USDA icon **Natural Resources Conservation Service**

Major Land Resource Area 246X
Arctic Coastal Plain

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Description

The Arctic Coastal Plain MLRA (MLRA 246X) consists of level to gently rolling plains along the coast of the Arctic Ocean. This area makes up 22,235 square miles. It is mostly remote, sparsely populated wildland. Numerous rivers, mostly originating in the Brooks Range, drain to the Arctic Ocean. The largest being the Canning, Colville, Jago, Kongakut, Kuk, Utukok, and Sagavanirktok Rivers. Narrow, nearly level flood plains and stream terraces parallel the many rivers. The area is dotted by thousands of small and medium-size lakes and interconnecting wetlands. Many of the lakes are elongated thaw lakes, which are consistently oriented from north to northwest. Small sand dunes occur along the coastline, rivers, and plains. Elevation ranges from sea level to about 655 feet. The dominant soil order in this MLRA is Gelisols. Most have an aquic soil moisture regime. The Gelisols are shallow or moderately deep to permafrost, occur on fine and coarse textured sediments, and are generally poorly drained or very poorly drained. Common Gelisol suborders are Histels, Orthels, and Turbels. The Histels have a glacic layer and/or thick accumulations of surface organic material and are associated with ice-wedge troughs of polygons, vegetated lake basins, swales, and low-gradient drainageways. The Orthels and Turbels have comparably thinner surface organic material and occur on flood plains, stream terraces, plains, and the centers of low- and high-center polygons. Miscellaneous (non-soil) areas make up about 20 percent of this MLRA. The most common are water, riverwash, and beaches.

Ecological site keys

MLRA 246 - Arctic Coastal Plain - Provisional Ecological Site Key

I. Wetland soils. Any soils that flood, pond, and/or have a water table at very shallow to shallow depth during the growing season (0 to 10 inches). Includes all soils associated with ice-wedge.

A. Soils on landforms that have ice-wedge polygons making a distinct mosaic of vegetation. These vegetation models are ecological site complex.

1 Landforms with a mosaic of low- and high-center ice-wedge polygons. Common landforms include stream terraces and relict lakebeds. ... R246XY005AK – Arctic Ice-Wedge Polygon Complex

2 Landforms that predominately have high-center ice-wedge polygons. Common landforms are slopes of plains. ...
R246XY009AK – Arctic High-Center Polygon Complex

B. Not as above.

1 Soils on shore complex with tidal flooding (Estuarine Fringe Wetlands)

i. Proximal to shore (height/distance); periodic tidal flooding. Common landforms include estuaries, tidal flats, and lower tidal marsh. Permafrost does not typically occur in the soil profile. ... R246XY050AK – Arctic Sedge Loamy Tidal Marsh

ii. Distal to shore (height/distance); sporadic tidal flooding. Common landforms include backshores and upper tidal marsh. Permafrost occurs in the soil profile. ... R246XY051AK – Arctic Shrub Loamy Frozen Tidal Marsh

2 Not as above, freshwater wetlands.

i. Depressions. Includes recently drained lakebeds and other depressions on floodplains, stream terraces, and plains. ...
R246XY014AK – Arctic Sedge Peat Frozen Depressions

ii. Not as above.

a. Frequent to rare flooding, riparian wetland with channel driven hydrology.

1) **Soils are capped with 8 or more inches of peat and mucky peat. Permafrost occurs in the soil profile. Common landforms are swales and low-gradient drainageways. ...** R246XY008AK – Arctic Sedge Peat Frozen Drainageways

2) **Mineral soils that lack thick peaty surface layers. Common landforms include floodplains and incised drainageways. ...** R246XY004AK – Arctic Shrub Sandy Flood Plains

b. **No flooding. Flats and slopes, includes stream terraces. ...** R246XY002AK – Arctic Sedge Loamy Frozen Terraces

II. Not as above. Mesic to dry, non-wetland soils.

A. Soils on active and relict dunes, blowouts, and eroded bluffs. ... R246XY012AK – Arctic Dwarf Scrub Sandy Coastal Plain