The state's most profound topographic feature, the Cascade Mountain Range, rises nearly two miles above sea level. These towering volcanic peaks set apart the eastern two-thirds of the state as a mile-high desert. To the west, Oregon's Coast Range is being elevated slowly while the Willamette Valley, already near sea level, is sinking. This movement is apparent today at raised beaches and headlands; it will be unmistakably apparent in the Willamette Valley far in the future when sea water begins to invade the valley. Barring intervention, the area will become Willamette Sound, like its northern counterpart, Puget Sound.

Heavily eroded drainage systems and long, meandering estuaries give the western edge of the continent a ragged appearance.

The political boundaries of Oregon position the state at the crossroads of many massive landform regions called physiographic provinces. Only 40 percent of the Klamath Mountains project into southwest Oregon from California, while in the northeast the Blue Mountains are almost fully within the state's boundaries. The Cascade Range, extending from Northern California across Oregon and Washington into British Columbia, has about 35 percent of its length in Oregon; the Coast Range is shared almost evenly with Washington. The Columbia Plateau has roughly 20 percent of its exposure in north-central Oregon, but less than 5 percent of the vast Basin and Range province lies in south-central Oregon. Representing about 12 percent of the whole, the Owyhee Plateau, part of the Payette section that reaches into the southeastern corner of Oregon, is the southwestern end of a linear track of volcanic activity that stretches through Idaho and Wyoming.

Physiographic Provinces and Sections