

Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin

MLRA Explorer Custom Report

A - Northwestern Forest, Forage, and Specialty Crop Region
5 - Siskiyou-Trinity Area

MLRA 5 - Siskiyou-Trinity Area

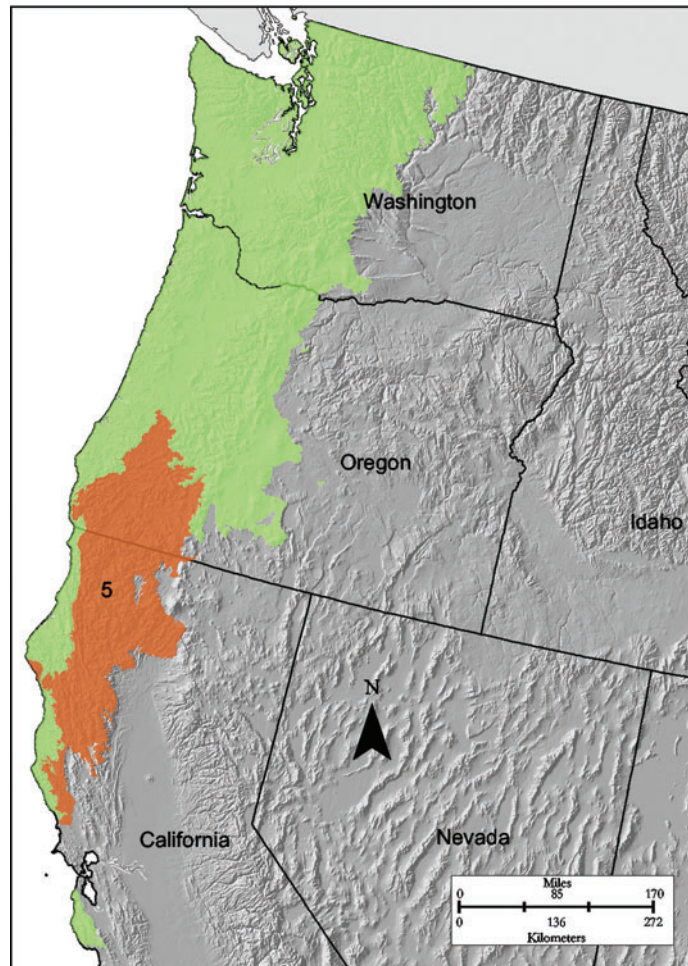


Figure 5-1: Location of MLRA 5 in Land Resource Region A

Introduction

This area (shown in fig. 5-1) is in California (62 percent) and Oregon (38 percent). It makes up about 20,150 square miles (52,215 square kilometers). The towns of Grants Pass, Medford, and Roseburg, Oregon, and Weaverville, California, are in this area. Interstate 5 crosses the northeast corner of the area, in Oregon. Many national forests, including the Umpqua, Rogue River, Siskiyou, Six Rivers, Klamath, Trinity, Shasta, and Mendocino National Forests, are in this area. National wilderness areas occur within almost all the national forests. The Hoopa Valley and Round Valley Indian Reservations are in this MLRA.

Physiography

The eastern half of the northern third of this area is in the Middle Cascade Mountains Section of the Cascade-Sierra Mountains Province of the Pacific Mountain System. This section is an area of steep mountainous terrain with generally accordant summits interspersed with higher volcanic cones. The Klamath Mountains Section of the Pacific Border Province of the Pacific Mountain System forms the western half of the northern third of this MLRA and also makes up most of the remaining area to the south. This section consists of an uplifted and eroded peneplain on very hard rocks. Numerous higher peaks are in scattered areas throughout this mountainous region. The “Trinity Alps” and “Marble Mountains” are in this province. The southeast portion of this MLRA is in the California Coast Ranges Section of the Pacific Border Province of the Pacific Mountain System. This section consists of parallel ranges and valleys underlain by folded and faulted metamorphic rocks. In this section, peaks are rounded and landslides are a dominant geomorphic process.

Elevation generally ranges from 330 to 6,000 feet (100 to 1,830 meters), but on some mountain peaks it is 8,850 feet (2,700 meters). Rounded but steeply sloping mountains are dominant. These mountains are underlain mainly by sandstone and shale. In some areas, however, the mountains are underlain by granodiorite, gabbro, and other intrusive rocks. The narrow valleys have gently sloping flood plains and alluvial fans and are bordered by strongly sloping foothills.

The extent of the major Hydrologic Unit Areas (identified by four-digit numbers) that make up this MLRA is as follows: Klamath-Northern California Coastal (1801), 55 percent; Oregon-Washington Coastal (1710), 37 percent; and Sacramento (1802), 8 percent. The Rogue River in Oregon and the Eel, Trinity, and Klamath Rivers in California are the largest rivers in this MLRA. Reaches of the Rogue, Illinois, Smith, Klamath, Salmon, and Eel Rivers are designated as Wild and Scenic Rivers in this area.

Geology

Most of this area consists of Mesozoic, marine sandstones and shales. In some areas granodiorite, gabbro, and other intrusive rocks of the same age are dominant. Mesozoic ultramafic rocks also are included in this area. All of these rocks have been metamorphosed to some extent. An extensive area of older Paleozoic marine sediments occurs in the south half of this area. These marine sediments are cut by the Mesozoic volcanics common in the north. The rocks in the south have also been strongly metamorphosed.

Climate

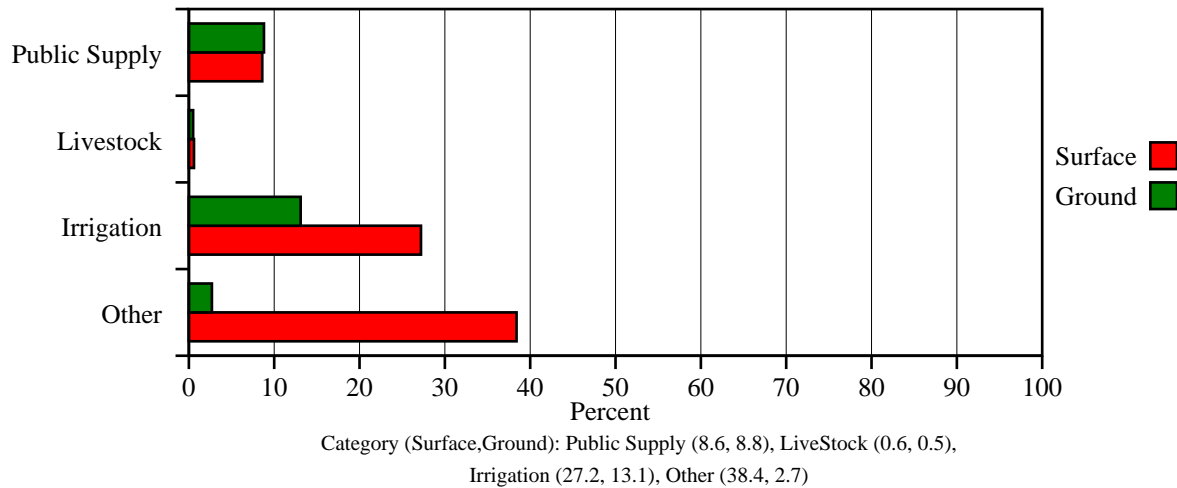
The average annual precipitation is 14 to 20 inches (355 to 510 millimeters) at the lower elevations and as much as 200 inches (5,080 millimeters) in the mountains. Most of the rainfall occurs as low-intensity, Pacific frontal storms. Rain turns to snow at the higher elevations. Very little precipitation occurs in summer. Most of the precipitation occurs between November and April. The average annual temperature is 40 to 62 degrees F (5 to 17 degrees C), decreasing with elevation. The freeze-free period averages 240 days and ranges from 110 to 365 days. The shorter freeze-free periods occur at the higher elevations.

Water

The total withdrawals average 150 million gallons per day (565 million liters per day). About 25 percent is from ground water sources, and 75 percent is from surface water sources. The moderate to high precipitation provides enough water in the mountains and higher valleys for most needs. The mountains also supply irrigation water for the lower, drier valleys. The surface water is suitable for almost all uses.

There are no major aquifers in the Klamath Mountains or the Coast Range. Ground water is abundant, however, in alluvial deposits in most valleys. The surface and ground water generally meets the recommended standards for all uses.

MLRA 5 Water Use by Category



Soils

The dominant soil orders in this MLRA are Alfisols, Inceptisols, and Ultisols. Xerolls are of minor extent on the grasslands. The soils in the area dominantly have a mesic soil temperature regime, a xeric soil moisture regime, and mixed mineralogy. They generally are moderately deep or deep, well drained, and loamy and occur on mountain slopes and hills. Dystroxerepts (Beekman, Neuns, and Sheetiron series) formed in colluvium or in colluvium over residuum. Shallow Dystroxerepts (Maymen and Vermisa series) formed in residuum. Haploxeralfs (Casabonne, Hopland, Sanhedrin, Speaker, and Vannoy series) and Haploxerults (Josephine series) formed in colluvium over residuum. Argixerolls and Haploxerolls (McNull, McMullin, Medco, and Yorktree series) formed in colluvium and residuum on low hills.

Biology

This area supports forest, open forest, and grassland vegetation. Douglas-fir, ponderosa pine, sugar pine, incense-cedar, white fir, red fir, tanoak, Oregon white oak, California black oak, canyon live oak, and Pacific madrone are the dominant tree species. Poison-oak, snowberry, ceanothus, manzanita, and rose characterize the forest understory. Blue wildrye, fescues, bluegrass, mountain brome, and some browse species are in the understory in open stands of timber. Soft chess, wild oats, burclover, fescues, and bromes are the major grassland species.

Some of the major wildlife species in this area include amphibians and reptiles along with black bear, mountain lion, mule deer, black-tailed deer, coyote, fox, raccoon, ring-tailed cat, porcupine, skunk, mink, squirrel, grouse, northern spotted owl, band-tailed pigeon, mountain quail, and California valley quail. The species of fish in the area include coho and king salmon, steelhead, and trout.

Land Use

Most of this area is in coniferous forests that are important for wood products, wildlife habitat, and recreation. About one-tenth of the area is grazed, and a smaller acreage is cropped. The raising of livestock is the principal farm enterprise. Irrigated pasture, hay crops, and some truck crops are grown in the valleys where water is available. On the more sloping parts of the valleys, hay and pasture are grown as feed for livestock.

Because of steep slopes, erodible soils, and high rainfall, the major soil resource concern on uplands is erosion. The erosion hazard is severe if the plant cover is removed. Mass movement in the form of landslides and slips is a serious problem and a major source of sediment in the rivers. Older or improperly designed roads also contribute sediment. Other concerns include compaction from farming activities, impacts on the health of forestland, such as catastrophic wildfire, and maintenance of the content of organic matter in the soils.

Conservation practices on forestland generally include tree and shrub establishment, forest stand improvement, forest harvest trails and landings, critical area planting, and control of understory fuels. These practices improve forest health and reduce the impacts on wildlife. They also control erosion on access roads, protect riparian areas, and improve the habitat for fish.

Conservation practices on rangeland and other grazing land generally include prescribed grazing, fencing, and water management. Conservation practices on cropland generally include irrigation water management and nutrient management. The cropland and grazing land practices help to keep erosion within acceptable limits in the fields, protect riparian areas, and reduce the hazard of streambank erosion.

MLRA 5 Land Use by Category

