

**Pacific Northwest Tribal Climate Change Project
Meeting Notes – Wednesday, May 22, 2013**

Call Participants

- Marc Anderson, P.E.
- Mary Basballe, Puyallup Tribe
- Alicia Bell-Sheetter, USDA Forest Service – Washington Office
- Cody Charwood, Red Lake Band of Chippewa, Department of Natural Resources
- Teresa Gaudette
- Laura Gephart, Columbia River Intertribal Fish Commission
- George Hart, Navy Region Northwest
- Keith Hatch, Bureau of Indian Affairs
- Dan Isaak, USDA Forest Service Rocky Mountain Research Station
- Edna Jackson, Organized Village of Kake, Alaska
- Linda Kruger, USDA Forest Service PNWRS – Juneau Forestry Lab
- Kathy Lynn, University of Oregon
- Gary Morishima, Technical Advisor to the Quinault Indian Nation and Intertribal Timber Council
- Jeff Morris, Model Forest Policy Program – Climate Solutions University
- Don Motanic, Intertribal Timber Council
- Cindy Spiry, Snoqualmie Tribe
- Steve Robinson, SR Productions
- Bob Rohde, Karuk Tribe
- Carl Sheeler, Confederated Tribes of the Umatilla Indian Reservation
- Toby Thaler, Model Forest Policy Program
- Patricia Tillman, National Wildlife Federation
- Steve Todd, Suquamish Tribe
- Kirsten Vinyeta, University of Oregon
- Garrit Voggeser, National Wildlife Federation

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PNW Tribal Climate Change Network Conference Call Schedule

Next call: June 26, 2013 at 10 am Pacific

Call-in #: 1-888-858-2144
Pass code: 5064716

***For the past year, our calls have been scheduled on the fourth Wednesday of each month. Several partners have regular conflicts during this time and we would like to find out if another regular time might work. Please select the date and times you are available for the regular monthly PNW Tribal Climate Change Network call: <http://www.surveymonkey.com/s/ZXMTWL6>. Please note, this will not change our next call, which is scheduled for Wednesday, June 26th at 10 am Pacific.*

Stream temperature database and high-resolution NorWeST climate scenarios - North Pacific LCC

Dan Isaak with the USDA Forest Service Rocky Mountain Research Station gave a presentation on the NorWest program. His PowerPoint slides are included on the attachment to the email with these meeting notes.

NorWest is a regional stream temperature database & model for high-resolution climate vulnerability assessments. It is an interagency effort involving over 60 agencies, including the US Forest Service, Trout Unlimited, Commonwealth Scientific and Industrial Research Organization, National Oceanic and Atmospheric Administration, and the US Geological Survey.

The NorWeST webpage hosts stream temperature data and geospatial map outputs from a regional temperature model for the Northwest U.S., including Washington, Oregon, Idaho, and California. The temperature database was compiled from hundreds of biologists and hydrologists working for dozens of resource agencies and contains more than 45,000,000 hourly temperature recordings at more than 15,000 unique stream sites. These temperature data are being used with spatial statistical stream network models to develop an accurate and consistent set of climate scenarios for all streams.

Temperature data and model outputs are posted to the website after QA/QC procedures and development of the final temperature model within a river basin. It is hoped that open access to the data and the availability of accurate stream temperature scenarios will foster new research and collaborative relationships that enhance management and conservation of aquatic resources. The models resulting from NorWest may enable users to map potential stream temperature scenarios in a climate change context, and overlay this information with aquatic species data to determine species vulnerability. The resulting overlays can then be used to identify habitat protection and restoration priorities.

Dan Isaak and others involved with NorWeST are eager to build bridges with tribal communities and make tribal data available in the database. **Tribes interested in finding out more about the database or in contributing data can contact Dan Isaak (disaak@fs.fed.us).**

Model Forest Policy Program: Climate Solutions University: 2014 Program

*Jeff Morris gave a presentation on the Climate Solutions University Program and the call for applications for their 2014 Session. Participants are selected on a first-come, first-served basis. **Those interested in participating in the 2014 program are encouraged to contact Jeff Morris (jeff@mfpp.org).***

Climate Solutions University: 2014 Program Summary

Preparing communities for climate adaptation is critical. Smart planning protects citizens from floods and drought, conserves water resources, preserves watershed health, stabilizes micro-climates, maintains species habitat, preserves the economy, and ensures community climate resilience. Climate Solutions University, Forest & Water Strategies helps participants prepare their communities. It is a two-step program: 1. Plan Development & 2. Plan Implementation, where participants create and implement a climate adaptation plan for their community. Climate Solutions University can help participants raise the funds to enable them to participate.

In 2011, Climate Solutions University partnered with the Nez Perce Tribe. This year, the Norton Bay Inter-Tribal Watershed Council in Alaska is among the various program participants. Climate Solutions University is presently recruiting program participants for 2014. Participants are selected on a first-come, first-served basis. **For program details, visit: <http://www.mfpp.org/csu/>. Tribes interested in participating in the 2014 program are encouraged to contact Jeff Morris (jeff@mfpp.org).**

National Landscape Conservation Cooperative (LCC) Council Call for Nominations

The National LCC Council steering committee, which is comprised of tribes, NGOs, and federal agencies, is seeking to form a National LCC Council. In the next few weeks, there will be a call for nominations for council seats. The council will include several seats for tribes and indigenous peoples. Information will be forwarded to the Network as it becomes available.

Department of Interior Climate Change Advisory Committee

A newly created federal advisory committee will provide guidance about the Interior Department's climate change adaptation science initiatives. The Advisory Committee on Climate Change and Natural Resource Science will advise the Secretary of the Interior about the USGS National Climate Change and Wildlife Science Center and the Department of the Interior Climate Science Centers, which are managed by the U.S. Geological Survey. Twenty-five committee members were selected from more than 100 nominations received by the Interior Department. Members represent Interior and other federal agencies; tribal, state, and local governments; nongovernmental organizations; academic institutions; and the private sector. The tribal representatives on the committee are Gary Morishima, Technical Advisor to the Quinault Indian Nation and Intertribal Timber Council and Anne Marie Chischilly, Executive Director of the Institute for Tribal Environmental Professionals. Gary encourages people to get in touch with him to voice issues they would like shared with the committee.

National Tribal Climate Change Policy Issues - Working Teams

Across the United States, American Indian and Alaska Native tribes and other indigenous communities are making significant strides to understand and address the impacts of climate change on tribal culture, sovereignty and traditional ways of life. Over the past few years, a number of initiatives have brought together tribal leaders, tribal staff, and tribal organizations, as well as non-tribal agencies, researchers, and non-governmental entities to document needs, identify resources and work together on common issues. The initiatives and events have pointed towards a need for increased coordination on policy, funding and programs related to climate change. As a first step in coming together on several key policy issues, we are coordinating a call to identify individuals that have an interest in working together on three different working teams to address national-level policy related to: 1) climate adaptation and adaptation funding, 2) mitigation and 3) traditional ecological knowledge. If you would like to participate in an upcoming call to discuss the background and direction of these working teams, please **sign up at:** <https://docs.google.com/spreadsheet/ccc?key=0Ah2p3YB1lGbydHVQdVFHYWN2QU5mU110RVV6aUR3V3c - gid=0>.

The first call will take place on June 5th at 1:00 PM Mountain time, with subsequent working team calls later in the summer. Please note that you must go to the google doc link above to register for the call. For more information on the Working Teams and actions resulting from the [2013 National Adaptation Forum](#), please see Appendix 1.

Region 10 EPA: Proposed Regional Climate Change Adaptation Implementation Plan

The Environmental Protection Agency Region 10 invites discussion of the proposed Regional Climate Change Adaptation Implementation Plan. This plan is in response to President Obama's Executive order requiring all federal agencies to develop plans to adapt their programs to the challenges created by a changing climate. The link to EPA's Draft National Adaptation Implementation Plan is: <http://www.epa.gov/climatechange/pdfs/EPA-climate-change-adaptation-plan-final-for-public-comment-2-7-13.pdf>. EPA Region 10 is scheduled to finalize the Regional Adaptation Implementation Plan in early June 2013 and then forward for review by the EPA National Office and then the Council for Environmental Quality prior to its publication by the end of June 2013. EPA plans to further engage the Tribes in the Pacific Northwest and Alaska after June 2013 to discuss future actions that are needed to adapt to the impacts from Climate Change in our Region. If you have questions, please contact Jim

Woods (woods.jim@epa.gov) at [206-553-2871](tel:206-553-2871) or Michelle Davis at [907-271-3434](tel:907-271-3434) (david.michelle@epa.gov) or Michael Cox at [206-553-1597](tel:206-553-1597) (cox.michael@epa.gov).

General Updates

Climate Change Adaptation for States, Tribes and Local Governments

North Carolina State University, in cooperation with EPA's Office of Strategic Environmental Management, will host a virtual Symposium on climate change adaptation for states, tribes and local governments to be offered in a series of twelve on-line sessions over two weeks. The series will bring together tribal, state and local stakeholders, EPA representatives, and experts from a variety of sectors to consider the impact of EPA's new Climate Change Adaptation Plan on the implementation of federal environmental programs, and to present case studies, tools and solutions to some of the most pressing climate change adaptation challenges. Individual webinars are stand-alone educational opportunities for governments, planners and policy makers, and participants can attend one or more webinars as meets their particular needs. Participants will obtain the most current knowledge and information applicable to states, tribes and communities on adaptation practice and implementation to build community resiliency. <http://climate-adaptation-symposium.org/index.html>

2013 Webinar Series Schedule (Subject to change until final)

Date/Time (EDT)	10:00-11:30am	11:30am-1:00pm	1:30-3:00pm	3:30-5:00pm
June 3		<u>Building Adaptive Capacity for Climate Change</u>	<u>Planning for Sea Level Rise</u>	<u>Water, Communities & Planning</u>
June 4	<u>Adapting to Air Quality and Health Impacts of Climate Change</u>		<u>Achieving Resiliency to Drought</u>	<u>Tribal Climate Adaptation</u>
June 10		<u>Incorporating Emergency Preparedness and Hazard Mitigation into Adaptation Plans</u>		<u>Risk Management and Insurance Strategies related to Climate Change</u>
June 11	<u>Equity and Adaptation for Vulnerable Communities</u>		<u>Climate Adaptation Decision Support Tools</u>	<u>Successful Response to Coastal Adaptation Challenges</u>
June 12				<u>Climate Adaptation: the Way Forward</u>

Rising Voices of Indigenous People in Weather and Climate Science Workshop

The challenges of understanding and responding to a changing climate and extreme weather necessitate broad engagement with diverse communities. As climate science has matured, it has moved toward a more inclusive dialogue where scientists and policy makers work together with seasoned indigenous communities to define and carry out research programs that advance science and address community priorities. NCAR is hosting a workshop on the growing engagement of Native American, Alaska Native, and Pacific Island communities in climate and weather science, research, policy, and community response conversations. The workshop will address the question: What are the elements of successful co-production of science and policy in the fields of extreme weather and climate change? The workshop will be conducted in collaboration with the Indigenous Peoples Climate Change Working Group (formerly the American Indian/Alaska Native Climate Change Working Group) and the Smithsonian National Museum

of the American Indian. Participants will be actively involved in cross-cultural scientific engagement with Native American, Alaska Native, and Pacific Island communities and will be from academic institutions, including tribal colleges and universities, as well as government agencies and non-governmental organizations. Travel support is available for a limited number of participants.

WORKSHOP VENUE: Foothills Laboratory 1, EOL Atrium, Boulder, CO 80307

WORKSHOP DATES: July 1-2, 2013

WORKSHOP GOALS:

- Identify lessons learned for, or barriers to, achieving successful co-production of science and policy by appraising the first-hand experiences of those involved in cross-cultural efforts to integrate indigenous knowledge and diverse understandings in climate and weather modeling and assessments;
- Foster and support collaborations between experts on cross-cultural engagement and NCAR scientists; and
- Promote student opportunities to work with NCAR scientists.

APPLICATION PROCESS: **Application due May 24, 2013**. If you are interested in participating in the Rising

Voices workshop, please send the following information to Kris

Marwitz (Email: kmarwitz@ucar.edu Phone: [303-497-8198](tel:303-497-8198)) by May 24, 2013:

- Name, affiliation, email address, and phone number
- A paragraph explaining how you have been and are involved in work related to weather or climate issues that engages indigenous communities within the United States.

For more information, please contact Heather Lazrus (hlazrus@ucar.edu) or Bob Gough (gough.bob@gmail.com)

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.

<http://envs.uoregon.edu/tribal-climate/>

Publication: Advancing Landscape-Scale Conservation: An Assessment of Climate Change-Related Challenges, Needs, and Opportunities for the NPLCC

This 2012 report by Patricia Tillmann and Dan Siemann with the National Wildlife Federation provides an assessment of climate change-related challenges, needs, and opportunities to advance landscape-scale conservation, climate change adaptation, and sustainable resource management in the North Pacific Landscape Conservation Cooperative (NPLCC) region. The NPLCC funded this report to inform NPLCC members, specifically the Science and Traditional Ecological Knowledge (S-TEK) Subcommittee, as they assess priorities and develop their 2013-2016 Strategy for Science and Traditional Ecological Knowledge. Findings are based on a series of surveys, web-based focus groups, and workshops with 195 resource managers, conservation practitioners, and researchers working in the region. After U.S. federal agencies and NGOs (74 and 35 participants, respectively), Tribes, First Nations, and Alaska Native communities were the third most commonly represented, with 29 participants (14.9%). Specific requests made include supporting the efforts of Tribes, First Nations, and Alaska Native communities to identify and address climate priorities related to indigenous natural and cultural resources, and addressing climate change effects on the Indigenous Way of Life more broadly. The importance of addressing climate change effects on indigenous natural and cultural resources was a cross-cutting theme in many venues, both by indigenous and non-indigenous participants. Links to download the report are available in the [technical](#)

[summary](http://www.nwf.org/~media/PDFs/Global-Warming/Advancing%20Landscape-Scale%20Conservation%20in%20the%20NPLCC_Final.ashx), as well as the more general summary, available at http://www.nwf.org/~media/PDFs/Global-Warming/Advancing%20Landscape-Scale%20Conservation%20in%20the%20NPLCC_Final.ashx

Publication: Exploring the Role of Traditional Ecological Knowledge in Climate Change Initiatives

Traditional ecological knowledge (TEK), as the indigenous knowledge system is called, has the potential to play a central role in both indigenous and nonindigenous climate change initiatives. The detection of environmental changes, the development of strategies to adapt to these changes, and the implementation of sustainable land-management principles are all important climate action items that can be informed by TEK. Although there is a significant body of literature on traditional knowledge, this synthesis examines literature that specifically explores the relationship between TEK and climate change. The synthesis describes the potential role of TEK in climate change assessment and adaptation efforts. It also identifies some of the challenges and benefits associated with merging TEK with Western science, and reviews the way in which federal policies and administrative practices facilitate or challenge the incorporation of TEK in climate change initiatives. The synthesis highlights examples of how tribes and others are including TEK into climate research, education, and resource planning and explores strategies to incorporate TEK into climate change policy, assessments, and adaptation efforts at national, regional, and local levels. http://www.fs.fed.us/pnw/pubs/pnw_gtr879.pdf

Appendix 1: National Tribal Climate Change Policy Issues – Action Items and Working Teams

Opportunity to Participate:

Across the United States, American Indian and Alaska Native tribes and other indigenous communities are making significant strides to understand and address the impacts of climate change and tribal culture, sovereignty and traditional ways of life. Over the past few years, a number of initiatives have brought together tribal leaders, tribal staff, and tribal organizations, as well as non-tribal agencies, researchers, and non-governmental entities to document needs, identify resources and work together on common issues. These initiatives include the Indigenous Peoples Climate Change Working Group, the National Climate Assessment Tribal Chapter, as well as regional and national events that have focused on tribal climate change issues, including the National Adaptation Forum, the Native American Fish and Wildlife Association, and the Affiliated Tribes of Northwest Indians. The initiatives and events have pointed towards a need for increased coordination on policy, funding and programs related to climate change. As a first step in coming together on several key policy issues, we are coordinating a call to identify individuals that have an interest in working together on three different working teams to address national-level policy related to adaptation, mitigation and traditional ecological knowledge. If you would like to participate in an upcoming call to discuss the background and direction of these working teams, please visit: <https://docs.google.com/spreadsheet/ccc?key=0Ah2p3YB11GbYdHVQdVFHYWN2QU5mU110RVV6aUR3V3c#gid=0>. A call will take place June 5th at 1 pm Mountain Time. To register for the call, sign up on the [google document](#).

Context:

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. PowerPoint Presentations from the forum are posted at: <http://tribalclimate.uoregon.edu/naf-2013/>. On the last day of the forum, participants had the opportunity to meet in two different tribal workgroup sessions to discuss issues, concerns and opportunities to address climate change. Three key areas of discussion focused on federal-tribal engagement, traditional ecological knowledge, and partnerships, resources and funding. Several action items were identified from the proceedings of the [working group sessions at the National Adaptation Forum](#), and have been refocused within three working teams.

Working Teams

Working Team #1: Traditional Ecological Knowledge

- The Traditional Ecological Knowledge working team would be tasked with developing a scope of work to:
 - Describe the role of TEK in climate change research, assessments and adaptation planning/implementation
 - TEK can identify goals, priorities; is holistic and ecosystem based (not single-species mgmt)
 - Document changes for culturally important species such traditional foods, medicines
 - Identify ways to incorporate local knowledge and culture into planning documents
 - Collaborate with cultural resources staff with environmental/science program
 - Can reconnect with tribal people to past or traditional ways of life
 - Identify protections for and mechanisms to ensure tribally-led sharing of TEK
 - Focus portions of TK and share only knowledge that's pertinent
 - TEK is decisional—not shared (e.g., sacred sites and cultural resources).
 - Share aggregate data, not specifics
 - Ensure information and process is vetted with tribal leaders on what is shared
 - Intellectual property rights and legal protection of information
 - Developing guidance (or a set of principles) on how TEK is used in climate change initiatives for tribes, public agencies, non-governmental organizations and private entities.

Working Team #2: Build support for Tribal Engagement in Administrative Adaptation Initiatives

- Strengthen legislative and administrative mechanisms for meaningful government to government relationships and consultation. Build congressional support for FY 2014 budget line items that foster opportunities for tribal climate change adaptation.
- Develop a series of white papers and/or briefing documents highlighting key tribal issues for Congress. Potential administrative priorities to support tribal climate efforts:
 - Describe tribal engagement strategies in federal adaptation programs
 - Share knowledge with federal agencies on climate change issues facing tribes, including on- and off-reservation cultural resources and the federal trust responsibility
 - Illustrate that Federal trust responsibility extends to funding channels, environmental protection, adaptation, and mitigation
 - Develop strategies that agencies can use to address issues.
 - Tribal climate science priorities
 - Tribal engagement in Climate Science Centers and Landscape Conservation Cooperatives
 - National LCC Council – Tribal Seat and DOI Advisory Committee
 - The role of/protection for TEK (coordinate this with the TEK subgroup)
- Advocate for Funding for Tribal Adaptation
 - Support BIA in accessing and distributing funding for tribal climate change initiatives
 - Pursue Cooperative Landscape Conservation Funding for Tribes (and BIA)
 - Develop briefing paper/talking points in regards to funding.

Working Team #3: Mitigation Policy and Programs

- Review recent white papers; develop a new paper to assist tribes in having a voice in legislative discussions
- Establish model green building code for tribes; document need for sustainable tribal housing
- Coordinate messaging with Senate Committee on Indian Affairs

Other Actions:

- Coordinate outreach
 - Action items and session notes from the National Adaptation Forum are available at: Post action items and session notes to <http://tribalclimate.uoregon.edu/naf-2013/>
 - Sign up to participate in National Tribal Climate Change Policy Working Teams:
 - Sign-up for the [Institute for Tribal Environmental Professionals Tribes and Climate Change](#) Newsletter: (Susan.Wotkyns@nau.edu)
 - Sign up for the [Pacific Northwest Tribal Climate Change Project](#) (kathy@uoregon.edu)
- Share information on access to climate science, assessments and research
 - National Climate Assessment: Tribal Chapter
 - Climatic Change Journal – Special Issue on Climate Change and Indigenous Peoples
 - Climate Science Centers and Landscape Conservation Cooperatives

For more information, feel free to contact anyone on the coordinating group for these working teams:

- Dave Connor, Red Lake Band of Chippewa Indians - REDLAKEWAE@aol.com
- Sean Hart, Bureau of Indian Affairs - Sean.Hart@bia.gov
- Joe Hostler, Yurok Tribe - jhostler@yuroktribe.nsn.us
- Kathy Lynn, PNW Tribal Climate Change Project - kathy@uoregon.edu
- Seth Moore, Grand Portage Band of Chippewa - samoore@boreal.org
- Kathleen Sloan, Yurok Tribe - ksloan@yuroktribe.nsn.us
- Garrit Voggesser, National Wildlife Federation - voggesser@nwf.org
- Susan Rose Wotkyns, Institute for Tribal Environmental Professionals- Susan.Wotkyns@nau.edu