

**Pacific Northwest Tribal Climate Change Project
DRAFT Meeting Notes – Wednesday, August 19, 2015**

Call Participants:

- Dominique Bachelet, Conservation Biology Institute
- Damion Ciotti, U.S. Fish and Wildlife Service
- Kai Foster-Henifin, Conservation Biology Institute
- Laura Gephart, Columbia River Intertribal Fish Commission
- Eliza Ghitis, NW Indians Fisheries Commission
- Larry Gilbertson, Quinault Tribe
- Jennifer Hanlon, Central Council of the Tlingit and Haida Indian Tribes of Alaska
- George Hart, Navy Region Northwest
- Dave Hatch, Confederated Tribes of Siletz Indians
- Scott Hauser, Upper Snakes River Tribes Foundation
- Jennie Hoffman, Adaptation Insight
- Linda Kruger, USDA Forest Service PNW Research Station – Juneau Forestry Lab
- David Lewis, Native Climate Council
- Kathy Lynn, University of Oregon
- Mary Mahaffy, North Pacific Landscape Conservation Cooperative
- Julie Maldonado, Rising Voices
- Amelia Marchand, Colville Tribes
- Andrea Martin, Cascadia Consulting
- Paul McCollum, Port Gamble S’Klallam Tribe
- Melissa Poe, Washington Sea Grant and Northwest Fisheries Science Center - NOAA Fisheries
- David Redhorse, Bureau of Indian Affairs
- Aiko Schaefer, Coalition of Communities of Color
- Tom Schlosser, Tribal Attorney
- Jonalee Squeochs, Yakama Indian Nation
- Maggie Tallmadge, Coalition of Communities of Color
- Bea Van Horne, USDA Northwest Climate Hub
- Paul Williams, Suquamish Tribe
- Ann Wyatt, Klawock Tribe
- Emily York, Oregon Climate and Health Authority

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Upcoming PNW Tribal Climate Change Network Conference Call Dates

- September 16, 2015
 - October 21, 2015
 - November 18, 2015
 - December 16, 2015
- Call-in Information:**
- Call Time: 10:00 am Pacific
 - Call-in #: 1-888-844-9904
 - Pass code: 5064716

MEETING NOTES

Geomorphology and Sustainable Coastal Resources in SE Alaska

Linda Kruger, Research Social Scientist with PNW Research Station Juneau Forestry Sciences Lab shared information about this project, which is examining local concerns relating to customary and traditional gathering, and observations of change in six communities in southeast Alaska (Yakutat, Hoonah, Angoon, Kake, Klawock, and Kasaan). Using the NOAA ShoreZone database as a framework, researchers have incorporated information on invasive species along with geomorphic metrics including uplift, tectonic shift, and sea level rise to assess at least 1200 shoreline segments for coastlines in the vicinity of each community. Eight students from within the six communities (and one student from Juneau) were selected and trained to conduct discussions with 10 families within each of their communities. The researchers hope to expand the study to include 2-4 rural communities on the Chugach National Forest and possibly the Tongass NF communities of Sitka and Juneau-Douglas. For more information on this project, contact Linda at: lkruger@fs.fed.us.

Providing Usable Climate Change Information

Dominique Bachelet with the Conservation Biology Institute presented information the efforts of CBI and on communicating climate change science effectively. Some specific models, studies and tools that Dominique shared include the following:

- **MC1 Dynamic Vegetation Model:** MC1 is a widely used dynamic global vegetation model (DGVM) that has been used to simulate potential vegetation shifts in California and Alaska, all of North America, and over the entire globe under various climate change scenarios. <http://consbio.org/products/tools/mc1-dynamic-vegetation-model>
- **LandCarbon Project:** LandCarbon is a national assessment focusing on implementation of the 2007 Energy Independence and Security Act and improved understanding of carbon sequestration and greenhouse gas fluxes in and out of ecosystems related to land use, using scientific capabilities from USGS and other organizations. The assessment covers all major terrestrial and aquatic ecosystems, is conducted for all fifty states, provides estimates of baseline as well as future potential carbon storage and greenhouse gas fluxes, and conducts analysis of effects of major natural and anthropogenic processes that impact ecosystem carbon storage and greenhouse gas fluxes. http://www.usgs.gov/climate_landuse/land_carbon/
- **Data Basin:** Data Basin is a science-based mapping and analysis platform that supports learning, research, and sustainable environmental stewardship. The functionality supports technical specialists, decision makers, and members of the interested public. <http://databasin.org/>
- **Creating Useful and Useable Climate Tools for Sagebrush Land Management Through Scientist and Manager Collaboration.** CBI surveyed land managers from eastern Oregon and western Idaho working in sagebrush country. Their goal was to gather information “to create a blueprint for a practical, nimble, accessible computer tool” to help sagebrush managers prepare for climate change. CBI is interested in talking with tribes in the region about this tool. <http://consbio.org/products/projects/collaboration-create-climate-tools>.
- **North Pacific Landscape Conservation Cooperative Conservation Planning Atlas:** The North Pacific LCC Conservation Planning Atlas is a data discovery, visualization, and analytical platform for stakeholders throughout the NPLCC area. With the CPA you can search for spatial datasets, visualize NPLCC supported projects, and learn more about landscape scale conservation science and design in the region. <http://nplcc.databasin.org/>

For more information about these efforts or to provide feedback or comments, contact Dominique Bachelet at dominique@consbio.org. For a copy of the PowerPoint, email Dominique or Kathy.

Rising Voices

Julie Maldonado shared information on *Rising Voices*, a community of engaged Indigenous leaders, Indigenous and non-Indigenous environmental experts, students, and scientific professionals across the United States, including representatives from tribal, local, state, and federal resource management agencies, academia, tribal colleges, and research organizations. The *Rising Voices* movement was initiated to increase engagement between Indigenous communities and Indigenous and non-Indigenous scientists to address the challenges of understanding and responding to a changing and variable climate, extreme weather events, and research and policy needs. Annual *Rising Voices* meetings have taken place since 2013, and have explored Indigenous Peoples in Weather and Climate Research and Policy, Adaptation to Climate Change and Variability: Bringing Together Science and Indigenous Ways of Knowing to Create Positive Solutions, and Education and Adaptation through Diverse Ways of Knowing. Outcomes from *Rising Voices* have included relationships and collaborations between tribes, scientists, academics, researchers, students, and agencies, membership with the National Climate Assessments network-of-partner organizations.

In 2014, Rising Voices submitted a Letter of Recommendations to the [President's State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience](#), and two of the recommendations -- one focused on climate-induced forced migration and relocation and one focused on creating a climate change corps to enhance capacity building of youth -- were included in the Task Force's final report to the White House. Another recommendation focused on a formalized structure for Indigenous support to the NCA. Some examples of on-going activities in relation to these recommendations are Rising Voices participants presenting to the NCA's Interagency Task Force on proposed recommendations for inclusion of Indigenous peoples, voices, and input in the sustained assessment process and participants currently collectively working on submitting request for information for sustained NCA process. Full workshop reports from *Rising Voices* meetings are available here: <https://www.mmm.ucar.edu/rising-voices-reports>. The 2016 meeting is anticipated to be held in Hawaii and will include a focus on the *Rising Voices* youth initiative. For more information, visit: <https://www.mmm.ucar.edu/rising-voices-home> or contact: Heather Lazrus hlazrus@ucar.edu, Julie Maldonado jkmaldo@gmail.com or Bob Gough gough.bob@gmail.com.

Native Climate Council

David Lewis shared information about the Native Climate Council, which is being organized by Wisdom of the Elders and focused on convening tribal representatives from along the Oregon coast and Native leaders, elders and youth in the Portland metropolitan area. Initial plans are to gain feedback from the community on climate issues impact Native people in Oregon; and which Native elders, scientists and cultural artists (storytellers, musicians, dancers and traditional artists) they suggest Wisdom of the Elders records for two climate documentary films and two public radio programs that Wisdom is producing as part of a climate documentary and radio series. David mentioned that he has been researching what is happening in the region on climate change, and that there is variability in plans and assessments. One task of the Native Climate Council is to look at local and state level plans to see how those efforts will inform decisions in the future. An issue they plan to focus on in particular, for example, is the impact of climate change on water supply in the Portland Metropolitan Region. The next meeting will take place Monday, August 24 at 10 am. For more information, contact David Lewis (dgl.coyotez@gmail.com) or Rose High Bear (rosehb@wisdomoftheelders.org).

U.S. Fish and Wildlife Service (Service) Tribal Wildlife Grants (TWG) - due October 30, 2015.

Damion Ciotti with the US Fish and Wildlife Service shared that Tribal Wildlife Grants are open and due October 30, 2015. The TWG program provides a competitive funding opportunity for Federally

recognized Tribal governments to develop and implement projects for the benefit of fish and wildlife and their habitat. In 2015 there was a total of \$930,000 awarded to five Tribes for conservation projects in CA, NV, and the Klamath Basin. For more information on the TWG program please see the website [Tribal Wildlife Grant Program](#) and don't hesitate to contact Damion if you have questions or need assistance (530) 889-2327. Damion is the point of contact for Tribes in Region 8 (California, Nevada, and the Klamath Basin in Oregon) and is happy to work with tribes in the region to review grant proposals. Damion's email is damion_ciotti@fws.gov. Barb Behan (Barbara_Behan@fws.gov) is the point of contact for Region 1 (Oregon, Washington and Idaho.) Other regional contacts can be found here: <http://www.fws.gov/nativeamerican/contact.html>.

Coalition of Communities of Color and Renew Oregon

The mission of the Coalition of Communities of Color (CCC) is to address the socioeconomic disparities, institutional racism, and inequity of services experienced by our families, children and communities; and to organize our communities for collective action resulting in social change to obtain self-determination, wellness, justice and prosperity. Formed in 2001, the CCC is an alliance of 19 culturally-specific community based organizations with representation from six communities of color: African, African American, Asian and Pacific Islander, Latino, Native American, and Slavic. The primary goal of the CCC is to advance racial equity through leadership development, policy analysis and advocacy, culturally-appropriate data and research, equity-based funding, partnership and coalition building, and racial justice movement building. The CCC supports a collective racial justice effort focused on improving outcomes in education and sustainable community development. In 2013, the CCC articulated its first environmental goals, recognizing that environmental frameworks and sustainability can be leveraged not only to create a healthier environment, but also to strengthen the economic self-determination of our communities and to meet existing social service and community development goals. This work is evidenced in member initiatives and advocacy across climate justice, community economic development, transportation justice, education, and community and cultural stability.

This year, CCC joined the leadership of **Renew Oregon** (<http://www.reneworegon.org/>) – a statewide campaign to create a clean energy future for Oregon with good-paying jobs, clean air and water and healthy communities. The CCC's objective is a statewide carbon pricing policy that provides economic and social benefit to communities of color. California has implemented similar successful legislation (Clean Energy Policies such as AB32 and SB535):

<http://www.publicadvocates.org/cap-and-trade-revenues-under-ab-32-and-sb-535>
<http://upliftca.org/>

In addition, the CCC, the Native American Youth & Family Center, and OPAL Environmental Justice developed a three year climate resilience plan for the Portland region. The plan articulates how our region's diverse communities can shape public processes related to climate resilience. For more information on these programs, contact Maggie Tallmadge Environmental Justice Manager [Coalition of Communities of Color](mailto:Maggie@CoalitionCommunitiesColor.org) at Maggie@CoalitionCommunitiesColor.org.

Communities of Color for Climate Justice

Join the Communities of Color for Climate Justice, a coalition bringing together leaders of color from across WA State advocating for equity and just state climate policies. Coming together across diverse perspectives and locations for the first time, we are sharing how climate change is impacting our communities, learning about local efforts that are already underway and how we can come together to fight for environmentally just policies. Please join us by [supporting the climate justice principles \[click link\]](#) and receive invitations to meetings/events and updates on work happening around Washington

State. For questions contact Aiko Schaefer, Coordinator, aikoschaefer@gmail.com (206) 941-4817.

- Upcoming meeting on Saturday August 29th, 10 years after Hurricane Katrina in Seattle. We will mark this anniversary by drawing attention to how people of color are disproportionately impacted by environmental and economic disasters, focusing our attention and dialogue on what's happening locally and how we can act together.
- When: Saturday August 29th from 9 am - 5 pm
- Where: [Northwest African American Museum](#) (2300 S Massachusetts St, Seattle)
- Please [RSVP for the summit](#). The event is free, food will be provided as well as transportation, lodging, childcare and interpretation upon request. For questions contact Aiko Schaefer, Coordinator, aikoschaefer@gmail.com (206) 941-4817.

General Updates

Positions Open: The Advisory Committee for the Sustained National Climate Assessment - Applications due September 14, 2015.

The Advisory Committee for the Sustained National Climate Assessment will provide advice on sustained assessment activities and products, including engagement of stakeholders. The Committee will be established under the Department of Commerce in 2015 and supported through the National Oceanic and Atmospheric Administration. The Committee will consist of fifteen (15) non-Federal members. The Committee's membership is required to be balanced and take into account: viewpoints represented, functions to be performed, the interests of geographic regions of the country, and the diverse sectors of U.S. society. Members will include a balanced representation of experts in physical and social sciences, communication, education, and other topics reflecting the full scope of issues relevant to the sustained National Climate Assessment process. Interested persons may submit nominations for themselves or third parties at contribute.globalchange.gov/ through Monday, September 14. Individuals may nominate more than one person. For more information, consult the [Federal Register Notice](#).

Swinomish Climate Change Video Project

The Swinomish Indian Tribal Community is currently undertaking a video project to document tribal experiences with climate impacts. The project will culminate in a short video featuring testimony from Northwest coastal tribal members about climate impacts facing their communities. If you are interested in participating in this project, please contact Carson Viles at cviles@uoregon.edu, or (541) 606-9485.

Pollinator Protection Training for Tribes - NOMINATIONS DUE 9/15/2015

November 17-19, 2015 Northern Quest Hotel, Spokane, WA Owned and operated by the Kalispel Tribe of Indians http://events.SignUp4.net/Tribal_Pollinator_Training

Nominations to attend this training are due on or before September 15, 2015. Training Goal and Topics: The goal of the training is for participants to gain a better understanding of issues affecting pollinator health and learn about actions they can take to protect pollinators on tribal lands. Tribal representatives will discuss what they are doing (or can do) to protect pollinators on tribal lands and ways to develop a Tribal Pollinator Protection Plan. The course will include a day-long field trip to the WSU Honey Bee Health Diagnostic Lab and the Palouse Prairie.

- **Target Audience:** The training is intended for representatives of federally-recognized tribal governments or tribal consortia who are interested in taking action to protect pollinators in tribal lands or in dependent Indian communities. This course is also intended for tribes or tribal consortia

interested in developing a Pollinator Protection Plan in response to the EPA's Proposal to Mitigate Acute Pesticide Risk to Bees.

- **Nomination Process:** Attendees must submit a nomination to be considered. Submit your nomination through this link: <https://www.surveymonkey.com/r/TribalPollinators> Nominations are due on or before September 15, 2015. More than one representative from the federally-recognized tribal government or tribal consortia may apply. All nominations will be considered for selection. Travel and accommodations will be paid for 35 participants. Selected participants must attend in person. This course will not be conducted via webinar or video teleconference. You will receive an email confirmation from WSU within two business days of submitting your nomination form. If you do not receive confirmation, or if you have any questions, please email PREP.sla@wsu.edu or call 509-335-2952.

Infrastructure and public health impacts from climate change

Amelia Marchand with the Confederated Tribes of the Colville Reservation shared the following thoughts and concerns about infrastructure and public health impacts from climate change and regional fires:

- Evacuations –where will people go and what resources will they have to sustain them? How long can food, water and sanitation be provided?
- Significant air quality issues – smoke and particles are probably at an all time high for the CCT, where indoor air quality is deemed hazardous, yet outdoor air quality is 2x as bad. What medical resources are available for vulnerable populations?
- Water sources and availability for fire suppression – state-wide drought conditions have reduced stream flows significantly.
- Potential impacts to power grid – is the system prepared for power failure? Are backup generators and gasoline available and on hand?

Kathy suggested that this would be a good topic to explore on an upcoming Network call, particularly given the significant drought and wildfires occurring in the region. Amelia also shared that the Confederated Colville Tribes (CCT) Integrated Resource Management Plan will be available in a few months for public comment. This is the 'guidance' document for natural resource management of the CCT, and suffices as the next 15-year timber harvest management plan for BIA Colville Indian Agency. When it is available for public comment, CCT encourages others for feedback to help make this document more responsive and inclusive to climate change impacts.

ITEP Tribal Climate Change Trainings:

The Institute for Tribal Environmental Professionals offers [training](#) to tribal environmental professionals to build their capacity to address climate change issues. The courses are taught by instructional teams that include staff from ITEP, federal agencies, universities, and/or organizations, and most importantly, the tribes themselves, who share their expertise and experience. Sue Wotkyns mentioned that they are seeking tribes to host upcoming trainings. If you are interested, please contact Sue at Susan.Wotkyns@nau.edu.

Cahokia Statement on Tribal Adaptation.

The Cahokia Statement on Tribal Adaptation has been assembled as a reflection of presentations made at the second National Adaptation Forum meeting that took place in St. Louis Missouri from May 12-14, 2015, as well as other recent publications, presentations and related activities by indigenous peoples in the United States and around the world. This Statement, while largely originating from the National Adaptation Forum, is not an official forum statement. It is open for endorsement by any individual or organization that wishes to support the issues and principles. <http://cahokiastatement.net/>

Climate Solutions University now accepting applications for 2016

(Model Forest Policy Program). Climate Solutions University has helped over 30 communities create adaptation plans that are ready for implementation. Participants foster positive, sustainable connections between people, economic, and ecosystem health. Contact Recruitment Coordinator Josh Dye at josh@mfpp.org or 612-481-8059 to get started. <http://www.mfpp.org/>

ANNOUNCEMENTS

[The Ethics of Traditional Knowledge Exchange in Climate Change Initiatives](#). An essay exploring the ethical philosophy behind Guidelines for Considering Traditional Knowledges in Climate Change Initiatives.

A Sacred Responsibility: Governing the Use of Water and Related Resources in the International Columbia Basin Through the Prism of Tribes and First Nations

The [University Consortium on Columbia River Governance](#) has released its report: A Sacred Responsibility – Governing the Use of Water and Related Resources in the International Columbia Basin through the Prism of Tribes and First Nations. ([click to download](#), 9.20MB)

The report is based on the 4th transboundary symposium held at in Polson, Montana, in October 2012 and convened by the University Consortium and involving tribal and First Nation leaders along with about 150 other people and organizations including CELP.

Climate Change Adaptation in Indian Country: Tribal Regulation of Reservation Lands and Natural Resources. This article provides an introduction to climate change and its impacts, systems of reservation land ownership, and how land ownership impacts tribal nations' ability to address serious community crises arising from climate change. It also highlights some recent climate change adaptation efforts by and for tribal nations and describes options for moving forward in a way that protects reservation lands and natural resources for the next seven generations. William Mitchell Law Review, Vol. 41:2 2015. <http://web.wmitchell.edu/law-review/wp-content/uploads/2015/03/3.-Ford-Website.pdf>

[June Health and Human Services Climate Justice Conference Proceedings Online](#). Climate change is having and will continue to have significant impacts on people's health, in particular those who are

already disproportionately impacted by environmental hazards and social conditions. HHS hosted a one and a half day conference to discuss the challenges, current HHS climate change related activities, and possible resources and tools in Research Triangle Park, North Carolina on June 8-9, 2015. <http://www.niehs.nih.gov/about/visiting/events/pastmtg/2015/climate/index.cfm>

[Effects of Climate Change on Native American Culture and Tradition on Native America Calling](#). The online recording is available here: <http://nativeamericacalling.com/wednesday-august-5-2015-effects-of-climate-change-on-native-american-culture-and-tradition/>.

[Climate Solutions University now accepting applications for 2016](#) (Model Forest Policy Program). Climate Solutions University has helped over 30 communities create adaptation plans that are ready for implementation. Participants foster positive, sustainable connections between people, economic, and ecosystem health. Contact Recruitment Coordinator Josh Dye at josh@mfpp.org or 612-481-8059 to get started. <http://www.mfpp.org/>

Oregon tribes prepare for climate change impact on traditional foods

http://www.oregonlive.com/pacific-northwest-news/index.ssf/2015/07/oregon_tribes_prepare_for_clim.html#incart_river_mobileshort

FY 2015 Tribal Cooperative Landscape Conservation Program Funding Awards Announced

The Bureau of Indian Affairs has announced awards of \$11.8 million to support Tribal Climate Change Adaptation Planning. A total of 104 awards have been made to the Bureau of Indian Affairs Tribal Climate Resilience Program in five categories, including Trainings and Workshops, Climate Adaptation Planning, Travel (Climate) Awards, Ocean and Coastal Management Planning, and Travel (Ocean and Coastal). For more information: <http://www.indianaffairs.gov/cs/groups/webteam/documents/document/idc1-030646.pdf>.

Traditional foods in school meals: American Indian communities have a rich history of eating native, local foods and a strong interest in serving these traditional foods through federal Child Nutrition Programs (CNPs). [In a new memo](#), Child Nutrition Programs and Traditional Foods, USDA reinforces that many traditional foods can contribute towards reimbursable meals in CNPs. While USDA's Food Buying Guide is an important tool for school food authorities, it doesn't contain an exhaustive list of traditional foods; the new memo is an important supplement to help assist tribal communities. For additional guidance concerning this memo, please reach out to your regional Farm to School Regional Lead or USDA's Office of Tribal Relations. For more information, visit: <http://www.fns.usda.gov/child-nutrition-programs-and-traditional-foods>

White House Releases "Actions to Build Resilience to Climate Change Impacts in Vulnerable Communities"

On July 9, 2015, the White House released a new fact sheet describing initiatives to build resilience to climate change impacts. These "actions" include Launching a Resilience AmeriCorps Pilot Program, Helping Tribes Prepare for Climate Impacts, and Providing Data and Tools for Climate Preparedness.. https://www.whitehouse.gov/administration/eop/ceq/Press_Releases/July_09_2015

UPCOMING EVENTS

August 21, 2015 - 8:00 a.m. to 12:00 p.m [Beaver Restoration Workshop](#), Portland, Oregon.

August 24-25, 2015. Conference: [California Climate Change Symposium 2015](#). Sacramento, CA.

Convened by the California Natural Resources Agency, the California Environmental Protection Agency and the Governor's Office of Planning and Research. Forum for the sharing of cutting-edge research addressing the impacts of climate change on the state. This research informs the state's strategies and policies to reduce greenhouse gas emissions and to develop programs to safeguard California from a changing climate.

<http://californiascience.org/>

August 26-27, 2015. [Greening Facilities Workshop](#). Solvang, CA. Hosted by the Santa Ynez Chumash Environmental Office. Learn about source reduction and pollution prevention strategies that tribes have implemented to reduce the use of energy, water, and toxic cleaning chemicals; improve purchasing practices; and decrease GHG emissions and waste products in their facilities. Our goal is to help tribes share ideas on how to reduce their impact on the environment. For more information, visit: <http://syceo.org/greening-facilities-workshop/> or contact Erik Martinez at emartinez@santaynezchumash.org

August 29, 2015. 9 am – 5 pm. [Communities of Color for Climate Justice Statewide Summit RSVP](#). [Northwest African American Museum](#) (2300 S Massachusetts St, Seattle)

We will mark the 10-year anniversary of Hurricane Katrina by drawing attention to how people of color are disproportionately impacted by environmental and economic disasters, focusing our attention and dialogue on what's happening locally and how we can act together. Please [RSVP for the summit](#). The event is free, food will be provided as well as transportation, lodging, childcare and interpretation upon request. For questions contact Aiko Schafer, Coordinator, aikoschafer@gmail.com (206) 941-4817.

September 1-3, 2015. Workshop: [Colorado Community-Scale Tribal Renewable Energy Workshop](#). Golden, CO. The U.S. Dept. of Energy (DOE) Office of Indian Energy, with support from the National Renewable Energy Laboratory (NREL), is offering a series of interactive workshops that will walk participants through the process for developing community-scale renewable energy projects on tribal lands. The workshops offer a unique opportunity for participants to learn from renewable energy project experts, get hands-on experience using technology resource assessment tools, explore project case studies, and hear about lessons learned from other Tribes. Workshop participants will learn about the five steps necessary to develop and finance renewable energy projects on tribal lands. <http://www.energy.gov/indianenergy/events/colorado-commercial-scale-tribal-renewable-energy-workshop>

September 3, 2015. [Department of Energy Minorities in Energy Regional Climate Change Impacts Webinars](#) - Alaska.

DOE will host [a series of webinars](#) highlighting the impacts and opportunities of climate change and responses for minority communities, using information from Quadrennial Energy Review and the National Climate Assessment. Participants may [register at anytime](#) for the webinars, and the webinars will be recorded for those interested who aren't able to attend. The presenter for the Alaska webinar is Sarah Trainor. For more information and to register, visit: <http://www.energy.gov/diversity/mie-webinar>.

September 14, 2015. 9:15 - 10:45 am Pacific. [Webcast: Climate Adaptation: American Indians and Alaska Natives](#). The effects of climate change are already impacting communities across the U.S.

and are projected to create increasing challenges. Preparing for climate resilience in Native American communities is particularly critical, as climate change impacts threaten the health and safety of tribal communities, subsistence practices, and land, water, and other natural resources communities depend on. Impacts communities are already facing include reduced water quality and quantity in the West, declining sea ice in Alaska, health hazards from increasing temperatures and thawing permafrost, and severe erosion and sea level change in coastal locations. Tribes and the federal government are working together to plan for and address these challenges. Please join the Office of Policy Analysis on September 14 for a panel discussion on current efforts and partnerships between tribes and the federal government to plan and prepare for and enable climate preparedness and resilience. To Livestream this event, login to www.doi.gov/events. Please join 5-10 minutes early to avoid technical difficulties. Closed captioning will be available. The recorded event will be posted to the Office of Policy Analysis website: http://www.doi.gov/ppa/seminar_series/video.

September 22-24, 2015. Annual Intertribal Nursery Council meeting. Pendleton, OR

Hosted by the Confederated Tribes of the Umatilla Indian Reservation. This year's meeting will include two-and-a-half days of information sharing, technical presentations, tours, and nursery training lectures. A few spots are open for additional presentations; relevant topics include overviews or updates from tribal nurseries, restoration projects using native plants, native plant research projects, conservation education efforts, pollinator projects, reforestation, and traditional ecological knowledge related to native plants. Travel funds are available for those that qualify. For more information please contact Jeremy Pinto, jpinto@fs.fed.us, 208-883-2352.

September 24-25, 2015. [National Tribal Energy Summit](#). Washington, D.C. The National Summit supports the Obama Administration's ongoing commitment to assist tribal efforts to enhance energy security, increase community resiliency, and cultivate a sustainable energy future. The event will highlight challenges and showcase opportunities in the areas of: Science and technology, policy, and the regulatory environment; Community- and commercial-scale energy project development; Tribal education and workforce development; Federal procurement; and Energy sector supply chain participation. Representatives from federal agencies, state and tribal governments, tribal corporations, private industry, utilities, and academia will come together with scientists, educators, analysts, and experts in energy policy, regulation, financing, and technology-to-market to exchange ideas and explore solutions. [Download the postcard for more information](#). Additional details about the location and how to register will be provided in the coming weeks. In the meantime, questions may be directed to Ana M. Han at 202-586-9820. For more information, [click here](#).

October 1, 2015. [Department of Energy Minorities in Energy Regional Climate Change Impacts Webinars - Midwest](#).

DOE will host [a series of webinars](#) highlighting the impacts and opportunities of climate change and responses for minority communities, using information from Quadrennial Energy Review and the National Climate Assessment. Participants may [register at anytime](#) for the webinars, and the webinars will be recorded for those interested who aren't able to attend. The presenter for the Midwest webinar is Sara Pryor. For more information and to register, visit: <http://www.energy.gov/diversity/mie-webinar>.

October 13-14, 2015. Conference: [2015 NAFWS Pacific Region Conference](#). Polson, Montana. Native American Fish and Wildlife Society regional conference. <http://www.nafws.org/events/regional-events>

October 18-23, 2015. [National Congress of American Indians \(NCAI\) 72nd Annual Convention and](#)

Marketplace, San Diego, CA. <http://www.ncai.org/events/2015/10/18/72nd-annual-convention-and-marketplace>

October 26-29, 2015. Climate Change Vulnerability Assessment. Santa Fe, NM. Offered by the USFWS National Conservation Training Center and sponsored in collaboration with the Bureau of Indian Affairs and the Choctaw Nation of Oklahoma. This course is designed to guide conservation and resource management practitioners in two essential elements in the design of climate adaptation plans: (1) identifying which species or habitats are likely to be most strongly affected by projected changes; and (2) understanding why these resources are likely to be vulnerable. For more information, contact April.Taylor@chickasaw.net

October 26-30, 2015. Conference: Alaska Tribal Conference on Environmental Management, Anchorage, AK. ATCEM, organized by the Alaska Native Tribal Health Consortium, is an annual gathering that brings together Tribes, Non-profits, and State and Federal organizations, for a week of environmental conversations. The discussions focus on finding and implementing solutions to address the unique environmental concerns facing Alaskan communities. <http://www.atcemak.com/>

October 27-29, 2015. 23rd Annual Tribal/EPA Region 9 Conference. Reno, NV. For the past 23 years, the annual conference has been an important opportunity for partnership and ongoing collaboration between Tribes, U.S. Environmental Protection Agency, and other federal, state, and local agencies. The annual conference provides the Tribes with valuable training, networking opportunities, and resource-sharing. Will include a climate change plenary session. <http://region9tribal-epaconference.com/>

November 2-3, 2015. Southwest Climate Summit: Bridging the Gap: Collaborative Science for Adaptive Management. Join the Southwest Climate Science Center (SW CSC) for a 2-day conference, **November 2-3, 2015**, that brings together scientists and managers to share emerging climate science, Climate-Smart Conservation results, management and policy responses, and lessons learned across the Southwest. The conference, held in Sacramento, California, will feature presentations by leading thinkers, oral and poster sessions, and workshops designed to engage participants in building collaborative partnerships for resilient southwestern landscapes. For more information: <http://www.swcsc.arizona.edu/content/2015-southwest-climate-summit>

November 4-5, 2015. Sixth Annual Pacific Northwest Climate Science Conference, Coeur d'Alene, ID. The PNW Climate Science Conference annually brings together more than 250 researchers and practitioners from around the region to discuss scientific results, challenges, and solutions related to the impacts of climate on people, natural resources, and infrastructure in the Pacific Northwest. It is the region's premier opportunity for a cross-disciplinary exchange of knowledge and ideas about regional climate, climate impacts, and climate adaptation science and practice.

November 5, 2015. Department of Energy Minorities in Energy Regional Climate Change Impacts Webinars - Hawai'i and Pacific Islands.

DOE will host [a series of webinars](#) highlighting the impacts and opportunities of climate change and responses for minority communities, using information from Quadrennial Energy Review and the National Climate Assessment. Participants may [register at anytime](#) for the webinars, and the webinars will be recorded for those interested who aren't able to attend. The presenters for the Hawai'i and Pacific Islands webinar are Jo-Ann Leong & Victoria Keener. For more information and to register, visit: <http://www.energy.gov/diversity/mie-webinar>.

November 9 - December 3, 2015. [Online training: Climate Change Policy and Public Health](https://www.coursera.org/course/ccandph). Offered by University of Wisconsin-Madison through Coursera. 4-8 hours/week. Explore current evidence linking climate change and public health while learning the fundamental co-benefits of climate change mitigation. Evaluate policies and interventions while gaining hands on experience communicating climate science and health to policy makers and the general public. <https://www.coursera.org/course/ccandph>

November 12-14, 2015. [2015 Rising Seas Summit, Cambridge, MA](http://www.risingseasummit.org/index.html). The Association of Climate Change Officers (ACCO) has announced the 2015 Rising Seas Summit, which will be held in collaboration with the City of Boston and the Boston Green Ribbon Commission. It brings together professionals from national and local government, industry, academic institutions and environmental NGOs to highlight the interrelationships between sea level rise, climate change and extreme events. <http://www.risingseasummit.org/index.html>

December 3, 2015. [Department of Energy Minorities in Energy Regional Climate Change Impacts Webinars - Great Plains](#).

DOE will host [a series of webinars](#) highlighting the impacts and opportunities of climate change and responses for minority communities, using information from Quadrennial Energy Review and the National Climate Assessment. Participants may [register at anytime](#) for the webinars, and the webinars will be recorded for those interested who aren't able to attend. The presenter for the Great Plains webinar is Bull Bennett. For more information and to register, visit: <http://www.energy.gov/diversity/mie-webinar>.

January 7, 2016. [Department of Energy Minorities in Energy Regional Climate Change Impacts Webinars - Southwest](#).

DOE will host [a series of webinars](#) highlighting the impacts and opportunities of climate change and responses for minority communities, using information from Quadrennial Energy Review and the National Climate Assessment. Participants may [register at anytime](#) for the webinars, and the webinars will be recorded for those interested who aren't able to attend. The presenter for the Southwest webinar is Hilda Blanco. For more information and to register, visit: <http://www.energy.gov/diversity/mie-webinar>.

February 4, 2016. [Department of Energy Minorities in Energy Regional Climate Change Impacts Webinars - Northwest](#).

DOE will host [a series of webinars](#) highlighting the impacts and opportunities of climate change and responses for minority communities, using information from Quadrennial Energy Review and the National Climate Assessment. Participants may [register at anytime](#) for the webinars, and the webinars will be recorded for those interested who aren't able to attend. The presenter for the Northwest webinar is TBD. For more information and to register, visit: <http://www.energy.gov/diversity/mie-webinar>.

NEWS, PUBLICATIONS AND RESOURCES

National Adaptation Forum Presentations: Session presentations and posters from the 2015 National Adaptation Forum held in May 2015 are now available on the conference website under the Program tab. <http://www.nationaladaptationforum.org/>

State of the Climate Reports (NOAA): The State of the Climate is a collection of monthly summaries recapping climate-related occurrences on both a global and national scale.

<http://www.ncdc.noaa.gov/sotc/>

Video: Climate Change From Inter-Tribal Youth Congress 2015: This video was made by Native American students from all over the US to help educate people about problems in their area caused by climate change. 7.5 min. July 2015. <https://www.youtube.com/watch?v=kHH85HcsHI4>

Murphy, Daniel J.; Wyborn, Carina; Yung, Laurie; Williams, Daniel R. 2015. Key concepts and methods in social vulnerability and adaptive capacity. Gen. Tech. Rep. RMRS-GTR-328. Fort

Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 24

p. National forests have been asked to assess how climate change will impact nearby human communities. To assist their thinking on this topic, we examine the concepts of social vulnerability and adaptive capacity with an emphasis on a range of theoretical and methodological approaches. This analysis is designed to help researchers and decision-makers select appropriate research approaches suited to particular planning and management needs. We first explore key conceptual frameworks and theoretical divisions, including different definitions of vulnerability and adaptive capacity. We then focus on the different methods that have been used to assess vulnerability and adaptive capacity and their respective pros and cons. Finally, we present and discuss three case examples and their respective research approaches. <http://www.treeseearch.fs.fed.us/pubs/48639>

[The Beaver Restoration Guidebook: Working with Beaver to Restore Streams, Wetlands, and Floodplains](#)

In 2013, the NPLCC partnered with U.S. Fish & Wildlife, NOAA, Portland State University, and the U.S. Forest Service to develop a comprehensive guide on using beaver for stream restoration. Throughout the past year, five sold out workshops were held to share information from this developing guidebook with over 200 land managers currently working with, or interested in, using beaver in restoration projects. Workshop participants provided input and feedback into the guidebook, and we are pleased to announce its finalization and official release. The goal of this guidebook is to provide an accessible, useful resource for anyone involved in using beaver to restore streams, floodplains, wetlands, and riparian areas. It provides a practical synthesis of the best available science, an overview of management techniques, and case studies from throughout the western US. To download the guidebook, [click here](#).

[New Fire Science Digest: Traditional Ecological Knowledge: A Model for Modern Fire](#)

Management? The interagency Joint Fire Science Program has released its latest issue of the Fire Science Digest. This issue discusses how state-of-the-art management strategies might benefit from an infusion of ancient indigenous wisdom and outlines efforts to braid traditional ecological knowledge with Western science. <http://www.firescience.gov/Digest/FSdigest20.pdf>

EPA: New Report on Benefits of Taking Action on Climate Change. The Environmental Protection Agency released a new report, [Climate Change in the United States: Benefits of Global Action](#), that estimates the physical and monetary benefits to the U.S. of reducing global greenhouse gas emissions. This report summarizes results from the Climate Change Impacts and Risks Analysis (CIRA) project, a peer-reviewed study comparing impacts in a future with significant global action on climate change to a future in which current greenhouse gas emissions continue to rise. The report shows that global action on climate change will significantly benefit Americans by saving lives and avoiding costly damages across

the U.S. economy.

White House: New Climate Data and Tools for Transportation. The White House announced new climate data and tools for the transportation sector. These resources include over 90 Federal datasets available through the [Climate Data Initiative](#) and case studies, visualizations, and other science-based resources available through the [Climate Resilience Toolkit](#).

[Alaskans Sharing Indigenous Knowledge \(AKSIK.org\) project.](#) A science and advocacy project documenting the impacts of climate change in two Native communities in Alaska and communicating their adaptation needs - now has a new film on its website. The new video entitled Stay and Defend is the debut film by David Smith and documents how this village of 250 people is struggling to build a protective berm to guard against increasingly severe storms. You can view the film at: <http://aksik.org/content/stay-and-defend>. This is the sixth film on the impacts of climate change on Native peoples on our website. Please share with other interested networks and parties.

[The Arctic Adaptation Exchange](#)

The Arctic Adaptation Exchange (AAE) facilitates knowledge exchange on climate change adaptation in the Arctic, and serves as a central information hub for communities, researchers and decision-makers in the public and private sectors. The AAE is a platform for individuals and organizations focused on northern issues to explore how others in the Arctic region have responded to the challenges and opportunities presented by climate change; share experiences and information on climate change impacts and adaptation initiatives and tools; and connect with others who have experience and knowledge.

Adaptation Workbook (NIACS)

This is a new web-based tool by the Northern Institute of Applied Climate Science (NIACS). The Adaptation Workbook is a structured process to consider the potential effects of climate change on forest ecosystems and design forest management and conservation actions that can help prepare for changing conditions. The process is completely flexible to accommodate a wide variety of geographic locations, scales, forest types, management goals, and ownership types. <http://www.adaptationworkbook.org/>

Climate Registry for the Assessment of Vulnerability (CRAVe) (NCCWSC)

The USGS National Climate Change and Wildlife Science Center worked with the non-profit EcoAdapt and other partners to develop this tool which will house metadata on climate change vulnerability assessments from across the nation and will be made available for searching by the general public. <https://nccwsc.usgs.gov/crave/>

Lessons Learned by Communities for Communities

EPA's Local Climate and Energy Program released several new resources for local climate and energy program staff. This latest round of resources are written by communities, for communities. Each resource was driven by community needs, inspired by actual implementation experiences, and informed by staff who have developed successful climate and energy programs. Each resource provides concrete steps for communities to follow when building or growing a climate and energy program: the focus is on practical, how-to implementation information: Local Climate Action Framework: A Step-by-Step Implementation Guide: <http://epa.gov/statelocalclimate/local/implementation/>; Effective Practices for Implementing Local Climate and Energy Programs

Tip Sheets:<http://epa.gov/statelocalclimate/local/showcase/csc-learn.html>, Local Climate and Energy Program Model Design Guide: <http://epa.gov/statelocalclimate/local/showcase/csc-learn.html#designguide>

Local Government Climate Adaptation Training (USEPA)

The U.S. Environmental Protection Agency released an online training module to help local government officials take actions to increase their communities' resiliency to a changing climate. The virtual training, which was informed by the National Climate Assessment released last year, was developed with advice from EPA's Local Government Advisory Committee and is the latest addition to the U.S. Climate Resilience Toolkit announced in November 2014. It includes successful examples of effective resilience strategies that have been implemented in cities and towns across the country.

<http://www.epa.gov/localadaptationtraining/>

NW Climate Magazine

This is a new annual publication from the Northwest Climate Science Center, the Climate Impacts Research Consortium and the North Pacific Landscape Conservation Cooperative aimed at sharing stories about Northwest climate research.

<https://www.nwclimatescience.org/nw-climate-magazine>

2014 Highlights of Progress and 2015 Implementation Plan for the National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate

This report highlights progress made in implementing the National Action Plan (https://www.whitehouse.gov/sites/default/files/microsites/ceq/2011_national_action_plan.pdf) and describes the specific tasks that federal agencies are planning to undertake in 2015.

http://acwi.gov/climate_wkg/NAP_2014_implementation_plan&2013_highlights_final3-24-14a.pdf

New Publication: Climate Change Adaptation in Indian Country: Tribal Regulation of Reservation Lands and Natural Resources.

<http://web.wmitchell.edu/law-review/wp-content/uploads/2015/03/3.-Ford-Website.pdf>

ITEP video Adapting to Change: The Institute for Tribal Environmental Professionals (ITEP) produced the video Adapting to Change with assistance from Jeremy Scott, a graduate student in Northern Arizona University's School of Communication. The filming occurred at ITEP's Climate Change Adaptation training in September 2014 in Portland, OR. The film highlights climate change impacts on tribes and their resources in the Pacific Northwest and Alaska, adaptation, and the training. The video and the training were made possible with funding support from the USDA Forest Service PNW Research Station. <http://vimeo.com/118150835>

ITEP Tribal Climate Change Fact Sheets: The Institute for Tribal Environmental produces 2-page fact sheets that focus on climate change impacts, adaptation strategies, and other relevant topics. They may be used in outreach with tribal government staff, leadership and communities. Two recent fact sheets focus on climate change mitigation and solid waste and climate change and human health and are attached below. Fact sheets are available at: http://www4.nau.edu/tribalclimatechange/resources/res_factsheets.asp

REGIONAL AND NATIONAL CLIMATE CHANGE RESOURCES, NEWSLETTERS AND CALENDARS

[ITEP Tribes and Climate Change Newsletter](#)

[PNW Tribal Climate Change Project](#) and [Funding Guide](#)

Climate Adaptation Knowledge Exchange (CAKE): events: <http://cakex.org/community/events>.
[Northwest Climate Science Center](#) and [NPLCC Northwest Climate Digest](#); [NW CSC Calendar](#)
Northwest Climate and Related Data
Resources: https://www.nwclimatescience.org/nw_data_resources
[USDA Climate Hubs](#)
[EPA's Stormwater Calculator](#)
[EPA's Climate Resilience Evaluation and Awareness Tool](#)
Climate Resilience Toolkit: <http://toolkit.climate.gov/tools>
[Columbia River Intertribal Fish Commission Climate Change Resources](#)
Climate Change Resource Center Education Modules: <http://www.fs.usda.gov/ccrc/climate-basics/education>.