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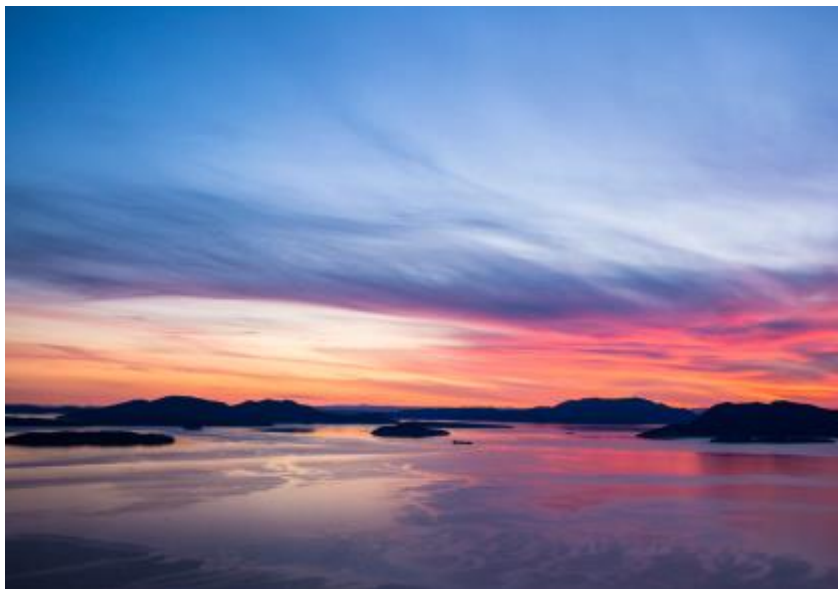
Institute for Tribal Environmental Professionals

## *Tribal Climate Change Newsletter*

### *October 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*



Sunset over the San Juan Islands: Blanchard Mountain, WA. Photo credit: Daniel Broker-Bulling

Yá'át'ééh!

Hope all is well with you & you are enjoying the fall weather. As we move into winter, we are staying pretty busy here at ITEP planning for the upcoming year. ITEP & NTAA are planning for the 2018 National Tribal Forum (NTF) on Air Quality & are looking for co-hosts. If your tribe is interested, please contact [Lydia.Scheer@nau.edu](mailto:Lydia.Scheer@nau.edu) for more information on submitting a proposal.

The climate change program has been doing monthly webinars including the recent *Forest Carbon Projects for Tribes and Food Sovereignty* and can be found in our [archives](#) and the upcoming webinar schedule can be found at on our [events page](#).

We send our prayers & well wishes to our relatives who are dealing with the aftermath of the wildfires in California, and to those who deal with the daily climate impacts each day. Finally, we would like to honor our dear friend, Bob

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#### *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/)

Gough who moved onto the spirit world in September. His tireless work on climate resilience and renewable energy was and will remain significant in Indian country. He founded the Intertribal Council of Utility Policy, which is focused on the tribal access to Western Area Power Association (WAPA) grid. As many of you know, Bob's enthusiasm, constant encouragement and mere presence was always a bright spot in our days. In moving forward, we will miss him but are comforted knowing his work and leadership will guide us forth in our work in climate resilience in Indian country. If you wish to contribute to a fund to be used for his Final Tour celebrations around the country and Native student scholarship, please consider contributing [here](#).

Until next time,

-Nikki, Karen, Adrian, Fletcher and Colleen

## *In The News*

### **Bull Trout Decline Presents Stark Choices in a Changing Climate**

There are many reasons why a dirt road in Montana's Flathead National Forest would collapse into the creek below: freeze and thaw cycles, heavy rains, passing logging vehicles, or everyday erosion. One particular washout in 2014, which occurred about 3.5 miles up Sullivan Creek from Hungry Horse Reservoir, blocked bull trout from reaching a critical spawning stream. This may seem benign, but to conservation groups, the fact that the creek has not been cleared more than three years later is proof that the federal agencies charged with restoring threatened habitat have misplaced their priorities. © 2017 Sierra Club, 10/25/2017.

<http://www.sierraclub.org/sierra/bull-trout-decline-presents-stark-choices-changing-climate>

### **Lummi Nation Carver, Group Unveil New Totem Pole**

A totem pole carved and put on tour to bring attention to the potential risks fossil fuel pipelines and shipping terminal projects present to Native American communities, and how climate change threatens the world at large. Jewell James, head carver with the House of Tears Carvers group and part of the Lummi Treaty and Sovereignty Protection Office, said the totem poles are a means to protest and to raise awareness for different causes. © 2017 Columbian.com, 10/16/2017.

<http://www.columbian.com/news/2017/oct/16/lummi-nation-carver-group-unveil-new-totem-pole/>

### **Native American Leaders Meet in Milwaukee, Push for Climate Action**

Native American leaders meeting in Milwaukee this week at the convention of the National Congress of American Indians are asking the Trump administration to do more to combat climate change. Tribal leaders speaking at the conference say recent wildfires and hurricanes that have destroyed housing and other resources are a sign of rising global temperatures, and that federal action to reduce greenhouse gas emissions is needed. © 2017 Wisconsin Public Radio, 10/18/2017.

<https://www.wpr.org/native-american-leaders-meet-milwaukee-push-climate-action>

### **Quinault Tribe in US Preparing Carbon Tax Proposal to Address Climate Change**

An indigenous tribe in the US has challenged Donald Trump's decision on the withdrawal from the Paris climate accord, which is aimed at keeping the increase in average global temperature below 2 degree Celsius above pre-industrial levels by reducing greenhouse gas emissions. The Quinault Indian Nation (QIN) in the US state of Washington is working on a legislative initiative to tax carbon emissions as part of the effort to combat climate change, QIN President Fawn Sharp told Sputnik. © 2017 Sputnik, 10/17/2017.

<https://sputniknews.com/us/201710171058321275-tribe-trump-climate-change/>

### **Elders to Bear Witness on Climate Changes**

Though there are some skeptics who have noted modulations in temperature have been part of the Earth's history even before man – a point that one tribal elder in Keller pointed out Monday at the town's senior meal site – the widely held understanding is that human-caused climate change is already occurring. That is one challenge as the Colville Tribes prepares for climate change: The long-term shift in weather on a global scale is already in process. © 2017 Tribal Tribune, 10/13/2017.

[http://www.tribaltribune.com/news/article\\_d83fa26e-b024-11e7-989d-fbadfe5950df.html](http://www.tribaltribune.com/news/article_d83fa26e-b024-11e7-989d-fbadfe5950df.html)

### **Why Climate Scientists Depend on Alaska's Indigenous Communities Now More Than Ever**

Arnold Brower Jr., a 70-year-old Iñupiat whaling captain, can recall his first encounter with scientists clearly. It was 1977,

and the International Whaling Commission (IWC) had just placed a moratorium on bowhead whale hunting, after a US government-led population survey determined the marine mammals' numbers to be dangerously low. But Brower, who has been hunting in the icy Arctic waters surrounding Utqiagvik (formerly Barrow) since he was a boy, felt certain that conclusion was wrong. And so Brower and his fellow whaling captains decided to take matters in their own hands. They formed the Alaska Eskimo Whaling Commission (AEWC), and partnered with wildlife biologists at the local government of the North Slope Borough to try to improve the population census. Within a few years, the hunters amassed clear evidence that researchers with the National Oceanic Atmospheric Administration had been undercounting bowheads, by overlooking whales that swam hidden beneath sea ice and far offshore. Armed with a revised census, the hunters convinced the IWC to grant them an annual subsistence harvest quota. © 2017 Gizmodo Media Group, 10/11/2017.

<https://gizmodo.com/why-climate-scientists-depend-on-alaska-s-indigenous-co-1798335127>

### **Celebrating Clean Tech on Indigenous Peoples' Day**

Today, instead of celebrating Columbus' impact on a 10,000-year old culture, we're looking at ways that indigenous people are being inspired and empowered to take direct climate action. With special knowledge of their regional environments, indigenous people are a substantial resource to build comprehensive solutions to climate change. © 2016 Sustainable Enterprises Media, Inc., 10/10/2017.

<https://cleantechnica.com/2017/10/10/celebrating-clean-tech-indigenous-peoples-day/>

### **EPA to Repeal Landmark Obama Climate Rule**

The Trump administration on Tuesday will formally propose repealing Barack Obama's landmark climate change rule for power plants, a key part of the U.S. commitment to reduce emissions under the Paris accord. Environmental Protection Agency (EPA) chief Scott Pruitt told a Kentucky audience on Monday that he will sign paperwork on Tuesday to repeal the rule, which he argued exceeded the previous administration's authority and treated coal communities unfairly. © 2017 Capitol Hill Publishing Corp., 10/09/2017.

<http://thehill.com/policy/energy-environment/354531-epa-to-begin-repealing-obamas-landmark-climate-rule-tuesday>

### **The US Defense Department Takes Climate Change Seriously**

While President Donald Trump has dismissed climate change as a hoax, the Department of Defense is focused on understanding and preparing for continued climate disruption and the security threats it poses in a warming world. © 2017 Public Radio International, 10/08/2017.

<https://www.pri.org/stories/2017-10-08/us-defense-department-takes-climate-change-seriously>

### **Tribal Communities Invited to Summit on Sustaining Water Resources and Agriculture**

The Native Waters on Arid Lands Project helps tribal communities in the Great Basin and American Southwest adapt to climate change and build resiliency for their water resources and agriculture. The Youth Day is a new event that has been added to the annual Native Waters on Arid Lands Tribal Summit, now in its third year, being presented this year Nov. 15-16 in Sparks, Nevada. © 2017 University of Nevada, Reno, 10/09/2017.

<https://www.unr.edu/nevada-today/news/2017/native-waters-on-arid-lands-tribal-summit>

### **In the 'The Anthropologist,' Susie Crate Tells the Story of Climate Change**

The impact of climate change on life on Earth has produced reams of reports, but Susie Crate got a firsthand taste of that impact standing chest deep in the Pacific Ocean a few years ago. Crate, a globe-trotting anthropologist, was tracked for five years in her travels by a documentary crew as she and her daughter, Katie, visited indigenous communities threatened by climate change, including the island republic of Kiribati in the Central Pacific. © 2017 Charleston Gazette-Mail 10/09/2017.

[https://www.wvgazettemail.com/arts\\_and\\_entertainment/screen/in-the-anthropologist-susie-crate-tells-the-story-of-climate/article\\_6a0a465d-4731-5d56-ab7d-0b53be54483a.html](https://www.wvgazettemail.com/arts_and_entertainment/screen/in-the-anthropologist-susie-crate-tells-the-story-of-climate/article_6a0a465d-4731-5d56-ab7d-0b53be54483a.html)

### **Ancient Bristlecone Pine Forests Are Being Overwhelmed by Climate Change**

For thousands of years, wind-whipped, twisted bristlecone pines have been clinging to existence on the arid, stony crests of eastern California's White Mountains, in conditions inhospitable to most other life. But the world's oldest trees may never have experienced temperature increases as rapid as those of recent decades. The climatic changes have triggered a struggle for dominance, in very slow motion, between the ancient bristlecones and the younger limber pines that have been able to charge up-slope as conditions become warmer and wetter. © 2017 Los Angeles Times, 10/01/2017.

<http://www.latimes.com/local/california/la-me-bristlecone-climate-change-20171001-htmlstory.html>

## **Resources**

### **Climate Change Missing from New Department of Interior Strategy: Report**

The Department of the Interior's thinking is stuck inside a very small box, and it doesn't include climate change, according to a report. A leaked draft for the department's five-year strategy seen by The Nation does not mention the term that many

leaders have called the greatest challenge the planet faces. The previous plan, for 2014-2018, mentioned the climate problems that the world can face 46 times and addressed how the country can deal with associated droughts and flooding, according to the outlet. © 2017 NYDailyNews.com, 10/25/2017.

<http://www.nydailynews.com/news/national/new-interior-strategy-doesn-mention-climate-change-report-article-1.3587435>

### **The Importance of Research Ethics to Native Communities**

The new Common Rule revisions modernize, simplify, and enhance oversight for human subjects research in the United States. Under the Common Rule, the Institutional Review Board is intended to review and approve research involving human subjects, protecting their rights and welfare. 06/08/17.

<https://www.hhs.gov/blog/2017/06/08/importance-research-ethics-native-communities.html>

## *Other Items of Interest*

### **52 Environmental Rules on the Way Out Under Trump**

Since taking office in January, President Trump has made eliminating federal regulations a priority. His administration — with help from Republicans in Congress — has often targeted environmental rules it sees as overly burdensome to the fossil fuel industry, including major Obama-era policies aimed at fighting climate change. © 2017 The New York Times, 10/06/2017.

<https://www.nytimes.com/interactive/2017/10/05/climate/trump-environment-rules-reversed.html>

### **US Government Agency Issues Climate Change Warning as Report Finds Natural Disasters Cost America \$350bn**

An independent US government agency has said natural disasters have cost the country \$350 billion in the last decade and that it is time for Donald Trump's administration to address climate change before it starts costing the country more. The nonpartisan auditing agency Government Accountability Office (GAO) issued the report that said the US has spent that amount just in responding to extreme weather events. © 2017 The Independent, 10/24/2017.

<http://www.independent.co.uk/news/natural-disasters-us-350bn-climate-change-gao-government-accountability-office-a8018226.html>

### **E.P.A. Cancels Talk on Climate Change by Agency Scientists**

The Environmental Protection Agency has canceled the speaking appearance of three agency scientists who were scheduled to discuss climate change at a conference on Monday in Rhode Island, according to the agency and several people involved. © 2017 The New York Times Company, 10/22/2017.

<https://www.nytimes.com/2017/10/22/climate/epa-scientists.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/>

### **Flood Mitigation Assistance (FEMA)**

The Flood Mitigation Assistance (FMA) Program makes available Federal funds to State, Local and Tribal Governments to reduce or eliminate the risk of repetitive flood damage to buildings and structures insured under the National Flood Insurance Program (NFIP). In FY17, the FMA Program will prioritize proposals that address community flood risk by setting aside \$70 million for this purpose. FEMA will seek to fund two types of community flood mitigation activities: Advance Assistance for flood mitigation design and development of community flood mitigation projects and mitigation projects that address community flood risk for the purpose of reducing NFIP flood claim payments. Funding opportunity #: DHS-17-MT-029-000-99. **Deadline 11/14/2017.**

<https://www.grants.gov/web/grants/view-opportunity.html?opId=295313>

### **Pre-Disaster Mitigation Grants (FEMA)**

The Pre-Disaster Mitigation (PDM) program makes available Federal funds to State, Local and Tribal Governments to implement and sustain cost-effective measures designed to reduce the risk to individuals and property from natural hazards, while also reducing reliance on Federal funding from future disasters. FEMA will provide allocations of \$575,000 as required by the Stafford Act to states and territories; and a tribal set aside of \$10 million for allocations up to \$575,000 for Native American Indian tribal governments to support overall mitigation planning and projects. Funding opportunity #: DHS-17-MT-047-000-99. **Deadline 11/14/2017.**

<https://www.grants.gov/web/grants/view-opportunity.html?opId=295314>

### **EDA Planning Program and Local Technical Assistance Program (EDA)**

Under the Planning program EDA assists eligible recipients in creating regional economic development plans designed to build capacity and guide the economic prosperity and resiliency of an area or region. As part of this program, EDA supports Partnership Planning investments to facilitate the development, implementation, revision, or replacement of Comprehensive Economic Development Strategies (CEDS), which articulate and prioritize the strategic economic goals of recipients' respective regions. Funding Opportunity #: EDA-HDQ-TA-HDQ-2016-2004759. **Deadline: Rolling Applications.**  
<https://www.grants.gov/web/grants/view-opportunity.html?oppld=280447>

#### **Recovery Implementation Grants (FWS)**

The FWS Ecological Services Program provides Federal financial assistance on a competitive basis to secure information about endangered, threatened or candidate species, to aid in the recovery of these species, to avert listing of species pursuant to the Endangered Species Act, and to help conserve the ecosystems upon which these species depend. Funding Opportunity Number: F17AS00005. **Deadline: Rolling Applications.**  
<https://www.grants.gov/web/grants/view-opportunity.html?oppld=289600>

### **Upcoming Events**

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

#### **November 2017**

##### **Conference: American Public Health Association (APHA)**

November 04-08, Atlanta, GA. Offered by APHA. Focus will be on bringing people together from the global and national levels, state and tribal levels including leaders from state and local health departments, and academic educators including professors and deans from leading public health schools and programs.  
<https://www.apha.org/events-and-meetings/annual>

##### **Conference: Coastal Estuarine Research Federation**

November 05-09, Providence, RI. The conference program offers four days of timely, exciting and diverse information on a vast array of estuarine and coastal subjects. Presentations will examine new findings within CERF's traditional science, education and management disciplines and encourage interaction among coastal and estuarine scientists and managers. Additionally, the Scientific Program Committee plans to convene special sessions and workshops that promote intellectually stimulating discussions. Join us and over a thousand of your colleagues to network, celebrate our work, learn from each other and grow within our amazing profession.  
<http://www.erf.org/cerf-2017-biennial-conference>

##### **Webinar: Implications of Climate Change for Invasive Species**

November 09, 3:30-4:30 pm (Eastern). Offered by NECSC. Invasive species and climate change are two of the most prominent forms of anthropogenic global change identified by the Millennium Ecosystem Assessment. These two global changes are likely to interact in a number of ways. Climate change could increase invasion risk by increasing growth rates, advancing phenology, and increasing weather-related disturbances. This seminar will review how climate change influences invasive species and how those changes might affect invasive species management.  
<https://necsc.umass.edu/webinars/implications-climate-change-invasive-species>

##### **Conference: 11<sup>th</sup> Graduate Climate Conference**

November 10-12, Woods Hole, MA. Offered by MIT Program in Atmospheres, Oceans & Climate and Woods Hole Oceanographic Institution. The goal is to provide a discussion forum for graduate students undertaking research on climate and climate change in an array of disciplines throughout the physical sciences, biological sciences, social sciences, and humanities.  
<http://gradclimateconf.mit.edu/>

##### **Training: Climate Smart Conservation with Scenario Planning**

November 13-17, Portland, OR. Offered by the National Conservation Training Center. This five-day course will be based on two guides: Climate-Smart Conservation: Putting Adaptation Principles into Practice and Considering Multiple Futures and Scenario Planning to Address Uncertainty in Natural Resource Conservation.  
<https://training.fws.gov/nctcweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-ALC3187>

##### **Conference: Preparing People for Climate Change in the Pacific Northwest**

November 15-17, Portland, OR. Offered by the International Transformational Resilience Coalition (ITRC). From Adverse Childhood Experiences, to job and financial struggles and racial and other forms of inequity and injustice, trauma and toxic stress are epidemic today. Climate change will aggravate all of these adversities, and add many new ones as well. Many



programs in the PNW help people with childhood, family, and other traumas. Washington and Oregon are also among the leaders in cutting climate-damaging greenhouse gasses. This conference will show how by breaking down silos and linking these issues, a powerful human resilience building movement can be launched that not only prevents harmful human reactions to climate change, but also advances individual and collective wellbeing and equity while reducing emissions. <http://www.theresourceinnovationgroup.org/pnw-2017-conference/>

**Webinar: Incorporating Spatial Heterogeneity in Temperature into Climate Vulnerability Assessments for Coastal Pacific Streams**

November 16, 2pm-3pm pacific. Offered by the NPLCC. Join presenters Aimee Fullerton of NOAA's Northwest Fisheries Science Center and Se-Yuen Lee of Climate Impacts Group as they present the results of this NPLCC-supported project. Their study analyzed water temperature for 6,106 km of rivers, evaluating the characteristics of cold-water habitat for Pacific salmon and steelhead within the NPLCC.

<https://lccnetwork.org/event/incorporating-spatial-heterogeneity-temperature-climate-vulnerability-assessments-coastal>

**Workshop: Green Infrastructure for Coastal Resilience**

November 17, Sayreville, NJ. Offered by The Lower Raritan Watershed Partnership and NOAA, this day-long workshop: "Introducing Green Infrastructure for Coastal Resilience" is designed for planners, engineers and municipal leaders who are not familiar with Green Infrastructure for coastal resilience.

[http://smartgrowth.org/event/workshop-green-infrastructure-coastal-resilience/?utm\\_source=SGN+2017-1010&utm\\_campaign=sgn-news-2017-1010&utm\\_medium=email](http://smartgrowth.org/event/workshop-green-infrastructure-coastal-resilience/?utm_source=SGN+2017-1010&utm_campaign=sgn-news-2017-1010&utm_medium=email)

**Webinar: What are the Impacts of Climate Change on Maple Syrup Production and Can We Manage for Them**

November 29, 3:30-4:30 pm. (Eastern). Offered by the NECSC. The production of maple syrup is strongly tied to climate since sap flows only when temperatures fluctuate around freezing. Climate change will likely impact the production of maple syrup and the livelihoods on which this depends. ACERnet (Acer Climate and Socio-Ecological Research Network) is filling in knowledge gaps in how climate influences total sap flow and sap quality over the entire tapping season and in how maple producers are responding to climate change. This seminar will report on how sap flow, sugar content, and secondary chemistry is influenced by climate variability at sites across sugar maple's distribution, and on how maple producers are and expect to respond to changing climate and market conditions.

<https://necsc.umass.edu/webinars/what-are-impacts-climate-change-maple-syrup-production-and-can-we-manage-them>

**December 2017**

**Conference: Cultures Under Water: Climate Impacts on Tribal Cultural Heritage**

December 07-08, Tempe, AZ. Offered by the ASU Sandra Day O'Connor College of Law (Indian Legal Program). The goal is to share knowledge and resources with tribal representatives to respond to threats to cultural heritage by addressing: Is cultural heritage a human right, and why is tribal cultural heritage important? How does climate change impact tribal cultural heritage? How can tribal communities maintain cultural heritage in the face of changing climate risks? Attendees will participate in sessions that focus on identifying obstacles and proposing solutions to these challenges.

<http://conferences.asucollegeoflaw.com/climate-impacts/>

**Conference: Tribes & First Nations Climate Summit**

December 13-14, Tulalip, WA. Offered by Tribes and First Nations for Tribal Leadership. Tribes and First Nations in the Pacific Northwest have made great progress in observing and documenting environmental change on their homelands, but climate change is increasing at a pace that challenges important ways of life. So Tribes and First Nations across the region are coming together to learn from past work and to discuss how to continue climate change studies to provide the support communities need to adapt and thrive for generations to come.

<http://events.r20.constantcontact.com/register/event?oeidk=a07eep8jo2c4ef1eb39&llr=vlmoveeab>

**Conference: 2017 Forest Ecosystem Monitoring Cooperative Conference**

December 15, Burlington, VT. Offered by FEMC. 2017 marks the 27th year of the Monitoring Cooperative and its first year as the Forest Ecosystem Monitoring Cooperative! This year's conference promises to deliver a dynamic array of talks and workshops designed to help collaborators build capacity to communicate and market their work to a broader stakeholder audience. This conference will help participants develop messages and share information in such a way that the public sees the value of forest ecosystem monitoring and research in our region and its relevance to their lives.

<https://www.uvm.edu/femc/cooperative/conference/2017/agenda>

**January 2018**

**Training: Climate Academy**

This 8 week online course is designed to cover the fundamentals of climate science, provide an overview of tools and resources for climate adaptation, and increase climate literacy and communication skills. The course

is designed to encourage networking among conservation professionals engaged in the management of fish, wildlife, habitat and cultural resources and provides participants an opportunity to interact with experts as they address case studies across multiple habitat types.

<https://training.fws.gov/nctcweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-ALC3193>

**Training: Forest Adaptation Planning and Practices Online Training**

January 15 – March 02. Offered by Northern Institute of Applied Climate Science. The popular Forest Adaptation Planning and Practices training will be available as an online, seven-week course for natural resource professionals working in New England and New York. Participants will use the [Adaptation Workbook](#) to create their own adaptation plans.

<https://forestadaptation.org/node/646>

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Thank you!\*\*\*

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