

Klondike Gold Rush National Historical Park

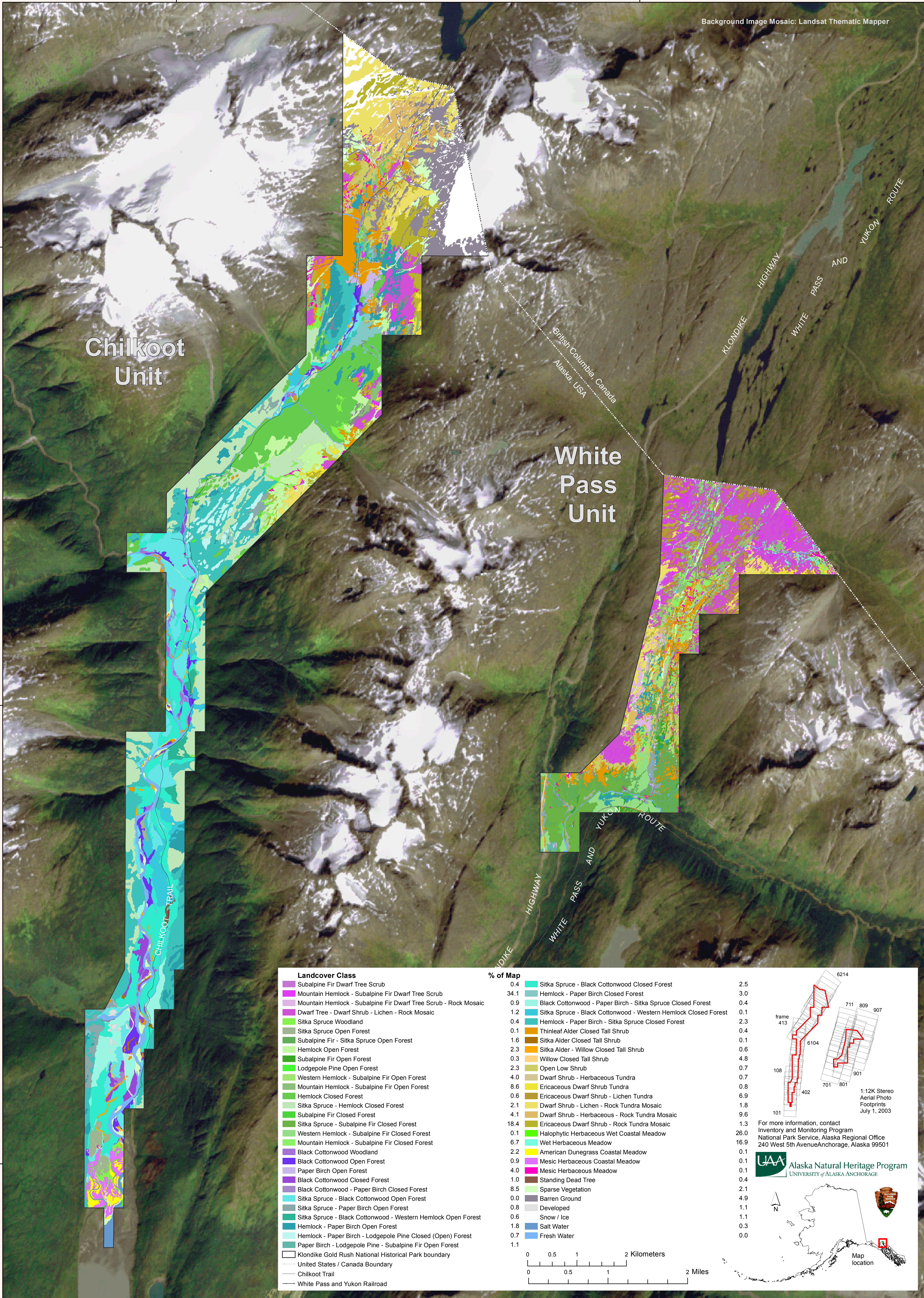
Landcover Classification

National Park Service
U.S. Department of the Interior



This project was undertaken by the National Park Service Alaska Region Inventory and Monitoring Program in cooperation with the Alaska Natural Heritage Program (AKNHP). The goal of the Inventory and Monitoring Program is to provide reliable and consistent information for assessing status and trends in the condition of National Park ecosystems. The inventory portion of the Program (Inventory Program) conducts landcover mapping and classification and provides baseline vegetation information for making resource management decisions. To this end, AKNHP and the Inventory Program have developed a digital landcover map based on aerial photography and field checked by vegetation survey. Fifty-seven landcover classes were mapped for Klondike Gold Rush National Historical Park using 1:12,000 aerial photographs acquired on July 1, 2003. Three levels of classification — ecological system, landcover class, and plant associations — provide information useful for addressing management and monitoring goals, and can be used for habitat assessments, coarse-scale resources analyses, as well as ecological planning, among other uses. For example, the classifications and maps for this project can help wildlife biologists evaluate forage availability for bear and moose as well as visualize the distribution of wetlands, rare habitats and diversity of vegetative species. Fine-scale vegetation structural information is provided by the accompanying Natural Resource Report. Find complete project information online at <https://irma.nps.gov/DataStore/Reference/Profile/2177110>.

Subalpine Fir Dwarf Tree Scrub Classification: Patches of dwarf trees < 1.8 m tall occupy at least 40% of the ground surface; <i>Abies lasiocarpa</i> comprises at least 75% of dwarf tree cover.	Mountain Hemlock Subalpine Fir Dwarf Tree Scrub - Rock Mosaic Classification: Patches of dwarf trees < 1.8 m tall occupy at least 40% of the ground surface; <i>Abies lasiocarpa</i> comprises < 75% of dwarf tree cover.	Mountain Hemlock - Subalpine Fir Dwarf Tree Scrub - Rock Mosaic Classification: Patches of dwarf trees less than 1.8 m tall, occupy < 40% of the ground surface; rock and crustose lichen occupy > 40% of the ground cover.
Dwarf Tree - Dwarf Scrub - Lichen - Rock Mosaic Classification: Patches of dwarf trees < 1.8 m tall, occupy < 40% of the ground surface; a mosaic of dwarf shrub, lichen (crustose, foliose and fruticose) and rock occupy > 40% of the ground cover.	Sitka Spruce Woodland Classification: Vegetation with 10-24% cover of trees; <i>Picea sitchensis</i> comprises at least 75% of tree cover.	Sitka Spruce Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Picea sitchensis</i> comprises at least 75% of tree cover.
Subalpine Fir - Sitka Spruce Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Picea sitchensis</i> and <i>Abies lasiocarpa</i> together comprise 25-75% of tree cover.	Hemlock Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Tsuga</i> species (<i>T. heterophylla</i> and/or <i>T. mertensiana</i>) comprise at least 75% of tree cover.	Subalpine Fir Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Abies lasiocarpa</i> comprises at least 75% of tree cover.
Lodgepole Pine Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Pinus contorta</i> var. <i>latifolia</i> comprises at least 75% of tree cover.	Western Hemlock - Subalpine Fir Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Tsuga heterophylla</i> and <i>Abies lasiocarpa</i> together comprise at least 75% of tree cover; lower mountain sideslopes.	Mountain Hemlock - Subalpine Fir Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Tsuga mertensiana</i> and <i>Abies lasiocarpa</i> comprise 25-75% of tree cover; upper mountain sideslopes.
Hemlock Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Tsuga</i> species (<i>T. heterophylla</i> and/or <i>T. mertensiana</i>) comprise at least 75% of tree cover.	Sitka Spruce - Hemlock Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Tsuga</i> species and <i>Picea sitchensis</i> together comprise at least 75% of tree cover.	Subalpine Fir Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Abies lasiocarpa</i> comprises at least 75% of tree cover.
Sitka Spruce - Subalpine Fir Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Abies lasiocarpa</i> and <i>Picea sitchensis</i> together comprise at least 75% of tree cover.	Western Hemlock - Subalpine Fir Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Tsuga heterophylla</i> and <i>Abies lasiocarpa</i> together comprise at least 75% of tree cover; lower mountain sideslopes.	Mountain Hemlock Subalpine Fir Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Tsuga</i> species and <i>Abies lasiocarpa</i> together comprise at least 75% of tree cover; upper mountain sideslopes.
Black Cottonwood Woodland Classification: Vegetation with 10-24% cover of trees; <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> comprises at least 75% of tree cover.	Black Cottonwood Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> comprises at least 75% of tree cover.	Black Cottonwood Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> comprises at least 75% of tree cover.
Paper Birch Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Betula papyrifera</i> comprises at least 75% of tree cover.	Black Cottonwood - Paper Birch Closed Forest Classification: Vegetation with 25-59% cover of trees; <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> and <i>Betula papyrifera</i> together comprise at least 75% of tree cover.	Sitka Spruce - Black Cottonwood Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Picea sitchensis</i> , <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> , and <i>Betula papyrifera</i> together comprise at least 75% of tree cover.
Sitka Spruce - Paper Birch Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Picea sitchensis</i> and <i>Betula papyrifera</i> together comprise at least 75% of tree cover.	Sitka Spruce - Black Cottonwood - Western Hemlock Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Picea sitchensis</i> , <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> , and <i>Betula papyrifera</i> together comprise at least 75% of tree cover.	Hemlock - Paper Birch Open Forest Classification: Vegetation with 25-59% cover of trees; <i>Tsuga</i> species (<i>T. heterophylla</i> and/or <i>T. mertensiana</i>) and <i>Betula papyrifera</i> together comprise at least 75% of tree cover.



Hemlock - Paper Birch - Lodgepole Pine - Subalpine Pine Closed (Open) Forest Classification: Vegetation with 25-100% cover of trees; <i>Tsuga</i> species (<i>T. heterophylla</i> and/or <i>T. mertensiana</i>), <i>Betula papyrifera</i> and <i>Pinus contorta</i> var. <i>latifolia</i> , together comprise at least 75% of tree cover.	Paper Birch - Lodgepole Pine - Subalpine Fir Open Forest Classification: Vegetation with 25-59% tree cover; <i>Betula papyrifera</i> , <i>Pinus contorta</i> var. <i>latifolia</i> and <i>Abies lasiocarpa</i> together comprise at least 75% of tree cover.	Sitka Spruce - Black Cottonwood Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Picea sitchensis</i> and <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> , together comprise = 75% of tree cover.
Hemlock Paper Birch Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Tsuga</i> species (<i>T. heterophylla</i> and/or <i>T. mertensiana</i>), <i>Betula papyrifera</i> and <i>Pinus contorta</i> var. <i>latifolia</i> , together comprise > 75% of tree cover.	Black Cottonwood - Paper Birch - Sitka Spruce Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> , <i>Betula papyrifera</i> and <i>Picea sitchensis</i> together comprise at least 75% of tree cover.	Sitka Spruce - Black Cottonwood - Western Hemlock Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Picea sitchensis</i> , <i>Populus balsamifera</i> ssp. <i>trichocarpa</i> and <i>Tsuga heterophylla</i> together comprise at least 75% of tree cover.
Hemlock - Paper Birch - Sitka Spruce Closed Forest Classification: Vegetation with 60-100% cover of trees; <i>Tsuga</i> species, <i>Betula papyrifera</i> and <i>Picea sitchensis</i> together comprise > 75% of tree cover.	Thineleaf Alder Closed Tall Shrub Classification: Vegetation with < 10% cover of trees and at least 25% cover of shrubs > 1.5 m tall; <i>Alnus viridis</i> ssp. <i>incana</i> ssp. <i>incana</i> comprises at least 75% of this tall shrub cover.	Sitka Alder Closed Tall Shrub Classification: Vegetation with less than 10% cover of trees and at least 25% cover of shrubs more than 1.5 m tall; <i>Alnus viridis</i> ssp. <i>incana</i> ssp. <i>incana</i> comprises at least 75% of this tall shrub cover.
Sitka Alder Willow Closed Tall Shrub Classification: Vegetation with < 10% cover of trees and = 25% cover of shrubs > 1.5 m tall; <i>Alnus viridis</i> ssp. <i>incana</i> ssp. <i>incana</i> and <i>Salix</i> species together comprise 25-75% of this tall shrub cover.	Willow Closed Tall Shrub Classification: Vegetation with < 10% cover of trees and at least 25% cover of shrubs > 1.5 m tall; <i>Salix</i> species comprise at least 75% of this tall shrub cover.	Open Low Shrub Classification: Vegetation with less than 10% cover of trees and = 25% cover of shrubs 20 cm to 1.5 m tall.
Dwarf Shrub - Herbaceous Tundra Classification: Vegetation with < 10% tree cover and = 25% cover of shrubs < 20 cm tall; patches of dwarf shrub and herbaceous species occupy > 60% of the ground surface; herbaceous species comprise > 40% of the vegetated cover.	Ericaceous Dwarf Shrub Tundra Classification: Vegetation with < 10% tree cover and = 25% cover of shrubs < 20 cm tall; patches of dwarf shrub and herbaceous species occupy > 60% of the ground surface; herbaceous species comprise < 40% of the vegetated cover.	Ericaceous Dwarf Shrub - Lichen Tundra Classification: Vegetation with < 10% tree cover and = 25% cover of shrubs < 20 cm tall; patches of dwarf shrub and herbaceous species occupy < 60% of the ground surface; lichen (crustose, foliose and fruticose) dominates the ground not occupied by vascular plant species.
Dwarf Shrub - Lichen - Rock Tundra Mosaic Classification: Vegetation with < 10% tree cover and = 25% cover of shrubs < 20 cm tall; patches of dwarf shrub and herbaceous species occupy < 60% of the ground surface; a mosaic of rock and lichen (crustose, foliose and fruticose) dominates the ground not occupied by vascular plant species.	Dwarf Shrub - Herbaceous - Rock Tundra Mosaic Classification: Vegetation with < 10% tree cover and = 25% cover of shrubs < 20 cm tall; patches of dwarf shrub and herbaceous species occupy < 60% of the ground surface; rock and crustose lichen dominate the ground not occupied by vascular plant species; herbaceous species comprise = 40% of vascular plant cover.	Ericaceous Dwarf Shrub-Rock Tundra Mosaic Classification: Vegetation with < 10% cover of trees and = 25% cover of shrubs < 20 cm tall; patches of dwarf shrub and herbaceous species occupy < 60% of the ground surface; rock and crustose lichen dominate the ground not occupied by vascular plant species; herbaceous species comprise > 40% of vascular plant cover.
Halophytic Herbaceous Wet Coastal Meadow Classification: Vegetation with < 10% cover of trees, < 25% cover of shrubs and = 25% cover of herbaceous species; wet sites with semi-permanent or standing water; vegetation is dominated by salt-tolerant species.	Wet Herbaceous Meadow Classification: Vegetation with < 10% tree cover, < 25% cover of shrubs and at least 25% cover of herbaceous species; wet sites with semi-permanent or standing water; not tidally-influenced or supporting salt-tolerant species.	American Dunegrass Coastal Meadow Classification: Vegetation with < 10% cover of trees, < 25% cover of shrubs and = 25% cover of herbaceous species; dry to mesic sites with little or no standing water where <i>Leymus mollis</i> covers = 50% of the ground surface.
Mesic Herbaceous Coastal Meadow Classification: Vegetation with < 10% cover of trees, < 25% cover of shrubs and = 25% cover of herbaceous species; dry to mesic sites with little or no standing water where <i>Leymus mollis</i> comprises < 50% of the ground cover, non-coastal.	Mesic Herbaceous Meadow Classification: Vegetation with < 10% tree cover, < 25% cover of shrubs and = 25% cover of herbaceous species; dry to mesic sites with little or no standing water where <i>Leymus mollis</i> comprises < 50% of the ground cover, non-coastal.	Standing Dead Tree Classification: Total vegetation cover is 10 to 24%; standing dead trees present in plot.
Sparse Vegetation Classification: Total vegetation cover is less than 10%; perennial snow and/or ice dominate the landcover.	Barren Classification: Total vegetation cover is less than 10%; barren ground dominates the landcover.	Developed Classification: Cultural vegetation Succession and Disturbance: Regular human disturbance typically holds sites in an early-seral state.
Snow / Ice Classification: Total vegetation cover is less than 10%; perennial snow and/or ice dominate the landcover.	Salt Water Classification: Total vegetation cover is < 10%; marine or tidally-influenced water dominates the landcover.	Fresh Water Classification: Total vegetation cover is < 10%; fresh water (not marine or tidally-influenced) dominates the landcover.