

## Case Study 2: Preparing for Impacts on Archeological Sites and Traditional Resources, *Olympic National Park, Washington*

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Tribal members share information about nearshore traditional resources at Crescent Bay in 2003. Image credit: Jacilee Wray, NPS.

### Goals

Archeological sites and traditional resources of significance to indigenous groups along the Olympic Coast are being affected by climate change. The goals of this project can be split into three facets. The first is for the park to foster communication, data sharing, and cooperation between the eight federally listed tribes on the Olympic Peninsula and the National Park Service (NPS) to ensure proper alignment of resources and priorities for climate change adaptation. The second is to work cooperatively with all stakeholders to develop long-term, proactive plans for managing coastal archeological sites in the face of sea level change and increased coastal erosion, including surveys for additional sites that could be threatened. A final goal is for the park and the tribes to move forward with the clear understanding that tribal resource concerns are best understood at the landscape level and without a sharp distinction between “natural” and “cultural” resources; cross-discipline participation and communication is critical.

### Challenges and Needs

The Olympic Coastal Strip, most of which is roadless and designated wilderness, includes a highly dynamic environment ranging from rocky headlands to broad sand beaches. Archeological sites and important traditional resources at Olympic National Park include terrestrial, intertidal, and submerged archeological resources as well as resources encompassed within offshore, nearshore, intertidal, and shoreline environments. These resources will be affected by sea level changes, inundation, and coastal erosion.

Coastal archeological sites, particularly shell middens, are actively eroding and will likely continue to do so. These sites are important to local tribes both for their traditional values and also for the cultural and scientific data they contain. Erosion of middens along the coast often exposes faunal remains, artifacts, and other sensitive materials that can be damaged or lost through wave action or inappropriate treatment by visitors. A worst-case scenario for exposed and highly visible coastal midden sites includes exposure of sensitive materials, increased unauthorized disturbances, and loss

of data. A major challenge in this regard is to develop and implement long-term management actions for coastal archeological sites given that erosion prevention is infeasible in most cases.

A critical need to guide future planning and adaptation is acquisition of updated baseline data on archeological site condition and potential climate-related threats.

One way to effectively address climate-related changes to the large variety of resources is for the NPS to work with tribes to identify important traditional resources. This includes working to understand how the resources were and are collected, how they were and are managed, and how they are affected by climate change. The development of appropriate adaptation strategies for archeological sites and traditional resources will require dedicated resources and staff to complete condition assessments and tribal consultation.

### **Responsive Actions**

Olympic National Park has identified and implemented several climate change adaptation actions on the Olympic Peninsula.

In 2008 the park and eight federally recognized tribes signed a Memorandum of Understanding (MOU) that guides consultation and data sharing among and between the participating groups. Required annual MOU meetings have been and will continue to be an excellent forum for climate change adaptation planning at the parkwide level and should be used to foster engagement for more detailed discussion and actions with individual tribes. The MOU agreement specifically provides for creation of workgroups to address issues like climate change in greater detail.

The park's cultural resources branch has submitted funding proposals to complete condition assessments and data collection for coastal archeological sites and to complete archeological surveys on raised beach terraces.

Park archeologists, in coordination with local tribes and park law enforcement staff, continue active monitoring of coastal archeological sites as staff time and resources permit.

This case study is an example of the following adaptation strategies:

- Conducting/gathering additional research, data, or products
- Communicating climate change or adaptation actions to the park and tribal partners

### **For more information:**

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