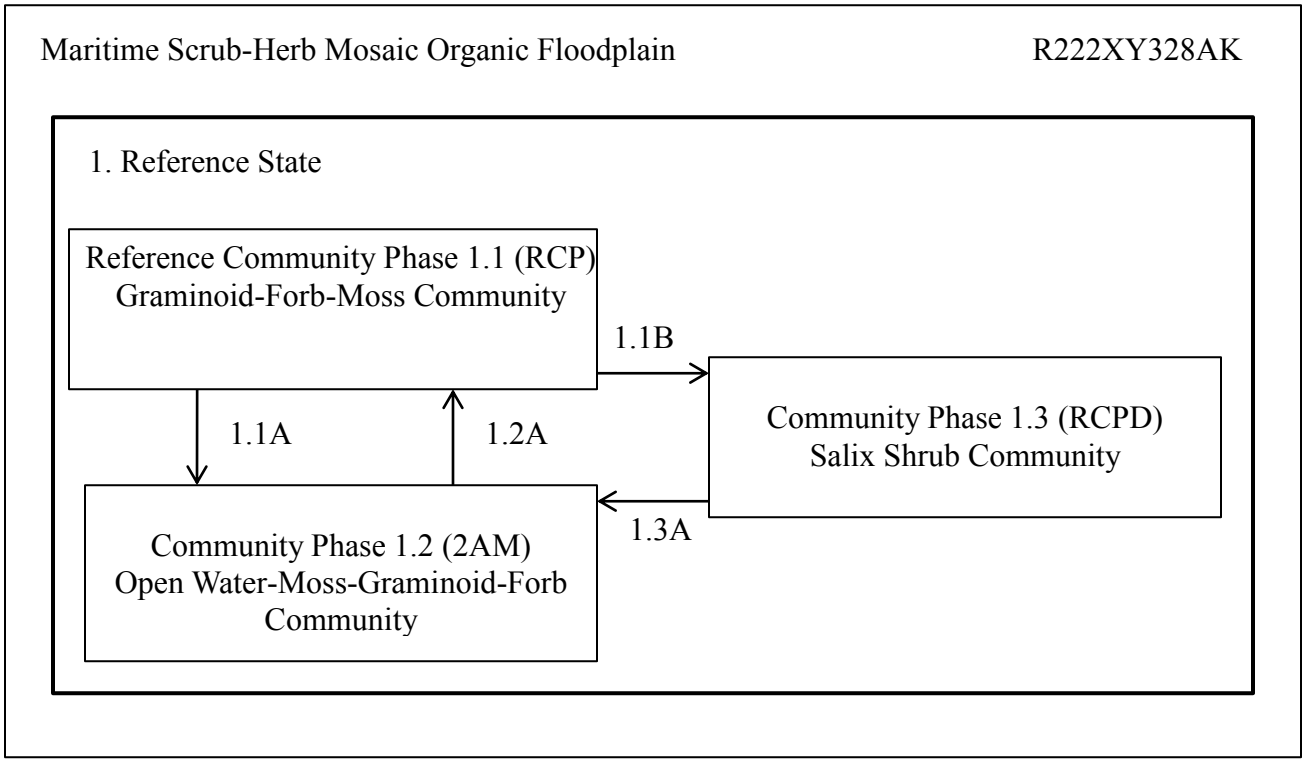
Ecological Site Description ID:	R222XY328AK

Ecological Dynamics of the Site:

This is a maritime shrub and herb ecological site that is shaped by the movement of water in discharge wetlands. The movement of water creates a unique banding of vegetation through the formation of string bogs. The bands of vegetation in the early development of a string bog consist of pools of open water with water-loving vegetation and moss. Surrounding the pools, organic matter develops and graminoid and forb cover increases. Over a longer period of time, the organic matter continues to develop and the ecological site transitions from an open water-moss herbaceous state to a shrub state. Once the shrub community develops, it will not transition back to an open water-moss herbaceous state unless the area is drained enough to erode the shrub community and organic mat. A rare ice jam flood may also erode the shrub vegetation and organic layer and deposit a mineral soil over the organic layer. The soils formed in thick organic matter with strata of mineral material of varying thickness.

State and Transition Model:



State ID Number:	1	State Name:	Reference state
Phase 1.1			
Community Phase Number:	1.1	Community Phase Name:	Graminoid-Forb-Moss Community

Community Phase Narrative:

This is the reference plant community for string bog succession. Waterflow in a discharge wetland produces strings, or bands, of water and vegetation. The vegetative community begins to grow as a layer of organic matter develops. The community is a mixture of moss, graminoids, and forbs. This ecological site has approximately 15 percent standing water. Graminoid cover may be as much as 80 to 90 percent with species such as *Trichophorum alpinum, Carex aquatilis,* and *Carex livida. Menyanthes trifoliate* is the dominant forb species.

Community Pathways

Pathway Number	Pathway Name & Description
1.1A	If drainage is sufficient to erode the organic mat, the graminoid-forb-moss community may transition back to an open water-moss-graminoid-forb community.
1.1B	Over a longer period of time, the string bog mosaic of open water and banded vegetation will transition to a more continuous organic mat with vegetation and a smaller proportion of open water. Following the establishment of a graminoid-forb community in the reference community phase, shrub species may begin to encroach. The ecological site will then transition from a graminoid-forb state to a drier shrub state.

Phase 1.2			
Community Phase Number:	1.2	**Community Phase Name:**	Open Water-Moss-Graminoid-Forb Community
Community Phase Narrative:			
This community phase is characterized by more than 30 percent open water. Moss may form a mat that makes up as much as 30 percent cover. A continuous cover of forbs such as *Menyanthes trifoliate, Equisetum fluviatile*, and *Comarum palustre* and graminoids such as *Carex aquatilis* and *Carex chordorrhiza* may be in small patches and along the edges of the bodies of water.			
Community Pathways			
Pathway Number	**Pathway Name & Description**		
1.2A	In the discharge wetland areas, a layer of organic matter begins to develop. The exact mechanism for the development is unknown, but downslope drainage and accumulation of mud, peat, and debris may contribute to the formation of banded organic material that supports the growth of water-loving graminoid and forb species.		

Phase 1.3			
Community Phase Number:	1.3	**Community Phase Name:**	Salix Shrub Community
Community Phase Narrative:			
The Salix shrub community is characterized by a mixed graminoid-shrub community with as much as 15 percent open water. Forb and graminoid cover may be 50 to 90 percent. Common graminoids include *Carex aquatilis* and *Calamagrostis Canadensis*. Forb species include *Comarum palustre* and *Equisetum arvense.* Shrub cover may be as much as 50 percent. *Salix barclayi* is the dominant shrub species. Sitka alder *(Alnus viridis ssp. sinuata)* and *Viburnum edule* may become established in small proportions along the edges of the discharge wetlands.			
Community Pathways			
Pathway Number			
1.3A	If water drainage is sufficient enough to erode the shrub community and organic mat, the plant community may transition back to an open water-moss-graminoid-forb community. A rare ice jam flood may also erode the shrub vegetation and organic layer and deposit a mineral soil over the organic layer.		