# Kenai Fjords National Park

## Landcover Classification

National Park Service
U.S. Department of Interior

**PROJECT DESCRIPTION**

This project was undertaken by the National Park Service Landcover Mapping Program, Inventory and Monitoring Program, Alaska Regional Office (AKRO) in cooperation with the Alaska Natural Heritage Program (AKNHP), University of Alaska Anchorage. The goal of the NPS Inventory and Monitoring Program is to provide reliable and consistent information for assessing status and trends in the condition of National Park ecosystems. It conducts landcover mapping and classification under the inventory portion of the program to provide basic information useful for making resource management decisions, and to collect data that can be aggregated on a service-wide level for designing monitoring programs. To this end, AKNHP and AKRO have developed a digital landcover map based on aerial photography and field checked by vegetation survey. We mapped 54 landcover classes for the Park using 1:40,000 and 1:36,000 color infrared aerial photographs taken in 2003 and 2004, respectively. The three levels of classification—ecological system, landcover class and plant association—provided through this project are important for addressing management and monitoring goals. The Kenai Fjords NP classifications can be used to understand habitat availability, provide baseline information about natural resources in the park, and for conducting coarse-scale analyses including regional ecological planning. For example, the classification and maps provided by this project can help wildlife biologists evaluate forage availability for bear and moose and visualize the distribution of wetlands, and rare habitats and species. Fine-scale vegetation structural information provided by the accompanying Natural Resource Technical Report NPS/KEFJ/NRTR—2008/136 can also enhance ecological analyses for evaluating passerine bird habitat distribution.

**LANDCOVER CLASSES**

The landcover classification identified on this map describes existing vegetation and barren classes. It is based primarily on life form (tree, shrub or herbaceous), vegetation stature and to a lesser extent, genera and species information. It follows, with modifications, The Alaska Vegetation Classification (Viereck et al. 1992) system at levels II through IV. The landcover class descriptions include geographic distribution, site characteristics such as elevation and landform, and the dominant species that occur within the landcover class.

### Closed Sitka Spruce

**Classification:** The tree canopy cover is 60% or more and Sitka spruce is dominant. This class is comparable to the tidal tree cover. This class is comparable to the Viereck et al. (1992) hierarchical level IV, Closed Sitka Spruce Forest (A.1.a).

**Environment:** It is common on slopes, alluvial fans, floodplains and moraines. It occurs from sea level to tree line, patch size is small to large, and the sites are mesic. It is common covering 5.6% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* typically dominates the tree layer. *Tsuga mertensiana* and *Abies lasiocarpa* ssp. *lochiocarpa* may be present with low cover. *Alnus viridis* ssp. *sinuata*, *Oplopanax horridus* and *Vaccinium* species are common shrub species.

### Open Sitka Spruce

**Classification:** The tree canopy cover is 25-59%, and Sitka spruce contributes 75% or more to the total tree cover. The class is comparable to the Viereck et al. (1992) hierarchical level IV open Sitka spruce forest (A.2.a.)

**Environment:** This class is widespread on slopes, alluvial fans, floodplains and moraines. The slope is level to steep, the elevation ranges from sea level to tree line, the patch size is small to large, and the sites are mesic. It is common with small wet inclusions. It occurs 5.8% of the Park's vegetated land.

**Vegetation:** Sitka spruce typically dominates the tree layer. *Tsuga mertensiana* and *Populus balsamifera* ssp. *trichocarpa* may be present with low cover. *Alnus viridis* ssp. *sinuata*, *Oplopanax horridus* and *Vaccinium* species are common shrub species.

### Woodland Sitka Spruce/Alder

**Classification:** Tree cover is 10-24%. Sitka spruce and alder species each contribute 25% or more cover, and alder cover is >25%. The class is comparable to the Viereck et al. (1992) hierarchical level III needleleaf woodland (I.A.3).

**Environment:** This class is widespread on slopes, alluvial fans, floodplains and moraines.

The slope is level to steep, the elevation ranges from sea level to tree line, the patch size is small to large, and the sites are mesic. It is common covering 3.3% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* dominates the tree layer, and *Alnus viridis* ssp. *sinuata* dominates the understory.

### Woodland Sitka Spruce/Alder-Willow

**Classification:** Tree cover is 10-24%, Sitka spruce contributes 75% or more to the total tree cover, and alder and willow cover is >25% each contributing >25% to the total shrub cover. The class is comparable to the Viereck et al. (1992) level III *needleleaf woodland* (I.A.3).

**Environment:** This class occurs on slopes, alluvial fans, floodplains and moraines. The slope is level to steep, the elevation ranges from sea level to tree line, the patch size is small to large, and the sites are mesic. It is common covering 4.1% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* dominates the tree layer, and *Alnus viridis* ssp. *sinuata* and *Salix barclayi* co-dominate the understory.

### Woodland Sitka Spruce/Herbaceous

**Classification:** Tree cover is 10-24%, Sitka spruce contributes 75% or more to the total tree cover, and herbaceous cover is >25%. The class is comparable to the Viereck et al. (1992) hierarchical level III *needleleaf woodland* (I.A.3).

**Environment:** This class is widespread on slopes, alluvial fans, floodplains and moraines. The slope is level to steep, the elevation ranges from sea level to tree line, the patch size is small to large, and the sites are mesic. It is uncommon covering 0.6% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* dominates the tree layer. Sitka spruce may be present with low cover in the understory including *Athyrium filix-femina*, *Chamerion angustifolium* ssp. *angustifolium*, *Achillea millefolium* var. *borealis*, *Calamagrostis canadensis*, *Equisetum arvense*, *Geranium erianthum*, *Lupinus nootkatensis*, *Sanguisorba canadensis* and *Senecio triangularis*.

### Woodland Sitka Spruce

**Classification:** This landcover class includes polygons we could not identify as one of the finer Sitka spruce landcover classes (Sitka spruce woodland/alder willow and Sitka spruce woodland/herbaceous). Tree cover is 10-24%, and Sitka spruce contributes 75% or more to the total tree cover. The class is comparable to the Viereck et al. (1992) hierarchical level III needleleaf woodland (I.A.3). It is rare covering 0.4% of the Park's vegetated land.

### Closed Mountain Hemlock

**Classification:** Tree cover is 60% or more, and mountain hemlock contributes 75% or more to the total tree cover. This class is comparable to the Viereck et al. (1992) hierarchical level IV, closed mountain hemlock forest (A.11.).

**Environment:** This class is common on slopes and moraines and uncommon on steep slopes. It extends from sea level to tree line, its patch size is small to large, and the sites are mesic. It covers 1.7% of the Park's vegetated land.

**Vegetation:** *Tsuga mertensiana* dominates the tree layer. Sitka spruce may be present with low cover. The shrub layer includes tall shrubs such as Vaccinium species and *Oplopanax horridus*. A variety of other understory species occur such as *Harrimanella stelleriana*, *Rhododendron lapponicum*, *Lysichiton americanus* and *Nephrophyllidium crista-galli*.

### Open Mountain Hemlock

**Classification:** Tree canopy cover is 25-59%, and mountain hemlock contributes 75% or more to the total tree cover. This class is comparable to the Viereck et al. (1992) hierarchical level IV open mountain hemlock (I.A.2.c).

**Environment:** This class is common on slopes and uncommon on steep slopes. It extends from sea level to tree line, its patch size is small to large, and the sites are mesic. It covers 1.2% of the Park's vegetated land.

**Vegetation:** *Tsuga mertensiana* dominates the tree layer. Sitka spruce may be present with low cover. The shrub layer includes tall shrubs such as Vaccinium species and *Oplopanax horridus*. A variety of other understory species occur such as *Harrimanella stelleriana*, *Rhododendron lapponicum*, *Lysichiton americanus* and *Nephrophyllidium crista-galli*.

### Woodland Mountain Hemlock

**Classification:** Tree canopy cover is 10-24%, and mountain hemlock contributes 75% or more to the total tree cover. Viereck et al. (1992) did not describe this class.

**Environment:** This class is common at higher elevations on the outer fjordlands, moraines and slopes. It occurs on flat to moderate slopes, from sea level to tree line, patch size is small to large, and the sites are typically mesic. It covers 1.7% of the Park's vegetated land.

**Vegetation:** *Tsuga mertensiana* dominates the tree layer. Understory species include *Harrimanella stelleriana*, *Nephrophyllidium crista-galli*, *Vaccinium ovalifolium* and *V. uliginosum*.

### Closed Sitka Spruce-Mountain Hemlock

**Classification:** Tree canopy cover is 60% or more and Sitka spruce in combination with mountain hemlock contribute 75% or more to the total tree cover. Viereck et al. (1992) did not describe this class.

**Environment:** This class is common on the outer fjordlands, moraines and slopes. Slopes are flat to moderate, it occurs from sea level to tree line, patch size is small to large, and the sites are typically mesic often with wet inclusions. It covers 7.5% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* dominates the tree layer in combination with *Tsuga mertensiana*. The shrub layer includes *Oplopanax horridus*, *Rubus spectabilis* and *Vaccinium* species. Other understory species include *Lysichiton americanus*, *Nephrophyllidium crista-galli* and *Dryopteris expansa*.

### Open Sitka Spruce-Mountain Hemlock

**Classification:** Tree canopy cover is 25-59%, and Sitka spruce in combination with mountain hemlock, each contribute 25% or more to the total tree cover. Viereck et al. (1992) did not describe this class.

**Environment:** This class is common on the outer fjordlands, moraines and slopes. Slopes are flat to moderate, it occurs from sea level to tree line, patch size is small to large, and the sites are typically mesic often with wet inclusions. It covers 7.5% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* dominates the tree layer in combination with *Tsuga mertensiana*. The shrub layer includes *Oplopanax horridus*, *Rubus spectabilis* and *Vaccinium* species.

### Woodland Sitka Spruce-Mountain Hemlock

**Classification:** Tree canopy cover is 10-24%, and Sitka spruce in combination with mountain hemlock, each contribute 25% or more to the total tree cover. Viereck et al. (1992) did not describe this class.

**Environment:** This class is common on the outer fjordlands, moraines and slopes. Slopes are flat to moderate, it occurs from sea level to tree line, patch size is small to large, and the sites are typically mesic often with wet inclusions. It covers 0.6% of the Park's vegetated land.

**Vegetation:** *Picea sitchensis* dominates the tree layer, with *Tsuga mertensiana* co-dominating the overstory. Understory species include *Cornus suecica*, *Rubus spectabilis*, *Vaccinium ovalifolium* and *Nephrophyllidium crista-galli*.

### Krummholz

**Classification:** Krummholz Sitka spruce and mountain hemlock dwarf tree scrub is typically at a cover of 10-24%. The class is comparable to the Viereck et al. (1992) hierarchical level III: Dwarf tree scrub woodland (canopy 10-25 percent) (I.A.3).

**Environment:** The krummholz landcover class is uncommon and typically occurs in the subalpine on older landscapes, and occurs occasionally on windswept knobs at lower elevations. Patch size is small and, consequently, we could rarely map it. Sites are typically mesic, and flat to steep on mountain ridges, hills and slopes. It covers 0.1% of the Park's vegetated land.

**Vegetation:** *Tsuga mertensiana* and *Picea sitchensis* have a krummholz lifeform. Tree height ranges from 1 to 3 m. Shrub cover is typically moderate to 2 m. Understory species include *Rhododendron albiflora*, *Rubus pedatus*, *Rubus spectabilis*, *Vaccinium uliginosum* and *Nephrophyllidium crista-galli*.

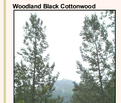
### Mountain Hemlock-Sitka-Spruce Peatland

**Classification:** Site is a peatland. Sitka spruce and mountain hemlock dwarf tree scrub is present with a cover greater than 10%. The class is comparable to the Viereck et al. (1992) hierarchical level IV woodland Sitka spruce—scrub (I.A.2.b) and open mountain hemlock dwarf tree scrub (I.A.2.c.).

**Environment:** This is a minor though widespread class in the Park and Prince William Sound. It is mosaicked with forests or wetlands that dominate the slopes of the older landscapes. The patch size is small to large, and the sites are flat to steep, mid elevations, the slope ranges up to 52°, and the sites are wet, often with an organic layer. It covers 0.8% of the Park's vegetated land.

**Vegetation:** *Tsuga mertensiana* dominates the overstory and is generally of a dwarf stature (2.5 to 3.7 meters tall). *Picea sitchensis* can be common. The shrubs are unexceptional. The dominant shrubs are *Empetrum nigrum*, *Ledum palustre decumbens*, *Vaccinium uliginosum* and *Vaccinium vitis-idaea*. Common species in the undergrowth include *Nephrophyllidium crista-galli* and *Rhytidiopsis robusta* and *Sphagnum*.

### Woodland Black Cottonwood



**Classification:** Black cottonwood with a cover of 25-59%. The class is comparable to the Viereck et al. (1992) level III: broadleaf woodland (I.B.3).

**Environment:** This class occurs primarily at low elevations on floodplains, outwash plains, and alluvial fans. It is common on the outwash of the Resurrection River and Bear Glacier, and rare throughout the remainder of the park. The slope is level, patch size is small to large, and the sites are mesic although high overflows will inundate floodplain and outwash sites. It covers 0.2% of the Park's vegetated land.

**Vegetation:** *Populus balsamifera* ssp. *trichocarpa* dominates this class with 10-24% cover. *Picea sitchensis* seedlings through mature trees may be present with low cover. Tall shrub commonly dominate the understory including *Alnus viridis* ssp. *sinuata* and *Oplopanax horridus*. Other understory species include *Calamagrostis canadensis*, *Chamerion angustifolium* ssp. *angustifolium*, *Galium triflorum*, *Gymnocarpium dryopteris* and *Orthilia secunda*.

### Closed Black Cottonwood

**Classification:** Black cottonwood with a cover of 10-24%. The class falls within the Viereck et al. (1992) level III: broadleaf woodland (I.B.3).

**Environment:** This class is common at low elevations on floodplains, outwash plains, and alluvial fans. It is common on the outwash of the Resurrection River and Bear Glacier, and rare throughout the remainder of the park. The slope is level, patch size is small to large, and the sites are mesic although high overflows will inundate floodplain and outwash sites. It covers 0.2% of the Park's vegetated land.

**Vegetation:** *Populus balsamifera* ssp. *trichocarpa* dominates this class with cover greater than 60%. Common understory species include *Calamagrostis canadensis*, *Chamerion angustifolium* ssp. *angustifolium*, *Galium triflorum*, *Gymnocarpium dryopteris* and *Orthilia secunda*.

### Open Black Cottonwood

**Classification:** Black cottonwood with a cover of 25-59%. The class is comparable to the Viereck et al. (1992) level III: broadleaf woodland (I.B.3).

**Environment:** This class occurs primarily at low elevations on floodplains, outwash plains, and alluvial fans. It is common on the outwash of the Resurrection River and Bear Glacier, and rare throughout the remainder of the park. The slope is level, patch size is small to large, and the sites are mesic although high overflows will inundate floodplain and outwash sites. It covers 0.2% of the Park's vegetated land.

**Vegetation:** *Populus balsamifera* ssp. *trichocarpa* dominates this class with 10-24% cover. *Picea sitchensis* seedlings through mature trees may be present with low cover. Tall shrubs commonly dominate the understory including *Alnus viridis* ssp. *sinuata* and *Oplopanax horridus*. Other understory species include *Calamagrostis canadensis*, *Chamerion angustifolium* ssp. *angustifolium*, *Galium triflorum*, *Gymnocarpium dryopteris* and *Orthilia secunda*.

### Closed Sitka Spruce-Black Cottonwood

**Classification:** Black cottonwood and needleleaf tree species each contribute 25% or greater to the total tree cover, and the combined cover of the trees is 25-59%. The class falls within the Viereck et al. (1992) hierarchical level III: open mixed forest (I.C.2).

**Environment:** This class occurs primarily at low elevations on floodplains, outwash plains, and alluvial fans. It is common on the outwash of the Resurrection River and Bear Glacier, and rare throughout the remainder of the park. The slope is level, patch size is small to large, and the sites are mesic although high overflows will inundate floodplain and outwash sites. It covers 0.2% of the Park's vegetated land.

**Vegetation:** *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* codominate this class with 25-59% cover. Understory species likely include *Alnus viridis* ssp. *sinuata*, *Oplopanax horridus* and *Calamagrostis canadensis*.

### Open Sitka Spruce-Black Cottonwood



**Classification:** Black cottonwood and needleleaf tree species each contribute 25% or greater to the total tree cover, and the combined cover of the trees is 25-59%. The class falls within the Viereck et al. (1992) hierarchical level III: open mixed forest (I.C.2).

**Environment:** This class occurs primarily at low elevations on floodplains, outwash plains, and alluvial fans. It is common on the outwash of the Resurrection River and Bear Glacier, and rare throughout the remainder of the park. The slope is level, patch size is small to large, and the sites are mesic although high overflows will inundate floodplain and outwash sites. It covers 0.2% of the Park's vegetated land.

**Vegetation:** *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* codominate this class with 25-59% cover. Understory species likely include *Alnus viridis* ssp. *sinuata*, *Oplopanax horridus* and *Calamagrostis canadensis*.

### Woodland Sitka Spruce-Black Cottonwood



**Classification:** Black cottonwood and needleleaf tree species each contribute 25% or greater to the total tree cover, and the combined cover of the trees is 10-24%. The class falls within the Viereck et al. (1992) hierarchical level III: mixed woodland forest (I.C.3).

**Environment:** This class occurs primarily at low elevations on floodplains, outwash plains, and alluvial fans. It is common on the outwash of the Resurrection River and Bear Glacier, and rare throughout the remainder of the park. The slope is level, patch size is small to large, and the sites are mesic although high overflows will inundate floodplain and outwash sites. It covers 0.1% of the Park's vegetated land.

**Vegetation:** *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* codominate this class with 10-24% cover. Understory species likely include *Alnus viridis* ssp. *sinuata*, *Oplopanax horridus* and *Calamagrostis canadensis*.

### Closed Alder/Mesic Herbaceous Mosaic

**Classification:** This class is a mosaic of the closed tall alder landcover class, closed low alder landcover class and mesic herbaceous landcover class. Each landcover class contributes 25% or more to the total cover.

**Environment:** It is a common and widespread class on recently deposited glacial till slopes, active colluvial slopes, avalanche chutes, stabilized talus, and young moraines. See the respective landcover classes for more detailed descriptions. It covers 13.8% of the Park's vegetated land.

### Closed Tall Alder

**Classification:** Average shrub height is greater than 1.8 m, total shrub cover is 25-74% and alder contributes 75% or more of the total shrub cover. The class is comparable to the Viereck et al. (1992) hierarchical level IV: closed tall scrub alder (II.B.1a).

**Environment:** This is an uncommon but widespread class. It occurs primarily on early seral sites or at higher elevations. The early-seral sites include floodplain and outwash deposits, recently deposited glacial till slopes, active colluvial slopes, avalanche chutes, stabilized talus, and moraines. Sites are flat to steep from sea level to alpine, patch size is small to large, and the sites are typically mesic. It covers 2.1% of the Park's vegetated land.

**Vegetation:** *Alnus viridis* ssp. *sinuata* is the dominant species within this class. Scattered young *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* are often characteristic. Understory species include *Calamagrostis canadensis*, *Dryopteris expansa*, *Luetkea pectinata* and *Oplopanax horridus*.

### Open Tall Alder

**Classification:** Average shrub height is greater than 1.8 m, total shrub cover is 25-74% and alder contributes 75% or more of the total shrub cover. This class is comparable to the Viereck et al. (1992) hierarchical level IV open tall scrub alder (II.B.2.b).

**Environment:** This is an uncommon but widespread class. It occurs on early seral sites and at higher elevations. It occurs on floodplain and outwash deposits, recently deposited glacial till slopes, active colluvial slopes, avalanche chutes, stabilized talus, on pockets of glacial till interspersed with rocky outcroppings, and young moraines. Sites are flat to steep from sea level to alpine, patch size is small to large, and the sites are typically mesic. It covers 0.7% of the Park's vegetated land. The adjacent map grows its distribution.

**Vegetation:** *Alnus viridis* ssp. *sinuata* is the dominant species within this class. Its height ranges to over 4 m. Scattered young *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* are often characteristic. Understory species include *Calamagrostis canadensis*, *Dryopteris expansa*, *Luetkea pectinata* and *Oplopanax horridus*.

### Closed Low Alder

**Classification:** Average shrub height is less than 1.8 m, total shrub cover is 25-74% and alder contributes 75% or more of the total shrub cover. The class is comparable to the Viereck et al. (1992) hierarchical level IV: closed low alder-willow (II.C.1a).

**Environment:** The closed low alder-willow class is common at mid to low elevations on outwash plains, floodplains, and recently deglaciated slopes. The sites are often early seral. The slope ranges from flat to steep, patch size is small to large, and the sites are mesic although high overflows may inundate floodplain and outwash sites. It covers 0.9% of the Park's vegetated land.

**Vegetation:** *Alnus viridis* ssp. *sinuata* and *Salix barclayi* less than 1.5 m in height are codominant in the overstory. A scattering of both sapling and large *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* may be present. Common understory species include *Athyrium filix-femina*, *Equisetum arvense* and *Calamagrostis canadensis*.

### Open Low Alder

**Classification:** Average shrub height is less than 1.8 m, total shrub cover is 25-74% and alder contributes 75% or more of the total shrub cover. The class is comparable to the Viereck et al. (1992) hierarchical level IV: open tall scrub alder (II.C.2).

**Environment:** This is an uncommon but widespread class. It occurs primarily on early seral sites or at higher elevations. The early-seral sites include floodplain and outwash deposits, recently deposited glacial till slopes, active colluvial slopes, avalanche chutes, stabilized talus, and moraines. Sites are flat to steep from sea level to alpine, patch size is small to large, and the sites are typically mesic. It covers 2.1% of the Park's vegetated land.

**Vegetation:** *Alnus viridis* ssp. *sinuata* is the dominant species within this class. Scattered young *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* are often characteristic. Understory species include *Athyrium filix-femina*, *Calamagrostis canadensis*, *Dryopteris expansa*, *Luetkea pectinata* and *Oplopanax horridus*.

### Closed Tall Alder-Willow

**Classification:** Average shrub height is greater than 1.8 m, total shrub cover is greater than 75% and alder and willow species each contribute 25% or more to the total shrub cover. The class is comparable to the Viereck et al. (1992) hierarchical level IV: closed tall alder-willow scrub (II.B.1.c).

**Environment:** This class is common on the outer fjordlands, moraines and slopes. Slopes are flat to moderate, it occurs from sea level to tree line, patch size is small to large, and the sites are typically mesic often with wet inclusions. It covers 7.5% of the Park's vegetated land.

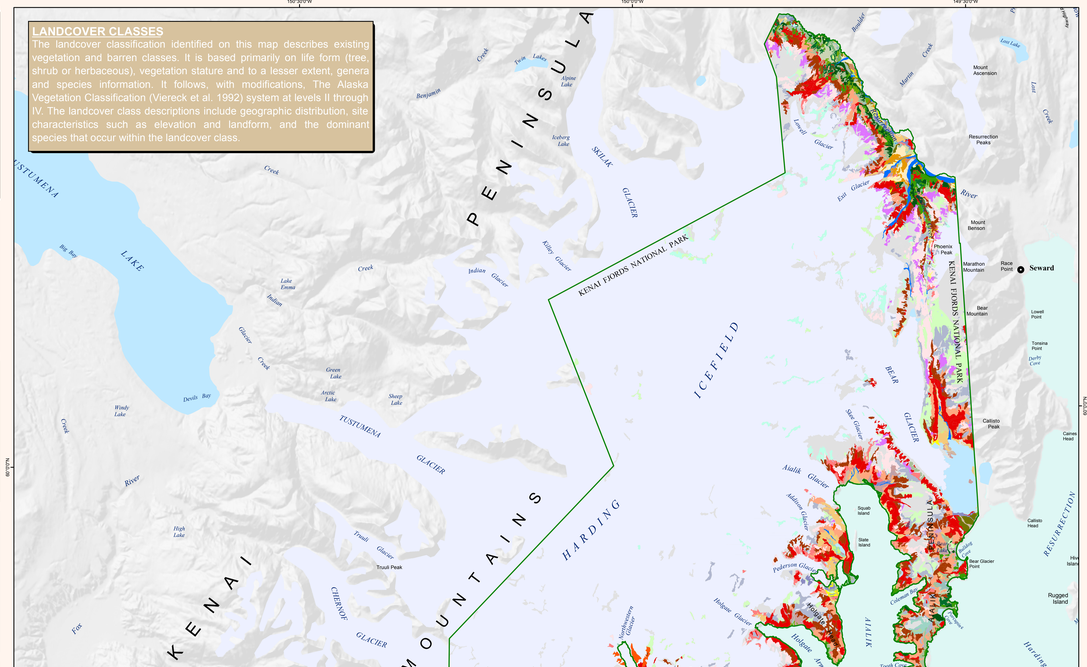
**Vegetation:** *Picea sitchensis* dominates the tree layer in combination with *Tsuga mertensiana*. The shrub layer includes *Oplopanax horridus*, *Rubus spectabilis* and *Vaccinium* species.

### Closed Low Alder-Willow

**Classification:** Average shrub height is less than 1.8 m, total shrub cover is 25-74% and alder and willow species each contribute 25% or more to the total shrub cover. The class is comparable to the Viereck et al. (1992) hierarchical level IV: closed low alder-willow (II.C.1.a).

**Environment:** The closed low alder-willow class is common at mid to low elevations on outwash plains, floodplains, and recently deglaciated slopes. The sites are often early seral. The slope ranges from flat to steep, patch size is small to large, and the sites are mesic although high overflows may inundate floodplain and outwash sites. It covers 0.9% of the Park's vegetated land.

**Vegetation:** *Alnus viridis* ssp. *sinuata* and *Salix barclayi* less than 1.5 m in height are codominant in the overstory. A scattering of both sapling and large *Populus balsamifera* ssp. *trichocarpa* and *Picea sitchensis* may be present. Common understory species include *Athyrium filix-femina*, *Equisetum arvense* and *Calamagrostis canadensis*.


KENAI FJORDS NATIONAL PARK
KENAI MOUNTAINS
HARDING ICEFIELD
PENINSULA
KENAI
LAKE
TUSTUMENA
GLACIER
SKILAK
GLACIER
HARDING
ICEFIELD
BEAR
GLACIER
AIALIK
GLACIER
McCARTY
FJORD
NORTH
ARM
BAY
PYE
ISLANDS
NUKA
BAY
RESURRECTION
BAY
HARRIS
BAY
AIALIK
PENINSULA
Seward
Mount Ascension
Resurrection Peaks
Mount Benson
Phoenix Peak
Marathon Mountain
Race Point
Bear Mountain
Lowell Point
Tonsina Point
Callisto Peak
Callisto Head
Caines Head
Squab Island
Bear Glacier Point
Rugged Island
Fox Islands
Chat Island
Harbor Island
Natoa Island
Granite Island
Granite Cape
Beehive Island
Matsutska Island
Chiswell Islands
Aialik Cape
Cheval Island
Three Hole Point
Toe Point
Aialik Peak
Pedersen Glacier
Holgate Glacier
Northwestern Fjord
Chiswell Glacier
Charnel Glacier
McCarty Glacier
Harris Point
Two Arm Bay
Surprise Glacier
Surprise Point
Icy Bay
Icy Point
Cloudy Cape
Seal Rocks
Storm Islands
Iceworm Peak
Paradise Peak
Mount Dispirit
Mount Dispirit
Beautiful Island
Ariadne Island
Yalik Point
Harrington Point
Sleep Point
Ragged Island
Outer Island
Rabbit Island
Kenley Peak
Wilkes Point
Pedersen Point
Cape Resurrection
Resurrection Peak
Brown Mountain
Long Island
Front Point
Tonsina Point
Tonsina Creek
Gore Point
Bulldog Lake
Kachemak Glacier
Dinglestadt Glacier
Petersburg Glacier
Petersburg Creek
Portage Glacier
Trail Glacier
Trail Lake
Trout Peak
Trail Creek
Fox Creek
Sheep Creek
Bradley River
Bradley Lake
Dixon Glacier
Windy Lake
Devils Bay
Green Lake
Arctic Lake
Sharp Lake
Indian Glacier
Kelley Glacier
Lake Emma
Indian
Big Bay
Lake
Alpine Lake
Iceberg Lake
Benjamin Creek
Twin Lakes
Bourbon Creek
Marion Creek
East Creek
East Glacier
Lowell Glacier
Resurrection River
Resurrection Creek
Lost Lake
Lost Creek
Aialik Glacier
Holgate Arm
Tooth Glacier
Pedersen Glacier
Northwestern Glacier
Chiswell Glacier
Surprise Glacier
Surprise Creek
Surprise Lake
Harris Glacier
Harris Creek
Harris Peak
Yalik Glacier
Yalik Arm
Yalik Peak
Paradise Glacier
Paradise Creek
Paradise Lake
Petrof Glacier
Petrof Creek
Petrof Lake
Nuka Point
Nuka Glacier
Nuka River
Nuka Bay
Tonsina Bay
Tonsina Point
Tonsina Creek
Gore Point
Sunday Creek
Sunday Glacier
Sunday Lake
Skilak Lake
Skilak Glacier
Skilak Creek
Kenai Lake
Kenai River
Kenai Lake
Kenai River
Russian River
Russian Creek
Russian Lake
Russian River
Russian Creek
Russian Lake
Russian River
Russian Creek
Russian Lake