



Ketchikan Misty Fjords Existing Vegetation Map Project

Appendix A: Vegetation Type Key

Master Key

1a. Total **absolute** tree cover is $\geq 10\%$ 2
1b. Total **absolute** tree cover is $< 10\%$ 4

2a. Tree **relative** cover of conifer species is $\geq 75\%$ of tree species **Conifer Key**
2b. Tree **relative** cover is $< 75\%$ conifer species 3

3a. Tree **relative** cover of broadleaf species is $\geq 75\%$ of tree species **Broadleaf Key**
3b. Tree **relative** cover of broadleaf species is $< 75\%$ of tree species **Mixed Broadleaf/Conifer Key**

4a. Shrub **absolute** cover is $\geq 25\%$ **Shrub Key**
4b. Shrub **absolute** cover is $< 25\%$ 5

5a. **Absolute** cover of herbaceous species is $\geq 25\%$ (includes graminoids and/or forbs) **Herbaceous Key**
5b. **Absolute** cover of herbaceous species is $< 25\%$ **Nonvascular/Sparse/Barren Key**

Vegetation Type Key

Conifer Forest

1a. Peatland forest (wetland indicators include stunted trees, cottongrass and tufted clubrush, Labrador tea and bog rosemary; open tree canopy typical). Sphagnum seen from above at least 25% cover 2
1b. Forest not in peatland habitat 4

2a. Shore pine $\geq 60\%$ relative canopy cover **Shore pine peatland**
2b. Shore pine $< 60\%$ relative canopy cover 3

3a. Yellow cedar $\geq 40\%$ relative canopy cover and stunted, peatland habitat **Yellow cedar peatland**
3b. Red cedar $\geq 40\%$ relative canopy cover and stunted, peatland habitat **Red cedar peatland**
3c. Yellow cedar $< 40\%$ relative canopy cover and most trees stunted, peatland habitat
..... **Mixed conifer peatland**
(woodland and low percent cover, or the low productivity forest)

4a. High elevation forest <5 meter in height. Site productivity may be variable; however, average tree height within the segment is stunted (copperbush and heather may be present as indicators; canopy cover is typically open)	5
4b. Forest otherwise.....	6
5a. Yellow cedar $\geq 40\%$ relative canopy cover and stunted..... Subalpine yellow cedar	
5b. Yellow cedar <40%, mountain hemlock with $\geq 75\%$ relative canopy cover..... Subalpine mountain hemlock	
5c. Mountain hemlock <75% relative canopy cover, codominant with at least 15% Sitka spruce	
..... Subalpine mountain hemlock – Sitka spruce	
5d. Mountain hemlock <75% relative canopy cover, codominant with at least 15% yellow cedar.....	
..... Subalpine mountain hemlock – yellow cedar	
5e. If forested stand is not as above and multiple tree species are present Subalpine mixed conifer	
6a. Sitka spruce with $\geq 60\%$ relative canopy cover; broadleaf trees or tall shrubs with <30% relative canopy cover..... Sitka spruce	
6b. Sitka spruce with $\geq 60\%$ relative canopy cover, broadleaf trees or tall shrubs with $\geq 30\%$ relative canopy cover..... Conifer-Broadleaf key	
6c. Sitka spruce with <60% relative canopy cover, no broadleaf trees present..... 8	
7a. Sitka spruce and Western hemlock combined are $\geq 90\%$ total relative canopy cover; Sitka spruce at least 15% relative cover. Trees are codominant in the canopy Spruce - Hemlock	
7b. Combined Sitka spruce and Western hemlock are < 90% total relative canopy cover..... 9	
8a. Mountain hemlock with $\geq 75\%$ relative canopy cover..... Mountain hemlock	
8b. Mountain hemlock with <75% canopy cover 10	
9a. Mountain hemlock present with <75% relative canopy cover, Sitka spruce is $\geq 15\%$ relative cover and is co-dominant (combined canopy cover $\geq 90\%$) Sitka spruce – Mountain hemlock	
9b. Mountain hemlock, if present, is <75% relative canopy cover; Sitka spruce is not present or if present not codominant 11	
10a. Subalpine or Pacific silver fir with $\geq 40\%$ relative canopy cover Fir	
10b. Subalpine or Pacific silver fir with <40% relative canopy cover 12	
11a. Red or yellow cedar relative canopy cover is ≥ 40 13	
11b. Red and yellow cedar are growing together and the combined relative canopy cover is $\geq 40\%$ 15	

11c. Red or yellow cedar growing together or as a single species is <40% relative canopy cover.....	16
12. Red cedar with ≥40% relative canopy cover. Somewhat poorly drained soils with skunk cabbage >3% absolute cover	Red cedar swamp
12b. Red cedar with ≥40% relative canopy cover; Skunk cabbage sparse to absent, moderately well drained soil	Red cedar
12c. Red cedar with <40% relative canopy cover	14
13a. Yellow cedar ≥40% relative canopy cover, most trees not stunted; Somewhat poorly drained soils with skunk cabbage >3% absolute cover	Yellow cedar swamp
13b. Yellow cedar ≥40% relative canopy cover, most trees not stunted; Skunk cabbage sparse to absent, moderately well drained soil.....	Yellow cedar
14a. Red and yellow cedar growing in somewhat poorly drained soils with skunk cabbage >3% absolute cover	Cedar swamp
14b. Red and yellow cedar combined relative cover ≥40%, skunk cabbage sparse to absent, moderately well drained soils	Cedar
15a. Western hemlock with ≥60% relative canopy cover; Somewhat poorly drained soils with skunk cabbage >3% absolute cover.....	Western hemlock swamp
15b. Western hemlock with ≥60% relative canopy cover; Skunk cabbage sparse to absent, moderately well drained soil.....	Western hemlock
15c. Western Hemlock with <60% relative canopy cover.....	16
16a. Somewhat poorly drained soils with skunk cabbage >3% absolute cover; western hemlock always combined with other species in various relative canopy covers. Stand is mid to late-seral.	Mixed conifer swamp
16b. Skunk cabbage sparse to absent, moderately well drained soil; western hemlock always combined with other species in various relative canopy covers.	Mixed conifer

Broadleaf Forest

1a. Red alder present with ≥75% relative cover	Red alder
1b. Black cottonwood present with ≥75% relative cover	Black cottonwood

Mix Conifer/Broadleaf Forest

1a. Black cottonwood with ≥25% relative cover and together with Sitka spruce comprise ≥75% relative cover	Sitka spruce – Black cottonwood
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1b. Red alder with $\geq 25\%$ **relative** cover and together with Sitka spruce comprise $\geq 75\%$ **relative** cover **Sitka spruce – Red alder**
1c. Not as above. **Other mixed conifer - broadleaf**

Shrub

1a. Relative canopy cover of Sitka alder is $\geq 75\%$ **Alder shrub**
1b. Relative canopy cover of Sitka alder is $< 75\%$ 2
2a. Relative canopy cover of willow is $\geq 75\%$ **Willow shrub**
2b. Relative canopy cover of willow is $< 75\%$ 3

3b. Combined canopy cover of combined taller shrubs ($\geq 1.5\text{m}$) such as willow, spirea, copperbush, crabapple, elderberry, sweet gale, Sitka alder, salmonberry, devil's club, blueberry, etc. $> 25\%$ **Tall shrub**
3c. Combined tall shrub species $< 25\%$ 4
4a. Peatland with shrubs $< 1.5\text{ m}$ (indicators include sphagnum peat, bog blueberry, bog cranberry, Labrador tea, bog laurel, or crowberry, etc. Other indicators include sedges, sundew, deer cabbage) **Shrub peatland**
4b. Not a peatland with shrubs $< 1.5\text{ m}$ (typically high elevation, mesic sites) **Ericaceous shrub**

Herbaceous

1a. Site is tidally influenced, vegetation is dominated by salt-tolerant species (e.g. *Carex lyngbei*) **Saltwater herbaceous**
1b. Site not tidally influenced, vegetation not dominated by salt-tolerant species 2

2a. Site has permanent standing water with $< 25\%$ emergent vegetation (rooting below the water). Dominant vegetation is aquatic or floating on the water surface **Aquatic herbaceous**
2b. Site otherwise 3

3a. Site a peatland with sedges such as cottongrass, tufted clubrush and scattered forbs (includes bog and poor fens) **Sedge peatland**
3b. Site otherwise 4

4a. Site with fluctuating water table, soils are saturated, frequently with shallow standing water and dominated by mixed forbs and graminoids (includes rich fens, marshes, wet meadows) **Wet herbaceous**



4b. Site does not contain higher water table or seasonal standing water; Soils dry to mesic; mixed forbs and graminoids present (e.g. *Leymus* beach berms or subalpine/alpine shallow soils)
..... **Mesic herbaceous**

Nonvascular/Sparse/Barren

1a. Total nonvascular vegetation cover is $\geq 25\%$ **Nonvascular**

1b. Total nonvascular vegetation cover is $< 25\%$ 2

2a. Total vascular vegetation ***absolute*** cover is $\geq 10\%$ and $< 25\%$ **Sparse vegetation**

2b. Total vascular vegetation ***absolute*** cover is $< 10\%$ 3

3a. Area is open water or a confined water course **Water**

3b. Not as above 4

4a. Area is developed for urban, residential or administrative sites as well as rock pits, roads, marine access points, etc. **Developed**

4b. Not as above 5

5a. Area is snowfield/ice covered **Snow/Ice**

5b. Not as above **Barren**