



Local Climate

The primary influence on the climate of Grays Harbor and Pacific Counties, Washington, is the Pacific Ocean, which forms the western boundary of both counties. The seasonal change in the ocean temperature is less than that of the land, thus the ocean is warmer than the land in the winter and cooler than the land in the summer, moderating the land temperature throughout the year. Considering our high latitude, this marine influence results in a generally mild climate. The average maximum temperature in July is near 70° F along the coast and 75° F in the foothills, and minimum temperatures are near 50° F. In winter, the warmer areas are near the coast. In January, average maximum temperatures range from 43° to 48° and minimum temperatures from 32° to 38° F.

Semi-permanent high and low-pressure areas over the North Pacific Ocean are the primary weather engines which control the climate of western Washington. During the spring and summer, a high-pressure area spreads over most of the North Pacific Ocean. A circulation of air around this high-pressure center brings a prevailing westerly and northwesterly flow of comparatively dry, cool and stable air into the Pacific Northwest. As the air moves inland, it becomes warmer and drier, which results in a dry season beginning in the late spring and reaching a peak in mid-summer. During July and August, the driest months, it is not unusual for two to four weeks to pass with only a few showers. During the latter half of the summer and early fall, the lower valleys are sometimes filled with fog or low clouds until noon, while at the same time, the higher elevations are sunny.



In the fall and winter, the Aleutian low-pressure center over the North Pacific Ocean intensifies and moves southward, reaching a maximum intensity in midwinter. A circulation of air brings a prevailing southwesterly and westerly flow of air into the Pacific Northwest. This air from over the ocean is moist and near the temperature of the water. Condensation occurs as the air moves inland over the cooler land and rises along the windward slopes of the mountains. This results in a wet season beginning in October, reaching a peak in winter, then gradually decreasing in the spring. In December and January, the wettest months, precipitation is frequently recorded on 20 to 25 days or more each month, with the heavier intensities occurring along the windward slopes of the Olympic Mountains and Willapa Hills. Rainfall is usually of light to moderate intensity and continuous over a period of time, rather than heavy, brief downpours.

The Olympic Mountains, located on the northern section of the Olympic Peninsula, tower to nearly 8,000 feet in the dome-like structures, deeply carved by rivers. The Willapa Hills, elevation 1,000 to 3,000 feet, form a continuous ridge from the Chehalis River valley to the Columbia River. This area receives the full force of storms moving inland from over the ocean, thus heavy precipitation and winds of gale force occur frequently during the winter season. Wind velocities in the lower elevations can be expected to reach 90 to 100 m.p.h. once in 100 years. Wind data from a well exposed site on a ridge near the ocean, elevation 2,000 feet, indicates that wind velocities in excess of 100 m.p.h. occur in the higher elevations almost every winter. The strongest winds are generally from the south or southwest and occur during the late fall and winter.

Source: "CLIMATE OF WASHINGTON". Western Regional Climate Center.
<http://www.wrcc.dri.edu/narratives/WASHINGTON.htm>