

# Major Land Resource Area 230X Yukon-Kuskokwim Highlands

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## Ecological site keys

### Nulato Hills AK630 Survey\_ full key

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#### I. Maritime

##### A. Coastal Plains

1 Berms - R240XY136AK

2 Talfs

i. Scrub Coastal Plain - R240XY135AK

ii. Grass Tidal Plains and Depressions - R240XY139AK

##### B. All Other Landforms

1 Plains

i. Lava Flow (or Proximal to Lava Flow)

a. Lava Flow

1) Lava flow - R240XY151AK

2) Swale on lava flow - R240XY150AK

b. Proximal to lava flow

1) Boulder field - well drained - R240XY155AK

2) Tussock tundra - poorly drained - R240XY166AK

ii. Other Landforms

a. Polygonal ground - R240XY169AK

b. Non-polygonal ground

1) Concave landforms

a) Organic soil - swale, drainageway, depression - R240XY162AK

b) Mineral soil

(1) Drainageway - R240XY160AK

(2) Swale - R240XY161AK

2) Linear and Convex landforms and microfeatures

a) Plain talf - R240XY166AK

b) Peat mounds - R240XY162AK

2 Mountains and Hills

i. Dunes and Sandy Ridges ... F230XY113AK – Woodland Terrace, non-thermokarst

ii. All Other Landforms

a. Hills and Low Elevation Mountains

1) Volcanic Cones

a) Backslopes, warm - R240XY153AK

**b) Backslopes and shoulders, moist - R240XY180AK**

**2) Slopes - broad, bedrock controlled**

**a) Upper Mountain Sites - summits, shoulders, upper backslopes & saddles**

**(1) Summits & Shoulders**

**(a) Summits - R240XY183AK**

**(b) Shoulders - R240XY182AK**

**(2) Upper Backslopes and Saddles**

**(a) Slopes**

**(1) Upper Backslopes**

**(a) Dry slopes**

**(1) Linear - R240XY181AK**

**(2) Exposed - R240XY186AK**

**(b) Moist slopes - R240XY150AK**

**(2) Saddles - R240XY168AK**

**(b) Slope microfeatures: depressions & mounds - R240XY162AK**

**b) Other Slopes**

**(1) Drainageway & associated flood plain - R240XY160AK**

**(2) Slopes**

**(a) Backslopes and Noseslopes**

**(1) Lower elevation - alder slopes**

**(a) Dryer sites - R240XY150AK**

**(b) Moist sites - R240XY180AK**

**(2) Higher elevations - ericaceous scrub**

**(a) Dry sites - R240XY168AK**

**(b) Moist sites - R240XY181AK**

**(b) Headslopes and Footslopes**

**(1) Boulders present - R240XY155AK**

**(2) Boulders absent**

**(a) Forest sites - F240XY146AK**

**(b) Scrub sites**

**(1) Swales and Narrow Headslopes - R240XY172AK**

**(2) Headslopes of wide valley - R240XY173AK**

**b. High Elevation Mountains**

**1) Summits, Shoulders and Upper Backslopes**

**a) Alpine**

**(1) Summits - R240XY183AK**

**(2) Other Landforms**

**(a) Shoulders**

**(1) Warm Slopes - R240XY185AK**

**(2) Cold Slopes - R240XY184AK**

**(b) Upper Backslopes - R240XY182AK**

**b) Subalpine**

**(1) Permafrost absent - R240XY181AK**

(2) Permafrost present - R240XY168AK

2) Other Mountain Positions

a) Drainageways

(1) Heather scrub valley terrace ... R230XY112AK – Scrub Terrace, poorly drained

(2) Willow drainage - poorly drained

b) Backslopes

(1) Very steep slope - R240XY186AK

(2) Slopes less than 45%

(a) Linear to convex slope - R240XY186AK

(b) Linear to concave slope

(1) Wetter sites - swales and concave lower backslopes - R240XY187AK

(2) Drier sites - linear to concave mid backslopes - R240XY180AK

II. Boreal

A. Organic depressions ... R230XY100AK – Open Scrub Organic Depressions

B. Other Landforms

1 Mountains and Hills

i. Saddles ... R230XY131AK – Subalpine Open Tall Scrub Saddles

ii. Other Mountain Positions

a. Summits, Shoulders and Convex Backslopes ... F230XY102AK – Woodland Low Mountain Slopes, dry

b. Other Mountain Positions

1) Headslopes ... F230XY121AK – Woodland Tall Mountain Backslopes, wet

2) Backslopes and Toeslopes

a) Backslopes

(1) Steep, dry slopes - F240XY193AK

(2) Other Backslopes

(a) Warmer, drier slopes

(1) Mixed woodland ... F230XY105AK – Open Forest Hill Slopes, steep

(2) Spruce woodland ... F230XY102AK – Woodland Low Mountain Slopes, dry

(b) Wetter slopes ... F230XY102AK – Woodland Low Mountain Slopes, dry

b) Toeslopes and Footslopes

(1) Colder, wetter areas ... F230XY103AK – Woodland Low Mountain Slopes, wet

(2) Warmer, drier areas ... F230XY102AK – Woodland Low Mountain Slopes, dry

2 Flood Plains and Valleys

i. Thermokarst Landscape ... F230XY108AK – Woodland Terrace, thermokarst

ii. Non-thermokarst Landscape

a. Drainages on Flood Plains and Terraces ... R230XY119AK – Closed Scrub Valley Flood Plain, poorly drained

**b. Flood Plains and Terraces**

**1) Flood Plains**

**a) Depressions on Flood Plain ... R230XY109AK – Meadow Floodplain Depression**

**b) Flood Plains**

**(1) River Flood Plain**

**(a) Braided river system ... F230XY110AK – Forest Floodplain, braided river system**

**(b) Mountain stream system ... R230XY111AK – Open Scrubland Valley Flood Plain, somewhat poorly drained**

**(2) Mountain Drainage ... R230XY119AK – Closed Scrub Valley Flood Plain, poorly drained**

**2) Terraces**

**a) Depression on Terrace ... R230XY100AK – Open Scrub Organic Depressions**

**b) Terraces**

**(1) Earth hummocks absent ... R230XY112AK – Scrub Terrace, poorly drained**

**(2) Earth hummocks present ... F230XY113AK – Woodland Terrace, non-thermocarst**

**AK630 Survey\_MLRA 230 only**

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**2) Backslopes and Toeslopes**

**a) Backslopes**

**(1) Steep, dry slopes - F240XY193AK**

**(2) Other Backslopes**

**(a) Warmer, drier slopes**

**(1) Mixed woodland ... F230XY105AK – Open Forest Hill Slopes, steep**

(2) **Spruce woodland** ... F230XY102AK – Woodland Low Mountain Slopes, dry

(b) **Wetter slopes** ... F230XY102AK – Woodland Low Mountain Slopes, dry

**b) Toeslopes and Footslopes**

(1) **Colder, wetter areas** ... F230XY103AK – Woodland Low Mountain Slopes, wet

(2) **Warmer, drier areas** ... F230XY102AK – Woodland Low Mountain Slopes, dry

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**i. Thermokarst Landscape** ... F230XY108AK – Woodland Terrace, thermokarst

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**2) Terraces**

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**b) Terraces**

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(2) **Earth hummocks present** ... F230XY113AK – Woodland Terrace, non-thermokarst

**MLRA\_230**

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a) Depression on Terrace ... R230XY100AK – Open Scrub Organic Depressions

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- (1) **Earth hummocks absent** ... R230XY112AK – Scrub Terrace, poorly drained
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## MLRA 230X Provisional Ecological Site Key

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### I. Flooding Landforms

- A. **Flood Plains - no permafrost, no ponding** ... R230XY601AK – Boreal Forest Flood Plain Complex
- B. **Drainages - permafrost, ponding** ... R230XY610AK – Boreal Scrub Silty Frozen Drainages

### II. Not as above

- A. **Organic Slope Depressions** ... R230XY606AK – Boreal Sedge Peat Depressions
- B. **Slopes - not as above**

#### 1 Alpine & Subalpine Climate

##### i. Alpine

- a. **Soils without a growing season water table, commonly well drained soils** ... R230XY630AK – Alpine Dwarf Scrub Gravelly Slopes
- b. **Soils with a very shallow water table, commonly poorly drained soils** ... R230XY634AK – Alpine Sedge Gravelly Frozen Slopes

##### ii. Subalpine

- a. **Water table between 20 and 40 inches in June, commonly somewhat poorly drained soils.** ... R230XY632AK – Subalpine Tall Scrub Gravelly Moist Slopes
- b. **Soils without a growing season water table, commonly well drained soils** ... R230XY633AK – Subalpine Scrub Loamy Slopes

#### 2 Boreal Slopes

##### i. Wetland Soils (Poorly to Very Poorly Drained)

- a. **Frequent, long ponding, very poorly drained; includes peat plateaus** ... R230XY620AK – Boreal Peat Frozen Flats Complex
- b. **Soils do not pond but have a very shallow water table; poorly drained.** ... F230XY611AK – Boreal Forest Loamy Frozen Slopes

##### ii. Upland Soils

- a. **Moist Soils. Water table commonly at 10-20 inches during extended portions of the growing season (somewhat poorly drained).** ... F230XY613AK – Boreal Forest Loamy Moist Slopes
- b. **Drier Soils**

1) **Slope mostly >20%** ... F230XY615AK – Boreal Deciduous Forest Loamy Steep Slopes

2) **Slope mostly <20%**

a) **Warm Slopes, thin (<6") organic cap** ... F230XY612AK – Boreal Forest Loamy Slopes

b) **Cool Slopes, thick (>6") organic cap** ... F230XY614AK – Boreal Black Spruce Unfrozen Well Drained Slopes