Ecological Site Description ID:	F222XY338AK

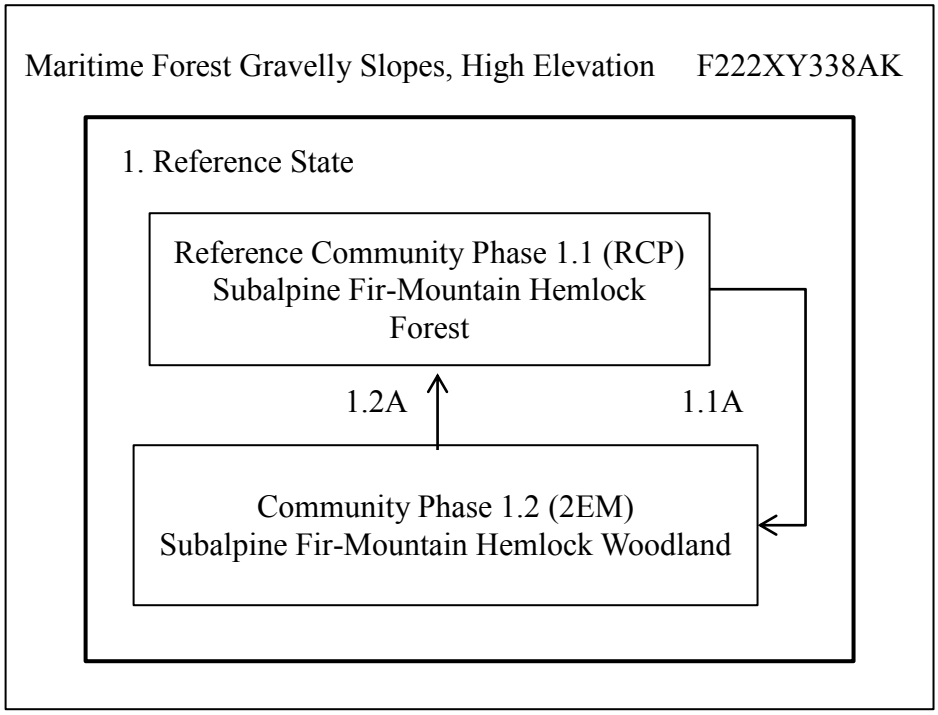
Ecological Dynamics of the Site:

This is a high-elevation, maritime forest ecological site on mountain slopes and shoulders. The soils are generally shallow and gravelly or are organic. The reference community is a forest of subalpine fir and mountain hemlock. Subalpine fir and mountain hemlock commonly are associated with colder, high-elevation mountain slopes. At the higher elevations, the forest transitions into a subalpine forest. In this transition zone, subalpine fir *(Abies lasiocarpa)* is prevalent and *Tsuga mertensiana* and Sitka spruce *(Picea sitchensis)* appear stunted. At lower elevations, subalpine fir is not prevalent and mountain hemlock is replaced by western hemlock.

This ecological site is similar to F222XY337AK, which is at the lower elevations that support western hemlock. *Pinus contorta* is also present in the early to late fire sere communities on ecological site F222XY337AK. Evidence of fire was not observed in areas of F222XY338AK.

This ecological site is influenced by the natural succession processes from age-related decline in forest productivity. There is minimal documentation of disturbance from slope erosion. The reference and mid sere community phases have been documented in the field. It is likely that an early sere community phase may be associated with this ecological site, but it has not been documented.

State and Transition Model:



State ID Number:	1	**State Name:**	Reference state
Phase 1.1			
Community Phase Number:	1.1	**Community Phase Name:**	Subalpine Fir-Mountain Hemlock Forest

Community Phase Narrative:

This is the climax community phase for this ecological site. The forest has approximately 30 to 50 percent tree cover that is characterized by medium-sized and tall *Tsuga mertensiana* and tall subalpine fir *(Abies lasiocarpa)*. As much as 10 percent cover of medium-sized Sitka spruce *(Picea sitchensis)* has also been documented, but it does not occur in all subalpine fir-mountain hemlock forest communities. Shrub cover is 30 to 65 percent consisting of medium-sized shrubs such as *Vaccinium ovalifolium* and *Menziesia ferruginea*. Dwarf shrub cover consisting of *Rubus pedatus* may be as much as 30 percent in some areas. Moss cover is 70 to 80 percent in most areas and includes species such as *Sphagnum girgensohnii, Pleurozium schreberi, Hylocomium splendens*, and *Dicranum scoparium*. Forb cover commonly is minimal and may include species such as *Cornus canadensis, Dryopteris expansa, Gymnocarpium dryopteris,* and *Athyrium filix-femina.*

Community Pathways

Pathway Number	**Pathway Name & Description**
1.1A	The subalpine fir-mountain hemlock woodland community shifts to a subalpine fir-mountain hemlock forest community following age-related decline in forest productivity. There is limited documentation for disturbance from slope erosion.

Phase 1.2			
Community Phase Number:	1.2	**Community Phase Name:**	Subalpine Fir-Mountain Hemlock Woodland
Community Phase Narrative:			
The subalpine fir-mountain hemlock woodland community is a mid sere community that develops following natural succession from age-related decline in the forest or from slope erosion. The community is characterized by an open forest canopy with as much as 20 percent cover of tall subalpine fir *(Abies lasiocarpa)* and regenerating and medium-sized *Tsuga mertensiana.* Shrub cover is about 60 percent and includes species such as *Rubus pedatus, Vaccinium ovalifolium,* and *Menziesia ferruginea.* Moss cover is about 70 percent.			
Community Pathways			
Pathway Number	**Pathway Name & Description**		
1.2A	Time and slope stabilization		