium	4	No	FAC
4.			
5.			
6.			
Total Cover:	49		
50% of total cover: 24.5	20% of total cover: 9.8		
Herb Stratum			
1. Cornus canadensis	4	Yes	FACU
2. Gymnocarpum dryopteris	5	Yes	FACU
3. Adiantum aleuticum	3	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	12		
50% of total cover: 6	20% of total cover: 2.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 42	x 3 =	45
FACU species 59	x 4 =	236
UPL species	x 5 =	
Column Totals: 101 (A)		281 (B)

Prevalence Index = B/A = 2.8

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 12

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/3	100					loam	
2-5	10YR 2/2	100					loam	
5-18	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 13

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): toe of slope

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Mitkof loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located in Wetland 6; all three wetland indicators present. Data point located near flag K2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	45.00	Yes	FAC
2. Picea sitchensis	10.00	No	FACU
3.			
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	15	Yes	FACU
2. Vaccinium ovalifolium	10	Yes	FAC
3. Tsuga heterophylla	5	No	FAC
4.			
5.			
6.			
Total Cover:	30		
50% of total cover: 15	20% of total cover: 6		
Herb Stratum			
1. Lyshichiton americanus	30	Yes	OBL
2. Coptis asplenifolia	15	Yes	FAC
3. Gymnocarpum dryopteris	4	No	FACU
4. Cornus canadensis	4	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	53		
50% of total cover: 26.5	20% of total cover: 10.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 20 (mud)

% Cover of Wetland Bryophytes - | Total Cover of Bryophytes 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 13

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/2	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 14

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillslope

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Mitkof loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located near flag K2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	55.00	Yes	FAC
2. Picea sitchensis	15.00	Yes	FACU
3.			
4.			
Total Cover:	70		
50% of total cover: 35	20% of total cover: 14		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	15	Yes	FACU
2. Vaccinium ovalifolium	10	Yes	FAC
3.			
4.			
5.			
6.			
Total Cover:	25		
50% of total cover: 12.5	20% of total cover: 5		
Herb Stratum			
1. Cornus canadensis	5	Yes	FACU
2. Athyrium filix-femina	3	No	FAC
3. Blechnum spicant	3	No	FAC
4. Streptopus amplexifolius	5	Yes	FACU
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	16		
50% of total cover: 8	20% of total cover: 3.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes _____ (Where applicable) | Total Cover of Bryophytes 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 71	x 3 =	213
FACU species 40	x 4 =	160
UPL species	x 5 =	
Column Totals: 111 (A)		373 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 14

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/1	100					loam	
12-18	10YR 3/3	70					sandy loam	refusal at 18" (cobble)
	10YR 4/4	30						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 15

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside seep

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 7; all three wetland indicators present. Data point located near flag LA6.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	45.00	Yes	FAC
2. Picea sitchensis	10.00	No	FACU
3.			
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	15	Yes	FACU
2. Oplopanax horridus	10	Yes	FACU
3. Vaccinium ovalifolium	4	No	FAC
4.			
5.			
6.			
Total Cover:	29		
50% of total cover: 14.5	20% of total cover: 5.8		
Herb Stratum			
1. Lysichiton americanus	15	Yes	OBL
2. Athyrium filix-femina	20	Yes	FAC
3. Tolmiea menziesii	15	Yes	FACW
4. Blechnum spicant	4	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	54		
50% of total cover: 27	20% of total cover: 10.8		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 35

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 15

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					Organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ____ Depth (inches): 0.5

Water Table Present? Yes X No ____ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 16

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): convex | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kupreanof gravelly silt loam | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not within a wetland; not all three wetland indicators present. Data point located near flag LA6.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2. Picea sitchensis	15.00	Yes	FACU
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 5		
Sapling/Shrub Stratum			
1. Oplopanax horridus	15	Yes	FACU
2. Tsuga heterophylla	15	Yes	FAC
3. Menziesia ferruginea	10	Yes	FACU
4.			
5.			
6.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Herb Stratum			
1. Blechnum spicant	7	Yes	FAC
2. Cornus canadensis	4	Yes	FAC
3. Athyrium filix-femina	5	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	16		
50% of total cover: 8	20% of total cover: 3.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 75

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 63 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 16

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					loam	
8-18	10YR 3/3	90					loam	
	10YR 2/2	10						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 17, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 17

Investigator(s): Jeff Gray, Carolyn Prentice, Chris Sears | Landform (hillside, terrace, hummocks, etc.): hillside seep

Local relief (concave, convex, none): concave | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 8 (seep); all three wetland indicators present. Data point located near flag A4.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	35.00	Yes	FACU
2.				
3.				
4.				
	Total Cover:	35		
	50% of total cover: 17.5		20% of total cover: 7	
Sapling/Shrub Stratum				
1.	Alnus viridis	20	Yes	FAC
2.	Vaccinium ovalofolium	8	Yes	FAC
3.	Oplopanax horridus	10	Yes	FACU
4.				
5.				
6.				
	Total Cover:	38		
	50% of total cover: 19		20% of total cover: 7.6	
Herb Stratum				
1.	Viola palustris	8	Yes	FACW
2.	Galium aparine	5	No	FACU
3.	Athyrium filix-femina	8	Yes	FAC
4.	Trisetum cernuum	15	Yes	FACU
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	36		
	50% of total cover: 18		20% of total cover: 7.2	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 55

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 17

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					muck	saturated

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to presence of shallow groundwater and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ____ Depth (inches): 1

Water Table Present? Yes X No ____ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 17, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 18

Investigator(s): Jeff Gray, Carolyn Prentice, Chris Sears | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland parameters present. Data point located in uplands near flag A4.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	55.00	Yes	FACU
2.				
3.				
4.				

Total Cover: 55

50% of total cover: 27.5 20% of total cover: 11

Sapling/Shrub Stratum				
1.	Alnus viridis	15	Yes	FAC
2.	Rubus spectabilis	10	Yes	FACU
3.	Menziesia ferruginea	7	No	FACU
4.	Tsuga heterophylla	8	Yes	FAC
5.				
6.				

Total Cover: 40

50% of total cover: 20 20% of total cover: 8

Herb Stratum				
1.	Blechnum spicant	8	Yes	FAC
2.	Dryopteris expansa	5	Yes	FACU
3.	Adiantum aleuticum	5	Yes	FAC
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Total Cover: 18

50% of total cover: 9 20% of total cover: 3.6

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 18

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					loam	dry
18-24	10YR 3/3	100					loam	dry

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present; no groundwater table present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 17, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 19

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): toe of slope, depression

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 9; all three wetland indicators preset. Data point located near flag B19.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	30.00	Yes	FAC
2. Alnus rubra	15.00	Yes	FAC
3.			
4.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum			
1. Vaccinium caespitosum	20	Yes	FACW
2. Tsuga heterophylla	15	Yes	FAC
3. Menziesia ferruginea	5	No	FACU
4.			
5.			
6.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Herb Stratum			
1. Carex mertensii	15	Yes	FACW
2. Lysichiton americanus	15	Yes	OBL
3. Trisetum cernuum	10	No	FACU
4. Athyrium filix-femina	7	No	FAC
5. Cornus canadensis	4	No	FACU
6.			
7.			
8.			
9.			
10.			
Total Cover:	51		
50% of total cover: 25.5	20% of total cover: 10.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15 (mud)

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 45

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 19

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ____ Depth (inches): 1

Water Table Present? Yes X No ____ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 17, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 20

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): convex | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag B19.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Tsuga heterophylla	70.00	Yes	FAC
2.			
3.			
4.			
Total Cover:	70		
50% of total cover: 35	20% of total cover: 14		
Sapling/Shrub Stratum			
1. Tsuga heterophylla	10	Yes	FAC
2. Menziesia ferruginea	15	Yes	FACU
3. Rubus spectabilis	5	No	FACU
4.			
5.			
6.			
Total Cover:	30		
50% of total cover: 15	20% of total cover: 6		
Herb Stratum			
1. Galium apparine	5	Yes	FACU
2. Dryopteris expansa	15	Yes	FACU
3. Phegopteris connectillis	5	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	25		
50% of total cover: 12.5	20% of total cover: 5		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 40

% Cover of Wetland Bryophytes - | Total Cover of Bryophytes 35

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 80	x 3 =	240
FACU species 45	x 4 =	180
UPL species	x 5 =	
Column Totals: 125 (A)		420 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 20

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					loam	refusal at 12" (bedrock)

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 18, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 21

Investigator(s): Jeff Gray, Chris Sears | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 10 (slope muskeg/bog); all three wetland indicators present. Data point located near flag E4.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. -			
2.			
3.			
4.			
Total Cover: 0			
50% of total cover: _____ 20% of total cover: _____			
Sapling/Shrub Stratum			
1. Tsuga heterophylla	8	Yes	FAC
2.			
3.			
4.			
5.			
6.			
Total Cover: 8			
50% of total cover: 4 20% of total cover: 1.6			
Herb Stratum			
1. Athyrium filix-femina	10	Yes	FAC
2. Lysichiton americanus	10	Yes	OBL
3. Carex disperma	5	No	FACW
4. Calamagrostis canadensis	5	No	FAC
5. Nephrophyllidium crista-galli	8	Yes	OBL
6. Platanthera stricta	4	No	FACW
7. Coptis asplenifolia	3	No	FAC
8. Cornus suecica	6	No	FAC
9. Erigeron peregrinus	4	No	FACW
10.			
Total Cover: 55			
50% of total cover: 27.5 20% of total cover: 11			

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 0

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) Total Cover of Bryophytes 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 21

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 18, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 22

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): convex | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland parameters present. Data point located near flag E4.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Callitropsis nootkatensis	35.00	Yes	FAC
2.			
3.			
4.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	15	Yes	FACU
2. Rubus spectabilis	8	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	23		
50% of total cover: 11.5	20% of total cover: 4.6		
Herb Stratum			
1. Cornus canadensis	15	Yes	FACU
2. Blechnum spicant	10	Yes	FAC
3. Cinna latifolia	8	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	33		
50% of total cover: 16.5	20% of total cover: 6.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 65

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 8	x 2 =	16
FAC species 45	x 3 =	135
FACU species 38	x 4 =	152
UPL species	x 5 =	
Column Totals: 91 (A)		303 (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 22

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					loam	
6-12	10YR 3/3	100					loam	refusal at 12" (rock)

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 23

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

Data point located within Wetland 10; all three wetland indicators present. Data point located near flag F13.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Callitropsis nootkatensis	35.00	Yes	FAC
2. Tsuga heterophylla	10.00	Yes	FAC
3.			
4.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum			
1. Alnus viridis	10	Yes	FAC
2. Vaccinium parviflorum	5	Yes	FACU
3. Tsuga heterophylla	10	Yes	FAC
4.			
5.			
6.			
Total Cover:	25		
50% of total cover: 12.5	20% of total cover: 5		
Herb Stratum			
1. Lysichiton americanus	8	Yes	OBL
2. Carex mertensii	10	Yes	FACW
3. Erigeron peregrinus	4	No	FACW
4. Coptis asplenifolia	8	Yes	FAC
5. Nephrophyllidium crista-galli	8	Yes	OBL
6. Trisetum cernuum	5	No	FACU
7.			
8.			
9.			
10.			
Total Cover:	43		
50% of total cover: 21.5	20% of total cover: 8.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 15

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) Total Cover of Bryophytes 50

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 89 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 23

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					sandy loam	
8-20	10YR 2/1	100					loam	(muck)

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

Hydric Soil Indicators:

- [ ] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [x] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Hydric soil indicator A4 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No _____ Depth (inches): 6

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0

Wetland Hydrology Present? Yes X No _____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 24

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka-Partofshikof complex, broken | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point located in upland near flag F13; not all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Callitropsis nootaktensis	35.00	Yes	FAC
2. Tusga heterophylla	15.00	Yes	FAC
3. Picea sitchensis	5.00	No	FACU
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	8	Yes	FAC
2. Menziesia ferruginea	15	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	23		
50% of total cover: 11.5	20% of total cover: 4.6		
Herb Stratum			
1. Streptopus amplexifolius	10	Yes	FACU
2. Calamagrostis canadensis	10	Yes	FACU
3. Lysichiton americanus	3	No	OBL
4. Cornus canadensis	15	Yes	FACU
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	38		
50% of total cover: 19	20% of total cover: 7.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 43 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	3	x 1 =	3
FACW species		x 2 =	
FAC species	58	x 3 =	174
FACU species	55	x 4 =	220
UPL species		x 5 =	
Column Totals:	116 (A)		397 (B)

Prevalence Index = B/A = 3.42

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 24

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100					loam	
4-18	10YR 3/2	100					loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 25

Investigator(s): Jeff Gray,Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka and Partofshikof soils, subalpine | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located with Wetland 11; all three wetland indicators present. Data point located near flag PP3.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2. Callitropsis nootkatensis	15.00	Yes	FAC
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum			
1. Vaccinium ovalofium	12	Yes	FAC
2. Tsuga heterophylla	20	Yes	FAC
3. Pinus contorta	5	No	FAC
4. Menziesia ferrugiana	7	No	FACU
5.			
6.			
Total Cover:	44		
50% of total cover: 22	20% of total cover: 8.8		
Herb Stratum			
1. Lysichiton americanus	20	Yes	OBL
2. Nephrophyllidium crista-galli	8	No	OBL
3. Calamagrostis canadensis	8	No	FAC
4. Carex disperma	7	No	FACW
5. Carex mertensii	10	Yes	FACW
6.			
7.			
8.			
9.			
10.			
Total Cover:	53		
50% of total cover: 26.5	20% of total cover: 10.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes (Where applicable) 100 | Total Cover of Bryophytes 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 25

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 26

Investigator(s): Jeff Gray,Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka and Partofshikof soils, subalpine | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located near flag PP3.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Tsuga heterophylla	45.00	Yes	FAC
2.			
3.			
4.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	25	Yes	FACU
2. Tsuga heterophylla	10	Yes	FAC
3. Vaccinium ovalifolium	6	No	FAC
4.			
5.			
6.			
Total Cover:	41		
50% of total cover: 20.5	20% of total cover: 8.2		
Herb Stratum			
1. Streptopus amplexifolius	6	No	FACU
2. Veratrum viride	5	No	FAC
3. Athyrium filix-femina	11	Yes	FAC
4. Cornus canadensis	10	Yes	FAC
5. Tristem cernuum	7	No	FACU
6. Blechnum spicant	8	Yes	FAC
7.			
8.			
9.			
10.			
Total Cover:	47		
50% of total cover: 22.5	20% of total cover: 9.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 45

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 26

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/2	100					loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 27

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): toe of slope

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka and Partofshikof soils, subalpine | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 11; all three wetland indicators present. Data point located near flag P2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Callitropsis nootkatensis	15.00	Yes	FAC
2. Tsuga heterophylla	10.00	Yes	FAC
3.			
4.			
Total Cover:	25		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum			
1. Tsuga heterophylla	15	Yes	FAC
2. Menziesia ferruginea	6	No	FACU
3. Vaccinium caespitosum	12	Yes	FACW
4.			
5.			
6.			
Total Cover:	33		
50% of total cover: 16.5	20% of total cover: 6.6		
Herb Stratum			
1. Lysichiton americanus	5	No	OBL
2. Nephrophyllidium crista-galli	25	Yes	OBL
3. Cornus suecica	7	No	FAC
4. Calamagrostis canadensis	10	No	FAC
5. Coptis asplenifolia	15	Yes	FAC
6.			
7.			
8.			
9.			
10.			
Total Cover:	62		
50% of total cover: 31	20% of total cover: 12.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) | Total Cover of Bryophytes 35

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 27

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

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

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 1

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 28

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 8-12

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Sitka and Partofshikof soils, subalpine | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag P2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	20.00	Yes	FAC
2. Callitropsis nootkatensis	35.00	Yes	FAC
3.			
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	10	Yes	FAC
2. Menziesia ferruginea	35	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Herb Stratum			
1. Nephrophyllidium crista-galli	6	No	OBL
2. Coptis asplenifolia	4	No	FAC
3. Calamagrostis canadensis	40	Yes	FAC
4. Cornus canadensis	12	Yes	FACU
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	62		
50% of total cover: 31	20% of total cover: 12.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 28

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/2	100					organic	moist
3-10	10YR 2/1	80					loam	dry
	10YR 2/2	20						
10-16	10YR 2/1	92					silt loam	dry; refusal at 16" (cobbles)
	10YR 4/2	8						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 29

Investigator(s): Jeff Gray, Carolyn Prentice, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 8-12

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Vestovia-McGlivery complex | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 12; all three wetland indicators present. Data point located near flag 02.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Callitropsis nootaktensis	10.00	Yes	FAC
2. Tsuga heterophylla	40.00	Yes	FAC
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum			
1. Menziesia ferrunginea	30	Yes	FACU
2. Vaccinium ovalifolium	25	Yes	FAC
3.			
4.			
5.			
6.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Herb Stratum			
1. Lysichton americanus	25	Yes	OBL
2. Blechnum spicant	8	No	FAC
3. Coptis aspleniifolia	6	No	FAC
4. Carex disperma	8	No	FACW
5. Cinna latifolia	5	No	FACW
6. Tiarella trifoliata	10	Yes	FAC
7.			
8.			
9.			
10.			
Total Cover:	62		
50% of total cover: 31	20% of total cover: 12.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) | Total Cover of Bryophytes 75

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 29

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [x] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0

Wetland Hydrology Present? Yes X No _____

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

-

Remarks:

primary hydric soil indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 30

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 8-12

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Vestovia-McGlivery complex | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag O2.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Callitropsis nootkatensis	35.00	Yes	FAC
2.	Tsuga heterophylla	15.00	Yes	FAC
3.				
4.				

Total Cover: 50

50% of total cover: 25 20% of total cover: 10

Sapling/Shrub Stratum				
1.	Menziesia ferruginea	35	Yes	FACU
2.	Tsuga heterophylla	10	Yes	FAC
3.	Rubus spectabilis	8	No	FACU
4.				
5.				
6.				

Total Cover: 53

50% of total cover: 26.5 20% of total cover: 10.6

Herb Stratum				
1.	Cornus canadensis	12	Yes	FACU
2.	Coptis aspleniifolia	7	Yes	FAC
3.	Streptopus amplexifolius	7	Yes	FACU
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Total Cover: 26

50% of total cover: 13 20% of total cover: 5.2

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 30

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					loam	dry
12-18	10YR 3/3	100					loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 25, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 31

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside (seeps)

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Vestovia-McGlivery complex | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 13 near flag WW3; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2.			
3.			
4.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	8	Yes	FAC
2. Rubus spectabilis	7	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	15		
50% of total cover: 7.5	20% of total cover: 3		
Herb Stratum			
1. Athyrium filix-femina	15	Yes	FAC
2. Lysichiton americanus	35	Yes	FAC
3. Carex mertensii	5	No	FACW
4. Coptis aspleniifolia	15	Yes	FAC
5. Circaea alpina	10	No	FACW
6.			
7.			
8.			
9.			
10.			
Total Cover:	80		
50% of total cover: 40	20% of total cover: 16		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 15

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 31

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 4/2	100					sandy loam	
6-10	10YR 5/8	40					sandy loam	
	7.5YR 3/2	60						
10-16	5GY 4/1	100					sandy loam	
16-20	10YR 4/4						loam	Muck; saturated

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☑ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A13 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 8

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 24, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 32

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): Hillside

Local relief (concave, convex, none): none | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Vestovia-McGlivery complex | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag WW2.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Tsuga heterophylla	40.00	Yes	FAC
2. Picea sitchensis	5.00	No	FACU
3.			
4.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum			
1. Menziesia ferrunginea	15	Yes	FACU
2. Vaccinium ovalofolium	5	No	FAC
3. Rubus spectabilis	5	No	FACU
4. Oplopanax horridus	5	No	FACU
5.			
6.			
Total Cover:	30		
50% of total cover: 15	20% of total cover: 6		
Herb Stratum			
1. Veratrum viride	5	No	FAC
2. Streptopus amplexifolius	5	No	FACU
3. Cornus canadensis	6	No	FACU
4. Athyrium filix-femina	10	Yes	FAC
5. Gymnicarpium dryopteris	8	Yes	FACU
6. Coptis aspleniifolia	12	Yes	FAC
7.			
8.			
9.			
10.			
Total Cover:	46		
50% of total cover: 23	20% of total cover: 9.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 30

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 32

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam	
3-11	10YR 3/3	100					loam	
11-20	2.5Y 4/1	100					sandy loam	
20-24	2.5Y 4/1	95	10YR 4/6	5	C	M	sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 24

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 22

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 23, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 33

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside; floodplain

Local relief (concave, convex, none): concave | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Vestovia-McGlivery complex | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 13; all three wetland indicators present. Data point located near flag WW18.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2. Picea sitchensis	10.00	Yes	FACU
3.			
4.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	5	Yes	FACU
2. Vaccinium ovalifolium	7	Yes	FAC
3. Rubus spectabilis	6	Yes	FACU
4.			
5.			
6.			
Total Cover:	18		
50% of total cover: 9	20% of total cover: 3.6		
Herb Stratum			
1. Lysichiton americanus	12	Yes	OBL
2. Carex disperma	8	Yes	FACW
3. Carex mertensii	5	No	FACW
4. Coptis aspleniifolia	8	Yes	FAC
5. Cornus canadensis	3	No	FACU
6.			
7.			
8.			
9.			
10.			
Total Cover:	36		
50% of total cover: 18	20% of total cover: 7.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 44

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 20

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 63 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 33

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 2/1	100					loam	saturated
5-12	10YR 4/1	100					sandy loam	saturated
12-20	10YR 4/1						sandy loam	muck; saturated

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to presence of shallow water table and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 10"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present; data point located adjacent to stream.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 25, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 34

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): terrace

Local relief (concave, convex, none): covex | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Vestovia-McGlivery complex | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located in upland between flags WW19 and WW25.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	45.00	Yes	FAC
2. Picea sitchensis	10.00	No	FACU
3.			
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	10	Yes	FAC
2. Menziesia ferruginea	25	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Herb Stratum			
1. Cornus canadensis	40	Yes	FACU
2. Gymnocarpium dryopteris	5	No	FACU
3. Coptis aspleniifolia	6	No	FAC
4. Blechnum spicant	2	No	FAC
5. Lysichiton americanus	4	No	OBL
6. Streptopus ampleixifolius	6	No	FACU
7.			
8.			
9.			
10.			
Total Cover:	63		
50% of total cover: 31.5	20% of total cover: 12.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 20

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	4	x 1 =	4
FACW species		x 2 =	
FAC species	63	x 3 =	189
FACU species	86	x 4 =	344
UPL species		x 5 =	
Column Totals:	153 (A)		537 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 34

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-16	10YR 3/2	85					silt loam	
	10YR 3/3	15						
16-24	10YR 2/1	30					sandy loam	gravels at 24"
	10YR 3/2	70						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 35

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

Data point located within Wetland 14; all three wetland parameters present. Data point located near flag V2 at edge of pond.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	40.00	Yes	FAC
2. Picea sitchensis	10.00	Yes	FACU
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum			
1. Alnus rubra	15	Yes	FAC
2. Oplopanax horridus	25	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	40		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum			
1. Athyrium filix-femina	20	Yes	FAC
2. Cinna latifolia	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	30		
50% of total cover: 15	20% of total cover: 6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 70

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 35

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100					sandy loam	
4-18	10YR 2/1	100					sandy loam	muck; gravels

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to shallow groundwater and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 4"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 2

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 36

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located near flag V2 adjacent to pond.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Alnus rubra	40.00	Yes	FAC
2. Picea sitchensis	15.00	Yes	FACU
3.			
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Oplopanax horridus	35	Yes	FACU
2. Sambucus racemosa	15	Yes	FACU
3. Alnus rubra	10	No	FAC
4. Aruncus dioicus	8	No	UPL
5.			
6.			
Total Cover:	68		
50% of total cover: 34	20% of total cover: 13.6		
Herb Stratum			
1. Athyrium filix-femina	25	Yes	FAC
2. Veratrum viride	15	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	40		
50% of total cover: _____	20% of total cover: _____		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 60

% Cover of Wetland Bryophytes - | Total Cover of Bryophytes 0

(Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 90	x 3 =	270
FACU species 65	x 4 =	260
UPL species 8	x 5 =	40
Column Totals: 163 (A)		570 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 36

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	7.5YR 4/3	100					sandy loam	gravels; refusal at 14"

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 37

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): toe of slope

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina peat | NWI classification: PFO4/PEM1

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 15; all three wetland indicators present. Data point located near flag U11.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	30.00	Yes	FAC
2. Picea sitchensis	10.00	Yes	FACU
3.			
4.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	25	Yes	FACU
2. Oplopanax horridus	15	Yes	FACU
3. Vaccinium ovalifolium	10	Yes	FAC
4.			
5.			
6.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Herb Stratum			
1. Carex meternesii	7	No	FACW
2. Lysichiton americanus	12	Yes	OBL
3. Athyrium filix-femina	15	Yes	FAC
4. Cinna latifolia	8	Yes	FACW
5. Gymnocarpium dryopteris	6	No	FACU
6. Coptis aspleniifolia	8	Yes	FAC
7.			
8.			
9.			
10.			
Total Cover:	56		
50% of total cover: 28	20% of total cover: 11.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 30

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 56 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 37

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [x] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [x] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary and secondary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 38

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina peat | NWI classification: PFO4/PEM1

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located near flag U11 on upland slope.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea sitchensis	25.00	Yes	FACU
2. Tsuga heterophylla	15.00	Yes	FAC
3.			
4.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum			
1. Oplopanax horridus	25	Yes	FACU
2. Menziesia ferruginea	25	Yes	FACU
3. Tsuga heterophylla	5	No	FAC
4.			
5.			
6.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Herb Stratum			
1. Athyrium filix-femina	10	Yes	FAC
2. Gymnocarpium dryopteris	8	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	18		
50% of total cover: 9	20% of total cover: 3.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 30	x 3 =	90
FACU species 83	x 4 =	332
UPL species	x 5 =	
Column Totals: 113 (A)		422 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 38

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					loam	
3-7	10YR 2/1	100					loam	
7-18	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 39

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): saddle

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Verstovia-McGilvery complex | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 16; all three wetland indicators present. Data point located near flag T7.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	15.00	Yes	FAC
2. Callitropsis nootkatensis	5.00	Yes	FAC
3.			
4.			
Total Cover:	20		
50% of total cover: 10	20% of total cover: 4		
Sapling/Shrub Stratum			
1. Tsuga heterophylla	15	Yes	FAC
2. Menziesia ferruginea	5	No	FACU
3. Vaccinium caespitosum	15	Yes	FACW
4.			
5.			
6.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Herb Stratum			
1. Carex mertensii	15	Yes	FACW
2. Carex pauciflora	10	Yes	OBL
3. Lysichiton americanus	7	No	OBL
4. Nephrophyliidium crista-galli	12	Yes	OBL
5. Cornus suecica	6	No	FAC
6.			
7.			
8.			
9.			
10.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 0

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) Total Cover of Bryophytes 65

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 39

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	saturated

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 18

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 40

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 8-12

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Verstovia-McGilvery complex | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag T7.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Tsuga heterophylla	35.00	Yes	FAC
2. Callitropsis nootkatensis	10.00	Yes	FAC
3.			
4.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	45	Yes	FACU
2. Vaccinium ovalifolium	10	No	FAC
3.			
4.			
5.			
6.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Herb Stratum			
1. Streptopus amplexifolius	7	Yes	FACU
2. Cornus suecica	5	Yes	FAC
3. Blechnum spicant	6	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	18		
50% of total cover: 9	20% of total cover: 3.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 40

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-11	10YR 4/3	70					loam	
	10YR 2/1	30					sandy loam	
11-18	10YR 4/3	100						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 41

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 5-8

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Verstovia-McGilvery complex | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 17 near flag S5; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2. Callitropsis nootkatensis	15.00	Yes	FAC
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	15	Yes	FAC
2. Menziesia ferruginea	15	Yes	FACU
3. Tsuga heterophylla	10	Yes	FAC
4.			
5.			
6.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Herb Stratum			
1. Nephrophyliidium crista-galli	15	Yes	OBL
2. Carex pauciflora	5	No	OBL
3. Lysichiton americans	8	No	OBL
4. Carex mertensii	8	No	FACW
5. Carex anthoxanthea	10	Yes	FACW
6.			
7.			
8.			
9.			
10.			
Total Cover:	46		
50% of total cover: 23	20% of total cover: 9.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 15

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) Total Cover of Bryophytes 50

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = 86

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 41

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 20

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 42

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Verstovia-McGilvery complex | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located in uplands near flag S5.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Tsuga heterophylla	30.00	Yes	FAC
2. Callitropsis nootkatensis	15.00	Yes	FAC
3. Picea sitchensis	10.00	No	FACU
4.			
Total Cover:	55		
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Tsuag heterophylla	10	Yes	FAC
2. Picea sitchensis	4	No	FACU
3. Menziesia ferruginea	35	Yes	FACU
4.			
5.			
6.			
Total Cover:	49		
50% of total cover: 24.5	20% of total cover: 9.8		
Herb Stratum			
1. Gymnocarpium dryopteris	7	Yes	FACU
2. Athyrium filix-femina	6	Yes	FAC
3. Cornus candensis	5	No	FACU
4. Blechnum spicant	3	No	FAC
5. Coptis aspleniifolia	6	Yes	FAC
6. Streptopus amplexifolius	4	No	FACU
7.			
8.			
9.			
10.			
Total Cover:	31		
50% of total cover: 15.5	20% of total cover: 6.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 50

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 42

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam	
3-10	10YR 4/3	65					loam	
	10YR 4/3	35					loam	
10-18	10YR 4/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 43

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 2-5

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 18 near flag RR4; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	25.00	Yes	FAC
2. Callitropsis nootaktensis	15.00	Yes	FAC
3.			
4.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	25	Yes	FAC
2. Tsuga heterophylla	15	Yes	FAC
3. Menziesia ferruginea	8	No	FACU
4.			
5.			
6.			
Total Cover:	48		
50% of total cover: 24	20% of total cover: 9.6		
Herb Stratum			
1. Nephrophyliidium crista-galli	17	Yes	OBL
2. Lysichiton americanus	8	No	OBL
3. Carex anthoxanthea	10	Yes	FACW
4. Carex pauciflora	5	No	OBL
5. Carex disperma	3	No	FACW
6.			
7.			
8.			
9.			
10.			
Total Cover:	43		
50% of total cover: 21.5	20% of total cover: 8.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 10

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) Total Cover of Bryophytes 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 43

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

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

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 44

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag RR4.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	35.00	Yes	FAC
2.	Callitropsis nootkatensis	10.00	Yes	FAC
3.				
4.				
	Total Cover:	45		
	50% of total cover: 22.5		20% of total cover: 9	
Sapling/Shrub Stratum				
1.	Menziesia ferruginea	35	Yes	FACU
2.	Tsuga heterophylla	10	Yes	FAC
3.	Picea sitchensis	8	No	FACU
4.	Vaccinium ovalifolium	5	No	FAC
5.				
6.				
	Total Cover:	58		
	50% of total cover: 29		20% of total cover: 11.6	
Herb Stratum				
1.	Coptis aspleniifolia	12	Yes	FAC
2.	Cornus canadensis	5	No	FACU
3.	Trisetum cernuum	3	No	FACU
4.	Maianthemum dilatatum	9	Yes	FAC
5.	Blechnum spicant	5	No	FAC
6.				
7.				
8.				
9.				
10.				
	Total Cover:	34		
	50% of total cover: 17		20% of total cover: 6.8	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 60

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation community present.

SOIL

Sampling Point: 44

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-10	10YR 4/3	75					loam	
	10YR 2/1	25						
10-18	10YR 4/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 45

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 19 near flag R7; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Callitropsis nootkatensis	10.00	Yes	FAC
2. Tsuga heterophylla	15.00	Yes	FAC
3.			
4.			
Total Cover:	25		
50% of total cover: 12.5	20% of total cover: 5		
Sapling/Shrub Stratum			
1. Picea sitchensis	8	Yes	FACU
2. Tsuga heterophylla	6	No	FAC
3. Menziesia ferruginea	8	Yes	FACU
4. Vaccinium ovalifolium	12	Yes	FAC
5.			
6.			
Total Cover:	34		
50% of total cover: 17	20% of total cover: 6.8		
Herb Stratum			
1. Lysichiton americanus	12	Yes	OBL
2. Trisetum cernuum	4	No	FACU
3. Cornus canadensis	4	No	FACU
4. Drosera rotundifolia	6	No	OBL
5. Athyrium filix-femina	7	No	FAC
6. Blechnum spicant	3	No	FAC
7. Coptis asplendiifolia	14	Yes	FAC
8. Carex disperma	5	No	FAC
9. Carex mertensii	8	Yes	FACW
10.			
Total Cover:	63		
50% of total cover: 31.5	20% of total cover: 12.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) | Total Cover of Bryophytes 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 45

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 15

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 22, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 46

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside/ridge

Local relief (concave, convex, none): none | Slope (%): 15-20

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: None

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag R5.

VEGETATION – Use scientific names of plants. List all species in the plot.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum			
1. Callitropsis nootkatensis	20.00	Yes	FAC
2. Tsuga heterophylla	10.00	Yes	FAC
3. Picea sitchensis	5.00	No	FACU
4.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 6.4		
Sapling/Shrub Stratum			
1. Vaccinium ovalifolium	35	Yes	FAC
2. Menziesia ferruginea	15	Yes	FACU
3. Tsuga hterophylla	4	No	FAC
4.			
5.			
6.			
Total Cover:	54		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum			
1. Maianthemum dilatatum	5	No	FAC
2. Cornus canadensis	25	Yes	FACU
3. Lysichiton americanus	3	No	OBL
4. Streptopus amplexifolius	4	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	37		
50% of total cover: 18.5	20% of total cover: 7.4		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 53

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 46

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-16	10YR 2/1	80					silt loam	
	10YR 4/3	20						
16-22	10YR 4/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 47

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): toe of slope

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina peat | NWI classification: PFO/PSS

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located in Wetland 20 near flag N6; all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tusga heterophylla	20.00	Yes	FAC
2. Callitropsis nootkatensis	15.00	Yes	FAC
3.			
4.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Sapling/Shrub Stratum			
1. Tsuga heterophylla	10	Yes	FAC
2. Menziesia ferruginea	15	Yes	FACU
3. Vaccinium ovalifolium	8	Yes	FAC
4.			
5.			
6.			
Total Cover:	33		
50% of total cover: 16.5	20% of total cover: 6.6		
Herb Stratum			
1. Lysichiton americanus	15	Yes	OBL
2. Cornus canadensis	7	No	FACU
3. Cinna latifolia	5	No	FACW
4. Eriophoreum angustifolium	10	Yes	OBL
5. Coptis asplendifolia	8	No	FAC
6.			
7.			
8.			
9.			
10.			
Total Cover:	45		
50% of total cover: 22.5	20% of total cover: 9		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes 100 (sphagnum) (Where applicable) | Total Cover of Bryophytes 50

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 86 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 47

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					organic	

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 48

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina peat | NWI classification: PFO/PSS

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located near flag N6 on slope above bog.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	45.00	Yes	FAC
2.	Callitropsis nootaktensis	5.00	No	FAC
3.				
4.				

Total Cover: 50

50% of total cover: 25 | 20% of total cover: 10

Sapling/Shrub Stratum				
1.	Menziesia ferruginea	35	Yes	FACU
2.	Oplopanax horridus	15	Yes	FACU
3.				
4.				
5.				
6.				

Total Cover: 50

50% of total cover: 25 | 20% of total cover: 10

Herb Stratum				
1.	Coptis asplendifolia	8	Yes	FAC
2.	Athyrium filix-femina	7	Yes	FAC
3.	Blechnum spicant	3	No	FAC
4.	Cornus canadensis	5	No	FACU
5.				
6.				
7.				
8.				
9.				
10.				

Total Cover: 23

50% of total cover: 11.5 | 20% of total cover: 4.6

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 35

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 48

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 2/1	100					loam	
5-13	10YR 2/1	75					loam	
	10YR 4/3	25						
13-18	10YR 4/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 49

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain, toe of slope

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 21 near flag QQ7; all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	20.00	Yes	FAC
2. Picea sitchensis	20.00	Yes	FACU
3.			
4.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum			
1. Picea sitchensis	7	Yes	FACU
2. Alnus rubra	5	Yes	FAC
3.			
4.			
5.			
6.			
Total Cover:	12		
50% of total cover: 6	20% of total cover: 2.4		
Herb Stratum			
1. Lysichiton americanus	70	Yes	OBL
2. Veratrum viride	10	No	FAC
3. Athyrium filix-femina	15	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	95		
50% of total cover: 47.5	20% of total cover: 19		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 5

% Cover of Wetland Bryophytes _____ (Where applicable) | Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 49

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam	
3-12	10YR 4/1	95					silt loam	
	10YR 2/1	5						organics translocated
12-18	10YR 3/2						silt loam	muck

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to shallow groundwater and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 50

Investigator(s): Jeff Gray, Carolyn Prentice, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 10-12

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; not all three wetland indicators present. Data point located near flag QQ7.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	60.00	Yes	FACU
2.				
3.				
4.				
	Total Cover:	60		
	50% of total cover: 30		20% of total cover: 12	
Sapling/Shrub Stratum				
1.	Picea sitchensis	15	Yes	FACU
2.				
3.				
4.				
5.				
6.				
	Total Cover:	15		
	50% of total cover: _____		20% of total cover: _____	
Herb Stratum				
1.	Blechnum spicant	4	Yes	FAC
2.	Gymnocarpium dryopteris	7	Yes	FACU
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	11		
	50% of total cover: 5.5		20% of total cover: 2.2	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 80

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 10

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	4	x 3 =	12
FACU species	82	x 4 =	382
UPL species		x 5 =	
Column Totals:	86 (A)		394 (B)

Prevalence Index = B/A = 4.6

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 50

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100					loam	
4-18	10YR 3/3	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 51

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 21 near flag Q4D; all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	25.00	Yes	FACU
2.	Alnus rubra	25.00	Yes	FAC
3.				
4.				

Total Cover: 50

50% of total cover: 25 20% of total cover: 10

Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				

Total Cover: 0

50% of total cover: _____ 20% of total cover: _____

Herb Stratum				
1.	Lysichiton americanus	65	Yes	OBL
2.	Athyrium filix-femina	5	No	FAC
3.	Cinna latifolia	2	No	FACW
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Total Cover: 72

50% of total cover: 36 20% of total cover: 14.4

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 51

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100					loam	
2-12	10YR 4/1	100					silt loam	organics transplanted
12-16	10YR 3/2	100					silt loam	refusal at 16" (gravels)

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☑ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to shallow groundwater and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicator present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 52

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): terrace above floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located within a wetland; not all three wetland indicators present. Data point located near flag Q4D.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Picea sitchensis	40.00	Yes	FACU
2.	Alnus rubra	35.00	Yes	FAC
3.				
4.				
	Total Cover:	75		
	50% of total cover: 37.5	20% of total cover: 15		
Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				
	Total Cover:	0		
	50% of total cover: _____	20% of total cover: _____		
Herb Stratum				
1.	Lysichiton americanus	3	No	OBL
2.	Athyrium filix-femina	11	Yes	FAC
3.	Gymnocarpium dryopteris	5	No	FACU
4.	Dryopteris expansa	13	Yes	FACU
5.	Maianthemum dilatatum	4	No	FAC
6.				
7.				
8.				
9.				
10.				
	Total Cover:	36		
	50% of total cover: 18	20% of total cover: 7.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	3	x 1 =	3
FACW species		x 2 =	
FAC species	50	x 3 =	150
FACU species	58	x 4 =	232
UPL species		x 5 =	
Column Totals:	111 (A)		385 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 52

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	70					silt loam	
	10YR 3/2	30						
4-8	10YR 4/1	100					silt loam	
8-16	2.5Y 4/4	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 53

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
Data point located within Wetland 22 near flag HA5; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	70.00	Yes	FAC
2. Picea sitchensis	10.00	No	FACU
3.			
4.			
Total Cover:	80		
50% of total cover: 40	20% of total cover: 16		
Sapling/Shrub Stratum			
1. -			
2.			
3.			
4.			
5.			
6.			
Total Cover:	0		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum			
1. Athyrium filix-femina	50	Yes	FAC
2. Lysichiton americanus	35	Yes	OBL
3. Cinna latifolia	4	No	FACW
4. Maianthemum dilatatum	5	No	FAC
5. Gymnocarpium dryopteris	4	No	FACU
6.			
7.			
8.			
9.			
10.			
Total Cover:	98		
50% of total cover: 49	20% of total cover: 19.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 2

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 35

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 53

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/1						loam	
1-11	10YR 4/2	75	10YR 4/6	15	c	m	silt loam	
			10YR 4/1	10	d	m		
11-20	5GY 4/1	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☑ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A13 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 54

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located in a wetland; not all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	45.00	Yes	FAC
2. Picea sitchensis	35.00	Yes	FACU
3.			
4.			
Total Cover:	80		
50% of total cover: 40	20% of total cover: 16		
Sapling/Shrub Stratum			
1. Picea sitchensis	10	Yes	FACU
2. Menziesia ferruginea	5	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	15		
50% of total cover: 7.5	20% of total cover: 3		
Herb Stratum			
1. Athyrium filix-femina	25	Yes	FAC
2. Dryopteris expansa	10	Yes	FACU
3. Gymnocarpium dryopteris	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	40		
50% of total cover: 20	20% of total cover: 8		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 35

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 70	x 3 =	210
FACU species 65	x 4 =	260
UPL species	x 5 =	
Column Totals: 135 (A)		470 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
No hydrophytic vegetation indicators present.

SOIL

Sampling Point: 54

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					loam	
3-18	10YR 4/2	100					loam	no redox features

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 55

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hummocks

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located within Wetland 22 near flag HH11; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	60.00	Yes	FAC
2.	Picea sitchensis	5.00	No	FACU
3.				
4.				
	Total Cover:	65		
	50% of total cover: 32.5	20% of total cover: 13		
Sapling/Shrub Stratum				
1.	Picea sitchensis	5	Yes	FACU
2.				
3.				
4.				
5.				
6.				
	Total Cover:	5		
	50% of total cover: 2.5	20% of total cover: 1		
Herb Stratum				
1.	Lysichiton americanus	35	Yes	OBL
2.	Athyrium filix-femina	20	Yes	FAC
3.	Cinna latifolia	5	No	FACW
4.				
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	60		
	50% of total cover: 30	20% of total cover: 12		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25 (water/mud)

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 15

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 55

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					loam	organics
2-18	10YR 2/1	30	7.5YR 5/8	20	C	M	sandy loam	
2-18	5B 4/1	50						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☑ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A13 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

Water Table Present? Yes X No ____ Depth (inches): 7

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 21, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 56

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point not located within a wetland; all three indicators not present. Data point located near flag HH11.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	65.00	Yes	FAC
2. Picea sitchensis	15.00	No	FACU
3.			
4.			
Total Cover:	80		
50% of total cover: 40	20% of total cover: 16		
Sapling/Shrub Stratum			
1. Alnus rubra	5	Yes	FAC
2. Picea sitchensis	5	Yes	FACU
3.			
4.			
5.			
6.			
Total Cover:	10		
50% of total cover: 5	20% of total cover: 2		
Herb Stratum			
1. Athyrium filix-femina	45	Yes	FAC
2. Gymnocarpium dryopteris	11	No	FACU
3. Dryopteris expansa	8	No	FACU
4. Cinna latifolia	4	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	68		
50% of total cover: 34	20% of total cover: 13.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 20

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 15

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 56

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam	
3-6	10YR 3/3	100					loam	
6-18	10YR 4/2	100					silt loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 57

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
Data point located within Wetland 23 near flag GG1D; all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	70.00	Yes	FAC
2.	Picea sitchensis	15.00	No	FACU
3.				
4.				
	Total Cover:	85		
	50% of total cover: 42.5	20% of total cover: 17		
Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				
	Total Cover:	0		
	50% of total cover: _____	20% of total cover: _____		
Herb Stratum				
1.	Lysichiton americanus	35	Yes	OBL
2.	Athyrium filix-femina	10	Yes	FAC
3.	Tiarella trifoliata	4	No	FAC
4.	Maianthamum dilatatum	5	No	FAC
5.	Dryopteris expansa	6	No	FACU
6.	Cinna latifolia	4	No	FACW
7.	Gymnocarpium dryopteris	7	No	FACU
8.				
9.				
10.				
	Total Cover:	71		
	50% of total cover: 35.5	20% of total cover: 14.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 57

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-18	10YR 4/2	30	10YR 4/6	15	c	m	loam	
	10Y 4/1	55					silt loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☑ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A13 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☑ Water-stained Leaves (B9)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 14

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Secondary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 58

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point located in upland near flag GG1D; not all wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	75.00	Yes	FAC
2. Picea sitchensis	10.00	No	FACU
3.			
4.			
Total Cover:	85		
50% of total cover: 42.5	20% of total cover: 17		
Sapling/Shrub Stratum			
1. Picea sitchensis	8	Yes	FACU
2.			
3.			
4.			
5.			
6.			
Total Cover:	8		
50% of total cover: 4	20% of total cover: 1.6		
Herb Stratum			
1. Athyrium filix-femina	70	Yes	FAC
2. Gymnocarpium dryopteris	5	No	FACU
3. Maianthemum dilatatum	7	No	FAC
4. Cinna lattifolia	4	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	86		
50% of total cover: 43	20% of total cover: 17.2		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 10

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator

SOIL

Sampling Point: 58

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam	
3-18	10YR 3/1	80	10YR 4/2	5	d	m	silt loam	no redox concentrations
	10YR 2/1	15						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 59

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): toe of slope

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located within Wetland 23 near flag G7; all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Tsuga heterophylla	60.00	Yes	FAC
2.	Picea sitchensis	5.00	No	FACU
3.				
4.				
	Total Cover:	65		
	50% of total cover: 32.5	20% of total cover: 13		
Sapling/Shrub Stratum				
1.	Menziesia ferruginea	4	Yes	FACU
2.	Oplopanax horridus	4	Yes	FACU
3.	Picea sitchensis	5	Yes	FACU
4.				
5.				
6.				
	Total Cover:	13		
	50% of total cover: _____	20% of total cover: _____		
Herb Stratum				
1.	Lysichiton americanus	65	Yes	OBL
2.	Athyrium filix-femina	10	No	FAC
3.	Dryopteris expansa	4	No	FACU
4.	Viola palustris	9	No	FACW
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	88		
	50% of total cover: 44	20% of total cover: 17.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	9	x 2 =	18
FAC species	70	x 3 =	210
FACU species	22	x 4 =	88
UPL species		x 5 =	
Column Totals:	166 (A)		381 (B)

Prevalence Index = B/A = 2.3

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 59

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1						organic	

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

Hydric Soil Indicators:

- [x] Histosol or Histel (A1)
- [ ] Histic Epipedon (A2)
- [ ] Hydrogen Sulfide (A4)
- [ ] Thick Dark Surface (A12)
- [ ] Alaska Gleyed (A13)
- [ ] Alaska Redox (A14)
- [ ] Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- [ ] Alaska Color Change (TA4)[4]
- [ ] Alaska Alpine Swales (TA5)
- [ ] Alaska Redox With 2.5Y Hue
- [ ] Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- [ ] Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A1 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- [ ] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Marl Deposits (B15)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Dry-Season Water Table (C2)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- [ ] Water-stained Leaves (B9)
- [ ] Drainage Patterns (B10)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Salt Deposits (C5)
- [ ] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] Microtopographic Relief (D4)
- [ ] FAC-Neutral Test (D5)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 0

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Primary wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 60

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): hillsope

Local relief (concave, convex, none): none | Slope (%): >35

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Kina-Sukoi association, sloping lowlands | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Data point not located in a wetland; not all three indicators present. Data point located near flag G7 on hillslope above wetland.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heteroiphylla	50.00	Yes	FAC
2. Picea sitchensis	25.00	Yes	FACU
3.			
4.			
Total Cover:	75		
50% of total cover: 37.5	20% of total cover: 15		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	35	Yes	FACU
2. Oplopanax horridus	5	No	FACU
3. Vaccinium ovalifolium	10	Yes	FAC
4.			
5.			
6.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Herb Stratum			
1. Dryopteris expansa	10	Yes	FACU
2. Streptopus amplexifolius	8	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	18		
50% of total cover: 9	20% of total cover: 3.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 25

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 60

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 60	x 3 =	180
FACU species 83	x 4 =	332
UPL species	x 5 =	
Column Totals: 143 (A)		512 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 60

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 2.5/2	100					loam	refusal at 12" (rock)

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 61

Investigator(s): Jeff Gray, Carolyn Prentice, | Landform (hillside, terrace, hummocks, etc.): toe of slope

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located in Wetland 24 near flag EEE2; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	75.00	Yes	FAC
2.	Picea sitchensis	5.00	No	FACU
3.				
4.				

Total Cover: 80

50% of total cover: 40 20% of total cover: 16

Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				

Total Cover: 0

50% of total cover: _____ 20% of total cover: _____

Herb Stratum				
1.	Lysichiton americanus	25	Yes	OBL
2.	Athyrium filix-femina	30	Yes	FAC
3.	Circaea alpina	8	No	FACW
4.	Gymnocarpium dryopteris	5	No	FACU
5.	Cinna latifolia	4	No	FACW
6.				
7.				
8.				
9.				
10.				

Total Cover: 72

50% of total cover: 36 20% of total cover: 14.4

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 28

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 61

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam	
3-18	10Y 4/1	55					silt loam	
	10YR 4/2	40	10YR 4/6	5	c	m		

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☑ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A13 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 2

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 62

Investigator(s): Jeff Gray, Carolyn Prentice, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 15

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point located on upland slope near flag EEE4 above wetland; not all wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga heterophylla	35.00	Yes	FAC
2. Picea sitchensis	15.00	Yes	FACU
3.			
4.			
Total Cover:	50		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum			
1. Menziesia ferruginea	25	Yes	FACU
2. Vaccinium ovalifolium	5	No	FAC
3. Picea sitchensis	5	No	FACU
4.			
5.			
6.			
Total Cover:	35		
50% of total cover: 17.5	20% of total cover: 7		
Herb Stratum			
1. Athyrium filix-femina	15	Yes	FAC
2. Dryopteris expansa	10	Yes	FACU
3. Gymnocarpium dryopteris	8	Yes	FACU
4. Circaea alpina	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	38		
50% of total cover: 19	20% of total cover: 7.6		

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 0

% Cover of Wetland Bryophytes - | Total Cover of Bryophytes 75

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	5	x 2 =	10
FAC species	55	x 3 =	165
FACU species	63	x 4 =	252
UPL species		x 5 =	
Column Totals:	123 (A)		427 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
No hydrophytic vegetation indicator present.

SOIL

Sampling Point: 62

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-18	10YR 3/3	100					loam	organics

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 63

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): concave | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:
Data point located in Wetland 24 near flag E2; all three wetland indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	75.00	Yes	FAC
2.				
3.				
4.				
	Total Cover:	75		
	50% of total cover: 37.5		20% of total cover: 15	
Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				
	Total Cover:	0		
	50% of total cover: _____		20% of total cover: _____	
Herb Stratum				
1.	Athyrium filix-femina	15	No	FAC
2.	Lysichiton americanus	25	Yes	OBL
3.	Viola palustris	5	No	FACW
4.	Heracleum maximum	15	No	FACU
5.	Veratrum viride	5	No	FAC
6.	Circaea alpina	20	Yes	FACW
7.				
8.				
9.				
10.				
	Total Cover:	85		
	50% of total cover: 42.5		20% of total cover: 17	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes _____ (Where applicable) | Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 63

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	75	10YR 4/4	10	c	PL	silt loam	
			10Y 4/1	15	d	PL		

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☑ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil indicator A15 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☑ Water-stained Leaves (B9)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 20, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 64

Investigator(s): Jeff Gray, Carolyn Prentice | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point located in uplands near flag E2; not all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	75.00	Yes	FAC
2.				
3.				
4.				
	Total Cover:	75		
	50% of total cover: 37.5		20% of total cover: 15	
Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				
	Total Cover:	0		
	50% of total cover: _____		20% of total cover: _____	
Herb Stratum				
1.	Athyrium filix-femina	35	Yes	FAC
2.	Heracleum maximum	25	Yes	FACU
3.	Lysichiton americanus	3	No	OBL
4.	Circaea alpina	15	No	FACW
5.	Veratrum viride	5	No	FAC
6.				
7.				
8.				
9.				
10.				
	Total Cover:	83		
	50% of total cover: 41.5		20% of total cover: 16.6	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 17

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 64

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	90					silt loam	some sand
	10YR 2/2	10						
16-24	10YR 2/1	100					sandy loam	

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicator present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 25, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 65

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): floodplain

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Data point located in Wetland 25 near flag D4; all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	70.00	Yes	FAC
2.				
3.				
4.				

Total Cover: 70

50% of total cover: 35 20% of total cover: 14

Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				

Total Cover: 0

50% of total cover: _____ 20% of total cover: _____

Herb Stratum				
1.	Athyrium filix-femina	30	Yes	FAC
2.	Lysichiton americanus	20	Yes	OBL
3.	Circaea alpina	15	No	FACW
4.	Veratrum viride	8	No	FAC
5.	Heracleum maximum	5	No	FACU
6.				
7.				
8.				
9.				
10.				

Total Cover: 78

50% of total cover: 39 20% of total cover: 15.6

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' % Bare Ground 22

% Cover of Wetland Bryophytes - (Where applicable) Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 65

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					silt loam	
4-18	10YR 4/2	60					sandy loam	
	10YR 2/2	40						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric soil determined to be present due to shallow water table.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes X No ____ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 3

Wetland Hydrology Present? Yes X No ____

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

-

Remarks:

Wetland hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Katlian Bay Road | Borough/City: Sitka | Sampling Date: June 25, 2015

Applicant/Owner: ADOT & PF, Southcoast Region | Sampling Point: 66

Investigator(s): Jeff Gray, Tad Schwager | Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none | Slope (%): 0-2

Subregion: Southeast Alaska | Lat: - | Long: - | Datum: -

Soil Map Unit Name: Tuxekan silt loam, floodplains | NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:
Data point located on hillside above wetland near flag D4; not all three indicators present.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	Alnus rubra	80.00	Yes	FAC
2.				
3.				
4.				
	Total Cover:	80		
	50% of total cover: 40		20% of total cover: 16	
Sapling/Shrub Stratum				
1.	-			
2.				
3.				
4.				
5.				
6.				
	Total Cover:	0		
	50% of total cover: _____		20% of total cover: _____	
Herb Stratum				
1.	Athyrium filix-femina	35	Yes	FAC
2.	Veratrum viride	15	No	FAC
3.	Heracleum maximum	25	Yes	FACU
4.	Circaea alpina	10	No	FACW
5.				
6.				
7.				
8.				
9.				
10.				
	Total Cover:	85		
	50% of total cover: 42.5		20% of total cover: 17	

Plot size (radius, or length x width) radius by stratum: 30', 15', 5' | % Bare Ground 15

% Cover of Wetland Bryophytes - (Where applicable) | Total Cover of Bryophytes 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Hydrophytic vegetation indicator present.

SOIL

Sampling Point: 66

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam	
4-18	10YR 2/2	80					silt loam	
	10YR 2/1	20						

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

Hydric Soil Indicators:

- ☐ Histosol or Histel (A1)
- ☐ Histic Epipedon (A2)
- ☐ Hydrogen Sulfide (A4)
- ☐ Thick Dark Surface (A12)
- ☐ Alaska Gleyed (A13)
- ☐ Alaska Redox (A14)
- ☐ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ☐ Alaska Color Change (TA4)[4]
- ☐ Alaska Alpine Swales (TA5)
- ☐ Alaska Redox With 2.5Y Hue
- ☐ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ☐ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No X

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained Leaves (B9)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Salt Deposits (C5)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? Yes ____ No X

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

-

Remarks:

No wetland hydrology indicators present.

Appendix E

ADDENDUM KATLIAN BAY ROAD BOSWORTH BOTANICAL CONSULTING

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Addendum
Katlian Bay Road

Bosworth Botanical Consulting

August 2016

Contents

List of Acronyms

Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
BBC	Bosworth Botanical Consulting
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
GIS	Geographical Information System
HGM	Hydro-geomorphic
LEI	LEI Engineering and Surveying, LLC
LTF	log transfer facility
MHW	mean high water
MP	milepost
MSL	mean sea level
NE	northeast
NW	southeast
OBL	obligate
PEM	palustrine emergent
PEM1B	palustrine emergent persistent, saturated
PFO	palustrine forested
PFO1A	palustrine forested broad-leaved deciduous, temporarily flooded
PFO1B	palustrine forested broad-leaved deciduous, saturated
PFO4	palustrine forested needle-leaved evergreen
PFO4A	palustrine forested needle-leaved evergreen, temporarily flooded
PFO4B	palustrine, forested, needle-leaved evergreen, saturated
PSS	palustrine scrub-shrub
PSS1B	palustrine scrub-shrub broad leaved-deciduous, saturated
PUB3X	palustrine unconsolidated bottom, mud, excavated
RPW	Relatively Permanent Water
SE	southeast
Shee Atiká	Shee Atiká Urban Corporation
SW	southwest
TNW	Traditional Navigable Water
USACE	United States Army Corps of Engineers
WESPAK-SE	Wetland Ecosystems Services Protocol for Southeast Alaska

Introduction

This addendum is a supplement to Amec Foster Wheeler's, *Katlian Bay Road Wetlands and Streams Delineation Report, May 2016*. Seven sites were surveyed for wetlands and watercourses and parts of the shoreline of Katlian Bay were check for presence of eelgrass.

Methods

The wetland delineation methodology generally followed that of the Amec Foster Wheeler *Katlian Bay Road* survey.

The sites were visited on July 20th and 21st, 2016. The weather was overcast and in the high 50's during the survey. For the month before the fieldwork was done the average daytime temperature was in the low 60's and rainfall totaled less than three inches.

Seas were calm and boat access to Katlian Bay was unrestricted. Eel grass presence/absence checks were done at low tide, which was between 8 and 9 am on the survey days. Stream water levels were low so stream crossings, when accessing most of the sites, were relatively easy. The salmon had not come into the streams yet so there was no recent sign of bears.

Results

Staging Area - MP_0.0 (Upland w/ 5% wetland mosaic)

This proposed staging area is a 1.5 acre triangular, forested piece at the end of Halibut Pt. Rd., next to the Starrigavan Hikers Campground. The piece is bedrock-cored, hilly and completely forested. The western and broader half of the triangle is an upland forest dominated by Sitka spruce (FACU), western hemlock (FAC), rusty menziesia (FACU) and dwarf dogwood (FACU). The northern half of the triangle is an upland/wetland mosaic of 15- 20% wetland. The wetlands are small narrow (3-4 ft) stringers in the depressions between the small bedrock-cored hills. The wetland stringers have an overstory of Sitka spruce and western hemlock and understory of blueberry (FAC) and skunk cabbage (OBL). The soil in the wet areas is a mucky peat over bedrock.

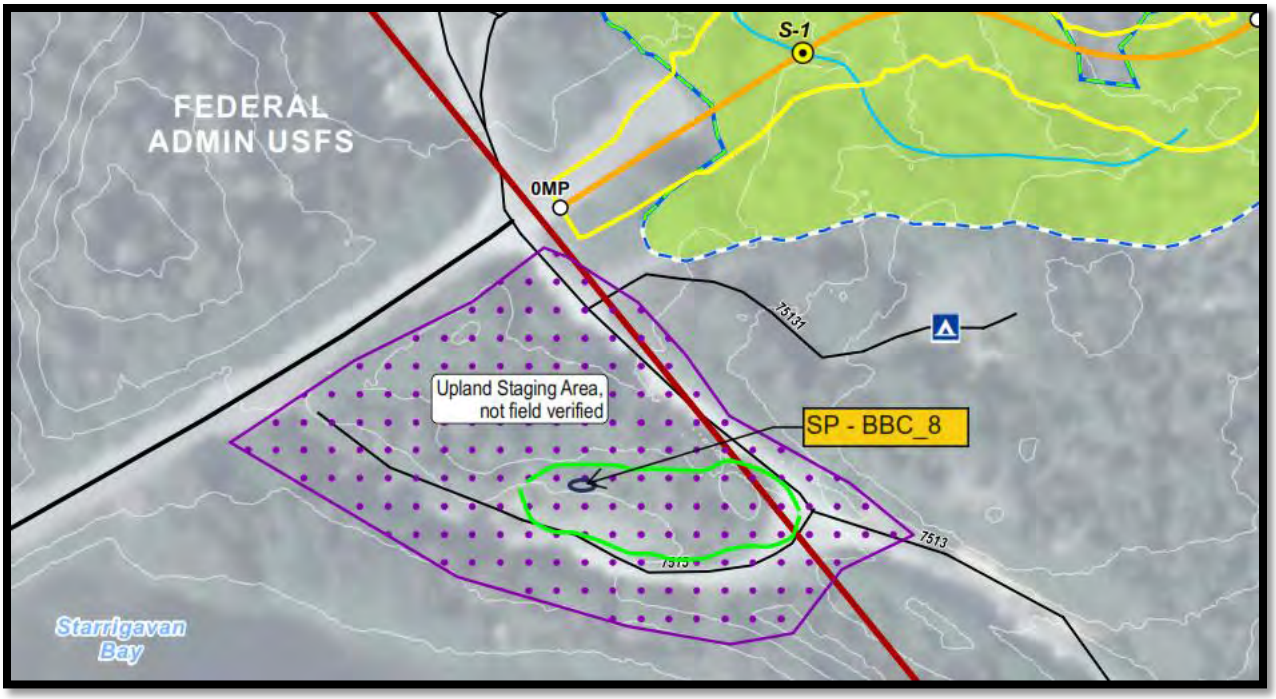

Figure 1 - Potential staging area at the end of Halibut Point Rd. at Starrigavan campground. Green line shows approximate location of wetland mosaic area. Oval with label is BBC sample point #8.

Figure 2 - View looking SE into the upland part of the triangle.

Figure 3 - View from within of the upland section of the "triangle".

Figure 4 - Rooty, unsaturated peat in upland section of "triangle".

Figure 5 - Narrow wetland stringers in the mosaic of the eastern section of the "triangle".

Figure 6 - Rooty, saturated peat in a wetland stringer in the wetland mosaic in the eastern section of the "triangle.

Waste site - MP_2.9 (Upland)

This proposed waste site on a ridgeline with no drainages. The vegetation is young second-growth dominated by mountain and western hemlock (FAC), Sitka spruce (FACU), rusty menziesia (FACU), blueberries (3 species) (FAC), devils club (FACU) and dwarf dogwood (FACU). The soils are unsaturated peats down to at least 12 inches.

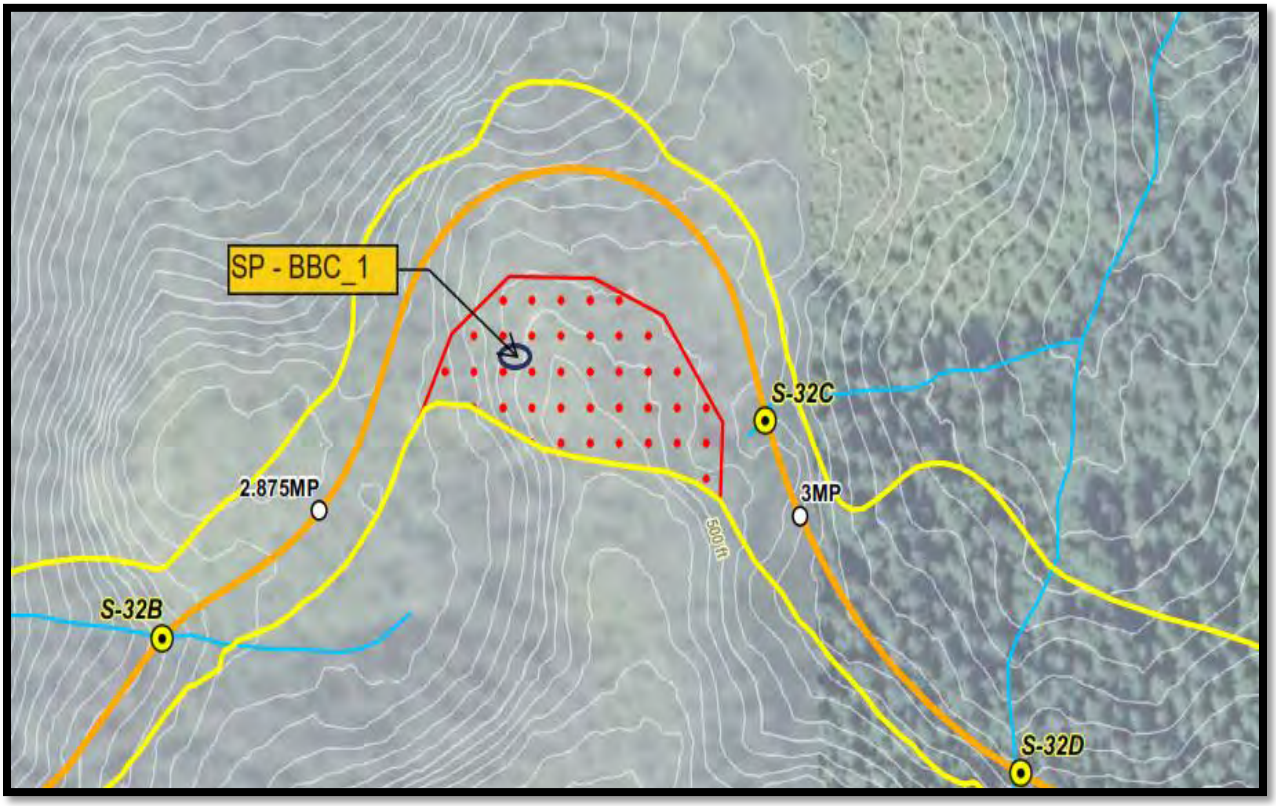

Figure 7 - Oval with label is BBC sample point #1.

Figure 8 - Overview of the proposed waste site at mile point 2.9.

Figure 9 - Detail view of proposed waste site at mile point 2.9.

Waste site - MP_3.875 (Wetland)

- Wetland Habitat Type - Evergreen Forest
- Cowardin Class - PFO4B
- HGM Class - Slope
- WESPAK_SE Wetland Type - Forested Peatland

There is a small wetland in a depression between a steep cliff and a bedrock knob at this proposed waste site. The wetland boundaries were flagged and LEI said they would survey it in. There is a small drainage out of the wetland to the north and a larger one out of the wetland to the south. This one drains down to a large stream just below the knob that then drains west into Katlian Bay. The wetland is dominated by yellow cedar (FAC), mountain and western hemlock (FAC), rusty menziesia (FACU), evergreen *Coptis* (FAC) and skunk cabbage (OBL). The soils are a deep, saturated peat.

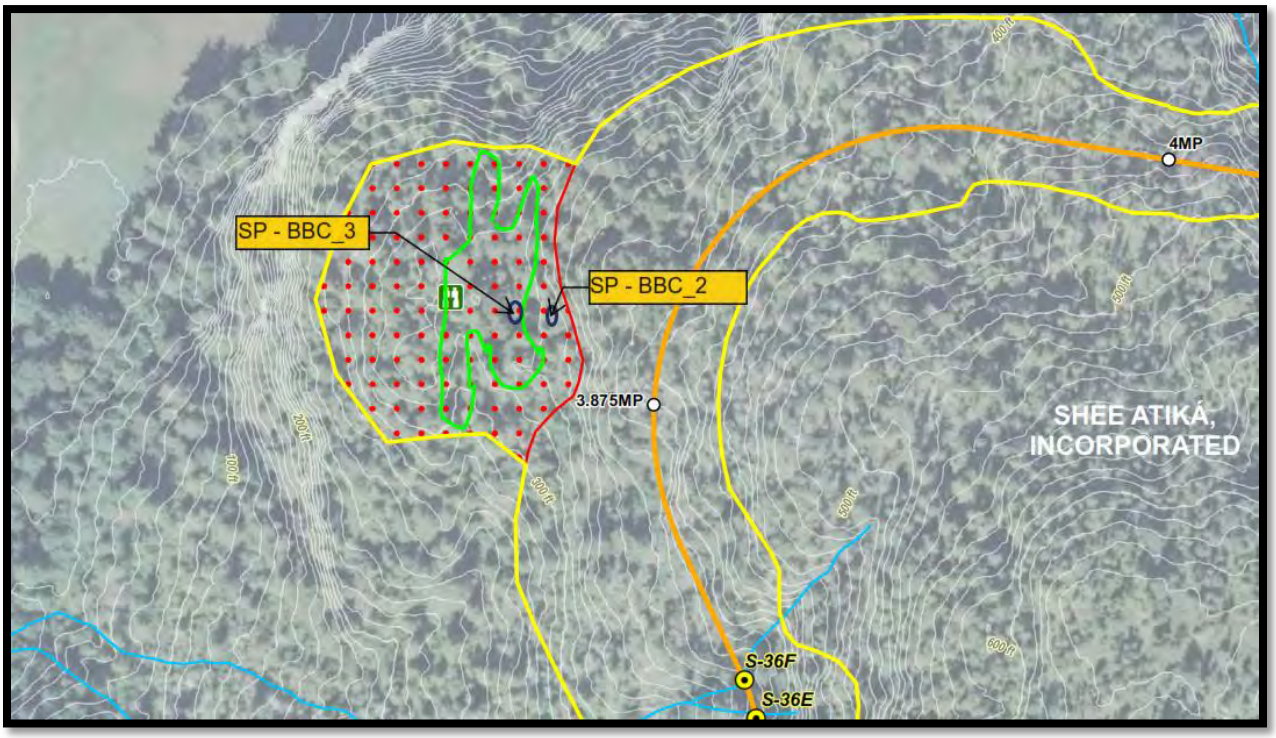

Figure 10 - The green is the approximate wetland location at mile point 3. 875. The ovals with labels are BBC sample points #2 and #3.

Figure 11 - Upland vegetation at sample point #2. Western hemlock, Sitka spruce rusty menziesia and dwarf dogwood dominate.

Figure 12 - Unsaturated peat at sample point #2.

Figure 13 - Forested wetland at sample point #3 - dominated by yellow cedar, rusty menziesia, evergreen *Coptis* and skunk cabbage.

Figure 14 - Deep saturated peat at wetland sample point #3.

Log Deck - MP_6.375 (Upland)

This proposed log deck is found over and around the old logging road 7591. The area around the road is second-growth red alder (FAC) forest with a scattering of Sitka spruce and an understory of devils club (FACU), skunk currant (FACU), and salmonberry (FACU) and a forb layer of enchanters nightshade (FAC) and lady fern (FAC). The soil is a well-drained silt-loam.

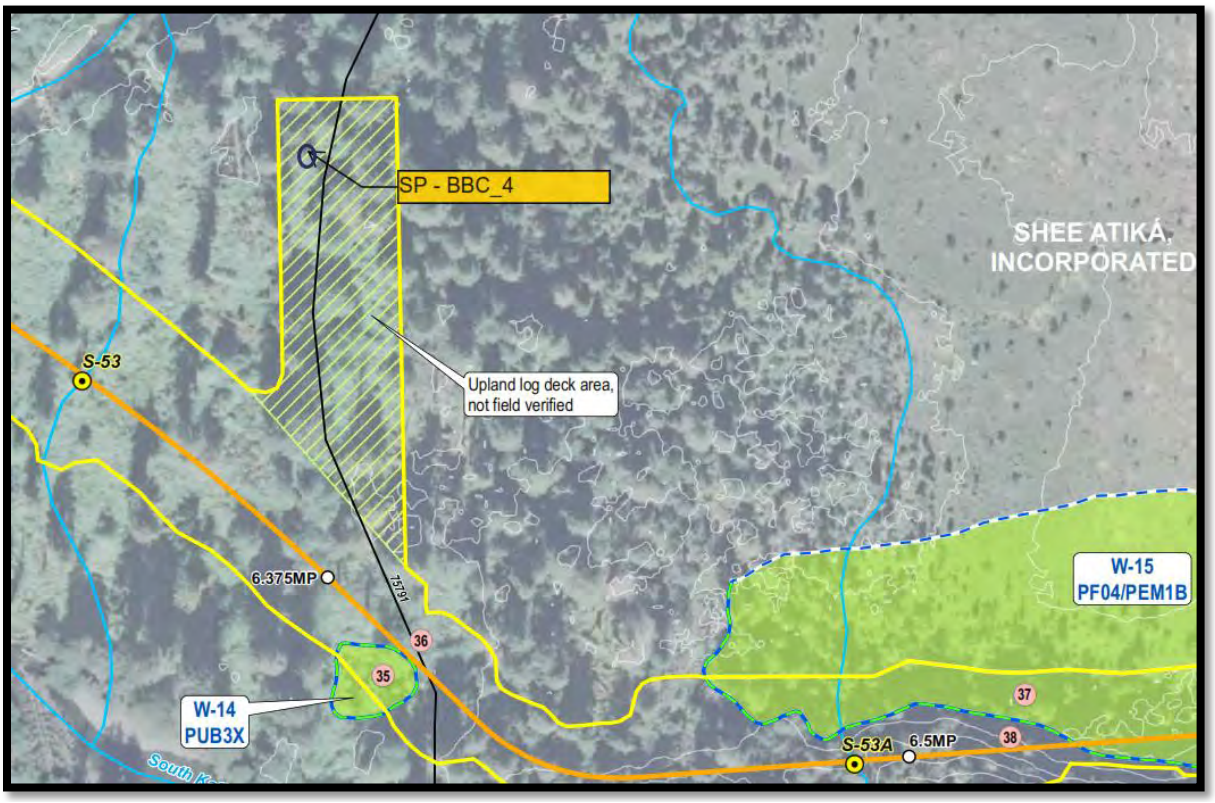

Figure 15 - Proposed log deck at mile post 6.375. The oval with label is BBC sample point #4.

Figure 16 - Unsaturated silt loam and enchanters nightshade at BBC sample point #4.

Log Deck - MP_7.5 (Upland)

The below-drawn, proposed, log deck would have impacted wetland so LEI proposed moving it north of the second drainage and along the old road prism. The road prism is well-drained and minimally vegetated. The area around the road is second-growth red alder (FAC) forest with a scattering of Sitka spruce(FACU) and a forb layer of enchanters nightshade (FAC) and lady fern (FAC). The soil is a well-drained silt-loam.

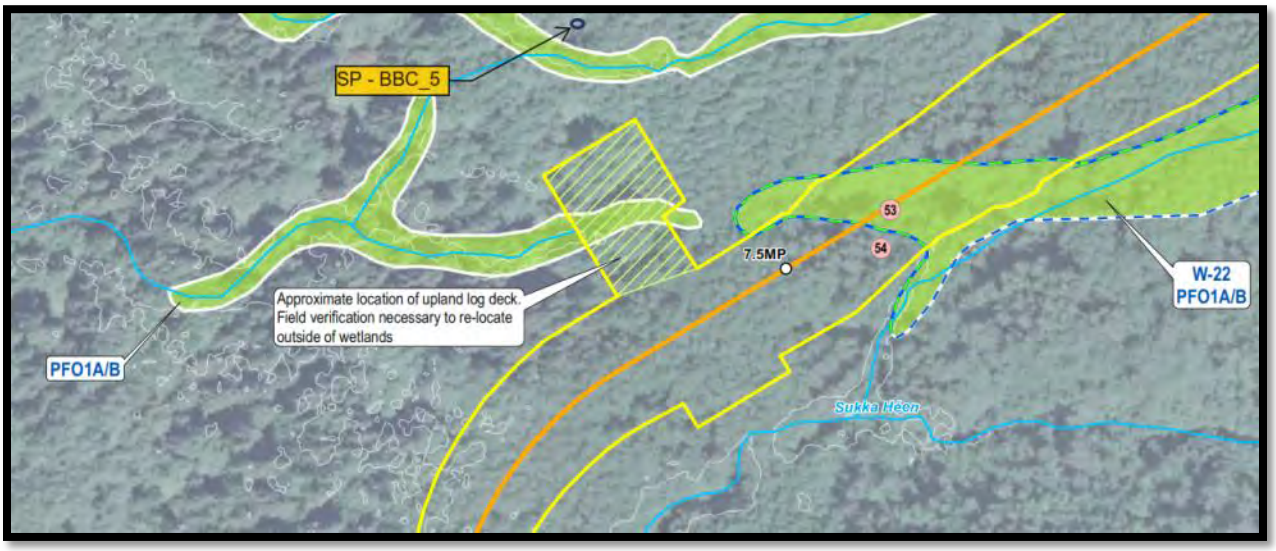

Figure 17 - The new proposed log deck was moved along the old logging road to an upland are north of the two stream wetlands.

Figure 18 - Upland second-growth red alder forest at BBC sample point #5.

Figure 19 - The old logging road at BBC sample point #5.

Coxe River Rd. Realignment

- Wetland Habitat Type - Evergreen Forest
- Cowardin Class - PFO4B
- HGM Class - Depressional
- WESPAK_SE Wetland Type - Forested Peatland

The western side of the Coxe River realignment stays up on the upland second -growth hillside, well out of the wet floodplain/overflow channel that runs along the toe of the slope. A sample point was done in a toe-of-slope PFO4 wetland that might be within the ROW of the road. This wetland was flagged and way pointed and could be surveyed if it was determined that it would be impacted by the road construction. The alignment comes off the hillside just above where the overflow channel leaves Coxe River and so would not be impacted. The eastern side of the realignment route is all upland in second growth red alder growing in well-drained alluvial sediments.

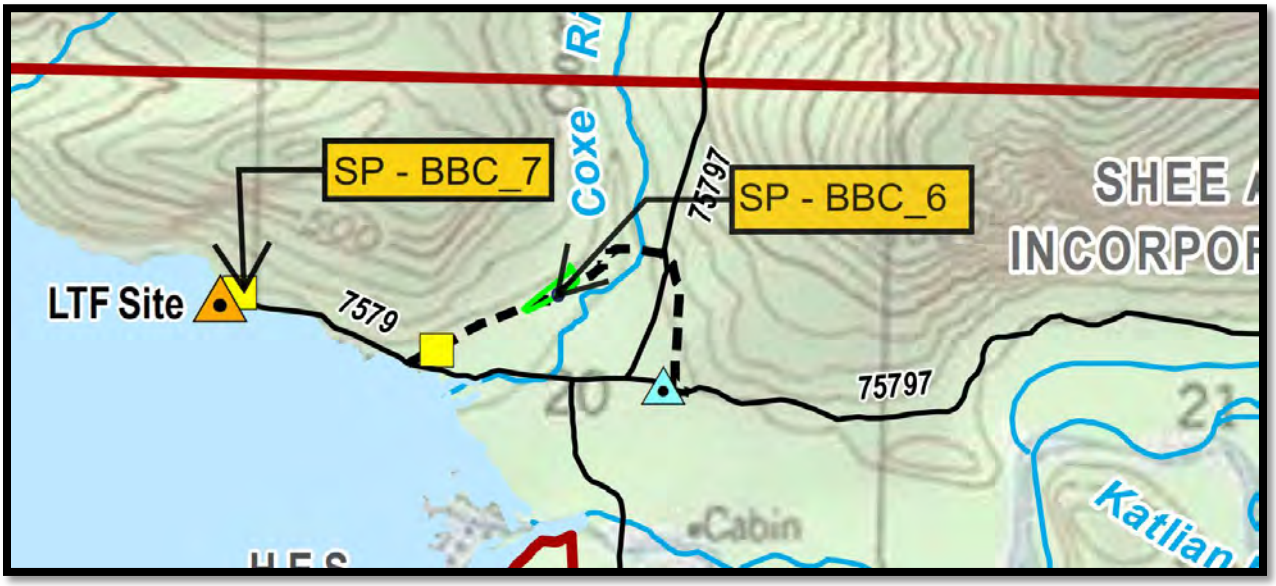

Figure 20 - The general location of the wetland and BBC sample point #6 along the west arm of the Coxe River road realignment. The depiction of the road route on this map is different from that flagged and walked in the field.

Figure 21 - Looking downstream along a toe-of-slope wetland (BBC sample point #6) between the road alignment up the logged hill to the left and a Coxe River overflow channel to the right.

Figure 22 - A jumble of layers of saturated, mixed, organics and loam and sand.

Staging Area - LTF -FS Rd_7579 (Upland)

The LTF site is a quarried bedrock bench with a steep, rocky, salt water landing site with a band of eelgrass at least 10 feet deep all along that section of the bay. The bench has been seeded with *Festuca rubra and Deschampsia beringensis* (FAC). The margins have red alder (FAC) and young Sitka spruce (FACU), goats beard (UPL), salmonberry (FACU) and red elderberry (FACU). The back wall is vertical and is sparsely vegetated with Sitka alder (FAC) and goatsbeard.

Figure 23 - Quarried bench at the LTF site.

Figure 24 - The LTF landing site at high tide.

Eelgrass in Katlian Bay

Four landing sites, three along the southern side of Katlian Bay and one on the northern side were visited at or near low tide on the two field days (Figure 25). All sites had thick, healthy patches of eelgrass. Surprisingly three of the four sites were rocky sites.

Figure 25 - The green clouds are the potential landing sites that were visited for presence or absence of eelgrass.

Figure 26 - The center potential landing site on the south shore of Katlian Bay.

Figure 27 - The eastern most of the southern sites, the largest, and the only one visited that was found in rooted in silt rather than on the rocks.

Table 1 - Sample Pt. Table

ID	Wetland Habitat Type	Cowardin Class[1]	HGM Class[2]	WESPAK-SE Wetland Type[3]	Functional Rating	Acreage in Study area (acres)	Latitude N	Longitude W
BBC-1 MP-2.9	Upland						57.157806	135.337280
BBC-2 MP-3.75	Upland						57.162540	135.329437
BBC-3 MP-3.75	Evergreen Forest	PFO4	slope	Forested Peatland			57.162449	135.329147
BBC-4 MP- 6.375	Upland							
BBC-5 MP - 7.5	Upland							
BBC-6 Coxe	Wetland	PFO4	Depression	Forested Peatland				
BBC-7 LTF site	Upland							
BBC-8 Staging	Mostly upland							

Appendix A - ACOE Data Sheets

waste site

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road – WP-2.9** Borough/City: **Sitka** Sampling Date: **July 19, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: BBC-1

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): none Slope (%): 5

Subregion: **Southeast Alaska** Lat: _____ Long: _____ Datum: **NAD83**

Soil Map Unit Name: Verstovia / McGilvery Complex NWI classification: —

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

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes_____ No ✓

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

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

Hydrophytic Vegetation Present?	Yes	(No)	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes	(No)	
Wetland Hydrology Present?	Yes	(No)	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**
site clear cut in 1980's

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Pisi - Picea sitchensis	35	✓	FU
2. Tsme - Tsuga mertensiana	15	✓	F
3. Tshe - Tsuga heterophylla	5		F
4.			
Total Cover: 55			
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Tsme (sapling)	5		F
2. Mefe - Menziesia ferruginea	30	✓	FU
3. Vaov - Vaccinium ovalifolium	5		F
4. Opho - Oplopanax horridus	10	✓	FU
5.			
6.			
Total Cover: 50			
50% of total cover: 25	20% of total cover: 10		
Herb Stratum			
1. Coca - Cornus canadensis	70	✓	FU
2. Cocs - Coptis asplenifolius	15		F
3. Gydr - Gymnocarpium dryop.	15		FU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover: 100			
50% of total cover: 50	20% of total cover: 20		

Plot size (radius, or length x width) 20' radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 20% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	45	x 3 =	135
FACU species	145	x 4 =	580
UPL species		x 5 =	
Column Totals:	180 (A)		715 (B)

Prevalence Index = B/A = 3.97

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Waste Site

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road - WP - 3,875** Borough/City: **Sitka** Sampling Date: **July 19, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: BBC-2

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): Hillside

Local relief (concave, convex, none): none Slope (%): —

Subregion: **Southeast Alaska** Lat: _____ Long: _____ Datum: **NAD83**

Soil Map Unit Name: Sitka / Partofshi Kof Complex NWI classification: —

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes_____ No ____

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

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

Hydrophytic Vegetation Present?	Yes	(No)	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes	(No)	
Wetland Hydrology Present?	Yes	(No)	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Pisi	20	✓	FU
2. Tshe	30	✓	F
3. Xano - Xanthocyparis noot.	5		F
4.			
Total Cover: 55			
50% of total cover: 27.5	20% of total cover: 11		
Sapling/Shrub Stratum			
1. Mofe	50	✓	FU
2. VaOv	8		F
3.			
4.			
5.			
6.			
Total Cover: 58			
50% of total cover: 29	20% of total cover: 11.7		
Herb Stratum			
1. Coca	35	✓	FU
2. Coas	5		F
3. Canu - Calamagrostis nutkaensis	5		F
4. Blsp - Blechnum spicant	2		F
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover: 47			
50% of total cover: 23.5	20% of total cover: 9.4		

Plot size (radius, or length x width) 15' radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	55	x 3 =	165
FACU species	105	x 4 =	420
UPL species	_____	x 5 =	_____
Column Totals:	160 (A)		585 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: BBC-2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16+	7.5YR 2.5/2						Peat	unsat

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

Hydric Soil Indicators:

- ___ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
- ___ Alaska Gleyed (A13)
- ___ Alaska Redox (A14)
- ___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ___ Alaska Color Change (TA4)[4]
- ___ Alaska Alpine Swales (TA5)
- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric 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)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): —

Water Table Present? Yes ____ No ✓ Depth (inches): 7 16

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): 7 16

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

Waste Site

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road - WP-3,875** Borough/City: **Sitka** Sampling Date: **July 19, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: BBC-3

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): hillside - bench

Local relief (concave, convex, none): concave Slope (%): —

Subregion: **Southeast Alaska** Lat: _____ Long: _____ Datum: **NAD83**

Soil Map Unit Name: Maybeso Series NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes_____ No ____

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

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

Hydrophytic Vegetation Present?	Yes	No	**Is the Sampled Area within a Wetland?** Yes _____ No _____
Hydric Soil Present?	Yes	No	
Wetland Hydrology Present?	Yes	No	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Xano	35	✓	F
2. Tsme	15	✓	F
3. Tshe	10		F
4. Pico - Pinus contorta	5		
Total Cover: 65			
50% of total cover: 32.5	20% of total cover: 13		
Sapling/Shrub Stratum			
1. Mefe	15	✓	FU
2. Vaov	10	✓	F
3. Tsme (sapling)	10	✓	F
4.			
5.			
6.			
Total Cover: 35			
50% of total cover: 17.5	20% of total cover: 7		
Herb Stratum			
1. Coas	15	✓	F
2. Lyam	10	✓	OB
3. Coca	3		FU
4. Blsp	2		F
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover: 30			
50% of total cover: 15	20% of total cover: 6		

Plot size (radius, or length x width) 15' radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 86% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: BBC-3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16+	7.5YR2.5/2						Peat/Mucksat.	

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

Hydric Soil Indicators:

- ✓ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
- ___ Alaska Gleyed (A13)
- ___ Alaska Redox (A14)
- ___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ___ Alaska Color Change (TA4)[4]
- ___ Alaska Alpine Swales (TA5)
- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric 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)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): 7.16

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 2

Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

Log deck (road prism edges)

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road – MP 6.375** Borough/City: **Sitka** Sampling Date: **July 20, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: BBC-4

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): flood plain

Local relief (concave, convex, none): — Slope (%): —

Subregion: **Southeast Alaska** Lat: Long: Datum: **NAD83**

Soil Map Unit Name: Tuxekan Silt loam NWI classification: —

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

Are Vegetation ✓, Soil ____, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes____ No ✓

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

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

Hydrophytic Vegetation Present?	Yes	(No)	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes	(No)	
Wetland Hydrology Present?	Yes	(No)	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**

clear cut in 60's. road prism may block surface flows during rainy season

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Arru - Alnus rubra	70	✓	F
2. Pisi	5		FU
3.			
4.			
Total Cover: 75			
50% of total cover: 37.5	20% of total cover: 15		
Sapling/Shrub Stratum			
1. Opho	20	✓	FU
2. Ribr - Ribes bracteosum	20	✓	FU
3. Rusp Rubus spectabilis	20	✓	FU
4.			
5.			
6.			
Total Cover: 60			
50% of total cover: 30	20% of total cover: 12		
Herb Stratum			
1. Cial - Circaea alpina	50	✓	FW
2. Viad - Viola adunca	5		FW
3. Hela - Heracleum lanatum	5		FU
4. Phco - Phegopteris connect.	5		FU
5. Gyor	5		FU
6. Atfe	40	✓	F
7.			
8.			
9.			
10.			
Total Cover: 110			
50% of total cover: 55	20% of total cover: 22		

Plot size (radius, or length x width) 20' radius % Bare Ground ____

% Cover of Wetland Bryophytes ____ Total Cover of Bryophytes ____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	55	x 2 =	110
FAC species	110	x 3 =	330
FACU species	95	x 4 =	380
UPL species		x 5 =	
Column Totals:	260 (A)		820 (B)

Prevalence Index = B/A = 3.15

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: BBC-4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16+	7.5YR 3/3						loam	unsat

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

Hydric Soil Indicators:

- ___ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
- ___ Alaska Gleyed (A13)
- ___ Alaska Redox (A14)
- ___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ___ Alaska Color Change (TA4)[4]
- ___ Alaska Alpine Swales (TA5)
- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric 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)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): —

Water Table Present? Yes ____ No ✓ Depth (inches): 7 16

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): 7 16

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

Log Deck moved 4 on road prism

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road - WP 7.5** Borough/City: **Sitka** Sampling Date: **July 20, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: **BBC-5**

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): **Floodplain**

Local relief (concave, convex, none): — Slope (%): —

Subregion: **Southeast Alaska** Lat: _____ Long: _____ Datum: **NAD83**

Soil Map Unit Name: **Tuxekan Silt loam** NWI classification: —

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

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

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

Hydrophytic Vegetation Present?	(Yes)	No	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes	(No)	
Wetland Hydrology Present?	Yes	(No)	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**

Second-growth

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alru	60	✓	F
2. Pisi	10		FU
3.			
4.			
Total Cover:	70		
50% of total cover: 35	20% of total cover: 14		

Herb

Sapling/Shrub Stratum			
1. Cial	60	✓	FW
2. Hola	20		FU
3. Atfe	15		F
4. Cydr	15		FU
5.			
6.			
Total Cover:	110		
50% of total cover: 55	20% of total cover: 22		

Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:			
50% of total cover:	20% of total cover:		

Plot size (radius, or length x width) 20' radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: BBC-5

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16+	7.5YR 3/3	100%					sandy loam	Unsat

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

Hydric Soil Indicators:

- ___ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
- ___ Alaska Gleyed (A13)
- ___ Alaska Redox (A14)
- ___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ___ Alaska Color Change (TA4)[4]
- ___ Alaska Alpine Swales (TA5)
- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric 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)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): —

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

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): >16

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

Coxe River Rd. Realignment

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road – Coxe River** Borough/City: **Sitka** Sampling Date: **July 20, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: **PBC-6**

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): toe of slope & near overflow channel

Local relief (concave, convex, none): concave Slope (%): 3%

Subregion: **Southeast Alaska** Lat: _____ Long: _____ Datum: **NAD83**

Soil Map Unit Name: — NWI classification: _____

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

Are Vegetation ✓, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

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

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

Hydrophytic Vegetation Present?	(Yes)	No	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	(Yes)	No	
Wetland Hydrology Present?	(Yes)	No	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**

second-growth – logging above has altered soil profile

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alru	30	✓	F
2. Pisi	20	✓	FU
3.			
4.			
Total Cover: 50			
50% of total cover: 25	20% of total cover: 10		

Herb

~~Sapling/Shrub Stratum~~			
1. Cial	65	✓	FW
2. Titr – Tiarella trifoliata	10		F
3. Phco – Phegopteris connect.	8		FU
4. Atfe	3		F
5.			
6.			
Total Cover: 86			
50% of total cover: 43	20% of total cover: 17.2		

Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:			
50% of total cover:	20% of total cover:		

Plot size (radius, or length x width) _____ % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: BBC-6

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4.5	7.5YR 2.5/2	100%					OM w/ silt	sat.
4.5-10	2.5Y 3/2	100%					sandy loam w/ om	sat
10-12+	7.5YR 2.5/2	100%					sand	sat

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

Hydric Soil Indicators:

- ✓ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
- ___ Alaska Gleyed (A13)
- ___ Alaska Redox (A14)
- ___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ___ Alaska Color Change (TA4)[4]
- ___ Alaska Alpine Swales (TA5)
- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

OM to 10" w/ sand + sandy loam washed in from above.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ~

Water Table Present? Yes ___ No ✓ Depth (inches): >12

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 1

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

Staging Area - LTF
FS 7579

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road – FS Rd. 7579** Borough/City: **Sitka** Sampling Date: **July , 2016**
Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: BBC-7
Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): man-made bench
Local relief (concave, convex, none): none Slope (%): 2%
Subregion: **Southeast Alaska** Lat: Long: Datum: **NAD83**
Soil Map Unit Name: — NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ___x___ (If no, explain in Remarks.)
Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes____ No ✓
Are Vegetation ____, Soil __, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	(Yes)	No
Hydric Soil Present?	Yes	(No)
Wetland Hydrology Present?	Yes	(No)

Is the Sampled Area within a Wetland? Yes ____ No ✓

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**
Quarried bedrock bench used as LTF during logging. Grasses were planted

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Alru	10	✓	F
2.			
3.			
4.			
Total Cover:			
50% of total cover: ____ 20% of total cover: ____			
Sapling/Shrub Stratum			
1. Pisi sapling	10	✓	FU
2. Rosp - Rubus spectabilis	10	✓	FU
3.			
4.			
5.			
6.			
Total Cover:			
50% of total cover: ____ 20% of total cover: ____			
Herb Stratum			
1. Feru - Festuca rubra	30	✓	F
2. Ardi - Aruncus dioecia	10		U
3. Agme - Agrostis mertensii	10		FU
4. Dece - Deschampsia beringensis	15	✓	F
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	65		
50% of total cover: 32.5 20% of total cover: 13			

Plot size (radius, or length x width) ____ % Bare Ground ____
% Cover of Wetland Bryophytes ____ Total Cover of Bryophytes ____ (Where applicable)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
___ Prevalence Index is ≤3.0
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: BBC-7

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	Mixed - no soil development						mixed loam + gravel	- unsat
bedrock								

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

Hydric Soil Indicators:

- ___ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
- ___ Alaska Gleyed (A13)
- ___ Alaska Redox (A14)
- ___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

- ___ Alaska Color Change (TA4)[4]
- ___ Alaska Alpine Swales (TA5)
- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric 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)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): —

Water Table Present? Yes ____ No ✓ Depth (inches): —

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): —

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

Staging Area
Starrigavan Rd
End

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: **Katlian Bay Road - MP 0** Borough/City: **Sitka** Sampling Date: **July 20, 2016**

Applicant/Owner: **ADOT & PF - Southcoast Region** Sampling Point: **BBC-8**

Investigator(s): **Koren Bosworth, Nina Horne** Landform (hillside, terrace, hummocks, etc.): hillside

Local relief (concave, convex, none): concave Slope (%): 2%

Subregion: **Southeast Alaska** Lat: _____ Long: _____ Datum: **NAD83**

Soil Map Unit Name: _____ NWI classification: PFO4

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

Are Vegetation _____, Soil _____, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes_____ No ✓

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

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

Hydrophytic Vegetation Present?	(Yes)	No	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	(Yes)	No	
Wetland Hydrology Present?	(Yes)	No	

Remarks: **Rainfall has been lower and temperatures have been higher than average this year. Stream levels are low.**
1.5 acre triangle cut off completely by roads. (This s.p. in the 20% wet mosaic at the East end of this site.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. Pisi	40	✓	FU
2. Tshe	30	✓	F
3.			
4.			
Total Cover:	70		
50% of total cover: 35	20% of total cover: 14		
Sapling/Shrub Stratum			
1. Vaov	10	✓	F
2. Mofe	5	✓	FU
3.			
4.			
5.			
6.			
Total Cover:	15		
50% of total cover: 7.5	20% of total cover: 3		
Herb Stratum			
1. Lyam - Lysichiton americanum	8	✓	O
2. Madi - Maianthemum dilat.	3	✓	F
3. Coca	2		FU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Total Cover:	13		
50% of total cover: 6.5	20% of total cover: 2.6		

Plot size (radius, or length x width) 10 X 5 % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: BBC-8

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12+	7.5YR2.5/2		100%				Peat w/roots	sat

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

Hydric Soil Indicators:

- ✓ Histosol or Histel (A1)
- ___ Histic Epipedon (A2)
- ___ Hydrogen Sulfide (A4)
- ___ Thick Dark Surface (A12)
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Indicators for Problematic Hydric Soils[3]:

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- ___ Alaska Redox With 2.5Y Hue
- ___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
- ___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present.

[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric 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)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
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- ___ Inundation Visible on Aerial Imagery (B7)
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- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-stained Leaves (B9)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Salt Deposits (C5)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): –

Water Table Present? Yes ___ No ✓ Depth (inches): 7 1/2

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 1

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks: