

Project Proposal for Phase III to include Terrestrial Habitats

Identifying and Synthesizing Climate Change Effects, Adaptation Approaches, and Science Opportunities in the North Pacific Landscape Conservation Cooperative's (NPLCC) Terrestrial Ecosystems

A Proposal Outlining the Convening of Expert Focus Groups and Production of First-Ever Reference Document to Inform Science Prioritization in the NPLCC's Terrestrial Ecosystems

Submitted by Patricia Tillmann and Dan Siemann, National Wildlife Federation

Submitted to North Pacific Landscape Conservation Cooperative on March 9, 2012

BACKGROUND: The NPLCC would like baseline information on climate change impacts, adaptation approaches, and climate-related science needs for the region's marine, freshwater, and terrestrial ecosystems. National Wildlife Federation (NWF) is currently funded to provide this information in marine and freshwater ecosystems, but not in terrestrial ecosystems. This proposal outlines a project to provide this information for the NPLCC's terrestrial ecosystems.

PROJECT DESCRIPTION: NWF proposes a two-phase project to help the NPLCC identify science priorities, and advance climate-smart landscape-scale conservation and sustainable resource management in the NPLCC region. This work would build on and leverage NWF's existing, complementary work in the region's marine and freshwater ecosystems.

In Phase I, NWF would convene five to eight focus groups comprised of experts working at the nexus of climate change, conservation, and sustainable resource management to identify challenges and information needs associated with managing terrestrial ecosystems, habitats, and species in light of current and project climate change impacts. One focus group would be an in-person expert workshop; the remaining focus groups would be conducted via webinar and conference call. NWF would synthesize the results of these focus groups, as well as the results of the marine and freshwater focus groups (currently funded by NPLCC), to produce a final focus groups report that integrates the cross-ecosystem science and non-science needs identified through the focus groups process and further defines and refines emerging roles for the NPLCC. As with NWF's current efforts with the NPLCC, the final report would be thoroughly reviewed by focus group participants and other climate change and ecosystem experts in the region.

In Phase II, NWF would compile the recent agency and scientific literature on climate change impacts and adaptation approaches in the region's terrestrial ecosystems to provide the first-ever compilation of this information particular to the NPLCC's terrestrial systems. Similar to the marine and freshwater reports produced by NWF, this report would assemble information from the peer-reviewed science and agency literature to describe the major physical, biological, and ecological effects of climate change on terrestrial ecosystems throughout the geographic scope of the NPLCC, including interactions and linkages with aquatic ecosystems. It would also provide a menu of project-level policy and management adaptation strategies, culled from the scientific literature and expert consultation, which could be used by managers and agencies responsible for managing terrestrial ecosystems. It would be thoroughly cited and reviewed by experts in the field, and NWF would work closely with the University of Washington Climate Impacts Group, Alaska Coastal Rainforest Center, North Cascadia Adaptation Partnership, and other similar entities to produce the report.

This report would be written specifically for NPLCC leaders, members and other stakeholders to improve understanding of how species assemblages, habitats, and landscapes may respond to altered landscape conditions. It would be highly similar in structure and scope to the Phase I Draft Final Reports NWF produced for marine and freshwater ecosystems. Leveraging NWF's current engagement with 200+ NPLCC stakeholders, NWF would conduct interviews with resource managers, researchers, conservation practitioners, and other NPLCC

Identifying and Synthesizing Climate Change Effects, Adaptation Approaches, and Science Opportunities in the North Pacific Landscape Conservation Cooperative’s Terrestrial Ecosystems (Proposal Outline, March 9, 2012)

stakeholders to acquire information on climate change effects in terrestrial ecosystems and ensure the document is useful and relevant for management needs.

TIMELINE: NWF proposes conducting Phase I from March/April 2012 through mid-August 2012, and Phase II from September 2012 through May 2013.

Phase I

- March/April 2012: Planning, research, and survey for web-based expert panels. Planning and conducting Expert Workshop to Inform Climate Change Science Priorities in the NPLCC, taking place in Juneau, AK on April 20, 2012 (Terrestrial topics will be added to the marine and freshwater topics already planned for this workshop. NWF will leverage existing funds to convene this workshop.).
- May 31, 2012: Web-based expert panels complete.
- Early June 2012: Second Expert Workshop to Inform Climate Change Science Priorities in the NPLCC complete – to take place before June 2012 NPLCC Science and Traditional Ecological Knowledge Subcommittee Meeting (this workshop will focus on terrestrial ecosystems and linkages with aquatic ecosystems).
- Mid-August 2012: Final focus groups report submitted to NPLCC (send draft report to NPLCC Science and Traditional Ecological Knowledge Subcommittee to use in writing 4-year Draft Science Plan, then send final report so Subcommittee can incorporate changes).

Phase II

- September 1-November 2, 2012: Produce first draft of *Climate Change Effects and Adaptation Approaches in Terrestrial Ecosystems of the North Pacific Landscape Conservation Cooperative Region: A Compilation of Scientific Literature* (working title, hereafter referred to as terrestrial report)
- Mid-December 2012: Second draft of terrestrial report complete.
- Early February 2013: Third draft of terrestrial report complete.
- Early April 2013: Fourth draft of terrestrial report complete.
- May 31, 2013: Final draft of terrestrial report submitted to NPLCC.

BUDGET & JUSTIFICATION: To complete the focus groups and terrestrial climate science summary, we are proposing budget of \$86,536.45.

FY12 Proposed Budget for NPLCC Terrestrial Ecosystems Project (to be completed by NWF and partners)	
Expenses	Total (in dollars)
Salary & Benefits	57,340.00
Cooperating Partner Expert Support – CIG	8625.00
Honoraria for external contributors and reviewers	1500.00
Other Expenses	
Communications	700.00
Conference calling for web-based expert panels	200.00
Layout, printing, and copying	500.00
Travel	4000.00
Meetings	2000.00
Subtotal – All Categories	73,865.00
Indirect Expense @ 15.59%	11,671.45
TOTAL	86,536.45