

# TRIBAL PROJECTS FUNDED BY NPLCC



The NPLCC takes seriously a commitment to supporting and partnering with the many Tribal/First Nations who inhabit the Northwest. We strive to fund our Tribal partners directly whenever possible. The list below details the Tribal projects funded by the NPLCC from 2012 until 2016. Almost one third of our funding to date has been directly distributed to Tribal partners.

The list is organized according to the subsections: Subsistence Resources; Traditional Knowledges; Assessments and Planning. These categories are not mutually exclusive and many projects overlap. Similarly, a project does not have to fall into any of these categories in order to receive funding from the NPLCC.

For those viewing the document online, more information on any project can be accessed by visiting the included website hyperlink.

## ***SUBSISTENCE RESOURCES***

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### **Studying Effects of Climate Change on the Traditional Gathering Calendar**

Organized Village of Kasaan, Alaska, 2012

The goal of this project was to interview multiple generations of tribal gatherers from the Craig, Hydaburg, Kasaan and Klawock Tribal communities on Prince of Wales Island to determine which resources are gathered and the weather conditions they are most commonly found in. This information, which included timings of gathering practices, factors influencing the ability to gather, and impacts of commercialization, comprised baseline data for a traditional gathering calendar. The inclusion of multiple generations allowed researchers to analyze how these practices have changed over time and assess how climate change might impact the seasonality of gathering resources.

Website [\(link\)](#)

### **Assessing Impacts of Climate Change on Pacific Lamprey and Pacific Eulachon**

Columbia River Inter-Tribal Fish Commission, Oregon/Washington, 2013

Pacific Lamprey and Pacific Eulachon, important first foods for Native American peoples of the Pacific Northwest, are facing unprecedented threats from habitat, temperature, and migration changes. This project evaluated the potential for Pacific Lamprey and Pacific Eulachon to survive under current climate change predictions. The project considered how changes to ocean conditions and freshwater habitat would impact the life cycles and survivability of these fish populations. Through communicating with many state, federal, university, and tribal organizations, the results are intended to inform a variety of management techniques throughout the Pacific Northwest.



Website [\(link\)](#)

## Mapping Relationships between Increasing Moths and Decreasing Berries

Chugachmiut Tribal Consortium, Alaska, 2013

Due to increasingly warmer winters in Alaska, Geometrid moth populations are growing larger and surviving longer than ever before. The Geometrid moth outbreaks are decimating salmonberry and blueberry plants, causing berry failures to be worse than at any time in elder memories or written history. This project developed a risk model to predict where subsistence berry plants will be most resistant to attacks from the Geometrid moth. The information could then be used to predict where treatments would be most successful in order to sustain a plentiful subsistence berry supply and fuel wood for wood energy projects.

Website [\(link\)](#)



## Climate Change and Fish-Bearing Streams in Western Washington

Point No Point Treaty Council, Washington, 2016

The rivers and tributaries of Northwest Washington State are home to several endangered species, including Summer Chum, Puget Sound Chinook, Steelhead, and Bull Trout. These species exist in traditional fishing areas and are essential to Tribal subsistence, cultural, and economic practices. This study will therefore provide streamflow predictions through the end of the 21<sup>st</sup> century under a range of climate change scenarios for five major streams and tributaries in the Olympic Peninsula. Such data will help to address vulnerability assessments and threats to habitat, while providing managers and governments with the first streamflow projections in the region.

Website [\(link\)](#)

## TRADITIONAL KNOWLEDGES

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### Sea-level Rise and Coastal Cultural Resources at Tolowa Dunes State Park, CA

California Department of Parks and Recreation, California, 2012

This project aimed to interview Tolowa elders from Elk Valley and Smith River Rancheria to document relationships between tsunamis and traditional smelt fishing camps. Due to coastal erosion from rising sea levels, archeological deposits are becoming exposed at Tolowa Dunes State Park, making cultural remains vulnerable to looting, animal disturbance, and weather erosion. Using the information generated from interviews with elders and GIS calculations, this project mapped the next century of inundation and overlaid this data with known archaeological and natural resources of importance to Tolowa people.

Website [\(link\)](#)

### Establishing Best Practices for Gathering and Sharing Traditional Knowledge

Central Council of Tlingit and Haida Indian Tribes of Alaska, Alaska, 2012

These funds provided support for the traditional gathering calendar developed by the Organized Village of Kasaan. The Central Council worked with the Southeast Alaska Tribes Climate Change Committee to create work plans for all Southeast Alaska Tribes to follow when initiating research into traditional ecological knowledge (TEK). The Central Council and SE Alaska Tribes Climate Change Committee met to support, review, and guide the process of the Organized Village of Kasaan's NPLCC grant.

Website [\(link\)](#)

### Utilizing Yurok Traditional Knowledge to Inform Climate Change Priorities

Yurok Tribe, California, 2012

This project collected knowledge from tribal elders on ecosystem function, community structure, species behavior, habitat use, traditional Yurok management approaches, and how each of these have changed over time. The information was then used to identify areas to prioritize for tribal research. The project also served as a model for other tribal and non-tribal entities who wish to utilize culturally-sensitive research methods, as, for example, traditional knowledge was used to identify climate change priorities without compromising the privacy of culturally-sensitive information.

Website ([link](#))

### Tribal Recommendations on the Use of Traditional Knowledge

Tulalip Tribes, Washington, 2012

Generating collaboration among 21 Tribes of the Northwest Indian Fisheries Commission, this project initiated the first large-scale inter-Tribal government discussions regarding the relationship between scientific research and traditional knowledge in NPLCC activities. Funding provided assistance for three regional meetings and resulted in a white paper outlining guidelines for respecting, understanding, and engaging with traditional knowledge in scientific research.

Website ([link](#))

### Tribal Knowledge and Self-Determination in the Face of Climate Change

Karuk Tribe, California, 2012

The homelands of the Karuk Tribe of the Klamath Basin, Northern California are largely owned by federal agencies such as the U.S. Forest Service, creating considerable challenges to the implementation of tribal restoration techniques and ability to exercise tribal sovereignty. The project identifies institutional and cultural barriers to the integration of TEK and Karuk management and subsequent proactive tools to overcome these barriers. Particularly in the context of the increasingly dangerous wildfires that spread rapidly throughout Karuk territory most summers, it is important that these barriers to traditional management are actively identified and improved.

Website ([link](#))



## Klamath Basin Traditional Ecological Knowledge and Climate Science Internship

Quartz Valley Indian Reservation, California, 2013

This internship provided 5 tribal college students the opportunity to conduct personal research projects under the mentorship of tribal leaders and federal scientists during the summer of 2014. Students from the Tribal Nations of the Klamath Basin were able to meet with and interview tribal elders and practitioners, learn federal forestry and fisheries monitoring techniques, and participate in conservation fieldwork, while gaining experience in environmental analysis,



management, and policy. Their final projects spanned an array of topics including fire management, traditional foods, gathering practices, community health, and aquatic restoration.

Website [\(link\)](#)

## Tribal Perspectives on Developing Resilience to Climate Change

Oregon Climate Change Research Institute, Oregon/Washington, 2016

In collaboration with the Quinault Indian Nation of Washington and the Confederated Tribes of Siletz Indians of Oregon, researchers will co-develop a guidebook for tribal climate change adaptation. Prioritizing Tribal values and the importance of knowledge held within Tribal communities, the guidebook will serve as a foundational document for many Tribal Nations and federal agencies.

Website [\(link\)](#)

## Creating an Inventory of British Columbia First Nations Engagement with Climate Change

British Columbia Ministry of Forests, Lands and Natural Resources (FLNRO), B.C., Canada, 2016

The British Columbia Ministry of FLNRO is creating an inventory of all climate change research, adaptation plans, vulnerability assessments, and mitigation projects that have been initiated by First Nation communities in British Columbia. The database will promote awareness of the environmental changes First Nations are witnessing while bridging an important information gap between natural resource managers and First Nations.

Website [\(link\)](#)

## ASSESSMENTS AND PLANNING

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### Heiltsuk Participation in Designating Forest Reserves

Heiltsuk Integrated Resource Management Department, British Columbia, Canada, 2012

Heiltsuk members collected spatial and photographic data, which was integrated with GIS mapping, to identify areas to set aside from logging and development over short and long timeframes. The project succeeded in increasing community awareness of the distribution of cultural features and resource values throughout Heiltsuk territory and providing baseline data from which to monitor impacts of climate change over time.

Website [\(link\)](#)

### Identifying Climate Vulnerabilities and Prioritizing Adaptation Strategies

Chilkoot Indian Association, Alaska, 2013

This project strives to complete a vulnerability assessment and adaptation plan for Eulachon that spawn in the Chilkoot and Chilkat rivers. Community members are involved in the collection of data on the spawning populations and the organizing of stakeholder meetings to analyze projections, apply community knowledge, and rank climate vulnerabilities. The project will result in tribally identified and prioritized adaptation strategies for Eulachon populations that are grounded in local monitoring efforts and are directly applicable to the citizen-based management of the fishery.

Website [\(link\)](#)

### Nooksack River Climate Change Vulnerability Assessment, River Restoration Planning, and Adaptation Plan

Nooksack Indian Tribe, Washington, 2014

With increasingly warming temperatures in the Pacific Northwest, studies report that glaciers are currently smaller than at any time in the last 4000 years. For the Nooksack Indian Tribe who

depend on resources from the Nooksack River, changes in snow melt are altering the temperature, sediment, and flow of the river. The purpose of this project is to evaluate the effect of climate change on glacier stability, and in turn, how this will influence Nooksack River flow regimes and fish. Data from such projections are used to conduct a vulnerability assessment, support salmon habitat restoration, and prepare an adaptation plan.

Website [\(link\)](#)

### Climate Change and Human Health in the Salish Sea: Developing Indigenous Health Indicators

Swinomish Indian Tribal Community, Washington, 2012

Through interviews with community members and climate modeling, participants tailored a series of Indigenous Health Indicators to evaluate the health of Indigenous communities and their traditional resources. The indicators include: community connection, natural resources security, cultural use, education, self-determination, and calm mind. Researchers evaluated how Swinomish communities were experiencing climatic changes through the lens of the Indigenous Health Indicators, and using widespread community input, ranked levels of concern and projected risks.

Website [\(link\)](#)



### Tribal Climate Change Partnership: Climate Science Connections Database

Pacific Northwest Tribal Climate Change Network, Entire NPLCC Region, 2015

The Pacific Northwest Tribal Climate Change Project works to build an understanding of the impacts that climate change may have on American Indian and Alaska Native tribal cultures and sovereignty. This grant supports the Network in building science connections between Tribes, developing an online database, and communicating among and beyond Tribes the needs, lessons, and opportunities that Native Nations have in planning for the effects of climate change.

Website [\(link\)](#)