

Appendix I – Vegetation

Table 1. Area of each vegetation type within the right-of-way for each action alternative and for the Project area. Vegetation types indicated as “Clearing Needed” include all vegetation, including those less than 8 inches in height.

Landfire Vegetation Type	Clearing Needed	Alternative		Alternative 2	
		30 ft Buffer Area (acres)	60 ft Buffer Area (acres)	30 ft Buffer Area (acres)	60 ft Buffer Area (acres)
LF 11: Water	N	65.03	130.56	63.45	127.43
LF 20: Developed	N	28.93	57.54	27.18	54.08
LF 33: Sparsely Vegetated	N	0.70	1.40	0.70	1.40
LF 40: Sedge Meadow	N	60.64	121.22	57.80	115.50
LF 50: Tidal Flats and Marshes	N	7.21	14.33	7.21	14.33
LF 71: Shrub and Herbaceous Peatlands	N	247.91	495.58	245.75	491.31
LF 72: Peatland Forests	Y	18.96	38.07	17.56	35.14
SAF 201: White Spruce	Y	10.57	20.95	7.86	15.66
SAF 202: White Spruce-Paper Birch	Y	11.52	23.01	9.46	18.84
SAF 203: Balsam Poplar	Y	67.31	134.81	64.26	128.71
SAF 204: Black Spruce	Y	6.20	12.42	5.93	11.90
SAF 252: Paper Birch	Y	0.42	0.83	0.42	0.83
SRM 901: Alder	Y	36.74	73.18	34.86	69.43
SRM 902: Alpine Herb	N	0.13	0.26	0.13	0.26
SRM 903: Beach Wildrye-Mixed Forb	N	8.70	17.34	7.40	14.79
SRM 907: Dryas	N	4.13	8.26	3.20	6.46
SRM 909: Freshwater Marsh	N	1.15	2.25	1.20	2.34
SRM 911: Lichen Tundra	N	21.44	42.63	18.59	37.03
SRM 912: Low Scrub Shrub Birch-Ericaceous	Y	474.83	949.05	448.02	895.31
SRM 913: Low Scrub Swamp	Y	0.27	0.54	0.27	0.54
SRM 915: Mixed Herb-Herbaceous	N	56.03	111.94	54.11	107.99
SRM 916: Sedge-Shrub Tundra	Y	500.54	1,001.65	461.29	923.21
SRM 917: Tall Shrub Swamp	Y	281.29	562.64	268.20	536.36
SRM 918: Tussock Tundra	N	227.96	456.47	211.27	423.16
SRM 921: Willow	Y	0.01	0.04	0.01	0.04

Source: Landfire 2025a,b

Table 2. Areas of vegetation height, based on Landfire vegetation height dataset, for each alternative and for the Project area.

Landfire Vegetation Type	Alternative 1		Alternative 2	
	30 ft Buffer Area (acres)	60 ft Buffer Area (acres)	30 ft Buffer Area (acres)	60 ft Buffer Area (acres)
Veg Height (No Clearing - <0.2m)	1,347.35	2,694.25	1,287.76	2,575.18
Veg Height 0.2 m to 1 m	665.45	1,331.18	615.81	1,231.88
Veg Height 1m - 2 m	50.41	100.82	44.90	89.77
Veg Height >2m	75.41	150.68	67.66	135.17
#N/A	0.01	0.04	0.01	0.04

Table 3. Cross reference between Landfire Vegetation Type and Resilience Rank and Likely Wetland Status

Landfire Vegetation Type	Resilience Rank	Likely Wetland Status	Alt 1 60 ft Buffer (acres)	Alt 2 60 ft Buffer (acres)
Fill-NoData	NA	NA	0.04	0.04
Alaska Arctic Coastal Sedge-Dwarf-Shrubland	L	Wetland	3.22	3.22
Alaska Arctic Floodplain Forest	L	Floodplain	13.61	13.61
Alaska Arctic Large River Floodplain Forest	L	Floodplain	34.33	34.28
Alaska Arctic Mesic Alder Shrubland	M	Upland	73.18	69.43
Alaska Arctic Permafrost Plateau Dwarf-Shrub Lichen Tundra	L	Upland	2.25	2.34
Alaska Arctic Tidal Flat	H	Wetland		
North American Arctic Bedrock and Talus	H	NA	1.01	1.01
North American Arctic Dryas Tundra	L	NA	20.99	20.99
North American Arctic Dwarf-Shrub Lichen Tundra	L	Upland	15.10	12.84
North American Arctic Dwarf-shrub-Sphagnum Peatland	M	Wetland	495.45	491.18
North American Arctic Freshwater Marsh	H	Wetland	7.75	6.33
North American Arctic Lichen Tundra	H	NA		
North American Arctic Mesic Herbaceous Meadow	H	Upland	0.54	0.54
North American Arctic Mesic Sedge-Willow Tundra	M	Wetland	30.39	28.79
North American Arctic Mesic-Wet Low Willow Shrubland	M	Wetland	454.04	421.02
North American Arctic Polygonal Ground Shrub-Tussock Tundra	L	Wetland	60.56	58.20
North American Arctic Scrub Birch-Ericaceous Shrubland	L	Upland	42.63	37.03
North American Arctic Sparse Tundra	H	NA	2.25	1.95
North American Arctic Wet Sedge Tundra and Polygonal Ground	L	Wetland	47.09	43.41
North American Arctic-Subarctic Coastal Dune & Beach Meadow	H	Upland		

North American Arctic-Subarctic Shrub-Tussock Tundra	L	Wetland	562.59	536.31
North American Arctic-Subarctic Tidal Salt and Brackish Marsh	H	Wetland	14.33	14.33
North American Arctic-Subarctic Tussock Tundra	L	Wetland		
Western North American Boreal Alpine Dwarf-shrubland	M	Wetland		
Western North American Boreal Alpine Mesic Herbaceous Meadow	M	Upland	0.26	0.26
Western North American Boreal Black Spruce Bog and Dwarf-Tree Peatland	L	Wetland	38.07	35.14
Western North American Boreal Black Spruce-Tamarack Fen	L	Wetland		
Western North American Boreal Cliff Scree and Rock	H	Upland		
Western North American Boreal Dry Aspen-Steppe Bluff	L	Upland		
Western North American Boreal Dry Grassland	H	Upland		
Western North American Boreal Freshwater Emergent Marsh	H	Wetland	0.51	0.13
Western North American Boreal Lowland Large River Floodplain Conifer Forest	L	Floodplain	8.61	5.07
Western North American Boreal Mesic Birch-Aspen Forest	L	Upland	0.83	0.83
Western North American Boreal Mesic Bluejoint-Forb Meadow	H	Upland		
Western North American Boreal Mesic Scrub Birch-Willow Shrubland	M	Upland	2.43	2.14
Western North American Boreal Mesic White Spruce Forest	L	Upland	12.33	10.59
Western North American Boreal Mesic-Wet Black Spruce Forest and Woodland	L	Wetland	3.38	3.38
Western North American Boreal Montane Floodplain Conifer Forest	L	Floodplain		
Western North American Boreal Riparian Stringer Conifer Forest	L	Upland		
Western North American Boreal Shrub Floodplain	M	Floodplain		
Western North American Boreal Shrub Swamp	M	Wetland	1001.65	923.21
Western North American Boreal Shrub-Sedge Bog & Acidic Fen	M	Wetland	949.05	895.31
Western North American Boreal Shrub-Sedge Rich and Alkaline Fen	M	Wetland	63.33	62.21
Western North American Boreal Spruce-Lichen Woodland	L	Upland	2.33	2.33
Western North American Boreal Treeline White Spruce Woodland	L	Upland		

Western North American Boreal Wet Black Spruce-Tussock Woodland	L	Wetland	6.59	6.07
Western North American Boreal Wet Meadow	H	Wetland	0.55	0.55
Western North American Boreal Treeline Hardwood-White Spruce Woodland	L	Upland		
Western North American Boreal Treeline White Spruce-Hardwood Woodland	L	Upland		
Western North American Boreal Mesic Hardwood-White Spruce Forest	L	Upland	9.60	7.82
Western North American Boreal Mesic White Spruce-Hardwood Forest	L	Upland	9.89	8.96
Western North American Boreal Mesic-Wet Black Spruce-Hardwood Forest and Woodland	L	Wetland	0.12	0.12
Western North American Boreal Lowland Large River Floodplain Deciduous Forest	L	Floodplain	4.89	2.51
Western North American Boreal Lowland Large River Floodplain Mixed Forest	L	Floodplain	3.53	2.06
Western North American Boreal Montane Floodplain Deciduous Forest	L	Floodplain		
Western North American Boreal Montane Floodplain Mixed Forest	L	Floodplain		
Western North American Boreal Riparian Stringer Deciduous Forest	L	Upland		
Western North American Boreal Riparian Stringer Mixed Forest	L	Upland		
Alaska Arctic Floodplain Shrubland	M	Floodplain	31.24	30.46
Alaska Arctic Large River Floodplain Shrubland	M	Floodplain	47.69	44.84
North American Arctic Wet Sedge-Sphagnum Peatland	H	Wetland	0.13	0.13
North American Arctic Polygonal Ground Tussock Tundra	L	Wetland	0.05	0.05
North American Arctic-Subarctic Coastal Dune & Beach	H	Upland		
Western North American Boreal Lowland Large River Floodplain Shrubland (Conifer Forest)	L	Floodplain		
Western North American Boreal Lowland Large River Floodplain Sparse Vegetation	H	Floodplain		
Western North American Boreal Montane Floodplain Sparse Vegetation	H	Floodplain		
Alaska Arctic Large River Floodplain Sparse Vegetation	H	Floodplain	0.39	0.39
Western North American Boreal Montane Floodplain Shrubland (Conifer Forest)	L	Floodplain		
Western North American Boreal Riparian Stringer Shrubland (Conifer Forest)	L	Floodplain		
Western North American Boreal Herbaceous Floodplain	H	Riparian		

Western North American Boreal Herbaceous Rich and Alkaline Fen	H	Wetland	7.04	6.11
Western North American Boreal Lowland Large River Floodplain Shrubland (Deciduous Forest)	L	Floodplain	3.04	3.01
Western North American Boreal Lowland Large River Floodplain Shrubland (Mixed Forest)	L	Floodplain		
Western North American Boreal Montane Floodplain Shrubland (Deciduous Forest)	L	Floodplain		
Western North American Boreal Montane Floodplain Shrubland (Mixed Forest)	L	Floodplain		
Western North American Boreal Riparian Stringer Shrubland (Deciduous Forest)	L	Riparian		
Western North American Boreal Riparian Stringer Shrubland (Mixed Forest)	L	Riparian		
Open Water	H	NA	130.56	127.43
Quarries-Strip Mines-Gravel Pits-Well and Wind Pads	H	NA	0.11	0.11
Developed-Low Intensity	H	NA	10.82	10.09
Developed-Medium Intensity	H	NA	0.93	0.92
Developed-Roads	H	NA	45.68	42.95
North American Glacier and Ice Field	H	NA		
Agriculture-Cultivated Crops and Irrigated Agriculture	H	NA		

** Unmapped areas are marine (ocean) environment*

Table 4. Sensitive Plant Species listed in Kobuk Seward Peninsula Resource Management Plan (ACCS 2025)

Scientific Name	Common Name	Sensitive Species in 2004?	Sensitive Species in BLM (2019)?	Remarks
<i>Artemisia globularia</i> var. <i>lutea</i>	purple wormwood	Yes	Yes	
<i>Artemisia senjavenensis</i>	yellow-ball wormwood	Yes	Yes	
<i>Beckwithia glandulifera</i> ssp. <i>alaskensis</i>	Alaskan glacier buttercup	Yes	No	Recent taxonomic change tentatively shows this taxon as <i>Ranunculus glacialis</i>
<i>Cardamine microphylla</i> SSP. <i>blaisdellii</i>	small-leaf bittercress	No	No	
<i>Carex heleonastes</i>	Hudson Bay sedge	No	No	
<i>Douglasia beringensis</i>	Bering dwarf primrose	Yes	No	
<i>Gentianopsis detonsa</i> ssp. <i>detonsa</i>	sheared gentian	No	No	
<i>Oxytropis arctica</i> var. <i>barnebyana</i>	Barneby's milkvetch	Yes	No	
<i>Oxytropis kobukensis</i>	Kobuk locoweed	Yes	Yes	Endemic to sand dune habitat in Kobuk Valley National Park.
<i>Pedicularis hirsuta</i>	hairy lousewort	Yes	Yes	
<i>Potentilla fraaiformis</i>	strawberry cinquefoil	No	Yes	
<i>Potentilla stipularis</i>	stipulated cinquefoil	Yes	No	
<i>Primula tschuktschorum</i>	Chukchi primrose	No	Yes	
<i>Ranunculus auricomus</i>	goldilocks buttercup	No	No	
<i>Ranunculus glacialis</i> ssp. <i>camissonis</i>	Glacier buttercup	No	No	
<i>Rumex krausei</i>	Cape Krause sorrel	No	Yes	Present on initial draft BLM Alaska SSS list - omitted from final in error.
<i>Saussurea triangulate</i>	Waring Mountain saw-wort	No	No	Shown as <i>Saussurea</i> sp. 1 on ANHP tracking list.
<i>Smelowskia johnsonii</i>	Johnson's smelowskia	No	Yes	
<i>Trisetum sibiricum</i> ssp. <i>littorale</i>	Siberian oatgrass	No	No	

References

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- Bureau of Land Management (BLM). 2008. Kobuk-Seward Peninsula Record of Decision and Approved Management Plan. Accessed July 2025 at https://eplanning.blm.gov/public_projects/lup/66967/82110/96711/Kobuk-Seward_Peninsula_Record_of_Decision_and_Approved_Management_Plan.pdf
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- Landfire. 2025a. Existing Vegetation Type National Vegetation Classification. Alaska. <https://landfire.gov/vegetation/nvc>.
- Landfire. 2025b. Existing Vegetation Height. Alaska. <https://landfire.gov/vegetation/nvc>.