

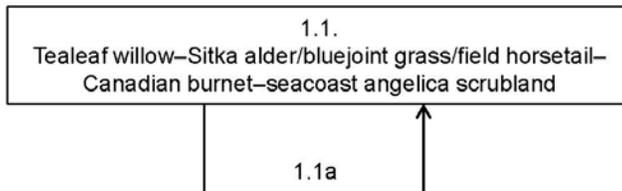
Ecological Site Description ID:	R236XY107AK—Western Alaska Maritime Scrub Gravelly Drainages
Ecological Dynamics of the Site:	
<p>This western Alaska maritime ecological site is in lowland drainageways. The site is typically 98 to 2,297 feet above sea level with slopes of 1 to 10 percent. Slope aspect does not appear to influence the plant community dynamics of this site because it is on all aspects.</p> <p>This ecological site is correlated to soil component D36-Western maritime scrub drainageways. Soil characteristics that are likely to influence plant community dynamics include the cryic soil temperature regime, the udic moisture regime with slow permeability to a depth of 40 inches, and a moderately acidic or strongly acidic (pH 5.3 to 5.6) first mineral horizon. Organic material content in the surface layer is commonly 5 to 20 percent. The annual precipitation is 25 to 70 inches, and the annual frost-free period is 80 to 140 days. The parent material is organic material over gravelly alluvium.</p> <p>The reference community phase is typified by medium to tall scrubland with an understory of hydrophilic forbs, low shrubs, and bluejoint grass (<i>Calamagrostis canadensis</i>). As compared to other ecological sites that are in western Alaska maritime lowland drainageways, such as sites R236XY109AK (Western Alaska Maritime Graminoid Peat Drainages) and R236XY136AK (Western Alaska Maritime Scrub Loamy Drainages), several differences are apparent. This ecological site is commonly at higher elevations with steeper slopes than R236XY109AK. R236XY109AK is in drainageways that are wider than 10 meters, and this site commonly is in drainageways that are much narrower, contributing to differences in soil drainage class and ponding frequency and duration. These differences lead to distinctly separate reference states and community phases. R236XY136AK is in lowland drainageways with steep surrounding slopes (more than 10 percent); the slopes surrounding this site are typically much less steep. R236XY136AK corresponds with soils mapped at the Order 2 level of intensity, and this site corresponds to those mapped at the Order 3 level. The scale of mapping can result in differences in how landscapes and landforms are defined and described in terms of soils, plant communities, and land uses, sometimes making it necessary to describe the soils and ecological sites differently. While all of these sites are on similar landforms, none of them support the same reference state or community phases or have the same disturbance regime; thus, unique ecological sites are needed.</p> <p>No known major disturbance regime is associated with this ecological site; thus, only a reference community phase is described. Throughflow and overflow from precipitation and seasonal snowmelt combined with soils that are poorly drained and have medium runoff potential may result in localized runoff and ponding. Ponding is occasional and brief. This community consists dominantly of hydrophilic plants (facultative to obligate wetland species, NWI: PSS1B) that can tolerate periods of ponding. Minor natural variations in plant richness and cover may be evident, but no <i>in situ</i> data or observations suggest a community-altering disturbance requiring an early flooding or ponding community phase.</p> <p>Browsing by moose on willow is possible, but it does not appear to affect the ecological processes on the site enough to alter the community significantly.</p> <p>No alternative states have been observed.</p> <p>This report provides baseline vegetation inventory data for this site. Future data collection is needed to provide further information about existing plant communities and the disturbance regimes that would result in transitions from one community to another.</p>	

State and Transition Diagram:

Western Alaska Maritime Scrub Gravelly Drainages

R236XY107AK

1. Reference State



LEGEND  
1.1a = Runoff/ponding

Ecological Site Description for Bristol Bay-Northern Alaska Peninsula, North and Bordering Areas, Alaska

Phase 1.1			
Community Phase Number:	1.1	Community Phase Name:	Tealeaf willow-Sitka alder/bluejoint grass/field horsetail-Canadian burnet-seacoast angelica scrubland
Community Phase Narrative:			
<p>The reference community phase for this ecological site is characterized by scrubland consisting of medium shrubs with an understory of shade-tolerant, commonly hydrophilic graminoids and forbs. Annual plant production is visually estimated to occur dominantly among shrubs, though understory forbs and graminoids commonly contribute to the overall production of the community. Typically, this community consists of a dense overstory of medium and tall tealeaf willow (<i>Salix pulchra</i>) and Sitka alder (<i>Alnus viridis ssp. sinuata</i>). The understory is a diverse community of forbs and graminoids, including bluejoint grass (<i>Calamagrostis canadensis</i>), various sedges (<i>Carex spp.</i>), field horsetail (<i>Equisetum arvense</i>), and Canadian burnet (<i>Sanguisorba canadensis</i>). The often wet soils in these drainageways can also support myriad facultative to obligate species in smaller densities. Several species of moss are generally present (total mean cover ~42 percent). Other ground cover typically includes herbaceous litter (~69 percent) and woody litter (~1 percent). About 3 percent of the surface is covered with water.</p>			

Community Phase Canopy Cover

(Vegetation data in the table are provided as constancy (percent) and average canopy cover (percent) of the most dominant and ecologically relevant species for this community phase.)

Plant group	Common name	Scientific name	USDA plant code	Constancy (percent)	Average canopy cover (percent)
S	Tealeaf willow	<i>Salix pulchra</i>	SAPU15	100.0	67.0
S	Sitka alder	<i>Alnus viridis ssp. sinuata</i>	ALVIS	60.0	22.0
G	Bluejoint grass	<i>Calamagrostis canadensis</i>	CACA4	100.0	45.0
F	Seacoast angelica	<i>Angelica lucida</i>	ANLU	100.0	1.1
F	Field horsetail	<i>Equisetum arvense</i>	EQAR	100.0	42.0
F	Canadian burnet	<i>Sanguisorba canadensis</i>	SACA14	100.0	7.2
F	Captiate valerian	<i>Valeriana capitata</i>	VACA3	80.0	3.3

Community Pathways

Pathway Number	Pathway Name & Description
1.1a	<p>Runoff/ponding.</p> <p>Throughflow and overflow from precipitation and seasonal snowmelt may result in runoff and ponding. Because the plant community is dominantly hydrophilic species, it appears to be capable of withstanding the anoxic condition commonly caused by such disturbances. Minor natural variations in plant richness and cover may be evident, but no <i>in situ</i> data or observations suggest a community-altering disturbance that requires an early flooding or ponding community phase.</p>

*This report is interim and subject to change.*