

OU Wins \$4.5 Million Science Center December 9, 2019

We are excited to announce that the University of Oklahoma (OU) will continue to host the South Central Climate Adaptation Science Center for the next 5 years! This extension was made possible after we won a \$4.5 million grant from the U.S. Geological Survey (USGS) to continue the Center's stay in Norman, Oklahoma. The Center's researchers help decision makers across Oklahoma, Texas, Louisiana, and New Mexico to apply cutting-edge science, data, and tools to prepare for climate extremes, like droughts, floods, and heat waves.

“We have seen devastating wildfires, extraordinary drought conditions, extensive flooding, and other climate-related disasters just in the past five years across our region,” says Renee McPherson, University Director of the South Central Climate Adaptation Science Center and OU associate professor of geography and environmental sustainability. “We know that the costs and damages of these disasters are rising. Now is the time to build resilience in our communities, water resources, coastal environments, forests, and other landscapes. The Climate Adaptation Science Center gathers many of the top scientists in the south-central United States and targets their work on science that helps us combat these climate extremes.”

Since the Center's establishment in 2012, the Center's scientists have partnered with decision-makers on a variety of research topics. For example, researchers mapped wildfire likelihood to assist fire managers in preparing for wildfire events. Others investigated the impacts of a changing climate on snowpack, streamflow, native wildlife, or invasive plants to develop planning scenarios for managers. Additionally, the Center has studied ways to effectively monitor soil moisture and drought conditions to help decision makers be proactive in extreme hot and dry conditions. By identifying how climate extremes are likely to affect the south-central U.S. in the coming decades, the science team can help resource managers build resilience in their national or state parks, wildlife refuges, tribes, communities, or other jurisdictions.

The South Central Climate Adaptation Science Center has worked extensively with tribes and pueblos. Center scientists have conducted research with tribes on their lands and waters, provided scientific expertise for development of tribal adaptation strategies, and hosted over 50 scientific trainings for tribal staff, elders, educators, and students. The tribal trainings have served over 550 tribal attendees for more than 5,000 contact hours. In 2015, the U.S. Secretary of the Interior honored the Center with an Environmental Achievement Award for increasing tribal capacity for climate change adaptation.

Through funding from the USGS, OU, and the Oklahoma NASA Space Grant Consortium, Center scientists also produced a series of 60 short videos that explain climate change, its impacts on ecosystems and various sectors of society, and techniques to help adapt to climate extremes. The video series is entitled *Managing for a Changing Climate* and is featured on the Center's YouTube channel (<https://tinyurl.com/t2vbqh2>).

Another important emphasis of the Center has been educating and mentoring a diverse group of next-generation scientists and resource managers. The Center's research programs provide opportunities for students and early-career scientists to work directly with decision makers across the region. Mentorship programs have included a summer undergraduate internship program for

traditionally underrepresented students in science, technology, engineering, and mathematics. During this program, students from across the south-central U.S. spend three weeks visiting major research universities and learning about the wide range of climate impacts on the region. Additionally, we have hosted three one-week workshops focused on early-career professionals to mentor them in how to conduct scientific research in partnership with resource managers. Finally, through the generosity of an anonymous donor, the Center sponsored a need-based international studies scholarship to aid OU students interested in environmental programs in pursuing a summer study abroad program.

It is our vision that we lead our region in understanding climate impacts and climate adaptation related to natural and cultural resource management. In the next five years, we plan to continue our innovative research and mentoring efforts with some new programs and partnerships. To stay up to date with our recent activity, be sure to subscribe to our newsletter (<https://southcentralclimate.org/news-3/newsletter-archive/>).

The South Central Climate Adaptation Science Center is one of eight regional centers funded by the USGS. Their collective mission is to “deliver science to help fish, wildlife, water, land and people adapt to a changing climate.” Members of the South Central Climate Adaptation Science Center are the University of Oklahoma (lead institution), Chickasaw Nation, Choctaw Nation of Oklahoma, Texas Tech University, Louisiana State University, University of New Mexico, and Oklahoma State University. For further information about the Center, visit <https://southcentralclimate.org/>.