









Welcome to ITEP's Tribal Climate Change Newsletter. This monthly newsletter provides news items, resources, announcements about funding opportunities, conferences, and training, and other information relevant to tribal climate change issues.

# ITEP's Climate Change Program News



Fort Hall, Idaho. Photo credit: Nikki Cooley

We are at the tail end of our scheduled Climate Change Adaptation Planning courses, with one in Billings, MT on August 2-5, and one in Nebraska City, NE scheduled for September 12-14. ITEP's climate change staff has been in consultation with the advisory committee on future introductory and advanced training courses. Stay tuned and check our training website for updates on courses: http://www7.nau.edu/itep/main/Training/training\_cc.

At our recent training in Red Cliff, WI, we had 22 participants from 15 regional tribes, 1 out of state and one tribal organization hosted by our friends, the Red Cliff Band of Chippewa Indians. We would like to extend our gratitude to all the participants, instructors, and of course, the Red Cliff Band for a successful course on shores of beautiful Lake Superior.

Finally, the National Adaptation Forum (NAF) is scheduled for May 9-11, 2017 in St. Paul, Minnesota, and call for proposals will open August 08, 2016, so start thinking of what you want to share with fellow attendees. Check the website for updates: http://www.nationaladaptationforum.org.

Have a wonderful and safe summer!

## About Us:

Nikki Cooley Co-Program Manager Nikki.Cooley@nau.edu

Karen Cozzetto Co-Program Manager Karen.Cozzetto@nau.edu

#### Newsletter

To subscribe or unsubscribe to this newsletter, please go to www7.nau.edu/itep/main/listsrv/where you can manage your Tribes & Climate Change Listserv and other ITEP Listserv subscriptions.

# Tribes & Climate Change website

For more on tribes and climate change issues, visit ITEP's Tribes & Climate Change website at www7.nau.edu/itep/main/tcc/

Ahéhee'! Thank you!

-Nikki Cooley and Karen Cozzetto

# In The News

## What Does Climate Change Mean for the County?

"If you think back a few decades ago and feel like winters were colder, the plant hardiness zones would suggest that's right," said Susan Erich, an agriculture professor at the University of Maine. Hardiness zones, calculated by the U.S. Department of Agriculture using the average lowest winter temperatures, have been moving north in recent decades. In the late update in 2006, much of central and southern Aroostook County moved from zone 3 to zone 4, based on data going back to 1976. They'll probably keeping moving in the coming decades, said Erich, one of several researchers at a recent conference in Presque Isle organized by the Aroostook Band of Micmacs. © 2016 Bangor Daily News, 07/26/16. http://bangordailynews.com/2016/06/23/news/aroostook/what-does-climate-change-mean-for-the-county/

# Rising Sea Levels are Forcing an Indigenous Tribe From Home and Could Be An Example of the Future

Leaders of the indigenous tribe from Louisiana's Isle de Jean Charles say they want to help other low-lying communities around the world cope with sea level rise. "We know we aren't the only ones," says Chantel Comardelle, a Biloxi-Chitimacha-Choctaw Indian who claims the Isle de Jean Charles as home. "This isn't just about us." © 2016 Public Radio International. 07/23/16.

http://www.pri.org/stories/2016-07-12/rising-sea-levels-are-forcing-indigenous-tribe-home-and-could-be-example-future

## A Native American Leader's Legacy Lives On at Nisqually Wildlife Refuge

Top Northwest officials and a member of President Obama's cabinet will gather Tuesday for the renaming of a wildlife refuge near Olympia in honor of one of the region's best known Native American leaders. The Nisqually National Wildlife Refuge is being renamed in honor of late Nisqually tribal leader Billy Frank, Jr. © 2016 KUOW News and Information, 07/18/16.

http://kuow.org/post/native-american-leaders-legacy-lives-nisqually-wildlife-refuge

# Protect Our Public Lands: Indigenous Witnesses Take Fracking and Climate Concerns On the Road

Indigenous Peoples on the front lines of climate change and development battles will be taking their testimony on the road starting on July 18, stopping at various points around Turtle Island. From July 18<sup>th</sup> through the 31<sup>st</sup> the Protect our Public Lands Tour will stop in Flagstaff, Arizona; Shiprock and Santa Fe, New Mexico; Lake Thunderbird, Oklahoma; Cahokia Mounds State Park, Illinois, and Philadelphia, according to a statement from the organizing group, Livelihoods(LiKEN), which describes itself as a "link-tank for policy- relevant research toward post-carbon livelihoods and communities. © 2016 Indian Country Today Media Network, LCC, 07/16/16.

http://indiancountrytodaymedianetwork.com/2016/07/16/protect-our-lands-indigenous-witnesses-take-fracking-and-climate-concerns-road-165168

## Bradley Bryne Blocks Obama From Using Offshore Drilling Revenue to Implement Climate Program

The U.S. House of Representatives on Tuesday adopted an amendment to block the Obama administration's proposal to transfer money away from Alabama and other Gulf states to help fund the president's "Coastal Climate Resilience" program that would help communities "prepare for and adapt to climate change." In February, President Barack Obama proposed transferring GOMESA money away from the Gulf States to pay for the Coastal Climate Resilience program by redirecting the funds toward climate projects, including \$400 million to help Native American tribes in Alaska deal with climate change. © 2016-ALToday.com, 07/14/16.

http://altoday.com/archives/11313-bradley-bryne-blocks-obama-from-using-off-shore-drilling-revenue-to-implement-climate-program

# Climate Change to Blame for Thinner Mussel Shells, Says Study

Increased acidity in our oceans as a result of burning fossil fuels is the cause of thinning of the California mussel shell, according to a new study by UChicago biologists. © Mercator Media Ltd 2016, 06/23/16. http://www.worldfishing.net/news101/industry-news/climate-change-to-blame-for-thinner-mussel-shells,-says-study

#### **Native American Tribes Learn to Fight Climate Change**

Climate change has affected communities across the United States, but for Native Americans the effects hit closer to home. Donald Simpson, the climate project director, has seen climate change in the Northwest create challenges for Native American tribes. He says it is especially evident for tribes when it comes to their tribal culture – a culture centered on a

relationship with their native lands. © 2016 KTVB-TV, 06/23/16. http://www.ktvb.com/news/native-ameican-tribes-fight-climate-change/253997866

## Resources

### Article: Effects of Climate Change on North American Inland Fishes: Introduction to the Special Issue

To sustainability manage North American fishes, understanding how climate change will impact, and is currently impacting, these ecologically, culturally, and economically valuable resources is a critical need. Because the effects of climate change on fisheries vary by ecoregion and interact with other anthropogenic stressors, synthesis of available information on the impacts of climate change on inland fishes at a continental scale is useful to their conservation and management. 06/16. <a href="http://tandfonline.com/doi/full/10.1080/03632415.2016.1187011">http://tandfonline.com/doi/full/10.1080/03632415.2016.1187011</a>

#### The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment

Climate change is a significant threat to the health of the American people. This scientific assessment examines how climate change is already affecting human health and the changes that may occur in the future. 2016. https://health2016.globalchange.gov/

# Other Items of Interest

# Americorps VISTA Volunteer on Climate Change Projects for the Tribal Colleges & Universities/VISTA Program (Americorps)

The Native Climate Resilience Network (NCRN) is a coordinated effort across Tribal communities to identify and plan for local climate change issues. Tribal Colleges and Universities (TCUs) develop site specific projects that integrate traditional, culturally specific ecological knowledge with western science practice in an effort to plan for locally identified climate change issues and to strengthen and develop partnerships with climate change experts. Deadline: TBD <a href="https://environment.uw.edu/wp-content/uploads/2016/05/NCRN-Flyer.pdf">https://environment.uw.edu/wp-content/uploads/2016/05/NCRN-Flyer.pdf</a>

# Notice of Intent: First Steps Toward Developing Renewable Energy and Energy Efficiency on Tribal Lands-2017 (DOE)

This funding opportunity announcement intends to solicit applications from Indian tribes (including Alaska Native Regional Corporations and Village Corporations) and Tribal Energy Resource Development Organizations to: 1) Conduct energy options analyses, 2) Benchmark baseline energy use and efficiency options, 3) Develop energy organizations, 4) Conduct climate resiliency planning, 5) Establish policy, regulations, and codes to reduce energy use or promote energy develop and 5) Obtain skills and training related to energy use and development. This funding opportunity will come out in August or September 2016.

https://eere-exchange.energy.gov/default.aspx#Foaldb3acdd95-837c-4756-bb32-681b7c6f2deb

# Funding Opportunities

NOTE: More Funding Opportunities can be found at the Tribes & Climate Change website: <a href="http://www7.nau.edu/itep/main/tcc/Resources/funding">http://www7.nau.edu/itep/main/tcc/Resources/funding</a>. Also, see the Tribal Climate Change Guide maintained by the Pacific Northwest Tribal Climate Change Project at the Univ. of Oregon: <a href="http://tribalclimateguide.uoregon.edu/">http://tribalclimateguide.uoregon.edu/</a>

# FY2017 Brownfields Area-Wide Planning Grant (EPA)

This funding is for research and/or technical assistance activities directed to one or more brownfield site(s) located in a specific area (such as a neighborhood, downtown or business district, local commercial corridor, community waterfront or city blocks). Each project funded under this grant must result in an area-wide plan which includes specific plan implementation strategies for assessing, cleaning up, and reusing the brownfields site(s) as well as related brownfields and project area revitalization strategies. Eligibility includes federally recognized Indian Tribal governments, intertribal consortia comprised of eligible Indian Tribes, Alaska Native Regional Corporations, Alaska Native Village Corporations, and Metlakatla Indian Community. Funding opportunity # EPA-OLEM-OBLR-16-05. Deadline: 08/10/16. http://www.grants.gov/web/grants/search-grants.html?keywords=climate%20change

#### FY 16 Coastal Ecosystem Resiliency Grants Program (NOAA)

The principal objective of the National Marine Fisheries Service's (NMFS) Coastal Ecosystem Resiliency Grants solicitation is to implement projects that use a proactive approach to improve or restore coastal habitat to: 1) strengthen the resilience of U.S. marine and coastal ecosystems and decrease the vulnerability of communities to extreme weather and 2) support sustainable fisheries and contribute to the recovery of protected resources. Eligibility includes federally recognized Native American tribal governments. Funding opportunity # NOAA-NMFS-HCPO-2016-2004840. Deadline: 08/16/16.

http://www.grants.gov/web/grants/search-grants.html?keywords=climate%20change

#### Climate Change Adaptation-Tribal Liaisons for 3 Regions Only (BIA)

The Secretary of the Interior (Secretary), through the Office of Trust Services, hereby solicits proposals from tribal non-profit, non-governmental organizations, and tribally controlled colleges or universities, to enter into 3 separate cooperative agreements for the identification and hiring of 3 tribal climate science liaisons in the Midwest region, the North Central region and the combined Northeast/Southeast region to address tribal climate change science needs in the appropriate science centers. This agreement provides a mechanism for the BIA to provide the Tribal organization with non-recurring funding for mutually agreed upon tasks in keeping with the climate science needs of the BIA and all tribal communities in the North Central Climate Science Center region. Eligibility includes tribal non-profits and tribally controlled colleges or universities. Funding opportunity # BIA-CLIMATE-16000-0001-0030. Deadline: 08/19/16. http://www.grants.gov/web/grants/search-grants.html?kevwords=climate%20change

# FY17 Tribal Wildlife Grants Program (USFWS)

This program provides a competitive funding opportunity for federally recognized tribal governments to develop and implement programs for the benefit of wildlife and their habitat, including species of Native American cultural or traditional importance and species that are not hunted or fished. Eligibility includes federally recognized Native American tribal governments. Funding opportunity # F16AS00199. Deadline: 09/02/16. http://www.grants.gov/web/grants/search-grants.html

# **Support to the National Tribal Water Council (EPA)**

This funding announcement is soliciting applications from eligible applicants to conduct, coordinate, and promote the acceleration of research, studies, training, and demonstration projects that will support the participation of the National Tribal Water Council (NTWC or "Council") and tribes to prevent, reduce, and eliminate pollution to waters, and protect drinking water in Indian country. Eligibility includes federally recognized Indian Tribes and intertribal consortia. Funding opportunity # EPA- EPA-OW-IO-16-0. Deadline: 09/11/16.

http://www.grants.gov/web/grants/search-grants.html?keywords=tribal%20climate%20change

#### Modeling of Climate Change Mitigation, Impacts and Adaptation (EPA)

This notice announces the availability of funds and solicits proposals to advance the field of climate economic modeling to assist decision makers and the public in effectively responding to the challenges and opportunities posed by climate change. The work involved in this effort includes two distinct modeling capabilities. Proposals should enhance "studies related to the causes, effects, (including health and welfare effects), extent, prevention and control of air pollution." Specifically, this effort is intended to contribute to the development and use of modeling tools to analyze the mitigation and impacts of greenhouse gas emissions. Eligibility includes federally recognized Indian Tribes. Funding opportunity # EPA-OAR-OAP-16-07. Deadline: 09/12/16.

http://www.grants.gov/web/grants/search-grants.html

#### **Coastal Program – Great Lakes Restoration Initiative (USFWS)**

The Coastal Program is a voluntary, incentive-based program that provides technical and financial assistance to coastal communities and landowners to restore and protect fish and wildlife habitat on public and private lands. The Coastal Program - Great Lakes Restoration Initiative funding is available to coastal areas within the U.S. portion of the Great Lakes basin which includes parts of Michigan, Wisconsin, Minnesota, Illinois, Indiana, Ohio, Pennsylvania, and New York. Eligibility includes federally recognized Native American tribal governments and Native American tribal organizations (other than Federally recognized tribal governments). Funding opportunity # F16AS00060. Deadline: 09/30/16. <a href="http://www.grants.gov/web/grants/search-grants.html">http://www.grants.gov/web/grants/search-grants.html</a>

## FY 2017 Climate Program Office (OAR, NOAA, Dept. of Commerce)

This funding opportunity is focused on conducting and supporting weather and climate research, oceanic and atmospheric observations, modeling, information management, assessments, interdisciplinary decision-support research, outreach, education, and partnership development. Climate variability and change present society with significant economic, health, safety, and security challenges and opportunities. In meeting these challenges, and as part of NOAA's climate portfolio within the Office of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO) advances scientific understanding, monitoring, and prediction of climate and its impacts, to enable effective decisions. These investments are key to NOAA's mission of "Science, Service, and Stewardship" and are guided by the agency's vision to create and sustain enhanced resilience in ecosystems, communities, and economies. Funding opportunity # NOAA-OAR-CPO-2017-2004896. Deadline: 10/24/16.

http://www.grants.gov/web/grants/search-grants.html

# **Upcoming Events**

**NOTE:** More Upcoming Events can be found at the Tribes & Climate Change website: http://www7.nau.edu/itep/main/tcc/Home/Events

# August 2016

# ITEP Training: Climate Change Adaptation Planning

August 02-04, Billings, MT. Offered by the Institute for Tribal Environmental Professionals (ITEP). The course provides an introduction to planning for climate change impacts, including identifying impacts, vulnerabilities, and adaptation strategies; and tools, resources, and partnerships. The course is intended for tribal environmental and natural resource professionals and other tribal staff who expect to be involved in climate change adaptation planning within the Northern Plains and Rocky Mountains region.

http://www7.nau.edu/itep/main/Training/training\_cc

# Training: Climate Education Regional Workshop: Rising Tides and Changing Times

August 03-04, Charleston, SC. Offered by the NOAA Climate Stewards Education Project. This two-day workshop will provide tools for formal and informal educators working with elementary through university age students with sustained professional development to build a climate-literate audience.

https://docs.google.com/forms/d/1IEkuKHcz-rwPI7s5k Ldx-wUrzpepvGNOAx-Ifkl5mQ/viewform

Webinar: Creating Lasting Resilience with Comprehensive Plans & Targeted Land Use Codes & Ordinances August 04, 1:00 - 2:30 p.m. EST. Offered by the Model Forest Policy Program. This session will examine real world examples from CSU communities to illustrate how to meld comprehensive planning, land use regulations, and climate adaptation, including relevant tools and resources to help practitioners make an impact.

https://www.eventbrite.com/e/creating-lasting-resilience-with-comprehensive-plans-targeted-land-use-codes-ordinances-registration-26518181595

#### **Conference: 2016 International Atmospheric Rivers Conference**

August 08-11, La Jolla, CA. Offered by the Center for Western Weather and Water Extremes. The aims of the 2016 conference are to discuss and identify differing regional perspectives and conditions from around the world, and to plan for future scientific and practical challenges.

http://cw3e.ucsd.edu/ARconf2016/

# ITEP Conference: 2016 Tribal Lands & Environment Forum

August 15-18, Mohegan Sun Resort, Uncasville, CT. Offered by the Institute for Tribal Environmental Professionals (ITEP). Once again, the forum will feature special trainings, field trips, and breakout sessions focused on solid/hazardous waste management, brownfields, UST/LUSTs, Superfund sites, and emergency response. This will also be the second time we include breakout sessions, trainings and field trips related to tribal water programs – water quality, drinking water, and habitat restoration (including wetlands, streams and fisheries). http://www7.nau.edu/itep/main/Conferences/confr\_tlef

# Webinar: Climate Resilience for Integrated Water Resource Management

August 18, 1:00 - 2:30 p.m. EST. Offered by the Model Forest Policy Program. Drought, flooding, source water security, and changing precipitation patterns are climate risks that must be addressed on the path to resiliency. Putting climate into a framework of integrated water resource management is ever more critical. This session offers real world applications for cities, utilities, and other public / private influence points.

https://www.eventbrite.com/e/creating-lasting-resilience-with-comprehensive-plans-targeted-land-use-codes-ordinances-registration-26518181595

#### Training: ALC3184 Climate Change Vulnerability Assessment

August 23-25, Shepherdstown, WV. Offered by the U.S. Fish & Wildlife Service and the National Conservation Training Center. The course is designed to guide conservation and resource management practitioners in two essential elements in the design of climate adaptation plans. Specifically, it will provide guidance in identifying which species or habitats are likely to be most strongly affected by projected changes; and understanding why these resources are likely to be vulnerable. Vulnerability assessments are a critical tool in undertaking any climate change planning or implementation process. http://training.fws.gov/nctcweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-ALC3184

# Webinar: Species in the Spotlight, Part 7: Sacramento River Winter-run Chinook Salmon

August 24, 12:00 -1:00 p.m. Offered by NOAA. In May 2015, NOAA Fisheries released the Recovering Threatened and Endangered Species FY 2013-2014 Report to Congress and launched "Species in the Spotlight", an initiative focused on

stabilizing populations of eight endangered species at very high risk of extinction. This talk will delve into the details of recovery and conservation for Sacramento River Winter-run Chinook Salmon.

https://calendar.google.com/calendar/render?eid=NGM4ODViY2o3Zm1mN3JzbGIxbGtvN2M0Z2Mgbm9hYS5nb3ZfNDk0NDMyMzQzNjMzMzJAcmVzb3VyY2UuY2FsZW5kYXluZ29vZ2xlLmNvbQ&sf=true&output=xml#eventpage 6

#### September 2016

## **Conference: California Climate Change Symposium**

September 06, Long Beach, CA. Offered by California Natural Resources Agency, CalEPA and Governor's Office of Planning. Goals are to: 1) facilitate the production, adoption and application of climate science with respect to California policy and local governance; 2) Provide a forum for sharing recent science and practical applications relevant to climate change impacts and vulnerability; 3) Foster the translation of regional climate change research into policy solutions; 4) Expand support for climate science research with applications to California's environment, public health and economy; and 5) Facilitate collaboration across scientific research fields and public policy silos.

http://www.californiascience.org/?utm\_source=Newsletter%205.24.16&utm\_campaign=Constant%20Contact&utm\_medium =email

## Conference: 2016 California Adaption Forum

September 07-08, Long Beach, CA. Offered by the National Adaptation Forum in partnership with State of California and Local Government Commission. The Forum will bring together over a 1,000 local, regional and state leaders to form a community of action, committed to addressing California's adaptation needs.

http://www.californiaadaptationforum.org/?utm\_source=Newsletter+12.15.15&utm\_campaign=Constant+Contact&utm\_medi\_um=email

#### Conference: 2016 Carolinas Climate Resilience Conference

September 12-14, Charlotte, NC. Offered by the Carolinas Integrated Sciences and Assessments. This conference will share information about climate-related tools, resources, experiences, and activities in the Carolinas. This will be a very interactive conference geared towards networking and exchange among stakeholders and decision makers throughout the region.

http://www.cisa.sc.edu/ccrc/

# ITEP Training: Climate Change Adaptation Planning

September 13-15, Nebraska City, NE. Offered by the Institute for Tribal Environmental Professionals (ITEP). The course provides an introduction to planning for climate change impacts, including identifying impacts, vulnerabilities, and adaptation strategies; and tools, resources, and partnerships. The course is intended for tribal environmental and natural resource professionals and other tribal staff who expect to be involved in climate change adaptation planning within the central U.S. <a href="http://www7.nau.edu/itep/main/Training/training\_cc">http://www7.nau.edu/itep/main/Training/training\_cc</a>

#### **Conference: West Coast Salmon Summit**

September 26-29, Canyonville, OR. Offered by the Cow Creek Band of Umpqua Tribe of Indians. The Summit is dedicated to the conservation of Pacific Salmon throughout their native range. This year's Summit will focus on "Restoring our Future". In this unique forum, scientists and resource managers, educators, tribal and First Nations representatives, federal and state agencies and non-governmental employees will find common ground and inspiration for creating a "...more natural state of recovery."

http://www.salmonsummit.org/

## October 2016

## **Conference: 2016 Mountain Climate Conference**

October 17-21, Leavenworth, WA. Offered by the Consortium for Integrated Climate Research in Western Mountains The conference will continue the tradition of excellence established by over a decade of meetings by working at the intersection of intersection of climate and a host of other scientific disciplines including hydrology, ecology, and glaciology. In addition, the conference will explore the central theme: *Mountains Without Snow: What are the Consequences?*. http://www.mtnclim.org/

# Conference: 43rd Natural Areas Conference

October 18-21, Davis, CA. Offered by the Natural Areas Association. The conference will focus on the nuts-and-bolts of climate change adaptation, with the target audience being organizations and individuals involved in on-the-ground natural areas management.

https://naturalareas.org/conference

Conference: 2016 Climate Strategies Forum, West Coast

October 19-21, San Diego, CA. Offered by the Association of Climate Change Officers. Climate Strategies Forum events are the premier programs centered on formal climate change preparedness training for credit applicable to credentials issued under the CCO CertificationTM program. http://www.climatestrategiesforum.org/

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