



<b>VULNERABILITY</b>	Low	Low-Med	<b>MED</b>	Med-High	High	Very High
<b>PRIORITY</b>	Low	Low-Med	Med	Med-High	High	<b>VERY HIGH</b>

<b>IMPORTANCE</b>	<b>POTENTIAL IMPACTS</b>	<b>ACTIONS</b>
<ul style="list-style-type: none"> <li>• Culture</li> </ul>	<ul style="list-style-type: none"> <li>• More Drought Stress</li> <li>• Fewer Western Redcedar</li> <li>• Altered Bark Harvest Times</li> </ul>	<ul style="list-style-type: none"> <li>• Increased Planting</li> <li>• Assisted Migration</li> <li>• Monitoring and Evaluation</li> </ul>

## WHY CEDAR IS IMPORTANT

The Jamestown S’Klallam people use western redcedar for building houses, making canoes and fishing gear, weaving baskets, and carving totems. Harvesting cedar remains an important component of self-identity, cultural expression, and artistic expertise of Tribal Citizens.



## POTENTIAL IMPACTS OF CLIMATE CHANGE

Increasing average temperatures and declining summer precipitation will increase drought stress in the northeastern portion of the Olympic Peninsula. Drought stress is correlated with increased insect attack, tree mortality, and higher wildfire risk. Western redcedar populations in these areas are projected to decline, interfering with successful harvest by Tribal Citizens.

Ideal harvesting for cedar bark, used in basket-making, occurs in the spring when temperature and precipitation conditions allow for easy removal of large bark strips with minimal harm to the tree. Tribal basket weavers have already noticed a shift in the optimal timing of these harvests to earlier in the year. Changing climate conditions are expected to continue to alter this timing.

- Increased Drought Stress
- Fewer Western Redcedar
- Shifting Harvest Times
- Increased Insect Attack, Tree Death, Wildfire

## ACTIONS TO INCREASE RESILIENCE

The promotion of cedar health and continued survival in the region will require adaptive management techniques and continued support of its cultural importance. Effective partnerships with other forest managers will ensure these efforts to increase resilience do not occur in isolation.

### NEXT STEPS

- Ensure that future plantings occur in areas that are protected and have high soil moisture content.
- Consider assisted migration, or helping cedar trees grow in regions where they have not historically been located, but where they are likely to survive given changing climate conditions.
- Create a monitoring and reporting system to track how redcedar abundance and yields are changing. Partner with traditional harvesters to gather on-the-ground observations.



Jamestown S'Klallam Tribe Artifact Collection Large Cedar Basket

## SHIFTING VEGETATION ZONES

Current vegetation distribution is shown (Halofsky et al. 2011). Climate change driven forest drying in the Northeast Olympic Peninsula could decrease abundance of western hemlock and western redcedar and promote growth of Douglas-fir and lodgepole pine.

