

Ecological Site Description ID:		R231XY109AK	
Ecological Dynamics of the Site:			
<p>This boreal ecological site occurred on very steep south facing escarpment slopes (i.e. slopes averaged 80%). Soils had argillite lithology and were considered unstable. For community phase 1.1, soils were classified as calcicrypts and were composed of gravelly colluvium</p> <p>Fire was a disturbance regime that resulted in 2 documented phases. Fire is a natural and typically unmanaged disturbance regime.</p>			
State and Transition Diagram:			
<div style="border: 1px solid black; padding: 10px;"> <p>1.0 Reference State Boreal scrub gravelly slope dry R231XY109AK</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>1.1 (HCPC) Sagebrush-moss-lichen-scrubland</p> </div> <div style="text-align: center;"> <p>↓ 1.1a</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>1.2 (2FE) Prickly rose-sagebrush-mixed grass-scrubland</p> </div> <div style="text-align: center;"> <p>↑ 1.2a</p> </div> </div> </div>			
State ID Number:	1	State Name:	Reference
State Narrative:	<p>Phases within the reference state were grouped related to time since last disturbance. As time since fire increases, grasses lose dominance and sagebrush increases in dominance.</p> <p>Tall trees are defined as trees growing >40' in height, medium trees are defined as growing 15-40' in height, while stunted and regenerative trees are defined as growing less than 15' in height. Tall shrubs are defined to grow greater than 10' in height, medium shrubs are defined to grow 3-10' in height, low shrubs are defined to grow 8" – 3' in height, and dwarf shrubs are defined to grow less than 8" in height.</p>		

Photo 1.1



Community Phase Number:

1.1

Community Phase Name:

Sagebrush-Moss-Lichen-Scrubland

Community Phase Narrative:

The dominant vegetation was sagebrush. Tree cover was observed but at trace amounts with the only species observed being *Populus tremuloides*. Shrubs had ~60% cover in plots and primarily occurred in the dwarf and medium shrub stratum. The most common species was *Artemisia frigida*. Graminoids and forbs were minor vegetative components. Moss and lichen cover were evenly split covering ~50% of the ground surface.

Community Pathways

Pathway Number

Pathway Name & Description

1.1 a

Fire. Sites are well-drained and fire appears to consume organic matter. Due to steep slope and loss of vegetation, fire may increase likelihood of landslides.

Photo 1.2



Community Phase Number:

1.2

Community Phase Name:

Prickly Rose-Sagebrush-Mixed grass-Scrubland

Community Phase Narrative:

The dominant vegetation is a mixture of shrubs and grasses. Tree cover was observed but at trace amounts with the only species observed being *Populus tremuloides*. Shrubs had ~30% cover in plots and primarily occurred in the dwarf and low shrub stratum. The most common low shrub was *Rosa acicularis*, while the most common dwarf shrub was *Artemisia frigida*. Grass had ~30% cover in plots. The most common grass species were *Calamagrostis purpurascens* and *Elymus trachycaulus*. While forb diversity was high (i.e. 14 species), overall cover was limited. Both lichen and moss cover was limited when compared to phase 1.1.

Community Pathways

Pathway Number

Pathway Name & Description

1.2a

Normal time and growth without fire. Plant community shifts to sagebrush dominant community.