



U.S. Forest Service Climate Change Vulnerability Assessments

Science Management Partnerships Focused on Climate Change Adaptation in the Western United States

To access all of the climate change vulnerability assessments, along with a “Library” of climate change adaptation options, go to <http://www.adaptationpartners.org/>

The Project

The U.S. Forest Service (Pacific Northwest Region, Pacific Northwest Research Station) and the Northwest Climate Hub have developed science-management partnerships to conduct climate change vulnerability assessments and adaptation planning across all of the national forests (and adjacent national parks) in the Pacific Northwest. These vulnerability assessments cover hydrology, fish, vegetation, disturbance, wildlife, recreation, and other ecosystem services. The vulnerability assessments were used as the basis for developing adaptation options for the forests and partners. All of this information was incorporated into peer-reviewed and published general technical reports. The Mount Hood and Willamette National Forests plan to use the recently released assessment for their forests in planning and implementing post-fire restoration.



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Jessica Halofsky is the director of the USDA Northwest Climate Hub and the Forest Service Western Wildland Environmental Threat Assessment Center (WWETAC). In her role, Jessica promotes applied climate change science and adaptation in natural resources in the Northwest and across the West. Jessica has a background in forest ecology and fire but has been doing climate change adaptation work in the Northwest for over a decade. In her previous position, she pioneered one of the first climate change vulnerability assessment and adaptation projects with Olympic National Forest and Park. Since that initial project, Jessica has co-led eight other sub-regional to regional-scale climate change vulnerability assessment and adaptation partnerships around the western U.S.

The report (in press) **“Climate Change Vulnerability and Adaptation in the Columbia River Gorge, Mount Hood National Forest, and Willamette National Forest”** finds that:

“The vulnerability assessment shows that the effects of climate change on hydrology in the CMWAP [Columbia River Gorge National Scenic Area, Mount Hood National Forest, and Willamette National Forest] assessment area will be significant, primarily because decreased snowpack and earlier snowmelt will shift the timing and magnitude of streamflow; peak flows will be higher, and summer low flows will be lower. Projected changes in climate and hydrology will affect aquatic and terrestrial ecosystems, especially as frequency of extreme climate events (drought, low snowpack) and ecological disturbances (flooding, wildfire) increase.”