









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



The Nottawaseppi Huron Band of the Potawatomi provided a tour of the reservation during the National Tribal Forum on Air Quality. Photo credit: S. Wotkyns

The tribally focused sessions at the **National Adaptation Forum** on May 12-14 in St. Louis (<a href="http://www.nationaladaptationforum.org/">http://www.nationaladaptationforum.org/</a>) were well attended and well received. Thanks to the session organizers, the participants, EcoAdapt, and the many people who served on the NAF Program Committee and Steering Committee. It was a great conference with many interesting, relevant sessions and many opportunities for networking. I'm already looking forward to the 2017 NAF! The **National Tribal Forum on Air Quality** on May 19-21 in Battle Creek, MI, was also a great success The Nottawaseppi Huron Band of the Potawatomi, was a very generous and welcoming host, and the keynote speakers, plenary and breakout sessions were all very good. The presentations will be available on the conference website soon: <a href="http://www4.nau.edu/itep/conferences/confr.ntf.asp">http://www4.nau.edu/itep/conferences/confr.ntf.asp</a>.

ITEP is starting a new **Tribal Climate Change Webinar Series** on Friday, May 29, with a webinar featuring a presentation by Mike Brubaker, Alaska Native Tribal Health Consortium about the Local Environmental observers (LEO) Network. For more information about this webinar and the three webinars scheduled for June, please visit ITEP's Climate Change Webinars webpage:

http://www4.nau.edu/itep/climatechange/tcc\_upcoming\_webinars.asp.

We're making final preparations for the upcoming **Climate Change Adaptation Planning course** scheduled for June 16-18 in Bishop, CA, and hosted by the Bishop Paiute Tribe.

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#### Newsletter

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# Tribes & Climate Change website

change/ tcc news letters.asp

For more on tribes and climate change issues, visit ITEP's Tribes & Climate Change website at <a href="https://www4.nau.edu/tribal.climate.change">www4.nau.edu/tribal.climate.change</a>

The class is full— any additional registrations will be added to a waiting list. We are offering the course in collaboration with the Great Basin Landscape Conservation Cooperative and with funding support from the Bureau of Land Management. ITEP's Climate Change training schedule, is available at:

http://www4.nau.edu/itep/climatechange/tcc\_trainings.asp,

ITEP is planning the **Tribal Lands and Environment Forum** (TLEF), for August 17-20 in Minneapolis, MN. The forum will feature trainings, field trips, and breakout sessions focused on solid/hazardous waste management, brownfields, UST/LUSTs, Superfund sites, and emergency response, as well as sessions focused on water quality, drinking water, and habitat restoration (including wetlands, streams and fisheries) and on climate change. Registration for TLEF is available on the conference website. http://www4.nau.edu/itep/conferences/confr\_tlf.asp

- Sue Wotkyns, Program Manager



#### **Tribes Cope With Flooding in Oklahoma**

Flooding in Oklahoma briefly closed down the Comanche casino and postponed a Muscogee fishing tourney this week as tribes and municipalities contended with extreme weather. Workers and volunteers made and set up sandbags to keep waters at bay from homes and buildings on the Comanche reservation in southwest Oklahoma, while the Comanche Nation Casino in Lawton, Oklahoma, was closed for a day, the tribe announced on May 25. © 2015 Indian Country Today Media Network, LLC, 5/28/15.

http://indiancountrytodaymedianetwork.com/2015/05/28/tribes-cope-flooding-oklahoma-160510

#### On the Bayou: Front Lines of Climate Change

The ground is eroding under the feet of southern Louisiana's indigenous people. These rural residents are dealing with the local consequences of a global problem. A tribe of Biloxi-Chicamauga-Choctaw from the Isle de Jean Charles, in the bayous of coastal Louisiana, is soon to become the first community in the lower 48 states to relocate because of coastal erosion. They will certainly not be the last. The Daily Yonder, 5/26/15.

http://www.dailyyonder.com/bayou-la-front-lines-climate-change/2015/05/26/7851

#### Restore forests to slow climate change

This week, leaders from the United States and around the world gathered in Sacramento to sign an agreement to significantly reduce greenhouse gas emissions by the year 2050. While it may seem far removed from the rainforests of California's Klamath River basin, where I [Thomas O'Rourke, Chairman of the Yurok Tribal Council] live, global warming hits very close to home. The new partnership includes tropical rainforest states such as Jalisco in Mexico and Acre in Brazil. Much like Northern California's redwood region was prior to the post-World War II logging boom, the Amazon rainforest is rich in resources coveted by industries seeking to exploit them. The Yurok tribe is greatly concerned that if we don't change course, the future of our environment will be in peril. @The Sacramento Bee, 5/21/15. http://www.sacbee.com/opinion/op-ed/soapbox/article21604359.html#storylink=cpv

#### Salmon harvest cut this year

Effects of climate change and the ongoing loss of salmon habitat came home to roost at this year's tribal and state salmon fishing season setting process. The result was some of the most restrictive salmon fisheries ever seen in some areas. A record low snowpack, low stream flows and increasing water temperatures, combined with the results of ongoing habitat loss and declining marine survival, forced the co-managers to sharply cut harvest this year to protect both hatchery and naturally spawning chinook stocks. copyright 2015 North County Outlook, Inc., 5/13/15.

http://www.northcountyoutlook.com/story/2015/05/13/opinion/salmon-harvest-cut-this-year/7980.html

#### Kick the Bucket: The Future of Rural Sanitation in Alaska

Part of a 4-part series that takes an in-depth look at Alaska's rural sanitation situation © Alaska Public Media 2015, 5/5/15. http://www.alaskapublic.org/2015/05/bick-the-bucket-the-future-of-rural-sanitation-in-alaska/

#### Villages help assess climate effects

There are some new faces in rural Alaska these days, and they're not necessarily a welcomed sight. As a result of changing climate, new species of fish, insects and plants are sprouting up in remote areas across the state. That's one of the transformations noted in a new climate and health assessment report released by the Alaska Native Tribal Health Consortium last month. The latest account focuses on seven communities — Shishmaref, Unalakleet, White Mountain.

Stebbins, St. Michael, Golovin and Teller — in the Bering Strait Region, but over the last several years, ANTHC has released several locally-driven studies focused on the Arctic and Southwestern Alaska. Copyright 2015 Arctic Sounder, 5/1/15

http://www.thearcticsounder.com/article/1518villages\_help\_assess\_climate\_effects

#### Resources

#### 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/

#### Audio: Bravery for the Earth (Yale Climate Connections)

In 2014, the Sault Sainte Marie Tribe was one of just 16 Climate Action Champions recognized by the White House. 1.5 min audio. © 2015 Yale Climate Connections, 4/30/15.

http://www.yaleclimateconnections.org/2015/04/bravery-for-the-earth/

# Climate Change Adaptation in United States Federal Natural Resource Science and Management Agencies: A Synthesis

Report organized under the auspices of the Adaptation Science Interagency Working Group, Interagency Land Management Adaptation Group, and sponsored by the U.S. Department of Agriculture Forest Service. April 2015. <a href="http://www.globalchange.gov/sites/globalchange/files/ASIWG\_Synthesis\_4.28.15\_final.pdf">http://www.globalchange.gov/sites/globalchange/files/ASIWG\_Synthesis\_4.28.15\_final.pdf</a>

#### 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.usqs.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: <a href="http://epa.gov/statelocalclimate/local/showcase/csc-learn.html#designguide">http://epa.gov/statelocalclimate/local/showcase/csc-learn.html#designguide</a>

#### **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

## Other Items of Interest

Federal Advisory Committee Issues Recommendations for Addressing Climate Change to NCCWSC & CSCs

Working directly with resource managers to produce science and tools should remain the core focus of the Climate Science Centers and the National Climate Change and Wildlife Science Center, according to the Advisory Committee on Climate Change and Natural Resource Science's Report to the Secretary of the Interior, released on May 11, 2015. The report recognizes the U.S. Geological Survey and the Department of the Interior for achieving significant accomplishments since the establishment of the NCCWSC and CSCs and provides several key recommendations to clarify, focus, and enhance the program's efforts. The committee also recommends that the NCCWSC/CSC program should expand its capacity to work closely with partners, including states, tribes and other indigenous groups, and environmental organizations, both within DOI and with other federal agencies. A "how-to guide" for "actionable science" is included as an appendix to the Committee's report. The report also includes two other documents to which committee members contributed: one is a summary of a primer on climate change and indigenous peoples and the other provides guidelines for considering traditional knowledge in climate change initiatives.

 $\underline{\text{https://nccwsc.usgs.gov/content/federal-advisory-committee-issues-recommendations-addressing-climate-change-nccwsc-cscs}$ 

# Funding Opportunities

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

NOTE: More Funding Opportunities can be found at the **Tribes & Climate Change website**: <a href="http://www4.nau.edu/tribalclimatechange/resources/res\_funding.asp">http://www4.nau.edu/tribalclimatechange/resources/res\_funding.asp</a>. Also, see the **Tribal Climate Change Funding and Program Guide** developed by the Pacific Northwest Tribal Climate Change Project at the Univ. of Oregon:

#### Solar Training and Education for Professionals (STEP) Program (DOE)

This FOA will support many activities in solar training and education. Firstly, it will support coordination among the Solar Training Network (STN), military bases, and the solar industry. Secondly, it will establish new credentials in solar operations & maintenance and mid-scale installations. Next, this FOA will enable solar training and education for professionals in indirect and related fields such as real estate, finance, insurance, fire and code enforcement, and state regulations. Finally, it will support the expansion of the GEARED initiative. Eligibility includes Indian housing authorities, Native American tribal governments (Federally recognized), and Native American tribal organizations. Funding opportunity #DE-FOA-0001329. Deadline: 6/12/15.

http://www.grants.gov/web/grants/view-opportunity.html?oppId=276607

#### Clean Diesel Funding Assistance Program FY 2015 (USEPA)

EPA's Office of Transportation and Air Quality is soliciting proposals nationwide for projects that achieve significant reductions in diesel emissions in terms of tons of pollution produced by diesel engines and diesel emissions exposure, particularly from fleets operating at or servicing goods movement facilities located in areas designated as having poor air quality. Eligibility includes tribal agencies (or intertribal consortia). Funding opportunity #EPA-OAR-OTAQ-15-06. Deadline: 6/15/15.

http://www.epa.gov/air/grants/rfp-epa-oar-otaq-15-06.pdf

Grant Program to Assess, Evaluate and Promote Development of Tribal Energy and Mineral Resources (BIA) BIA is making available funding for projects that assess, evaluate, or promote the processing, use, or development of energy and mineral resources on tribal lands. Eligible projects include renewable energy or minerals development, conventional energy development, assessment studies, feasibility studies, or economic analysis. Successful applications should promote community-scale energy development, energy independence, security, and reliability, diversification, and environmental benefits. Eligibility: Tribal governments. Deadline: 6/23/15.

http://www.bia.gov/cs/groups/xbia/documents/document/idc1-029754.pdf

#### WaterSMART: Drought Resiliency Project Grants for Fiscal Year 2015 (BOR)

Reclamation has developed a new Drought Response Program to improve its ability to assist States, tribes, and local governments to prepare for and address drought in advance of a crisis. The Drought Response Program is funded under the U.S. Department of the Interior's (Interior) WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program. The Drought Response Program supports a proactive approach to drought by providing assistance to water users to (1) develop and update comprehensive drought contingency plans Drought Contingency Plans, (2) implement projects

that will build long-term resiliency to drought (Drought Resiliency Projects), and (3) implement emergency response actions. This Funding Opportunity Announcement (FOA) supports Drought Resiliency Projects that will build long-term resiliency to drought and reduce the need for emergency response actions. Eligibility includes Indian tribes. Funding opportunity #R15AS00046. Deadline: 6/25/14.

http://www.grants.gov/custom/viewOppDetails.jsp?oppId=276505

#### WaterSMART: Drought Contingency Planning Grants for Fiscal Year 2015 (BOR)

Reclamation has developed a new Drought Response Program to improve our ability to assist States, tribes, and local governments to prepare for and address drought in advance of a crisis. The Drought Response Program supports a proactive approach to drought by providing assistance to water managers to (1) develop and update comprehensive drought plans (Drought Contingency Planning), (2) implement projects that will build long-term resiliency to drought (Drought Resiliency Projects), and (3) implement emergency response actions. This Funding Opportunity Announcement (FOA) supports the Development and Update of Drought Contingency Plans that will build long-term resiliency to drought and climate change. Eligibility includes Indian tribes. Funding opportunity #R15AS00047. Deadline: 6/25/14. http://www.grants.gov/custom/viewOppDetails.jsp?oppId=276506

#### Grant Program to Build Tribal Energy Development Capacity (BIA)

BIA announced funding to build tribal capacity for energy resource development. The funding is intended to support a range of renewable energy projects, in terms of scale, technology, geographic location, and tribal representation. The funding is also intended to build capacity through the establishment of organizational structures capable of engaging in commercial energy development or management activities, and providing funding for the development of tribal energy policies. Eligibility: Tribal governments. Funding opportunity #BIA-TEDC-15-FA-0002. Deadline: 6/29/15. http://www.grants.gov/web/grants/view-opportunity.html?oppId=275611

#### 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 our marine and coastal ecosystems to decrease the vulnerability of communities to extreme weather and 2) support sustainable fisheries and contribute to the recovery of protected resources. Eligibility includes Native American tribal governments (Federally recognized) and Native American tribal organizations. Funding opportunity #\_NOAA-NMFS-HCPO-2015-2004410. Deadline: 7/2/15.

http://www.grants.gov/web/grants/view-opportunity.html?oppId=276660

#### Regional Conservation Partnership Program (USDA NRCS)

Through the Regional Conservation Partnership Program (RCPP)NRCS seeks to co-invest with partners in innovative, workable and cost-effective approaches to benefit farming, ranching, and forest operations, local economies, and the communities and resources in a watershed or other geographic area. RCPP partners develop project applications to address specific natural resource objectives in a proposed area or region. Eligibility includes Native American tribal governments (Federally recognized). Funding opportunity #USDA-NRCS-NHQ-RCPP-16-01. Deadline for pre-proposals: 7/8/15.

http://www.grants.gov/web/grants/view-opportunity.html?oppId=276494

## Tribal Clean Diesel Funding Assistance Program FY 2015 (EPA)

EPA's Office of Transportation and Air Quality is soliciting proposals nationwide for Tribal projects that achieve significant reductions in diesel emissions in terms of tons of pollution produced by diesel engines and diesel emissions exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas. Eligible entities include Tribal agencies (or intertribal consortia) with jurisdiction over transportation or air quality. Funding opportunity # EPA-OAR-OTAQ-15-05.Deadline: 7/15/15.

http://www.epa.gov/air/grants/rfp-epa-oar-otaq-15-05.pdf

#### 2015 Regional Coastal Resilience Grant Program (NOAA)

The Regional Coastal Resilience Grant program will support regional approaches to undertake activities that build resilience of coastal regions, communities, and economic sectors to the negative impacts from extreme weather events, climate hazards, and changing ocean conditions. It will support planning or implementing actions that mitigate the impacts of environmental drivers on overall resilience, including economic and environmental resilience. Funded projects will result in improved information for decision makers and actions that reduce risk, accelerate recovery, and promote adaptation to changing social, economic, and environmental conditions. Eligibility includes tribal governments. Deadline: 7/24/15. <a href="http://coast.noaa.gov/resilience-grant/">http://coast.noaa.gov/resilience-grant/</a>

#### FY 2016 Tribal Wildlife Grants (USFWS)

Tribal Wildlife Grants are used to provide technical and financial assistance to Tribes for the development and implementation of programs that benefit fish and wildlife resources and their habitat. Eligibility: Federally recognized tribal

government. Deadline: 10/30/15.

http://www.fws.gov/nativeamerican/grants.html

# **Upcoming Events**

**NOTE:** More Upcoming Events can be found at the Tribes & Climate Change website: http://www4.nau.edu/tribalclimatechange/events.asp

June 2015

#### **Training: Climate-Smart Planning Tools Workshop**

June 2, Tiburon, CA. Point Blue Conservation Science, the San Francisco Bay Joint Venture, and the San Francisco Bay National Estuarine Research Reserve are hosting a workshop for practitioners to learn how to use the Future Tidal Marshes and Climate-Smart Riparian Restoration tools to develop and implement restoration and adaptation actions. <a href="https://www.eventbrite.com/e/point-blue-climate-smart-planning-tools-workshop-june-2-tickets-16812229832?utm\_source=May+19+2015+Newsletter&utm\_campaign=Constant+Contact&utm\_medium=email</a>

#### Webinar: Engaging Diverse Urban and Regional Communities in Climate Adaptation

June 3, 1:00-2:10 MDT. Model Forestry Policy Program webinar. Developing and implementing effective community engagement strategies for vulnerable communities is one of the most rewarding and challenging aspects of climate adaptation and urban resiliency. Hear from Tanya Harris about Make It Right's successful efforts post-Katrina to engage residents of New Orleans 9th Ward in rebuilding their community, and to create a partnership where community members have a seat at the table in making decisions that affect their lives and communities.

https://www.eventbrite.com/e/building-climate-resilience-in-urban-vulnerable-populations-a-webinar-series-registration-16321940363

#### Training: Extreme Events and Climate Adaptation Planning Workshop

June 3-4, Santa Fe, NM. The U.S. Environmental Protection Agency's (EPA) Climate Ready Water Utilities (CRWU) initiative is offering a workshop for drinking water, wastewater and stormwater utilities that focuses on understanding and adapting to challenges from extreme events, featuring training on the Climate Resilience Evaluation and Awareness Tool (CREAT).

https://www.thetestportal.com/climateadaptation

#### Webinar: Water Hazards and Community Resilience

June 4, 1:00 pm EDT. Part of the "Climate Information for Managing Risks in Water Resources Webinar Series" co-hosted by NOAA, USEPA, and other partners. Jim Schwab, American Planning Association.

http://cpo.noaa.gov/ClimatePrograms/ClimateandSocietalInteractions/SARPProgram/WebinarsandWorkshops.aspx

#### 2015 HHS Climate Justice Conference

June 8 - 9, Research Triangle Park, NC. U.S. Department of Health and Human Services (HHS) is hosting a one and a half day conference to discuss the challenges, current HHS climate change related activities, and possible resources and tools. <a href="http://tools.niehs.nih.gov/conference/hhs\_climate\_justice/">http://tools.niehs.nih.gov/conference/hhs\_climate\_justice/</a>

#### Conference: Thirty-Ninth Annual National Indian Timber Symposium

June 8-11, North Bend, OR. Hosted by the Coquille Indian Tribe. http://www.itcnet.org/get\_involved/annual\_symposium.html

nttp://www.itchet.org/get\_involved/annual\_symposium.ntml

# Webinar: Climate Change Planning Resources and Funding and the Use of TEK to Address Climate Change June 9, 10:00 - 11:30 am AKT. 2015 Climate Change for Alaska's Rural Communities webinar series. Presenters: Hal Shepherd, Principle, Water Policy Consulting, and Emily Murray, Traditional Elder, Native Village of Golovin. Visit the website for more information about the webinar series including details for each webinar. http://www.waterpolicyconsulting.com/

#### Conference: UA Water Resources Research Center Annual Conference

June 9-10, Chandler, AZ. Theme: Indigenous perspectives on Sustainable Water Practices. The University of Arizona's Water Resources Research Center (WRRC), in partnership with the Gila River Indian Community, is hosting the conference to increase awareness of water sustainability efforts on tribal lands and to provide perspectives in the discussion of water management options to meet growing supply gaps in Arizona. <a href="https://wrrc.arizona.edu/conf-2015">https://wrrc.arizona.edu/conf-2015</a>

Workshop: Oklahoma Community-Scale Tribal Renewable Energy Workshop

June 9-11, Norman, OK. 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/oklahoma-community-scale-tribal-renewable-energy-workshop

# Webinar: Indicators for Urban and Regional Social Vulnerability - How NAACP's Indicators were Developed, and How to Use Them

June 10, 1:00-2:10 MDT. Model Forestry Policy Program webinar. Learn about the resource for equitable adaptation planning that the NAACP Environmental and Climate Justice Program released late last year. Hear about the indicators and measures of vulnerability and resilience they developed that relate to infrastructure, community and population characteristics, systems, policies, programs and services, protocols, and governance/decision making. Hear about how the indicators are being used in on-the-ground adaptation planning work.

https://www.eventbrite.com/e/building-climate-resilience-in-urban-vulnerable-populations-a-webinar-series-registration-16321940363

#### Conference: 2015 AWRA Summer Specialty Conference: Climate Change Adaptation

June 15-17, New Orleans, LA. This American Water Resources Association specialty conference is about action - how we respond, build resilient systems, and influence decision makers.

http://www.awra.org/meetings/NewOrleans2015/index.html?utm\_source=January+26+newsletter&utm\_campaign=Constant +Contact&utm\_medium=email

#### Training: Understanding Climate Change in California

June 15, Bishop, CA. Bishop Paiute Tribe, Project WET and the CA Dept. of Water Resources will host this workshop to discuss climate change basics, how DWR is addressing these impacts, and how Project WET activities can integrate climate science into the classroom.

http://files.ctctcdn.com/d332aa07201/d35e493b-dd1b-492b-8841-

d7bed2fae597.pdf?utm\_source=Copy+of+March+16+Newsletter&utm\_campaign=Constant+Contact&utm\_medium=email

#### ITEP Training: Climate Change Adaptation Planning

June 16-18, Bishop, CA. The course provides an introduction to planning for climate change impacts, highlighting the work of several tribes. The course is intended for tribal environmental and natural resource professionals who expect to be involved in climate change adaptation planning. The class is full—new registrations will be added to a waiting list. http://www4.nau.edu/itep/climatechange/tcc\_trainings.asp

#### Workshop: Indicators of Climate Change in California

June 16-17, Sacramento, CA. The California Environmental Protection Agency's (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is convening a workshop to collect input into the next update of the report, Indicators of Climate Change in California, scheduled for 2017. This workshop is part of OEHHA's ongoing effort to examine potential indicators that should be tracked to present a comprehensive picture of climate change and its impacts on California. <a href="http://oehha.ca.gov/multimedia/epic/EPIC2015.html?utm\_source=Copy+of+March+16+Newsletter&utm\_campaign=Constant+Contact&utm\_medium=email">http://oehha.ca.gov/multimedia/epic/EPIC2015.html?utm\_source=Copy+of+March+16+Newsletter&utm\_campaign=Constant+Contact&utm\_medium=email</a>

#### Webinar: Conducting Social Vulnerability and Resiliency Assessments for Climate Adaptation

June 17, 1:00-2:10 pm MDT. Model Forestry Policy Program webinar. Learn about the most commonly used tool for assessing social vulnerability, the Social Vulnerability Index (SoVI) developed by the Hazards and Vulnerability Research Institute at the University of South Carolina. Hear from the U.S. Corps of Engineers how they have adapted the tool for use in a range of settings, including communities that can't afford a full time statistician.

https://www.eventbrite.com/e/building-climate-resilience-in-urban-vulnerable-populations-a-webinar-series-registration-16321940363

#### Webinar: Midwest and Great Plains Drought Webinar

June 18, 1-2 pm Central. Each month, a state climatologist and a NOAA regional climatologist conduct public webinars to brief interested members of the public about ongoing and near-future changing climate conditions in the Great Plains and Midwestern United States.

http://drought.gov/drought/content/regional-programs/regional-drought-webinars

#### **Webinar: EPA Grants Award Process**

June 18, 2:00 pm ET. EPA's Office of Grants and Debarment is hosting a webinar for the EPA grants community. The webinar will cover grants topics, including: how to find and apply for grant opportunities; EPA's new Grants.gov requirement;

and preparing a proper budget detail. In addition, we will be hosting a Q&A session during the second half of the webinar. http://www.epa.gov/ogd/training/grantaward.htm

#### Webinar: June 2015 National Weather Service Alaska Climate Forecast Briefing

June 19, 12-1 pm Alaska time. The tools and techniques for making monthly and season scale climate forecasts are rapidly changing, with the potential to provide useful forecasts at the month and longer range. We will review recent climate conditions around Alaska, review some forecast tools and finish up the Climate Prediction Center's forecast for July and the remaining summer.

https://events-

na11.adobeconnect.com/content/connect/c1/1083313451/en/events/event/shared/1178050388/event\_landing.html?sco-id=1336867350&\_charset\_=utf-8

#### Webinar: Changing extreme streamflow patterns in boreal forest watersheds of Alaska

June 23, 10 am AKDT. Alaska Center for Climate Assessment and Policy webinar. Speaker: Katrina E. Bennett, Los Alamos National Laboratory. The Interior discontinuous permafrost zone of the boreal subarctic represents one of the largest ecosystems on earth and is vastly understudied with respect to changing hydrologic extreme events. The first part of this presentation will focus on recent research results for snowmelt and glacially dominated Interior Alaska river basins for the past 50/60 years (1954/64-2013). The second part of this presentation will present projections of future extreme streamflow changes in a snowmelt dominated basin of the Tanana River, a sub-watershed to the Yukon River system, using six global climate models, two emission scenarios, two hydrologic models and two different time periods. Projections for temperature, precipitation and streamflow will be discussed, with a focus on changing peak flows events, and return intervals. https://accap.uaf.edu/?q=webinars

#### **Training: Extreme Events and Climate Adaptation Planning Workshop**

June 23-24, Portland, OR. The U.S. Environmental Protection Agency's (EPA) Climate Ready Water Utilities (CRWU) initiative is offering a workshop for drinking water, wastewater and stormwater utilities that focuses on understanding and adapting to challenges from extreme events, featuring training on the Climate Resilience Evaluation and Awareness Tool (CREAT).

https://www.thetestportal.com/climateadaptation

#### ITEP Webinar: Impacts of Climate Change on Tribal Health

June 24, 11:00 am -12:30 pm Pacific. Hosted by the Institute for Tribal Environmental Professionals, Northern Arizona University. Climate change, together with other natural and human-made health stressors, threatens our health and well-being in many ways. This webinar will provide an overview of climate-related health impacts facing tribes and indigenous peoples in the United States, drawing mainly from the results of the Third National Climate Assessment. This webinar will also present work by EPA to compile a set of key indicators related to the causes and effects of climate change into a report entitled: Climate Change Indicators in the United States. The presentation will focus on climate-related health indicators and how the report highlights the far-reaching significance of these changes and their possible consequences for people, the environment, and society.

https://attendee.gotowebinar.com/register/4202798900971276545

#### Webinar: Effective Marketing and Communications Strategies for Social Resiliency in Climate Adaptation

June 24, 1:00-2:10 pm MDT. Model Forestry Policy Program webinar. Effective communications strategies are essential in climate adaptation planning. This session will cover the fundamentals of an effective communications strategy, and highlight how to reach hard-to-reach audiences such as low income urban communities. This session will walk through key questions such as who do you need to reach, what do they care about, what are the likely barriers to effective communication, and who can most effectively deliver the message? You will also learn about several tools and resources that walk you through developing an effective communications strategy, provide guidance on planning a campaign, and more. Spitfire Strategies shares a vision of a better world, and works with nonprofits to make great things happen.

 $\underline{\text{https://www.eventbrite.com/e/building-climate-resilience-in-urban-vulnerable-populations-a-webinar-series-registration-} \\ \underline{16321940363}$ 

#### ITEP Webinar: Extreme Weather Events and Climate Change

June 26, 11:00 am-12:30 pm Pacific. Hosted by the Institute for Tribal Environmental Professionals, NAU. The presentation will review known variability in extreme weather such as excessive heat, cold waves, floods, droughts, hurricanes, severe thunderstorms and tornadoes. Projections and uncertainties of how these hazards might change due to global warming will be reviewed.

https://attendee.gotowebinar.com/register/7695983626299314177

#### ITEP Webinar: Climate Change Impacts on Fish and Wildlife

June 29, 11:00 am-12:30 pm Pacific. Hosted by the Institute for Tribal Environmental Professionals, NAU. The Earth's climate is changing. In some places such as the Arctic, the change is rapid and profound, while in other areas change has

been less dramatic and more gradual. But virtually everywhere, climate change has – and will continue to – impact fish, wildlife, and plants and the habitats upon which they depend through effects on species' distribution and abundance, community composition, productivity, timing of life history events, and other biological and ecological characteristics. Some species are even threatened with extinction. Not only are fish, wildlife, and plants inherently worthy of conservation, they provide valuable ecosystem services – including jobs, food, clean water, storm protection, carbon sequestration, health benefits and many others – that support people, communities and economies across the nation every day. Climate change impacts are expected to increase with continued changes in the planet's climate system. Action is needed now to help safeguard fish, wildlife, and plants and the communities and economies that depend on them. https://attendee.gotowebinar.com/register/5056697223288190977

#### Workshop: Rising Voices 3

June 29-July 1, Boulder, CO. Rising Voices 3 workshop will have the theme of Learning and Doing: Education and Adaptation through Diverse Ways of Knowing and be held at the National Center for Atmospheric Research (NCAR). The workshop will occur in collaboration with the Engineering for Climate Extremes Partnership, which aims to improve methods of incorporating resilience and cultural values explicitly in future planning programs. Registration deadline: 6/19/15. https://www.mmm.ucar.edu/rising-voices-home

#### **Training: Climate Change Vulnerability Assessment**

June 29-July 2, Durant, OK. 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 and registration, contact <a href="mailto:April.Taylor@chickasaw.net">April.Taylor@chickasaw.net</a>.

#### **July 2015**

#### 2015 Signs of the Land II: Reaching Arctic Communities Facing Climate Change Academy

July 13-17, Howard Luke Gaalee'ya Camp near Fairbanks, AK. The Signs of the Land Academy will explore the PoLAR Climate Change Education Partnership (CCEP) activities and climate change information through the cultural lens of Arctic communities in Alaska. Participants will attend a six-day camp to gain insight and an understanding about local climate change observations and knowledge from participating Alaska Native elders, and learn about climate change interactive resources. Participants will design an individual plan to share and adapt the activities to fit the needs of their particular community. Applications are being accepted now with a deadline of June 29, 2015. http://thepolarhub.org/project/reaching-arctic-communities-facing-climate-change-reac

#### Training: Extreme Events and Climate Adaptation Planning Workshop

July 14-15, Des Moines, IA. The U.S. Environmental Protection Agency's (EPA) Climate Ready Water Utilities (CRWU) initiative is offering a workshop for drinking water, wastewater and stormwater utilities that focuses on understanding and adapting to challenges from extreme events, featuring training on the Climate Resilience Evaluation and Awareness Tool (CREAT).

https://www.thetestportal.com/climateadaptation

## **Training: Fostering Climate Resilient Coastal Communities**

July 22-23, Irvine, CA. Learn more about how to build resilient coastal communities with available communication and planning tools, funding strategies, and resilient coastal designs.

http://files.ctctcdn.com/d332aa07201/33e441fa-c660-4f93-8c05-

30645b6a5897.pdf?utm source=May+19+2015+Newsletter&utm campaign=Constant+Contact&utm medium=email

## Workshop: New Mexico Community-Scale Tribal Renewable Energy Workshop

July 27-29, Albuquerque, NM. 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. <a href="http://www.energy.gov/indianenergy/events/new-mexico-community-scale-tribal-renewable-energy-workshop">http://www.energy.gov/indianenergy/events/new-mexico-community-scale-tribal-renewable-energy-workshop</a>

### **Training: Climate-Smart Conservation**

July 28-30, Rapid City, SD. Offered by the USFWS National Conservation Training Center. This course is based on the new guide 'Climate-Smart Conservation: Putting Adaptation Principles into Practice.' This publication is the product of an expert workgroup on climate change adaptation convened by the National Wildlife Federation in collaboration with the FWS's National Conservation Training Center and other partners. The course is designed to demystify climate adaptation for

application to on-the-ground conservation. It will provide guidance in how to carry out adaptation with intentionality, how to manage for change and not just persistence, how to craft climate-informed conservation goals, and how to integrate adaptation into on-going work. Conservation practitioners and natural resource managers will learn to become savvy consumers of climate information, tools, and models.

http://training.fws.gov/NCTCWeb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-ALC3195

#### August 2015

#### **Training: 2015 Climate Boot Camp**

August 16-21, Eatonville, WA. Offered by the Northwest Climate Science Center (NW CSC). One objective of the NW CSC is to support and train graduate students and early career professionals to work at the interface of scientific research on climate and resource management decision-making. Our annual Climate Boot Camp (CBC), now in its fifth year, is our primary educational offering to meet this objective. https://www.nwclimatescience.org/bootcamp

#### **Conference: Tribal Lands and Environment Forum**

August 17-20, Minneapolis, MN. Hosted by the Institute for Tribal Environmental Professionals, National TWRAP Steering Committee, and USEPA's Office of Solid Waste and Emergency Response (OSWER). 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, as well as sessions focused on water quality, drinking water, and habitat restoration (including wetlands, streams and fisheries) and on climate change. http://www4.nau.edu/itep/conferences/confr\_tlf.asp

#### **Conference: California Climate Change Symposium 2015**

August 24-25, 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. <a href="http://californiascience.org/">http://californiascience.org/</a>

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