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1986

NBMG OPEN FILE REPORT 86-3
(supplements NBMG Map 2Ae)

VEGETATION
SOUTH LAKE TAHOE QUADRANGLE
NEVADA AND CALIFORNIA

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Prepared cooperatively by the
United States Geological Survey

This report has been edited, reviewed,
and approved by the U.S. Geological Survey.

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The distribution of natural vegetation within the South Lake Tahoe quadrangle is strongly influenced by elevation, varying soil types, and water availability (drainage patterns).

The principal vegetation of the quadrangle is pine and fir forest. Ponderosa pine (*Pinus ponderosa*), Jeffrey pine (*P. jeffreyi*), and white fir (*Abies concolor*) occur at the lower elevations, whereas California red fir (*A. magnifica*), western white pine (*P. monticola*), and some whitebark pine (*P. albicaulis*) and mountain hemlock (*Tsuga mertensiana*) occur at the higher elevations. Lodgepole pine (*P. contorta*) occurs at all elevations, typically in moist areas.

Shrubs and other plants common to the forest understory of the South Lake Tahoe quadrangle include several species of *Ceanothus*, greenleaf manzanita (*Arctostaphylos patula*), pinemat manzanita (*A. nevadensis*), big sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), rabbit brush (*Chrysothamnus nauseosus*), bush chinquapin (*Castanopsis sempervirens*), huckleberry oak (*Quercus vaccinifolia*), currants and gooseberries (*Ribes* sp.), bittercherry (*Prunus emarginata*), wild rose (*Rosa* sp.), mule ears (*Wyethia mollis*), lupine (*Lupinus* sp.), several wildflowers, and other herbs. Grasses are generally sparse.

Riparian vegetation occupying meadows, marshes, and stream banks is intermixed with the pine and fir forest. Although areas of riparian vegetation are not extensive, they are of special significance for management. They act as sediment and nutrient "traps," and therefore are extremely important in preserving the water quality of Lake Tahoe (U.S. Forest Service, 1979, p. 10). They are also a very important habitat for wildlife.

The alpine areas of higher elevations (generally more than 9,000 ft above sea level) are affected by temperature extremes, poor soils, intense solar radiation, and frequent high winds. Vegetative cover is therefore sparse, and on some rocky slopes it is virtually nonexistent. The limited growth includes western white pine, whitebark pine, mountain hemlock, wild daisy (*Erigeron* sp.), gilia (*Gilia* sp.), knotweed (*Polygonum* sp.), wild onion (*Allium* sp.), saxifraga (*Saxifraga* sp.), chaenactis (*Chaenactis* sp.), sibbaldia (*Sibbaldia procumbens*), elephant heads (*Pedicularis groenlandica*), and scattered grasses.

The South Lake Tahoe quadrangle also includes a few areas dominated by shrubs, a few relatively large disturbed areas, and some urban development near the lake shore.

The timber is almost entirely second growth. The original forest was logged off between 1873 and 1890 to provide fuel and shoring timbers for the gold and silver mines in the Virginia City area (Rogers, 1974, p. 1). Lumbering activities ended when the Comstock Lode was depleted. In the subsequent 80-100 years, natural revegetation has created rather even-aged stands of timber.

In more recent years, the vegetation has been affected by the construction of residential and commercial buildings, roads, ski slopes, campgrounds, and other developments. The result in some areas has been a removal of vegetation or the introduction of a few nonnative grasses. Thus, the current vegetation in this quadrangle is generally a modification of what existed prior to human influence.

The map explanation lists only the dominant species of vegetation, and this text lists some, but not all, additional species. The actual boundaries between plant communities, especially between forest types, are commonly quite diffuse, rather than abrupt as implied on the map.

REFERENCES

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- U.S. Forest Service (1979) Draft environmental impact statement. Lake Tahoe Basin Management Unit, land management plan--part 2: San Francisco, Calif., Pacific Southwest Region report, 179 p.