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Major Land Resource Area 225X
Southern Alaska Peninsula Mountains

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Description

Major Land Resource Area 225X (Southern Alaska Peninsula Mountains), herein called area, is in the Southern Alaska Land Resource Region (LRR). MLRA 225X covers approximately 23,935 square miles of the southern parts of the Kodiak Archipelago and the slopes of the southern Aleutian Mountains on the Alaska Peninsula. The landscape is comprised of rugged mountains separated by narrow valleys, with outwash plains and low hills towards the coast. Glaciers and ice fields cover the highest mountains. Flood plains are predominantly restricted to broad river valleys. Elevations range from sea level to 9,372 feet at the summit of Shishaldin Volcano. The soils and vegetation in this MLRA have been influenced by ash deposits from nearby Mount Katmai and surrounding volcanoes. This MLRA is primarily comprised of wilderness, with towns and villages primarily located along rivers, lakes, and the coast. Small villages are scattered along the coastline and include King Cove, Old Harbor, Karluk, and Larsen Bay among others. There is no road access to MLRA 225X from Anchorage, AK, and access is primarily via plane or boat. MLRA 225X, excluding high peaks and steep upper backslopes, was glaciated during the Late Pleistocene. Glacial deposits were eroded or covered by colluvium or alluvium during the Holocene, which comprises 60 percent of the current landscape. Modified glacial moraines and outwash landforms are prevalent. Volcanic activity continues through the present day, and ash deposits are represented in many of the soils of this MLRA. The dominant soil orders are Andisols, Histosols, and Inceptisols. Soils have a cryic temperature regime or subgelic soil temperature class, an aquic or udic soil moisture regime, and primarily amorphic mineralogy. Permafrost is sporadic in the Southern Alaska LRR. The primary soils in this MLRA developed from volcanic ash over colluvium or from thick organic material. Miscellaneous (non-soil) areas comprise greater than 50 percent of all acreage in this MLRA and includes “rock outcrops, rubble land, glaciers, riverwash, and beaches” (USDA-NRCS, 2022). The climate in this MLRA is shaped by maritime influences from Bristol Bay to the west and the Pacific Ocean to the south. Mountains effect local patterns in temperature and precipitation. Temperatures are typically cool throughout the year. The mean annual temperature at sea level is 37 to 43 degrees F. Precipitation ranges from 30 inches along the coast to over 100 inches at high elevations. Snowfall ranges from 50 to 200 inches and glaciers and icefields are present at higher elevations. This MLRA is dominated by tall alder and willow shrubs at lower elevations. Vegetation shifts to low and then dwarf shrubs at increased elevations. Herbaceous communities are on exposed plains and hills, and sedges dominate wet depressions. Balsam poplar forests are restricted to flood plains and warm, low mountain slopes in the northern parts of the MLRA (USDA-NRCS, 2022).

Ecological site keys

Land Resource Region (LRR) Break - Southern Alaska (W1) & Aleutian Alaska (W2)

I. LRR W1 - Southern Alaska concepts, noted for maritime climate including high precipitation, mostly dense forests and alpine areas supporting glaciers. Areas in MLRA 225 that meet these criteria include most of Kodiak Archipelago and all but the most western regions of the Alaska

II. LRR W2 - Aleutian Alaska concepts. Vegetation is shaped by island maritime climate, including cool temperatures and scouring winds. Trees are absent. Areas in MLRA 225 that meet these criteria are mostly found at the far western end of the Alaska Peninsula..... See MLRA 226 Key

MLRA 225 Key

A. River Valleys & Riparian Complexes

1 Oxbows ... R225XY313AK – Southern Alaska Scrub Loamy Oxbows

2 Not Oxbows

i. Flood Plains, flooding frequent to rare ... F225XY310AK – Southern Alaska Riparian Complex Flood Plains

ii. Terraces, no flooding ... F225XY315AK – Southern Alaska Forest Loamy Terraces

B. Not as above

1 Shore complex, describing areas that are tidally influenced

i. Thick Organic Soil ... R225XY302AK – Southern Alaska Sedge Organic Depressions

ii. Not as above

a. Not a dune ... R225XY301AK – Southern Alaska Herbaceous Silty Coastal Plain

b. Dunes ... R225XY304AK – Southern Alaska Graminoid Sandy Dunes

2 All other areas, not tidally influenced

i. Alpine slopes, on exposed slopes at or above 2,000ft elevation ... R225XY330AK – Alpine Dwarf Scrub Slopes

ii. Non-alpine slopes, generally below 2,000ft elevation

a. Dry Soils. Water does not occur in the soil profile, or if present, occurs at deep to very deep depths (Fits well-, moderately well-, and excessively well-drained Drainage Classes).

1) Local climate warm enough to support trees ... F225XY360AK – Southern Alaska Forest Loamy Hill Backslopes

2) Local climate is cool and does not support trees

i) Moderately steep or greater slopes gradient (Representative slope value > 25%) ... R225XY333AK – Southern Alaska Scrub Steep Backslopes

ii) Slope gradient less than above

a) Soils that contact bedrock

1) Very shallow to moderately deep soils ... R225XY334AK – Southern Alaska Scrub Shallow Ashy Backslopes

2) Deeper soils ... R225XY363AK – Southern Alaska Scrub Loamy Hill Backslope

b) Soils that do not contact bedrock ... R225XY335AK – Southern Alaska Tall Scrub Loamy Backslopes

b. Wet Soils. Water is shallow to moderately deep for part or all of the growing season (Fits poorly-, somewhat poorly- and very poorly drained Drainage Classes)

1) Depressions ... R225XY364AK – Southern Alaska Scrub Loamy Plain Depressions

2) Wet, poorly drained, aquic soil ... R225XY337AK – Southern Alaska Scrub Wet Ashy Backslopes