

## **Coastal Weather Patterns by Rebecca Lexa**

The Willapa National Wildlife Refuge is very close to the ocean, with coastline bordering the western side of Leadbetter Point. Even the units that are further inland are still heavily affected by coastal weather patterns. While the worst of winter's weather is behind us, spring and summer can still show a great variety in temperature and precipitation.

One of the causes of this variety is a marine push. During warmer months, the barometric pressure offshore is high, which cools the air there. Meanwhile on land, warm air moving in from the eastern part of Washington, and the sun's heat, mean that the pressure is lower and the temperatures are higher. Clouds may form over the ocean, and as the warm air on land rises, the cooler ocean air moves in, bringing the clouds and fog with it. While the temperature can change by over twenty degrees in a few hours, a marine push generally won't cause as great a shift as its cousin, the alongshore surge.

This occurs when a larger mass of cool air moves up the Pacific coast from the south. Warm temperatures suddenly drop, and winds shift quickly from northeast to southwest, sometime within minutes. Heavier wind gusts may occur, and a formerly sunny sky becomes completely overcast.

This means that even if you visit the Refuge on a nice, sunny day it's a good idea to have a rain coat in your car, especially if the forecast calls for possible rain. If you see large stratus clouds in the southwest, you may wish to head indoors to avoid messier weather!