

**Pacific Northwest Tribal Climate Change Project
DRAFT Meeting Notes – Wednesday, April 24, 2013**

Call Participants

- Mary Basballe, Puyallup Tribe
- Meghna Babbar-Sebens, Oregon State University
- Alicia Bell-Sheetter, USDA Forest Service – Washington Office
- Mike Cox, EPA Region 10
- Kenton Dick, Burns Paiute Tribe
- Chris Farley, USDA Forest Service – Washington Office
- Larry Gilbertson, Quinault Indian Nation
- Oliver Grah, Nooksack Indian Tribe
- Zoltan Grossman, Evergreen State College
- George Hart, Navy Region 10
- Joe Hostler, Yurok Tribe
- Jennie Hoffman, Research and Consulting
- Linda Kruger, USDA Forest Service PNWRS – Juneau Forestry Lab
- Kathy Lynn, University of Oregon
- John Mankowski, North Pacific Landscape Conservation Cooperative
- Paul McCollum, Port Gamble S’Klallam Tribe
- Sascha Peterson, Adaptation International
- Dean Polchies, National Congress of American Indians
- Jacqueline Reid, Washington Chapter of American Planning Association
- Carson Viles, University of Oregon
- Kirsten Vinyeta, University of Oregon
- Garrit Voggeser, National Wildlife Federation

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Upcoming PNW Tribal Climate Change Network Conference Call Dates

- May 22, 2013
 - June 26, 2013
 - July 24, 2013
 - August 28, 2013
 - September 25, 2013
 - October 23, 2013
 - November 20, 2013
- Call-in Information:*
Call Time: 10:00 am - 11:30 Pacific
Call-in #: 1-888-858-2144
Pass code: 5064716

National Adaptation Forum -Tribal Sessions

The inaugural National Adaptation Forum took place April 2 – 4, 2013 in Denver, Colorado. A series of tribal sessions highlighted case studies of tribal climate change adaptation initiatives around the country, discussed planning tools, capacity building and partnerships, and brought together participants to define the path forward in two working group sessions. The Tribal Sessions included:

- Session 1: Tribal Climate Adaptation Case Studies – Building on Success
- Session 2: Tribal Climate Adaptation Management: Planning Tools, Capacity Building, and Partnerships
- Workgroup Part 1: Tribal Adaptation Action Planning (World Cafe)
 - Federal tribal engagement
 - Traditional Ecological Knowledge
 - Partnerships, funding and resources
- Workgroup Part 2: Tribal Adaptation Action Planning (Prioritizing Actions)

The session organizers are working on developing proceedings from the two work group sessions and will share those proceedings in the coming weeks. Network call participants mentioned they were pleased with the abundant participation and active engagement of tribes from across the country. This was in part made possible by proper communication about funding opportunities that tribes could pursue to secure their participation in the Forum. The next National Adaptation Forum is scheduled for 2015. California is planning a state adaptation forum in 2014.

North Pacific Landscape Conservation Cooperative Grants

John Mankowski, Coordinator for the North Pacific Landscape Conservation Cooperative (NPLCC) shared information on two funding opportunities.

Funding Announcement #1: The NPLCC, the Northwest Climate Science Center and the Alaska Climate Science Center, joined hands and pooled resources to support the development of climate change science and information relevant to the adaptation and management of subsistence/cultural resources. Funding Announcement #1, [found here](#), provides descriptions of eligible projects and application details. This funding opportunity is intended to support two types of projects:

1. Assessment of climate-related impacts and adaptation planning for non-salmonid anadromous fish of cultural or subsistence significance (e.g. eulachon or lamprey).
2. Assessment of climate-related impacts and adaptation planning for cultural and/or subsistence resources that are traditionally gathered or hunted (e.g., basketry materials, berry or nut trees and bushes, roots or bulbs, wildlife, or shellfish; but not fish).

This action is included in the [NPLCC S-TEK Strategy Implementation Plan](#) as Focused Activity #5.

⇒ Applications for Funding Announcement # 1 are due to nplcc@fws.gov on 5/9/13 by 5:00 p.m. PDT.

Funding Announcement #2: The NPLCC is also releasing a second funding opportunity, [found here](#). Funding Announcement #2 implements for 4 additional actions included in the recently adopted [NPLCC S-TEK Strategy Implementation Plan](#) under Focused Activities 2 and 4. These 4 actions include:

- Action 2.2: Conduct a case study using existing data to assess the vulnerability and resilience of selected anadromous fish populations for a specific audience. As these populations are important cultural and economic resources, assessing vulnerabilities and resilience is of concern to managers when determining actions to protect or enhance these resources. Projects should address the NPLCC Priority Topic D (Effects of the changes in the hydrologic regime on anadromous fish). Maximum funding awarded to a project under this action - \$80,000.

- Action 2.3: Increase knowledge, sharing, and use of existing tools and approaches by entities involved in landscape-level planning. Focus on understanding unique approaches that may be applied in one area of the NPLCC and not familiar to those in others (e.g., consider differences across international borders). Projects can be applicable for any of the NPLCC Priority Topics. Maximum funding that will be awarded to a project under this action - \$40,000
- Action 4.1: Assess vulnerabilities of key natural and cultural resources in a targeted location with partners from different jurisdictions, and develop adaptation and mitigation strategies that can be implemented to address climate-related issues in areas beyond the targeted location. Addressing landscape-scale ecosystem, habitat, and species vulnerabilities requires working together across boundaries with various decision-makers and stakeholders. Cross-boundary collaboration and developing and sharing adaptation strategies is essential to be effective. Projects should address the NPLCC Priority Topic A (Effects of Hydrologic Regime Shifts on Rivers, Streams, and Riparian Corridors) or Priority Topic B (Precipitation and temperature change and their effects on forests). Maximum funding that will be awarded to a project under this action - \$80,000
- Action 4.2: Assist one or more partners to incorporate climate change information into habitat conservation, restoration, adaptation, and enhancement efforts. Projects should address the NPLCC Priority Topic C (Effects of sea level changes and storms on marine shorelines, the nearshore, and estuaries) or Priority Topic D (Effects of the changes in the hydrologic regime on anadromous fish). Maximum funding that will be awarded to a project under this action - \$40,000

⇒ Applications for Funding Announcement # 2 are due to nplcc@fws.gov on 5/6/13 by 5:00 p.m. PDT.

To learn more about the [NPLCC](#), [Northwest Climate Science Center](#), and [Alaska Climate Science Center](#), please visit their web sites. Please share this information with anyone in your organization who may be interested in submitting proposals in response to either of these announcements. If you have questions, please contact NPLCC Staff at: Mary Mahaffy - mary_mahaffy@fws.gov, or John Mankowski - john_mankowski@fws.gov

Youth Summit on Climate Change - Washington Chapter of the American Planning Association

Jacqueline Reid, with the Washington Chapter of the American Planning Association joined the Network call to gain input on the 2013 Youth Summit on Climate Change. In October 2011, a group of 50 Pacific Northwest professionals representing urban planning, economics, architecture, landscape architecture, real estate development, academia and communications met in Portland, Oregon, for a half-day symposium to discuss the political and economic crisis we face as a nation and the threats it poses to our livability and civil society. The dialogue identified the need to focus on creating change – in our professions and in society at large- that will enable Americans to make the kinds of communities and regions that will provide a more sustainable, vital and enjoyable life. During an American Planning Association meeting in 2012, a discussion ensued about how social change often arises from youth activity, and those spearheading the Game-changing Initiative thought it was important to engage youth in the climate change conversations. This led to the collaboration with the Washington Chapter of the American Planning Association's Kids in Planning Committee program to coordinate the Youth Summit on Climate Change. A preliminary Youth Climate Summit meeting will take place in June 2013, while the final Summit will occur on October 1, 2013. Both events are described in more detail below:

Washington Youth Climate Summit

High school and community college students across Washington State are invited to join the June 2013 Youth Climate Summit. Webcasts from local colleges will provide a forum for students to work face to face and also collaborate with students in remote areas of the state. The Youth Climate Summit promises dynamic keynote presentations on Pacific Northwest climate challenges, skillbuilding and networking

opportunities. The June Youth Climate Summit meeting will generate solutions and questions for consideration at a final Summit event on October 1st, 2013. For more information on the June 28th meeting, visit <http://climatechangeforfamilies.com/2013/03/27/washington-youth-climate-summit-first-meeting-june-28th-1-4pm/>

Youth Summit on Climate Change– October 1

This Summit will convene high school students in leadership roles at their schools across the state for an exciting and inspirational day that will feature dynamic keynote presentations in the morning, a lunchtime festival of food, networking and music, and an afternoon plenary sessions that will highlight key issues and provide skill building opportunities - all focused on creating a more sustainable Washington. For more information on the final Summit, visit <http://www.washington-apa.org/documents/youthSummit2013.pdf>

Jacqueline sought Network input in four key areas:

1. How can we reach out to youth from Tribal Nations to participate in the 6/28 & 10/1 events?
2. At the event, we want to highlight youth accomplishment on the topic of Climate Change. We are hoping to develop a "Youth Climate Innovation Challenge" if we can get sponsorship for prizes. To kick this off, we'd like to highlight youth innovation, with young people showcasing their work. How can we seek those accomplishments from Tribal Nations' youth to showcase?
3. How can solicit interest from a Tribal leader that may wish to participate on a panel at the Oct 1 event? We are trying to keep the number of adult speakers fairly small - to make this an event that has high delivery by youth. It would be great to have a Tribal leader speak (and participate in Q and A) on a panel.
4. How can we seek sponsorship and in-kind contributions to help in delivery of the event? We are a volunteer group and the Washington Chapter of the APA is demonstrating great interest in providing meeting space and lunches at the Oct 1 Meydenbauer Center in Bellevue - we are waiting for confirmation. There are other costs that, if covered, could help us. Examples include - speaker costs, refreshments, scholarships, prizes, musicians' costs, and others.

Network call participants offered the following contact suggestions:

- Northwest Indian College
- Daniel Wildcat at Haskell Indian Nations University
- Affiliated Tribes of Northwest Indians
- Paul Williams with the Suquamish Tribe (he is working with tribal youth on climate projects)
- John Mankowski at the North Pacific LCC to discuss potential Summit sponsorship opportunities
- Micah McCarty with the Makah Tribe, in regards to the First Stewards Symposium.

Network call participants also suggested the following links for more as good examples of youth involvement:

- American Indian Alaska Native Climate Change Working Group
 - <http://www.haskell.edu/climate/>
- Indigenous Peoples' Global Summit on Climate Change:
 - <http://www.un.org/ga/president/63/letters/globalsummitoncc.pdf>
- First Stewards Symposium:
 - <http://firststewards.org/>
- Northwest Tribes: Meeting the Challenge of Climate Change
 - <http://academic.evergreen.edu/g/grossmaz/climatechangebooklet.pdf>
- Suquamish Teens Participate in Climate Change Summit with Peers

- <http://nwifc.org/2011/03/suquamish-teens-participate-in-climate-change-summit-with-peers/>
- Youth Curriculums:
 - <http://diverseeducation.com/article/13655/>
 - <http://gcce.larc.nasa.gov/node/95>
- Tribal youth videos on climate change
 - http://www.tribalyouthmedia.org/video_gallery_2008.html
- Climate Youth Camps
 - <http://www.sunstar.com.ph/baguio/local-news/tribal-youth-talk-climate-change>
 - <http://www.wolfcollege.com/youth/summer-overnight-camps/adventures-to-volcanoes-oceans-rainforests-glaciers-and-more/>
 - <http://www.climate.ucla.edu/news/article.asp?parentid=15619>

Nominations for Forestry Research Advisory Council

On April 17, 2013, Agriculture Secretary Tom Vilsack announced the re-establishment of the Forestry Research Advisory Council and is seeking nominations for new members. "This council will play a critical role as USDA continues to lead the way in forest conservation efforts," said Vilsack. "We base our forest conservation policies and decisions on the best available science, and this group will bring the expertise and experience to help us continue that practice." The council's many responsibilities include providing advice to Secretary Vilsack on national and regional research planning projects and on coordination of forestry research within federal and state agencies, forestry schools and forest industries. In addition, the council will provide advice to the U.S. Forest Service's Research and Development program—the world's largest forestry-research organization. The Forestry Research Advisory Council has 10 current and upcoming vacancies. Nominations are sought to immediately fill six vacancies on the council and additional vacancies that will occur when current appointments expire in December 2013. Vacancies are open in the following categories:

- Forestry schools
- State and Federal agencies
- Forest industries
- Voluntary organizations

Nominations must be received by April 29, 2013. The announcement appeared in the Federal Register and is available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-03-13/pdf/2013-05739.pdf>, along with the required nomination form and more background information.

General Updates

Indigenous Peoples and Climate Change Lecture at the University of Oregon

On April 10, 2013, the University of Oregon hosted the second annual Climate Change and Indigenous Peoples keynote at the University's Many Nations Longhouse, in Eugene, OR. The keynote featured Frank Lake, research ecologist from the USDA Forest Service-Pacific Southwest Research Station, and Kyle Powys Whyte, professor at Michigan State University. Lake, who identifies as Karuk, Seneca, Cherokee and Mexican, is currently focusing on research about how traditional ecological knowledge can be incorporated into scientific research to support adaptation and mitigation for climate change strategies. Whyte, who is an enrolled member of the Citizen Potawatomi Nation in Shawnee, Okla. and is currently the principal investigator of Manajiwon Project: Respecting Tribes and First Nations in Environmental Management. The keynote speakers engaged each other and the audience about why the impacts of climate change on indigenous peoples in the United States are unique and how a relationship of reciprocity between tribes and nature inform indigenous approaches to climate change.

The University of Oregon Climate Change Research Symposium of which the Climate Change and Indigenous Peoples Keynote was a part of also featured a Climate Justice panel in which three students (Kirsten Rudestam, Carson Viles, and Kirsten Vinyeta) presented on their research related to climate change impacts on indigenous peoples. Lake and Whyte served as panel moderators and provided their insight at the end of student presentations. Both the Climate Change and Indigenous Peoples keynote and the Climate Justice panel were video-recorded by Wisdom of the Elders, and will soon be posted on [Wisdom of the Elders' website](#). Kathy will be sure to notify the Network once the videos are posted.

Tribal Climate Change Funding and Program Guide

Carson Viles is continually updating the Tribal Climate Change Funding Guide as new funding opportunities arise. Please visit the Guide to find out about new funding opportunities. Please don't hesitate to contact Kathy Lynn (kathy@uoregon.edu) or Carson Viles (cviles@uoregon.edu) with questions, or to suggest funding opportunities that should be added to the guide.

Web-based planning tool for conservation practices in watersheds

Meghna Babbar-Sebens at Oregon State University (OSU) initially worked on the development of this web-based planning tool while living in Indiana. Now at OSU, she wants to gauge interest within communities and tribes in the Pacific Northwest. This tool, which was initially developed with Midwestern landscapes in mind, is an interactive planning tool that serves to design conservation practices in watersheds. In the Midwest, it has served to create networks of small wetlands on farmlands, which might serve to help the region prevent massive spring floods and also retain water and mitigate droughts in a warming climate.

Meghna is interested in finding out how tribes and communities in the Pacific Northwest might best benefit from this tool. The tool could be customized to account for these differences in order to better serve Pacific Northwest communities. This would give landowners, communities and tribes in the Northwest access to technology they can use to better design conservation planning. Network participants who are interested in this tool or who might have suggestions for what uses the tool could serve in the Northwest should get in touch with Meghna at meghna@oregonstate.edu.

Resources and Publications

Water Resources Adaptation to Climate Change Workgroup (WRACCW)

http://acwi.gov/climate_wkg/index.html

The Yupik and Global Warming - 9 minute clip

CCTV takes viewers to a remote part of western Alaska where the Yupik call home. These native Alaskans share their history and how global warming is having a disastrous affect on their way of life. The Yupik have high unemployment rates and rely on government welfare programs for income. Hunting and fishing for their food hasn't been a problem, but thinning salmon runs threaten their traditional way of life. Please watch and share this video:

http://www.youtube.com/watch?v=GIqkeKfRcow&feature=youtube_gdata_player

Climatic Change - Special Issue on Climate Change and Indigenous Peoples in the U.S.

(These articles are available online via the Climatic Change Journal online first link

at: <http://link.springer.com/journal/10584/onlineFirst/page/1>. Or email kathy@uoregon.edu if you would like to request a PDF)

- Cochran P, Huntington OH, Pungowiyi C, Tom S, Chapin FS, Huntington HP, Maynard NG, Trainor SF (2013) Indigenous Frameworks for Observing and Responding to Climate Change in Alaska. Climatic Change. DOI: 10.1007/s10584-013-0735-2

- Gautam M, Chief K, Smith WJ (2013) Climate Change in Arid Lands and Native American Socioeconomic Vulnerability: The Case of the Pyramid Lake Paiute Tribe. Climatic Change. DOI: 10.1007/s10584-013-0737-0
- Grah O, Beaulieu J (2013) The Effect of Climate Change on Glacier Ablation and Baseflow Support in the Nooksack River Basin and Implications on Pacific Salmon Species Protection and Recovery. Climatic Change. DOI: 10.1007/s10584-013-0747-y
- Lynn K, Daigle J, Hoffman J, Lake F, Michelle N, Ranco D, Viles C, Voggeser G, Williams P (2013) The Impacts of Climate Change on Tribal Traditional Foods. Climatic Change. DOI: 10.1007/s10584-013-0736-1
- Maldonado JK, Shearer C, Bronen R, Peterson K, Lazrus H (2013) The Impact of Climate Change on Tribal Communities in the US: Displacement, Relocation, and Human Rights. Climatic Change. DOI: 10.1007/s10584-013-0746-z
- Voggeser, G., K. Lynn, J. Daigle, F. K. Lake, and D. Ranco. "Cultural Impacts to Tribes from Climate Change Influences on Forests." Climatic Change. DOI: 10.1007/s10584-013-0733-4
- Whyte K (2013) Justice Forward: Tribes, climate adaptation and responsibility. Climatic Change. DOI: 10.1007/s10584-013-0743-2

Other Articles

- Water-quality impacts from climate-induced forest die-off. Results suggest the total organic carbon composition is being altered in mountain pine beetle infested watersheds, e.g. "higher total organic carbon concentrations along with significantly more DBPs at water-treatment facilities using mountain-pine-beetle-infested source waters when contrasted with those using water from control watersheds." Abstract at <http://www.nature.com/nclimate/journal/v3/n3/abs/nclimate1724.html>
- A reconstruction of regional and global temperature for the past 11,300 years. Their conclusion: IPCC "model projections for 2100 exceed the full distribution of Holocene temperature under all plausible greenhouse gas emission scenarios." Link to full-text http://content.csbs.utah.edu/~mli/Economics%207004/Marcott_Global%20Temperature%20Reconstructed.pdf
- Trends in hourly rainfall statistics in the US under a warming climate. Data from 13 stations in the contiguous US. Results from the Olympic Peninsula in WA are highlighted. Abstract at <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate1828.html>
- Decoupled response of Ocean Acidification to variations in climate sensitivity. Acidification is projected to increase in the surface mixed layer but decrease in the subsurface as climate sensitivity increases. The authors also find pH and carbonate ion concentration show opposite effects under variable climate sensitivity: Surface ocean pH increases 4% while surface carbonate ion reduction shrinks by 2% for every 1C increase in temperature. Abstract at <http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-12-00290.1>