# South Central Climate Science Center: Tribal Climate Change Variability Workshops

American Indians, Alaska Natives, and other Indigenous peoples are particularly vulnerable to climate change impacts—including extreme weather and natural disasters that continue to affect various regions of the United States (US)—in part because these impacts threaten tribal homelands and valued cultural resources (Maldonado et al. 2013). The South Central Climate Science Center (CSC) is a consortium of US agencies, tribes, and universities that serves a region of the southern US including Texas, New Mexico, and Oklahoma. One major focus of the South Central CSC is helping regional tribes increase awareness of the unique climate-related challenges they face. This profile highlights the collaboration between tribes, academics and inter-agency organizations that are part of the South Central CSC, and one innovative approach these partners are developing to address climate change.

With support from the South Central CSC and the Southern Climate Impacts Planning Program (SCIPP), the University of Oklahoma hosted five Intertribal Workshops on climate variability and change during the summer of 2013, four in Oklahoma, and one in New Mexico. The workshop invitations were extended to the 63 federally recognized tribes within the service region of the South Central CSC. The objectives of the workshops were to (1) introduce participants to the SCCSC and Landscape Conservation Cooperatives (LCCs), (2) to provide information and tools to help tribes deal with drought and other climate impacts relevant to the region and (3) to promote the development of tribally-led video projects to aid in community education, climate impact documentation, and information sharing.

This project has also served to document participant opinions, experiences, and observations for thesis research of Absentee Shawnee graduate student Paulette Blanchard. Blanchard, a graduate of Haskell Indian Nations University, is currently a Master's student at the University of Oklahoma's Department of Geography and Environmental Sustainability.

> *"[Blanchard]* seeks to blend tribal perspectives with climate science in ways that might respect, enrich and sustain the natural and cultural resources distinguishing the places Native Peoples call home. She wants to know how video-mediated climate data might be used to document the impacts of environmental transformations, as well as the capabilities and needs of the region's tribal nations *(Smith 2013)."*

Blanchard's work is motivated by the dearth of scholarship on how regional tribes have historically dealt with changes in climate. She has noted that in the past, most tribes in Oklahoma were forced to deal with climate change through relocation. For example, Cherokee people were forcibly removed from their homelands in the Southeastern US and sent on a death march—commonly known as the Trail of Tears—to reservations in Oklahoma. Less well publicized are the many successful adaptations of the Cherokee people to climate features of Oklahoma. Krakoff (2011) argues that Cherokee sovereignty was a central factor that enabled the Cherokee to adapt to extremely adverse conditions. Similarly, Indigenous workshop

participants are finding ways to adapt to climate impacts that necessarily strengthen their peoples' sovereignty.

Interestingly, little historical documentation exists on how native peoples in this region dealt with the Dust Bowl and other major droughts during the 20th century despite the fact that at the time, native peoples constituted a significant portion of the population in the region. More recent literature on how climate change has affected this region continues to lack a tribal perspective and features little information about how tribes in the region are adapting to and mitigating the effects of climate change. In response to this lack of tribal voices, the intertribal workshops included screenings of videos showcasing how some tribes currently address climate change. These videos helped cultivate a culturally-grounded understanding of climate change through historical accounts and stories about particular places.

Paulette Blanchard, workshop organizer and OU Master's Candidate

## Creating Links between Tribes and Coordinating Organizations

This summer's intertribal workshops emerged out of the 2011 Oklahoma Intertribal Climate Change Meeting convened by Haskell Indian Nations University, Kiksapa Consulting and others which brought together 22 tribes to discuss climate change. This summer's five intertribal workshops, which were funded by the South Central CSC, represent part of an institutional response to tribal interests and concerns on the part of this Climate Science Center. The data collected during this meeting will help to inform the forthcoming Tribal Chapter of the Third National Climate Assessment. One important outcome of the workshops was the discovery that, according to initial results, tribes are interested in convening more meetings focused on locally relevant information.

Agency staff and tribal participants used the workshop as an opportunity to exchange information

As climate change adaptation becomes a larger focus for tribes and US governmental agencies, more opportunities emerge for collaboration, coordination and support among these parties. While collaboration between different tribes to address climate change is ongoing and rapidly increasing throughout the US, collaboration among US governmental agencies and tribes too often lacks infrastructure and support. The South Central CSC and representatives from Landscape Conservation Cooperatives (LCCs) took part in these workshops to more effectively collaborate with tribes. In addition to seeking a better understanding of what tribes are experiencing, workshop organizers sought to share climate-induced drought adaptation data and tools with tribal participants.

These workshops provided an opportunity to initiate new and/or foster already established relationships among tribes and federal and state agencies. While tribal leadership and participants look forward to gaining more tools to help their communities adapt, tribes want to ensure full protection of Indigenous knowledge. With guidance from Paulette Blanchard, these workshops used regionally appropriate, Indigenous methods of respect and communication predicated on establishing trust and strong government-to-government relationships, which in turn enable effective collaboration. The workshops brought together agency personnel with tribal leadership in an effort to find common ground that respects tribal sovereignty and ensures tribes and agencies engaged on equal footing.

**Participatory Video as a Tool for Adaptation**

These workshops promoted the use of participatory videos—videos created through a community-led process—in tribal adaptation efforts. Paulette Blanchard and Native media makers Filoteo Gómez Martínez and Jeffery Palmer led a video-making project during each workshop. Participatory videos can be a powerful tool for tribes as they adapt to climate change and can help to give tribes a broader audience when describing how climate is impacting their communities. Additionally, video documentation of climate impacts and community responses can be distributed within the community for educational purposes.

Randall Ware being interviewed; the workshop provided media makers with a chance to document native peoples' experiences with climate impacts

This project included interviews conducted during the workshops in order to provide voice to native concerns regarding climate impacts. The videos made with footage of these interviews allow tribal participants to document the climate impacts that their communities and homelands are facing. The workshops provided a place for native filmmakers and tribal participants—many of whom had experience creating and/or using video—to network, compare methods, and compare and contrast videos about climate impacts made by both native and non-native filmmakers. Among other topics, participants discussed how Indigenous methods result in very different representations of experience and convey particularly salient and impactful messages.

The media makers, as well as workshop organizers and supporters, hope that tribal participants will be inspired to tell their own stories about climate. Stories told by tribal participants are educational, provide historical and cultural documentation of tribes' struggles with climate impacts, and can serve as public service announcements about adaptation planning. In addition, these videos can strengthen networks among different tribes and serve as educational pieces that tribes can distribute, not only between one another, but also to non-tribal organizations and individuals who want to learn about tribal efforts to address climate change. Most importantly, by creating videos, tribal participants ensure that the struggles they face as sovereign nations are recognized and more accurately depicted. Fundamentally, the videos are useful tools that help participants 1) tell stories about climate impacts that are culturally and socially appropriate, 2) document climate impacts on their region and people, 3) uphold their

rights and enrich their capacity to control their own past and future, and 4) strengthen control of tribal intellectual property and knowledge[1].

By articulating their stories, participants are also asserting the validity of native science. Historically, western science has been promoted at the expense of native science and epistemologies; by visualizing their own ways of knowing, Indigenous videographers help correct this imbalance. Creating videos that demonstrate how native scientists observe and understand climate changes helps to dismantle the perception that western science is the only valid form of scientific or verifiable information.

## Conclusion: Sharing Knowledge and Developing New Tools to Adapt

Climate researchers anticipate that the South Central US will be heavily impacted by drought and other climate-induced impacts. These projections underscore how critical planning is for tribes in the region. By networking with regional organizations, tribes can utilize existing resources, while fostering productive partnerships with other entities committed to climate adaptation. By making participatory videos, tribal planners refine their ability to create culturally appropriate resources, sometimes even in their own tribal languages. These videos are particularly useful because they aid tribes in disseminating information on what challenges their communities face, and what measures they are taking to adapt. Additionally, these videos are a tool for tribes to reinforce their sovereignty by exercising control over Indigenous science and stories around climate, which in turn strengthens tribes' capacity to address climate issues. In the past, tribes in this region relied upon their legal and political sovereignty to respond to forced relocation and the associated changes in climate (Krakoff 2011). Today, tribes are continuing to empower themselves to adapt to climate changes by drawing on their sovereignty.

This summer's intertribal workshops provided tribes with information about existing resources that increased their capacity to respond to expected changes, and which encouraged them to continue planning for climate change. As an added benefit, the workshops permitted Paulette Blanchard, Filoteo Gómez Martínez and Jeffery Palmer to begin work on a feature-length documentary about the stories and experiences of native people from the Southern Plains and New Mexico as they cope with climate change impacts. Lastly, the workshops provided an opportunity for tribal participants and academics to give greater voice to their concerns regarding native people and climate impacts.

## Resources


- Elliott, K. Gregg. Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative. 2013. "Native American Perspectives on Climate Change." Accessed via: http://gcpolcc.org/profiles/blogs/native-american-perspectives-on-climate-change-and-the-lccs
- Haskell Indian Nations University. http://www.haskell.edu/
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- Maldonado JK, Pandya RE, and Colombi BJ (Eds.). 2013. "Climate Change and Indigenous Peoples in the United States: Impacts, Experiences, and Actions." *Climatic Change:* 120 (3).
- Smith, Laurel. 2013. South Central Climate Science Center (CSC). Research Highlight: Intertribal Workshops on Climate Variability. Accessed via: http://www.southcentralclimate.org/index.php/pages/research_highlight
- Southern Climate Impacts Planning Program (SCIPP): http://www.southernclimate.org/
- South Central Climate Science Center (CSC): http://southcentralclimate.org/


[1] See Krakoff (2011) for additional discussion of the importance of sovereignty for Indigenous peoples' adaptation to climate and colonization.

- US Department of Interior. About the South Central CSC: http://www.doi.gov/csc/southcentral/about.cfm
- US Department of Interior, Landscape Conservation Cooperatives Index: http://www.doi.gov/lcc/index.cfm
- Oklahoma Intertribal Climate Change Meeting. 2011. http://www.southernclimate.org/publications/Oklahoma_Intertribal_Climate_Change_Meeting.pdf
- Bennett, T.M., Nancy Maynard, Patricia Cochran, Bob Gough, Kathy Lynn, Garrit Voggesser, Susan Wotkyns. Forthcoming. "Impacts of Climate Change on Tribal, Indigenous and Native Lands and Resources." *Third National Climate Assessment:* US Global Change Research Program. Accessed via: http://ncadac.globalchange.gov/download/NCAJan11-2013-publicreviewdraft-chap12-tribal.pdf



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**Tribal Climate Change Profile Project:**
The University of Oregon Environmental Studies Program and the USDA Forest Service Pacific Northwest Research Station are developing tribal climate change project profiles as a pathway to increasing knowledge among tribal and non-tribal organizations interested in learning about climate change mitigation and adaptation efforts. Each profile is intended to illustrate innovative approaches to addressing climate change challenges and will describe the successes and lessons learned associated with planning and implementation. For more information about the PNW Tribal Climate Change Project, contact Kathy Lynn at kathy@uoregon.edu, or visit http://tribalclimate.uoregon.edu/.

Carson Viles, a University of Oregon undergraduate research assistant with the Project, is coordinating development of these profiles. Carson is an enrolled member of the Confederated Tribes of Siletz Indians. He is in the Clark Honors College and is pursuing a degree in Environmental Studies. Carson can be contacted at cviles@uoregon.edu.


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