Major Land Resource Area 227X
Copper River Basin

Accessed: 12/15/2025

Ecological site keys

MLRA 227X - Provisional Ecological Site/Group Key

I. Site occurs along a river or stream AND is frequently to occasionally flooded

A. Site floods frequently, resulting in plant communities dominated by willows, graminoids, alders, and poplars (ESG 1 - Low Floodplains)

1 Soils are very poorly-drained

i. Site occurs on a riverbank dominated by sedges and grasses. Willows and other shrubs are sparse or absent ... R227XY500AK – Loamy Riverbanks

ii. Site does not occur on a riverbank…OR, if site is adjacent to the stream channel it supports willows as well as sedges, grasses, and herbs

a. Site occurs on floodplains and supports herbaceous and woody scrub vegetation ... R227XY205AK – Loamy Flood Plain, Wet

b. Site occurs on Wet depressions and supports a wet sedge-low scrub community ... R227XY501AK – Wet Depressions

2 Soils are drier than very poorly

i. Soil textures are sandy and gravelly ... R227XY200AK – Gravelly Flood Plains, Moderately Wet

ii. Soil textures are coarse-loamy or finer ... R227XY201AK – Loamy Flood Plains, Moderately Wet

B. Site floods rarely or occasionally, resulting in spruce establishment and mixed forests of conifers, willow, alders, and poplar (ESG 2 - High Flood Plains)

1 Soils are somewhat poorly-drained to moderately well-drained ... F227XY100AK – Loamy Flood Plains

2 Soils are well-drained to excessively well-drained ... F227XY101AK – Loamy High Flood Plains

II. Site does not occur along a river or stream, OR, site occurs near a river or stream but never or very rarely floods

A. Shallow soils, with bedrock less than 20 inches (50 cm) below the mineral soil surface (ESG 7 - Shallow Bedrock)

1 Elevations below 2900 feet ... F227XY110AK – Mountain Slopes, Shallow

2 Elevations above 2900 feet ... R227XY203AK – Upper Mountains Slopes, Shallow

B. Soils not shallow, bedrock greater than 20 inches (50cm) below the mineral soil surface

1 Permafrost soils, frozen less than 60 inches (150 cm) below the soil surface throughout the year (ESG 4 - Frozen Terraces and Uplands)

i. Soils ruptic, with high amounts of freeze-thaw action resulting in a broken pit and mound surface topography on silty lacustrine sediments ... F227XY109AK – Glaciolacustrine Uplands, Ruptic

ii. Soils not ruptic (as described above)

a. Soils are very poorly-drained ... R227XY105AK – Terraces, Wet

b. Soils drier than very poorly-drained

1) Soil poorly-drained or somewhat poorly-drained

a) Site occurs on stream terrace ... F227XY103AK – Stream Terraces Frozen

b) Site occurs on lacustrine terrace, outwash terrace, or till plain ... F227XY107AK – Glaciolacustrine Uplands, Frozen

2) Soils moderately well-drained or well-drained

a) Site occurs as a frozen peat mound (pingo or palsa) 2-30 feet in height, consisting of frozen organic soil material underlain by a large mass of ice ... F227XY111AK – Peat Mounds

b) Site occurs on high floodplain or stream terrace ... F227XY102AK – Laomy High Flood Plains, Frozen

2 Soils not frozen within 60 inches (150 cm) of the soil surface for at least part of the year

i. Site occurs in an exposed upland position, prone to wind scour AND does not support forest plant communities (ESG 6 - Exposed Uplands)

a. Site occurs on very steep lacustrine escarpments, 20-80% slopes ... F227XY800AK – Escarpments

b. Site occurs on pitted outwash plains and hills, 0-30% slopes ... R227XY204AK – Gravelly and Sandy Hills

ii. Site is not prone to wind scour AND supports forest vegetation (ESG 5 - Non-frozen Terraces and Uplands)

a. Soils sandy to sandy-skeletal in texture AND excessively-drained to somewhat excessively-drained ... F227XY108AK – Gravelly and Sandy Terraces

b. Soils finer than sandy in texture AND well-drained

1) Site occurs on stream terraces ... F227XY104AK – Stream Terraces

2) Site does not occur on a stream terrace ... F227XY106AK – Glaciolacustrine Uplands