



## ***Tribal Climate Change Newsletter***

### ***February 2017***

*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***



*Northern CA. Photo credit: Sue Rose*

Happy March! The ITEP Climate Change website has been updated to make it more streamlined for user access, and more updates will take place over the next few months. Check out the updated *Tribal Voices* section which features a video (via National Sierra Club) of Esau Sinnok, a young man from the village of Shishamaref, in NW Alaska, who is an emerging leader in the climate movement. Powerful words from our youth! If you have ideas for someone to be featured in our *Tribal Voices*, please contact us.

Travel scholarships to attend the National Climate Assessment Regional Engagement Workshops is still open so please visit the following link for more information: <https://sites.google.com/site/ncaregionaltravelscholarships/>.

Registration for the National Tribal Forum on Air Quality, May 01-04 in Tucson, AZ, is open and we are still looking for anyone interested in presenting during

#### About Us:

*Nikki Cooley*  
Co-Program Manager  
[Nikki.Cooley@nau.edu](mailto:Nikki.Cooley@nau.edu)

*Karen Cozzetto*  
Co-Program Manager  
[Karen.Cozzetto@nau.edu](mailto:Karen.Cozzetto@nau.edu)

*Fletcher Wilkinson*  
Program Coordinator  
[Fletcher.Wilkinson@nau.edu](mailto:Fletcher.Wilkinson@nau.edu)

*Colleen Davis*  
Administrative Assistant  
[Colleen.Davis@nau.edu](mailto:Colleen.Davis@nau.edu)

#### **Newsletter**

To subscribe or unsubscribe to this newsletter, please go to [www7.nau.edu/itep/main/listsrv/](http://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/](http://www7.nau.edu/itep/main/tcc/)

the climate change breakout sessions. Please visit website for more information: [http://www7.nau.edu/itep/main/Conferences/confr\\_ntf](http://www7.nau.edu/itep/main/Conferences/confr_ntf).

The annual Tribal Lands and Environment Forum (TLEF) is taking place in Tulsa, OK, August 14-17. Please visit website for more information regarding registration and presentations:

[http://www7.nau.edu/itep/main/Conferences/confr\\_tlef](http://www7.nau.edu/itep/main/Conferences/confr_tlef)

Thank you and have a great day!

-Nikki, Karen, Fletcher and Colleen

## *In The News*

### **Pope Says Indigenous People Must Have Final Say About Their Land**

Last week, over 560 years later, Francis, the first Pope from Latin America, struck a rather different note – for indigenous peoples around the world, for land rights, for better environmental stewardship. He said publicly that indigenous peoples have the right to “prior and informed consent.” © 2017 Guardian News & Media Limited, 02/20/2017.

<https://www.theguardian.com/environment/andes-to-the-amazon/2017/feb/20/pope-indigenous-people-final-say-land>

### **Growing Change: Homegrown Food is One Safety Net in a Less Stable World for Native Americans**

Indigenous peoples are already central in the fights for clean water and against global warming – food may be next. Local gardens are a budding solution to the food insecurity that plagues indigenous communities. Climate change makes these efforts especially urgent, said anthropologist Darren Ranco of the University of Maine in Orono. © 2017 Salon Media Group, Inc., 02/18/2017.

[http://www.salon.com/2017/02/19/growing-change-homegrown-food-is-one-safety-net-in-a-less-stable-world-for-native-americans\\_partner/](http://www.salon.com/2017/02/19/growing-change-homegrown-food-is-one-safety-net-in-a-less-stable-world-for-native-americans_partner/)

### **The Trump Administration’s Climate Denial Could Be Catastrophic for Tribes**

Drying wells, dying crops, and a vanishing landscape confront US tribes from the Arctic Circle to the Gulf Coast. They are now also concerned the Trump administration threatens efforts to forestall that changing climate in tribal homes.

“We were just getting the resources we needed to assess the impacts and mitigate the impacts on tribal people,” Don Sampson, climate change project coordinator of the Affiliated Tribes of Northwest Indians, told BuzzFeed News. © 2017 BuzzFeed, Inc., 02/17/2017.

[https://www.buzzfeed.com/nidhisubbaraman/indigenous-climate-action?utm\\_term=.asX2AQPw9#.ykeoJzxbq](https://www.buzzfeed.com/nidhisubbaraman/indigenous-climate-action?utm_term=.asX2AQPw9#.ykeoJzxbq)

### **Professor Explores Intersection of Climate Change and Social Justice**

Prof. Gerald Torres, law, discussed the ramifications of climate disruption and its effect on children, vulnerable communities and indigenous people in a lecture. © 2017, The Cornell Daily Sun, 02/16/2017.

<http://cornellsun.com/2017/02/16/professor-explores-intersection-of-climate-change-and-social-justice/>

### **Pipeline Protests Rally at the Home of U.S. Bank CEO, Demanding Divestment**

Local climate change group MN350 and Native American leaders want to pressure the bank to end financial support for the Dakota Access Pipeline. They say the pipeline poses a threat to climate change and the water supply. © 2017 CBS Broadcasting Inc., 02/12/2017.

<http://minnesota.cbslocal.com/2017/02/12/pipeline-protesters-rally-at-home-of-u-s-bank-ceo-demanding-divestment/>

### **Karuk Tribe, Forest Service and EcoAdapt Meet to Explore Climate Change Adaptation**

The US Forest Service's Pacific Southwest office, in partnership with the non-profit organization EcoAdapt and the Bureau of Land Management (California), met with the Karuk Tribe's Department of Natural Resources on January 17th to receive input on their Northwestern California Climate Adaptation Project. The project intends to assess the climate change vulnerability of resources and habitats within the Klamath, Six Rivers, Mendocino, Shasta-Trinity National Forests, and BLM lands (Arcata, Redding and Ukiah) to inform future forest and resource management planning. © 2000-2017 San Francisco Bay Area Independent Media Center. 02/07/2017.

<https://www.indybay.org/newsitems/2017/02/07/18796268.php>

### **Arctic Indigenous Leaders Speak Up About the Dangers of Increased Shipping**

Increased shipping in Arctic waters is a direct threat to the livelihood of indigenous communities from Alaska, Canada and Russia. Faced with the constant threat of a possibly devastating oil spill, as well as huge climate disruptions, Arctic voices are now demanding to be heard. © 2017 Kable, 02/01/2017.

<http://www.ship-technology.com/features/featurearctic-indigenous-leaders-speak-up-about-the-dangers-of-increased-shipping-5726000/>

### **Climate Change Drove Population Decline in New World Before Europeans Arrived**

What caused the rapid disappearance of a vibrant Native American agrarian culture that lived in urban settlements from the Ohio River Valley to the Mississippi River Valley in the two centuries preceding the European settlement of North America? In a new study, researchers from Indiana University-Purdue University Indianapolis reconstructed and analyzed 2,100 years of temperature and precipitation data—and point the finger at climate change. © Phys.org 2003-2017, Science X network. 01/31/17.

<https://phys.org/news/2017-01-climate-drove-population-decline-world.html>

## **Resources**

### **A Global Estimate of Seafood Consumption by Coastal Indigenous Peoples (PLOS)**

Coastal Indigenous peoples rely on ocean resources and are highly vulnerable to ecosystem and economic change. Their challenges have been observed and recognized at local and regional scales, yet there are no global-scale analyses to inform international policies. We compile available data for over 1,900 coastal Indigenous communities around the world representing 27 million people across 87 countries. 12/05/2016.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0166681>

### **Article: Tambora and the Mackerel Year: Phenology and Fisheries During an Extreme Climate Event**

Just over two hundred years ago, the Tambora volcano, a massive cone volcano in Indonesia, erupted, altering atmospheric composition and causing lowered temperatures globally. The eruption occurred in April, leading to agricultural ruin in the following boreal summer. Clues into how human societies modified fishing practices to cope with a failed harvest gives us insight into how a drastic global climatic event might be handled today. 2017.

<http://advances.sciencemag.org/content/3/1/e1601635>

### **Article: Managing Climate Change Refugia for Climate Adaptation (PLOS)**

Refugia have long been studied from paleontological and biogeographical perspectives to understand how populations persisted during past periods of unfavorable climate. Recently, researchers have applied the idea to contemporary landscapes to identify climate change refugia, here defined as areas relatively buffered from contemporary climate change over time that enable persistence of valued physical, ecological, and socio-cultural resources. 2017.

[file:///Users/n1979/Downloads/PLOS%20ONE\\_%20Managing%20Climate%20Change%20Refugia%20for%20Climate%20Adaptation.pdf](file:///Users/n1979/Downloads/PLOS%20ONE_%20Managing%20Climate%20Change%20Refugia%20for%20Climate%20Adaptation.pdf)

### **Article: Responses of Marine Organisms to Climate Change Across Oceans**

Climate change is driving changes in the physical and chemical properties of the ocean that have consequences for marine ecosystems. Here, [a] review of the evidence for the responses of marine life to recent climate change across ocean regions, from tropical seas to polar oceans. 2017.

<file:///Users/n1979/Downloads/2016%20journal%20article%20re%20phenology%20and%20more%20fmars-03-00062.pdf>

## *Other Items of Interest*

### **Researcher Finds Limited Sign of Soil Adaptation to Climate Warming**

While scientists and policy experts debate the impacts of global warming, the Earth's soil is releasing roughly nine times more carbon dioxide to the atmosphere than all human activities combined. This huge carbon flux from soil, which is due to the natural respiration of soil microbes and plant roots, begs one of the central questions in climate change science. © 2017 Newswise, Inc., 01/30/2017.

<http://www.newswise.com/articles/unh-researcher-finds-limited-sign-of-soil-adaptation-to-climate-warming>

### **Slower Snowmelt in a Warming World**

As the world warms, mountain snowpack will not only melt earlier, it will also melt more slowly, according to a new study by scientists at the National Center for Atmospheric Research (NCAR). The counterintuitive finding, published today in the journal *Natural Climate Change*, could have widespread implications for water supplies, ecosystem health, and flood risk. © Phys.org 2003-2017, Science X network. 02/27/17.

<https://phys.org/news/2017-02-slower-snowmelt-world.html>

## *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/>

### **Centers for Oceans & Human Health 3: Impacts of Climate Change on Oceans and Great Lakes (COHH3) (P01) (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. Eligibility includes federally recognized Native American tribal governments and native American tribal organizations. Funding opportunity #: RFA-ES-16-009. **Deadline: 03/07/17.**

<https://www.grants.gov/web/grants/search-grants.html>

### **FY 2017 NOAA Coastal Resilience Grants Program (NOAA)**

The objective of this FOA is to implement projects that build resilient U.S. coastal communities, economies, and ecosystems. This program is intended to build resilience by reducing the risk to coastal communities, economies and ecosystems from extreme weather events and climate-related hazards. Funding opportunity #: NOAA-NOS-NRPO-2017-2005159. **Deadline: 03/15/17.**

[https://coast.noaa.gov/funding/\\_pdf/NOAA-NOS-NRPO-2017-2005159-FFO.pdf](https://coast.noaa.gov/funding/_pdf/NOAA-NOS-NRPO-2017-2005159-FFO.pdf)

### **Tribal Colleges Research Grants Program (NIFA)**

This program was designed to assist 1994 Land-Grant Institutions (Tribal Colleges) in building institutional research capacity through applied projects that address student educational needs and solve community, reservation or regional problems. Awards are to be made on the basis of a competitive review process. Collaboration with 1862 or 1890 Land Grant Institutions is a requirement. Eligible institutions may propose projects in any discipline of the food and agricultural sciences. Eligibility unrestricted. Funding opportunity #: USDA-NIFA-TCRGP-006224. **Deadline: 03/21/17.**

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=291808>

### **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.grants.gov/web/grants/view-opportunity.html?oppld=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>

### March 2016

#### **Webinar: Climate Change Impacts on Lake Thermal Habitat**

March 01, 3:30-4:30 p.m. (Eastern). Offered by the NE Climate Science Center. Inland waters are warming, with consequences for ecosystem functions and fisheries management. Fish populations in some temperate lakes and streams have experienced range shifts, extirpations, and changes in species dominance, while populations in other nearby waters are comparably resilient. Understanding and predicting thermal refugia within individual waterbodies is an important component of climate adaptation for management agencies. To address these issues, our NE CSC-funded project leveraged several data networks for water temperature and fisheries observations, and created new methods for modeling in order to simulate contemporary (1979-2015) and future (2020-2100) thermal habitat for over ten thousand lakes in Wisconsin, Minnesota, and Michigan.

<https://necsc.umass.edu/webinars/climate-change-impacts-lake-thermal-habitat>

#### **Webinar: Rolling Up Our Sleeves Together: Building an Inclusive & Impactful Adaptation Movement**

March 01, 11:00 a.m. – 12:00 p.m. MST. Offered by the National Adaptation Forum. As we prepare for the 2017 National Adaptation Forum what role can the National Adaptation Forum play for the broader climate adaptation movement? What ways can we build cross-sectorial partnerships to for local, regional and state level adaptation wins? What barriers need to be broken and opportunities awakened to harness the momentum before, during, and after National Adaptation Forum? Join us in a conversation among social justice practitioners and adaptation leaders who lead with equitable solutions in their work.

<https://www.nationaladaptationforum.org/other-adaptation-events/webinars/rolling-our-sleeves-together-building-inclusive-and-impactful>

#### **Meeting: Strategic Collaboration Meeting: Flower Hill Institute & South Central Climate Science Center**

March 02, 9:00-4:00 p.m. MST, Albuquerque, NM. Offered by the South Central Climate Science Center.

For further information, or to RSVP, please contact Roger Fragua, [rogerfragua@gmail.com](mailto:rogerfragua@gmail.com), 720-220-7720

[https://calendar.google.com/calendar/render?tab=mc&pli=1#eventpage\\_6%7Ceid-bHlzcRmRpOWVranJlbjY0OTZsbGQwbms3Y3MgMHBvamVmY2xqcHEwOGxxbWwxc3FiM2lybTRAZw-1-0-](https://calendar.google.com/calendar/render?tab=mc&pli=1#eventpage_6%7Ceid-bHlzcRmRpOWVranJlbjY0OTZsbGQwbms3Y3MgMHBvamVmY2xqcHEwOGxxbWwxc3FiM2lybTRAZw-1-0-)

#### **Webinar: A Sticky Situation: When Maple Syrup Producers Receive Conflicting Guidance from Different Climate Models**

March 08, 3:30-4:30 p.m. (Eastern). Offered by the NE Climate Science Center. This study aims to answer this question for one prominent practitioner group in the NE CSC region as an example case study: maple syrup producers. Maple syrup is a major cultural resource in the Northeast and Midwest U.S. — one with a strong link to climate. In the traditional spout-and-bucket method of collecting sap, collection requires sapflow, which occurs only on days when the temperature drops below freezing at night and rises above freezing the next day.

<https://necsc.umass.edu/webinars/sticky-situation-when-maple-syrup-producers-receive-conflicting-guidance-different-climate>

#### **Conference: 2017 New England Society of American Foresters: Winter Meeting**

March 08-10, Bangor, ME. Offered by the NESAF. This year's theme to "adapt, adopt, and advance" has never been more relevant in the science and management of forest health. Adapting to new problems, adopting new solutions, and advancing healthy forests will be explored in a wide variety of presentations designed to maximize interaction between researchers and practitioners.

<http://www.nesaf.org/>

#### **ITEP Training: Climate Change Adaptation Training**

March 14-16, Spokane, WA. 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 Northwest.

[http://www7.nau.edu/itep/main/Training/training\\_cc](http://www7.nau.edu/itep/main/Training/training_cc)

#### **Training: Preparing for Climate Change in Forested Watersheds**

March 15-16, Minocqua, WI. Offered by the USDA, Northern Forests Climate Hub. Natural resource managers face the tremendous challenge of developing and implementing management actions that help ecosystems respond to climate



change. Sessions will help with adaptation concepts and strategies, climate change impacts, identify actions, resources and tools, and the testing and continued development of adaptation strategies and approaches. This is the mid-west workshop. [https://forestadaptation.org/sites/default/files/MW%20ClimateWaterWorkshop\\_3\\_15v3.pdf](https://forestadaptation.org/sites/default/files/MW%20ClimateWaterWorkshop_3_15v3.pdf)

**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](http://www7.nau.edu/itep/main/Training/training_waste)

**Webinar: Using Decision Tools to Assess Vulnerability & Inform Mgt. of Wildlife in the Northeast**

March 29, 3:30-4:30 p.m. (Eastern). Offered by the Northeast Climate Science Center. This presentation will focus on a rapid assessment of wildlife in Massachusetts and mammals across the northeastern forest that was conducted through a knowledge coproduction framework. Ways to develop specific adaptation actions, including managing climate change refugia and incorporating actions into project planning at the state and forest level, will also be discussed.

<https://necsc.umass.edu/webinars/using-decision-tools-assess-vulnerability-and-inform-management-wildlife-northeast>

**Webinar: Federal & State Policy: Advancing Tribal Energy Partnerships**

March 29, 10:00 a.m. – 12:00 p.m. (Mountain). Offered by the DOE. A number of federal laws and regulations can affect tribal energy activities and partnerships, so developing energy resources through partnerships can be complex. Attendees will learn about circumstances where state government regulatory responsibilities, services, and infrastructure benefits can impact communities (tribal and nontribal alike), and which federal requirements could impact energy projects on tribal lands depending upon the type of project, location, and size, among other considerations.

<https://attendee.gotowebinar.com/register/7866524490105585155>

**April 2016**

**Training: Preparing for Climate Change in Forested Watersheds**

April 04-05, Antioch University New England, Keene, NH. Offered by the USDA, Northern Forests Climate Hub. Natural resource managers face the tremendous challenge of developing and implementing management actions that help ecosystems respond to climate change. Sessions will help with adaptation concepts and strategies, climate change impacts, identify actions, resources and tools, and the testing and continued development of adaptation strategies and approaches. This is the Northeast workshop.

[https://forestadaptation.org/sites/default/files/MW%20ClimateWaterWorkshop\\_3\\_15v3.pdf](https://forestadaptation.org/sites/default/files/MW%20ClimateWaterWorkshop_3_15v3.pdf)

**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.

<http://www.awrancrs.org/events/events2016-2017.html>

**Training: Climate Science Tools & Training for Native American Tribes**

April 13-14, Baton Rouge, LA. Offered by the South Central Climate Science Center. For registration information or questions, contact April Taylor - [April.Taylor@chickasaw.net](mailto:April.Taylor@chickasaw.net)

**Conference: Rising Voices 5: Collaborative Science with Indigenous Knowledge for Climate Solutions**

April 13-15, Boulder, CO. Offered by NCAR, IITC, LIKEN Knowledge, Cultural Survival. The theme of the 5th Rising Voices workshop is "Pathways from Science to Action." Through collaborative research presentations and group discussions we will develop specific pathways to move from science to action for climate adaptation at local, national, and international levels. Rising Voices seeks to diversify scientific research and inform culturally appropriate solutions to weather and climate extremes with a focus on Indigenous science.

<https://risingvoices.ucar.edu/events>

**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**

**ITEP Conference: National Tribal Forum on Air Quality**

May 01-014, Tucson, AZ. This is a cooperative endeavor co-sponsored by The Institute for Tribal Environmental Professionals (ITEP) and the National Tribal Air Association (NTAA), made possible by funding from US EPA and our generous sponsors. This forum provides environmental professionals from tribes, EPA, and other organizations an

opportunity to meet and discuss current policies, regulatory initiatives, technical topics in air quality.

[http://www7.nau.edu/itep/main/Conferences/confr\\_ntf](http://www7.nau.edu/itep/main/Conferences/confr_ntf)

**Conference: 15<sup>th</sup> 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://nwbclcc.org/?p=2107>

**Conference: National Adaptation Forum**

May 09-11, St. Paul, MN. The National Adaptation Forum is the gathering of the adaptation minded. Since the Forum is created by and for the members of the adaptation community, the meeting focuses on issues of the day - established and emerging. This event affords attendees the opportunity to learn more about how to make their work climate smart, share what they have learned with others, and develop a stronger network to be climate savvy in all that they do.

<https://www.nationaladaptationforum.org/>

**Conference: Impacts of a Changing Environment on the Dynamics of High-latitude Fish and Fisheries**

May 09-12, Anchorage, AK. Offered by Sea Grant Alaska. This symposium examines the impacts of the environment, especially climate change and variability, on the dynamics of arctic and subarctic species of commercial, subsistence, and ecological importance. We will focus on the effects of warming, loss of sea ice, ocean acidification, and oceanographic variability on the distribution, phenology, life history, population dynamics, and interactions of these species and how a better understanding of these effects can inform the assessment and management of fish and invertebrate populations in a changing ocean for the benefit of affected communities.

<https://seagrant.uaf.edu/conferences/2017/wakefield-fish-dynamics/>

**Conference: Northeast Climate Science Center's Regional Science Meeting**

May 15-17, Amherst, MA. Offered by the NECSC. Theme of the meeting is, "Incorporating Climate Science in the Management of Natural and Cultural Resources in the Midwest and Northwest. To share NE CSC research and discuss emerging themes for future work. To provide a forum for and build collaborations among resource management professionals applying climate-related information and researchers who are currently engaged in climate-related projects to discuss inter-disciplinary and inter-institutional research topics. To identify opportunities and improve directions in actionable science, science communication, and advancing adaptation plans for resource professionals.

<https://necsc.umass.edu/ne-csc-regional-science-meeting-2017>

**Conference: Great Basin Bird Conference**

May 17-21, Reno, NV. Offered by the GBLCC. In addition to showcasing birds and habitat conservation efforts in the region, the conference will be a wonderful celebration of Great Basin Bird Observatory's 20-year anniversary and will have a lively keynote address by Ted Floyd.

<http://greatbasinlcc.org/calendar/great-basin-bird-conference>

**June 2016**

**ITEP Training: Climate Change Adaptation Training**

June 06-08, Albuquerque, NM. 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 Southwest.

[http://www7.nau.edu/itep/main/Training/training\\_cc](http://www7.nau.edu/itep/main/Training/training_cc)

**Conference: 2017 Summer Specialty on Climate Change Solutions: Collaborative Science, Policy and Planning for Sustainable Water Management**

June 25-28, Tysons Corner, VA. Offered by the AWRA. Responding to climate change is complicated by the scale, complexity and inherent uncertainty of the problem. Climate change adaptation must use the best available science while managing uncertainty. Challenges remain in developing the scientific information necessary to support water resources adaptation planning. Managers and policy makers also often struggle with translating information produced by the scientific community for use in decision-making. We particularly welcome proposals related to collaborative solutions involving scientists, managers and other stakeholders. Such collaborations are essential to ensure management and policy decisions are informed by the best available science, and that the scientific community in turn has a strong awareness of managers' and policy makers' highest priority needs.

<http://www.awra.org/meetings/Tysons2017/>

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