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**

We have confirmed a few of our training dates for the early part of 2017 which are listed on our website: [http://www7.nau.edu/itep/main/Training/training_cc](http://www7.nau.edu/itep/main/Training/training_cc). Currently, registration is open for the Climate Change Adaptation training scheduled for February 21-23 in Anchorage, AK, and once again, we are honored to be collaborating with the Alaska Native Tribal Health Consortium (ANTHC). Additional climate change trainings will take place in Spokane, WA (March 14-16) and Albuquerque, NM (June 06-08), Northeast (TDB) and Southeast (TBD).

For the past 13 years, Mehrdad Khatibi has served as ITEP’s Director working with tribes and organizations across the country but in the new year, he will be starting a new position with the EPA in Seattle, WA. We are so sad to lose him as he is a valued colleague, mentor, friend and family member, but we are so happy and excited for him in this new endeavor. We wish nothing but success and happiness for Mehrdad and his family! Thank you!!!!

Happy New Year!

-Nikki, Karen, Fletcher and Colleen
In The News

Peabody Energy and Native Americans in Dispute Over Mining in Arizona
The world’s largest coal company, Peabody Energy, is seeking federal approval to expand its mine on Navajo and Hopi land in northern Arizona, a move supported by tribal leaders. © 2016 The New York Times. 12/29/2016.

For Native Americans, New National Monument a Rare Victory
Obama’s designation of Bear Ears National Monument represented victory in a growing effort to protect tribes’ lands – efforts many say have also led them to reconnect with their spiritual traditions. From earlier protests to the Keystone XL pipeline and the Idle No More movement over the past decade, many described their protests as part of a resurgence that “may be turning Native Americans into a leading force in the domestic movement on climate change.” © The Christian Science Monitor. 12/29/2016.
http://www.csmonitor.com/USA/Politics/2016/1229/For-Native-Americans-new-national-monument-a-rare-victory

Alaska Indigenous People See Culture Slipping Away as Sea Ice Vanishes
The Yupik, an indigenous people of western Alaska, have dozens of words for vagaries of sea ice, which is not surprising given the crucial role it plays in subsistence hunting and transportation. But researchers have noted that some of these words, such as “tagneghneq” (thick, dark, weathered ice), are becoming obsolete. © 2016 the guardian. 12/19/2016.

Trump to Pick Oil Drilling Advocate, Climate Change Sceptic to Run Interior Department, Sources
President-elect Donald Trump is expected to pick US Representative Cathy McMorris Rodgers, a strong advocate of increased oil and gas development who is skeptical about climate change, to run the Department of Interior. The appointment could mean easier access for industry to more than a quarter of America’s territory, ranging from national parks to tribal lands stretching from the Arctic to the Gulf of Mexico, where energy companies are eager to drill and mine. © 2016 Fairfax Media. 12/10/2016.

Obama Creates “Resilience Area” for Alaskan Natives Along Bering Strait
President Barack Obama responded to appeals from Alaska Native villages and gave them more of a stay in the federal management of marine resources of the Bering Sea. Obama signed an executive order to create a Northern Bering Sea Climate Resilience Area that will focus “locally tailored” protections on marine resources. The newly created resilience area covers 112,300 square miles and stretches from north of the Bering Strait to north of Bristol Bay. © 2016 CBS Interactive Inc., 12/09/2016.

New Report Recounts Alaskan Subsistence Hunters’ Climate Change-Driven Challenges
Climate change has made life harder in many ways for indigenous peoples of the circumpolar north who depend on fish and wildlife to feed their families. And a new study examines what’s become the biggest difficulty for Alaska’s subsistence hunters: that is, just getting out into the field to get to the food. © 2016 KUAC. 12/02/2016.

Indigenous Peoples of the World’s Coastlines are Losing their Fisheries – and their Way of Life
A new study released Friday by the Nippon Foundation-Nereus Program, based at the University of British Columbia, shows that indigenous people who live on the world’s coasts are definitely hooked. They don’t simply catch and eat fish and other seafood. It’s the heart of communities, the center of culture and religion, a gift from the heavens. © 2016 Alaska Dispatch Publishing. 12/02/2016.

Activists Praise Clothing Company for Porcupine Caribou Herd Support
Activists working to protect the Arctic National Wildlife Refuge (ANWR) in Alaska say they’ve been given a big boost from clothing and gear company Patagonia as they ramp up to fight renewed efforts to open the refuge to oil and gas development. Opponents of drillings say that threatens the survival of the Porcupine caribou herd that migrates across parts of Alaska, Yukon and the Northwest Territories. © 2016 CBC/Radio-Canada.12/01/16.
Native American Pipeline Resistance in North Dakota is about Climate Justice

Over the past months, hundreds of indigenous persons and their allies have gathered near the crossing of the Missouri and Cannon Ball rivers in the ancestral territories of the Standing Rock Sioux tribe. Their primary fear is that an oil leak would threaten water quality for many members of the tribal community. Stopping DAPL is a matter of climate justice and decolonization for indigenous peoples. It may not always be apparent to people outside these communities, but standing up for water quality and heritage are intrinsically tied to these larger issues. © 2016 iflscience.com, 11/24/2016.


The Last Whale Hunt for a Vanishing Village

Some Alaskan villages catch a whale every year. Kivalina was never that lucky, partly because it occupies a spot on the coast that's farther from the migratory path of the bowhead whale. Still, there was a time when villagers could reasonably expect to land a whale every three or four years. Those days are gone. © 2016 Men's Journal, 10/12/2016.

http://www.mensjournal.com/features/articles/the-last-whale-hunt-for-a-vanishing-village-kivalina-alaska-w443825

Resources

Report: Climate Change and Our Natural Resources: A Report from the Treaty Tribes in Western Washington

A report from the treaty tribes in western Washington released a comprehensive report on how climate change is hurting tribal treaty rights and natural resources. 11/15/16.

http://nwtribe.org/climatechange/

Report: Beyond Coal: Scaling Up Clean Energy to Fight Global Poverty

The coal industry claims that expanding coal use is critical to fighting extreme poverty and improving energy access for billions of people in developing countries. The evidence is clear: a lasting solution to poverty requires the world’s wealthiest economies to renounce coals, and we can and must end extreme poverty without the precipitous expansion of new coal power in developing ones. This paper explores the role of energy in fighting poverty, arguing that: more coal will not end energy poverty, coal is given too much credit for the reduction of extreme poverty, better energy options exist to lift people out of income poverty, and more coal will entrench poverty. 10/16.


CU Boulder Launching Arctic Studies Program This Spring

Students will study environment, politics and culture of polar region in 18-credit certificate program. The certificate program will be titled "Introduction to Arctic Climate and Environment," which will be offered in the spring semester and will focus on the effects – environmental and otherwise – of disappearing sea ice in the Arctic region. 12/26/16.

**Other Items of Interest**

**AmeriCorps VISTA & Tribal Resilience (AIHEC)**
American Indian High Education Consortium is seeking Tribal Colleges & Universities to host full-time, college-educated, Volunteers in Service to America (VISTAs) through the TCU VISTA Program. VISTAs can help provide capacity for community-driven projects that address pressing local climate change concerns.

http://www.gobridgenet.org/

**Video: The Refuge (Patagonia)**
For hundreds of generations, the Gwich’in people of Alaska and northern Canada have depended on the caribou that migrate through the Arctic Refuge. With their traditional culture now threatened by oil extraction and climate change, two Gwich’in women are continuing a decades-long fight to protect their land and future. 15 min, 33 sec.

http://www.patagonia.com/the-refuge.html

**Video: How Melting Arctic Ice Could Cause Uncontrollable Climate change**
Arctic scientists have reported that the speed at which the northern ice cap is melting risks triggering 19 climate tipping points, with disastrous consequences. It could also affect ecosystems elsewhere on Earth, perhaps irreversibly. The Arctic Resilience Report says it is crucial to reduce greenhouse gas emissions. 1min 17secs. 11/25/16.


**Video Documentary: How Indigenous Knowledge is Changing What We Know About the Arctic**
Arctic Peoples are more than just victims of climate change. In many parts of the circumpolar world, they're collaborating with scientists to unravel the unprecedented environmental transformation of the North. 9min 58secs. 12/23/16.


**Funding Opportunities**

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

**WaterSMART: Development of Feasibility Studies under the Title XVI Water Reclamation and Reuse Program (FY) 2017 (BOR)**
The objective of this FOA is to invite applicants to cost share the development of new water reuse feasibility studies. Water reclamation and reuse projects provide growing communities with new sources of clean water while promoting water and energy efficiency and environmental stewardship. Eligibility includes Indian tribes or tribal organizations. Funding opportunity #BOR-DO-17-F003. Deadline: 01/05/17.

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

**FY17 Coral Reef Conservation Program, Domestic Coral Reef Conservation Grants (NOS, NOAA, Dept. of Commerce)**
This funding opportunity is soliciting applications intended to support coral reef conservation projects in shallow water coral reef ecosystems, including reefs at mesophotic depths, in American Samoa, the Commonwealth of the Northern Mariana Islands, Florida, Guam, Hawaii, Puerto Rico, the U.S. Virgin Islands, and coral-dominated banks in the U.S. portions of the Gulf of Mexico. Eligibility includes federally recognized Indian tribal governments. Funding opportunity # NOAA-NOS-OCM-2017-2005011. Deadline: 01/11/17.

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

**FY 2017 National Climate Change & Wildlife Center Program (Geological Survey)**
This program was created to ensure that the National Climate Change and Wildlife Science Center is responsive to the research and management needs of Federal and State agencies to provide science and technical support regarding the impacts of climate change in fish, wildlife, plants and ecological processes. National coordination of research and modeling at regional centers will ensure uniformity of downscaling and forecasting models and standardized information to support management of fish and wildlife resources and regional partnership collaborations. The CSC’s will provide access to the expertise at cooperating universities and supports the mission of the program. Eligibility: Unrestricted. Funding opportunity # G16AS00129. Deadline: 01/12/17.

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

NOAA Climate Program Office FY2017 - Understanding Climate Impacts on Fish Stocks and Fisheries to Inform...
Sustainable Management (Dept. of Commerce)
The goal is to inform sustainable fisheries management and promote resilience of the nation’s fish stocks and fisheries in a changing climate. For FY17, this OAR/NMFS partnership, through the Coastal and Ocean Climate Applications (COCA) Program, will continue to take a regional approach to improving the resilience and adaptation of fisheries in a changing climate by soliciting proposals under two competitions. Eligibility includes Indian tribal governments. Funding opportunity #: OAA-OAR-CPO-2017-2004998. Deadline: 01/30/17. http://www.grants.gov/web/grants/view-grant-collaboration.htm

HHS Impacts of Climate Change on Oceans and Great Lakes Program (NIH)
The purpose of this FOA is to invite applications for multi-component projects that will investigate the impact of climate change on emerging public health threats associated with marine and Great Lakes Basin environments. The focus of the program will be to support research on the exposures, toxicities and human health impacts that arise in these environments and how climate change is influencing these factors now and in the future. The FOA solicits applications that will achieve program goals through integrated, multidisciplinary scientific approaches and a community engagement component. Eligibility includes federally recognized tribal governments and Alaska Native serving institutions. Funding opportunity #: RFA-ES-16-009. Letter of Intent Deadline: 02/07/17. https://grants.nih.gov/grants/guide/rfa-files/RFA-ES-16-009.html#_Section_III._Eligibility

Anticipating the Environmental Impacts and Behavioral Drivers of Deep Decarbonization Program (EPA)
This announcement is making available funding for research that improves understanding of the public health and environmental impacts and behavioral drivers of significant changes in energy production and consumption, especially changes associated with reducing greenhouse gas emissions consistent with achieving international climate change goals. Eligibility includes tribal governments. Funding opportunity #: EPA-G2017-STAR-B1. Deadline: 02/10/17. https://www.epa.gov/research/anticipating-environmental-impacts-and-behavioral-drivers-deep-decarbonization

BOR Drought Response Program FY2017
The objective of the Drought Contingency Planning FOA is to invite eligible applicants to leverage their resources by cost sharing Drought Contingency Planning with Reclamation to build resilience to drought in advance of a crisis. Applicants under this FOA may request funding to develop a new drought plan or to update an existing drought plan. Applicants may also request technical assistance from Reclamation for the development of elements of the Drought Contingency Plan. Deadline: 02/14/17.

NOAA climate Program Office’s Regional Integrated Sciences and Assessments (RISA) Program (Dept. of Commerce)
Part of NOAA’s vision is to create and sustain enhanced resilience in ecosystems, communities, and economies, as outlined in the NGSP. RISA is holding two competitions for research funding focused on three geographies. We are soliciting proposals for: 1) Competition 1: a RISA team focused on the Arizona/New Mexico region of the US; and 2) Competition 2: a RISA team focused on either the California/Nevada region of the US or on the Midwestern region of the US. Eligibility includes Indian tribal governments. Funding opportunity #: NOAA-OAR-CPO-2017-2005017. Deadline: 02/16/17. http://www.noaa.gov/web/grants/search-grants.html

Coastal Program (FWS)
This funding opportunity is to provide direct technical assistance and financial assistance to coastal communities and landowners to restore and protect fish and wildlife habitat on public and private lands. Projects should specify benefits for species and habitats considering the expected effects of climate change. Eligibility includes federally recognized tribal governments. Funding opportunity #: F17AS00014. Deadline: 08/30/17. http://www.noaa.gov/web/grants/view-opportunity.html?oppId=289863

Upcoming Events

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

January 2016

Webinar: A Three-Step Decision Support Framework for Taking Climate Adaptation Actions
January 10, 12:00-1:00 p.m. Mountain. Offered by Great Northern LCC Rocky Mtn. Partner Forum. This webinar will present a framework for using available climate science to set forward-looking conservation goals and select a menu of climate adaptation strategies.
Webinar: Managing California’s Limited Water Supply: Improvements to the Sacramento River Drought Water Rights Allocation Tool
January 11, 1:00-2:00 p.m. Pacific. Offered by the California LCC. In this webinar, speakers will present the Sacramento River Drought Water Rights Allocation Tool (DWART), which can be used to optimize water rights curtailments based on the spatial and temporal variability of water demands, priority of rights, and hydrology. The speakers will highlight the results of recent efforts to improve the natural flow model for dry years in the Sacramento watershed using machine learning techniques. 
http://www.californialcc.org/webinars/managing-california%E2%80%99s-limited-water-supply-improvements-sacramento-river-drought-water

Training: Managing Visitor Use in Coastal and Marine Protected Areas
January 11-12, 2017. Watsonville, CA. Offered by the Coastal Training Program. This two-day course helps coastal resource managers, protected area managers, local decision-makers, and planners learn how to better understand, monitor, and manage visitor use to maintain quality resource conditions and visitor experiences. During this program, participants will obtain the knowledge, skills, and tools to identify and define unacceptable visitor use impacts, and to apply strategies and tactics that can be used to address them. 

Webinar: What is Ecological Drought? Exploring Its Impact on Natural and Cultural Resources
January 12, 3:00-4:00 p.m. Eastern. Offered by the USGS. The Climate Science Centers and NCCWSC, along with a number of partners are actively working to understand the regional effects of ecological drought, identify potential threats to valued resources, and prioritize research efforts that consider potential drought effects on ecological systems. 
https://nccwsc.usgs.gov/webinar/Ecodrought-Carter

Webinar: Vegetative and Geomorphic Complexity at Tributary Junctions on the Colorado and Dolores Rivers: A Blueprint for Riparian Restoration
January 17, 11:00-12:00 a.m./p.m. Pacific. Offered by the Southern Rockies LCC. Speaker, Meg White, will discuss Habitat complexity in rivers is linked to physical processes that act at various spatial scales and requires dynamic hydrologic and geomorphic conditions. On regulated rivers in the western United States, tributaries may provide important resource inputs and serve as sources of dynamism on regulated systems, offering blueprints to guide restoration of habitat complexity in riparian areas. We investigated spatial patterns and extent of tributary influence on riparian habitat complexity along regulated reaches of the Colorado and Dolores Rivers in the western United States. 

Conference: 2017 National Conference & Global Forum on Science, Policy, & the Environment
January 24-26, Washington, D.C. Offered by the National Council for Science & Environment. More than 1,000 colleagues to hear from key experts in the field of environment and health, network with your peers, and learn about new scientific breakthroughs. Address the critical, interconnected issues of environment and health and how to improve the health and well-being of people, the planet, and its ecosystems. 
http://www.neseconference.org

Conference: California Climate Change Symposium
January 25-26, Sacramento, CA. Offered by the CalEPA, CANRA and Governor’s Office of Planning & Research. This symposium is the premier 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. 

February 2016

Conference: Alaska Forum on Environment
February 06-10, Anchorage, AK. The Alaska Forum on the Environment (AFE) is a statewide gathering of environmental professionals from government agencies, non-profit and for-profit businesses, community leaders, Alaskan youth, conservationists, biologists and community elders. 
http://www.akforum.org/

Conference: Tribal Water in Arizona
February 09-10, Phoenix, AZ. Offered by Law Seminars International. This Conference will present a comprehensive and current overview of the legal and practical issues impacting Tribal water rights and the development of Tribal water projects. It is particularly timely as we transition to a Trump administration with the attendant uncertainty at the federal level.
Conference: 2017 National Native Seed Conference
February 13-16, Washington, D.C. Offered by the Native Seed Network and Institute for Applied Ecology. The National Native Seed Conference connects research, industry, land management, and restoration professionals, providing the premier opportunity to develop relationships and share information about the collection, research and development, production, and use of native plant materials.
http://nativeseed.info/

Conference: Northwest Basin & Range Ecosystem Symposium
February 15-17, Lakeview, OR. Offered by the Great Basin LCC. The NW Great Basin ecoregion is one of the most intact ecosystems in the west. It is also a biological hotspot for migratory birds, greater sage-grouse and a stronghold for pronghorn antelope. However, altered fire regimes, invasive species, water scarcity, development, and climate change threaten the integrity of this landscape. Several efforts are ongoing for individual species, specific threats or sub-geographies, and over 60 existing plans and assessments have been identified for the region.
http://greatbasinlcc.org/nw-basin-range

Conference: Climate Change in the West – The Path Forward
February 16-17, Seattle, WA. Offered by Law Seminars International. Our faculty of expert attorneys, policy makers, and environmental advocates will explore the climate strategies that are underway within Western states and Canadian provinces, the integration of the Western electricity grid as a means of achieving reductions, the adaptation strategies being undertaken at all levels of government, and the increasing sense that environmental justice needs to inform all of these efforts.

Conference: Great Basin Consortium Conference
February 21-23, Reno, NV. Offered by the GBLCC. The conference will focus on the implementation of the Science Plan being developed as part of the Secretarial Order on Rangeland Fire Prevention, Management and Restoration by hosting workshops to address the key science needs described in the forthcoming plan. The output from these discussions will help shape the implementation of the science plan.
http://greatbasinlcc.org/calendar/great-basin-consortium-conference

March 2016

ITEP Training: Climate Change Adaptation Training
March 14-16, Spokane, WA.
http://www7.nau.edu/itep/main/Training/training_cc

ITEP Training: WASTE: Composting Programs and Tribal Food Sovereignty
March 21-23, Tucson, AZ. Offered by ITEP’s Waste & Response Program.
http://www7.nau.edu/itep/main/Training/training_waste

April 2016

Conference: 2017 NCR Water Resources Symposium
April 07, 8:30 a.m. – 4:30 p.m. Eastern. Offered by the American Water Resources Association. This one-day symposium will bring together experts from governmental agencies, academia, the private sector, and non-profits to present and discuss innovations in water research, technology, policy and management to respect and reflect the true value of water.

Training: Adapting to Climate Change: Actions, Implementations, and Outcomes
April 28-May 01, University of Notre Dame. Offered by the Northwest CSC. This workshops will showcase cutting edge social science research on climate change adaptation.
https://www.nwclimatescience.org/events/adapting-climate-change-actions-implementations-and-outcomes

May 2016

Conference: 15th Annual Climate Prediction Applications Science Workshop
May 02-04, Anchorage, AK. Offered by NOAA, ACCAP and others. The 2017 conference will have the theme “Understanding Extreme Events and Decision-Maker Needs in the Context of Climate Variability and Change”. The meeting format will include symposium-style sessions, panel sessions, discussions, and keynote speakers that address this theme.
http://nwbiclcc.org/?p=2107