



*We promote development, coordination, and dissemination of science to inform landscape-level conservation and sustainable resource management in the face of a changing climate and related stressors.*

## Summary

The area encompassed by the North Pacific Landscape Conservation Cooperative (NPLCC) supports an amazing number of native plant and animal species, a growing human population, and a rich diversity of natural resource-dependent traditions, cultures, and businesses. Resources within this 200,000-square-mile area are affected by climate change and other large-scale environmental disturbances. In close partnership with science and management organizations, the NPLCC will help coordinate development of science to inform its partners as they work to conserve and sustainably manage a variety of natural and cultural resources. As an international, member-driven partnership of Federal, State, and Provincial agencies, Tribes, nongovernmental organizations, universities, and others, the NPLCC builds on the institutional knowledge these cooperators provide to address challenges to resource management in the 21st century.

## Conservation Challenges in the North Pacific Region

The NPLCC extends from the Kenai Peninsula in south-central Alaska along the coasts of Canada, Washington, and Oregon to Bodega Bay in northern California. It includes landscapes and adjacent marine areas of the Kenai, Chugach, St. Elias, and Coast mountains of Alaska and Canada and portions of the Cascade, Klamath, and Coast mountains in Washington, Oregon, and California. In addition to the nearshore marine waters, there are nine terrestrial ecoregions within the North Pacific area (see map).

Natural resources in these areas are threatened by land-use changes, invasive species, and a variety of factors related to the region's changing climate. Climate change has already begun to affect the Pacific region. Predicting and preparing for these widespread changes will require new science along with a heightened level of coordination between resource managers and scientists across the North American continent.





Photograph taken by Sue L. Powell

## Rising to the Challenge through Science and Collaboration

In 2009, the Secretary of the Interior signed Order No. 3289, which laid out a specific plan to address the impacts of climate change on our Nation's natural and cultural resources. The Order called for the formation of Landscape Conservation Cooperatives (LCCs) to develop landscape-level strategies for understanding and responding to climate change and other natural resource threats. These cooperatives are management-science partnerships that identify specific conservation needs and initiate strategies to meet those needs. LCCs serve as a much-needed bridge between scientists, policy makers, and resources managers. The NPLCC is one of 22 LCCs established throughout the United States and portions of Canada and Mexico. They work in conjunction with eight national Climate Science Centers (CSCs) and other organizations that conduct climate-related research to provide management-relevant science to a broad coalition of partners across the region.

## What are the Goals of the NPLCC?

### Conservation and Restoration

Maximize the ability of partners to make informed decisions with respect to conservation and sustainable resource management of priority natural and cultural resources subject to climate change and related large-scale stressors in the NPLCC region.

### Identify Needs

Identify and address trans-boundary, landscape-level, natural and cultural resource information needs that the NPLCC is uniquely qualified to address, including the identification of opportunities for and barriers to landscape-level conservation and sustainable resource management.

### Information Priorities

Identify priorities for applied science and other information for conservation and sustainable resource management. Coordinate efforts with the relevant Climate Science Centers and other research entities to help inform research priorities.

### Use of Information

Promote identification, use, and sharing of science, traditional knowledge, and other relevant information to support conservation and sustainable resource management, and adaptive-management decisions.

### Availability of Information

Maximize the availability and accessibility of data and information about large-scale stressors and their impacts on natural and cultural resources, and about conservation and sustainable resource management approaches and effectiveness.

### Coordination

Promote coordination and efficiency of efforts among resource managers and science entities that are addressing science, traditional knowledge, and other relevant information to achieve landscape-level conservation and sustainable resource management.

### Outreach

Promote awareness and understanding of NPLCC and its products for landscape-level conservation and the effects of climate change on ecosystems, resources, cultures, and economies.

### North Pacific LCC Quick Facts:

- Size: 204,000 square miles
- Coastline: 38,000 miles
- U.S. states and Canadian areas: California, Oregon, Washington, Alaska, British Columbia, and Yukon Territory
- Tribes and First Nations: Over 200
- Land Ownership: Over 75 percent public land
- Diverse habitats, including coastal, marine, freshwater aquatic, and terrestrial
- Major regional cities: Arcata, CA; Portland, OR; Seattle, WA; Vancouver, BC; Juneau, AK



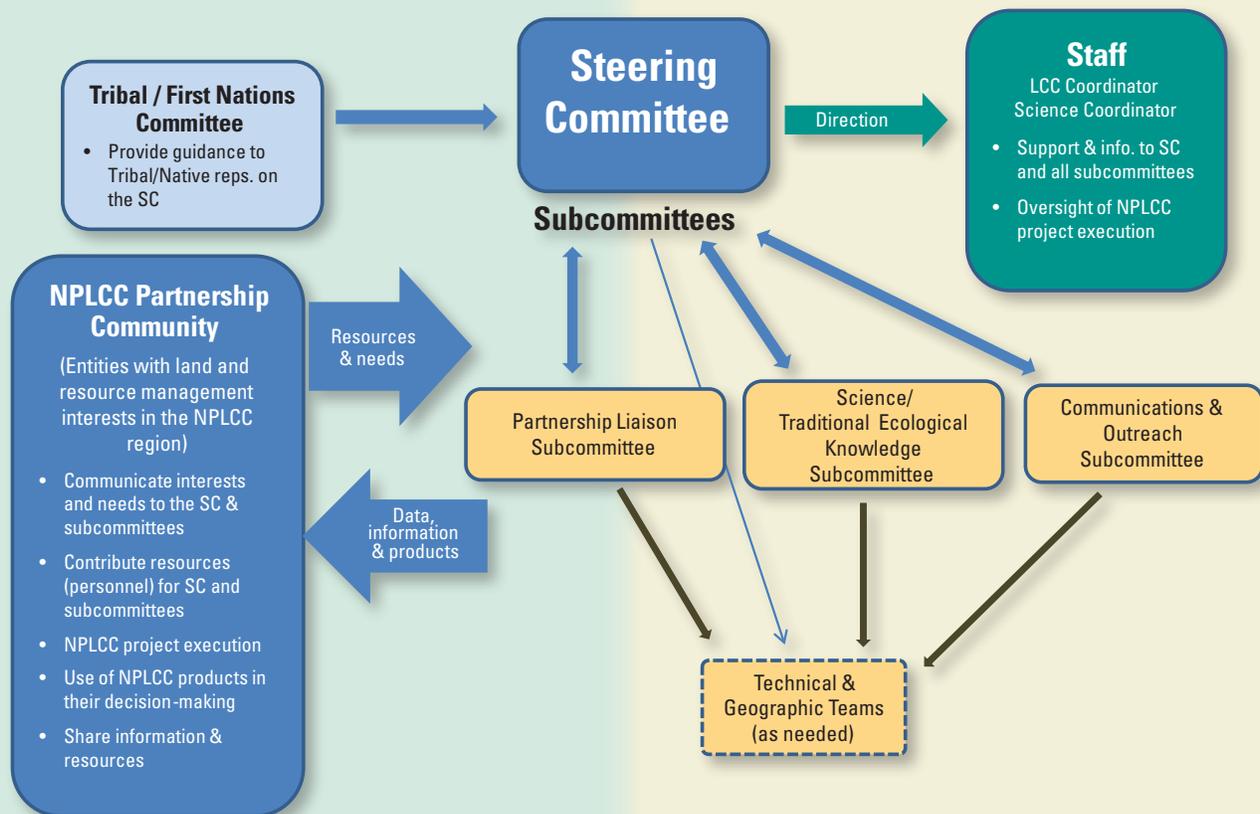
Photograph taken by Matt T. Lee



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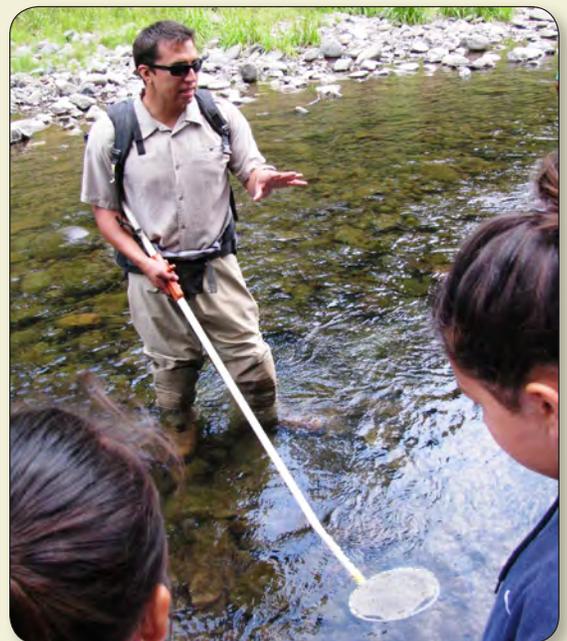
## North Pacific Landscape Conservation Cooperative



### Who Does What in the NPLCC?

The NPLCC is governed by a Steering Committee that consists of senior leadership from Federal, State, Provincial, Tribal/First Nation, and partnership organizations who own, manage, and influence natural and cultural resources. The Steering Committee establishes and supervises standing subcommittees and other ad hoc groups as necessary to accomplish the mission of the NPLCC. Committees include the Tribal and First Nations Committee and the following subcommittees: Science and Traditional Ecological Knowledge (TEK); Communications and Outreach; and Partnership Liaison, which are flexible, responsive, and include members with diverse perspectives.

The Core Staff includes the Coordinator, the Science Coordinator, and others who report to the Steering Committee and implement both the strategic plan and the day-to-day operations of the NPLCC.





Photograph taken by Sue L. Powell



### Steering Committee Member Organizations:

- Bureau of Land Management (Anchorage, AK and Portland, OR)
- Bureau of Indian Affairs
- National Park Service (AK areas and Seattle, WA)
- National Oceanic and Atmospheric Administration (Regional Climate Service, NOAA Fisheries)
- U.S. Fish and Wildlife Service (Regions 1, 7, and 8)
- U.S. Forest Service (Regions 6 and 10, PNW and AK Research Stations)
- U.S. Geological Survey (AK and PNW areas)
- USDA Natural Resources Conservation Service (West National Technology Support Center, National Water and Climate Center)
- Environmental Protection Agency (Region 10)
- Canadian Wildlife Service (Pacific/Yukon Region)
- Other Canadian Federal Departments
- Alaska Tribal representative
- British Columbia First Nations representative
- Washington Tribal representative
- Oregon Tribal representative
- California Tribal representative
- Province of British Columbia
- State of Alaska
- State of Washington
- State of Oregon
- State of California Governor's Office
- Pacific Coast Joint Venture
- Non-decisional Science Organizations
  - Regional Climate Science Centers (AK, NW, SW)
  - NOAA Regional Integrated Sciences and Assessments
  - Canadian climate centers

### Tribal / First Nations Committee

The Tribal/First Nations Committee is a forum where interested members of area Tribes and First Nations discuss how climate change is affecting their culture and resources; share information about adaptation practices; identify resource priorities; and advise the five Tribal/First Nations representatives on the Steering Committee about important natural and cultural resource issues related to climate change.

### Science and Traditional Ecological Knowledge (TEK) Subcommittee

The Science and TEK Subcommittee:

- Develops and recommends a five-year science strategy for consideration by the Steering Committee
- Initiates and recommends a prioritization of science needs
- Reviews and recommends projects for NPLCC support
- Implements science-quality assurance, such as peer review of NPLCC-supported projects

Membership includes university, government and nongovernmental scientists, researchers, and specialized science and technical expertise, including traditional-knowledge experts throughout the NPLCC geographic area.

### Communications and Outreach Subcommittee

The Communications and Outreach Subcommittee is charged with developing and implementing approaches for communicating the work of the NPLCC to the broader stakeholder community.

### Partnership Liaison Subcommittee

The Partnership Liaison Subcommittee includes interested agencies and organizations that are working on conservation and sustainable-resource management on a large scale within the NPLCC area. This subcommittee interacts with the broader NPLCC community to bring the priorities of partner organizations to the NPLCC Steering Committee for consideration.

It also encourages the appropriate use of the products and tools developed by the NPLCC.





Photograph courtesy of National Park Service

## Science and Traditional Ecological Knowledge Strategy

The NPLCC seeks to maximize the ability of partners, constituents, and stakeholders to make informed conservation and sustainable resource management decisions under a changing climate. The NPLCC Science-TEK Strategy (S-TEK Strategy) will guide NPLCC activities from 2013 to 2016 and help identify opportunities for collaboration with U.S. and Canadian partners, uniquely emphasizing the combination of western science and the Traditional Ecological Knowledge of Tribes and First Nations.

### S-TEK Strategy Guiding Principles

In annual implementation planning, and in the activities it supports, the NPLCC will:

- Focus on helping managers understand the availability and effectiveness of adaptation and mitigation response actions
- Focus on facilitating coordination, collaboration, and capacity building, and on developing or assisting with tools to assist decision makers
- Identify and promote opportunities to use TEK to inform partner and stakeholder decisions
- Promote and facilitate consideration of the connections and interactions between ecosystems

### S-TEK Strategy Priority Topics

- Effects of hydrologic regime shifts on rivers, streams, and riparian corridors
- Effects of change in air temperature and precipitation on forests
- Effects of changes in sea levels and storms on marine shorelines, the nearshore, and estuaries
- Effects of the changes in the hydrologic regime on anadromous fish
- Invasive species, diseases, pests and their effects on biological communities



Photograph taken by Matt T. Lee

This S-TEK Strategy identifies equally important Guiding Principles and Priority Topics. The Principles provide guidance for the types of activities the NPLCC will support, and the Topics describe issues for which those activities will be of particular benefit to conservation and sustainable resource management within the NPLCC in the face of climate and related stressors.

## Communication Strategy

The NPLCC Communication Strategy identifies the primary venues through which the NPLCC communicates internally and with various partners and stakeholders. It identifies four distinct target audiences (internal, policymakers and legislative staff, customers and contributors, and the public), ten communication objectives, and displays how various communication tools will be used to meet the needs for each target audience.

## NPLCC Projects

The NPLCC funds a variety of innovative projects to address its partners' science and information needs. It also partners with other organizations to support high-priority projects, often leveraging funding in creative ways to accomplish work that would otherwise not be possible. Project outcomes are intended to spur interest and action, and include tools and models to facilitate conservation, management, and climate-adaptation planning.

Visit [www.northpacificlcc.org](http://www.northpacificlcc.org) for a complete list and description of projects funded since the NPLCC was established.



Photograph taken by Matt T. Lee



## How to Get Involved

There are many opportunities to participate with the NPLCC at the local, regional, and landscape levels. Be part of the action and join the list-serve at [www.northpacificlcc.org](http://www.northpacificlcc.org).



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Please refer to NPLCC website for the most updated information: [www.northpacificlcc.org](http://www.northpacificlcc.org)

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