

A photograph of a desert landscape featuring a rocky, reddish-brown mountain range in the background and numerous saguaro cacti in the foreground. A dark blue rectangular overlay box is centered on the image, containing white text.

Southwest Climate Adaptation Science Center Tribal Engagement Strategy 2024 - 2026



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Southwest Climate Adaptation Science Center Tribal Engagement Strategy — 2024-2026 Update

Executive Summary

The Southwest region is home to a number of distinct landscapes ranging from the Sonoran and Mojave Deserts, the California Coast, the Sierra Nevada Mountains, the Colorado Plateau, the Southern Rockies, the Great Basin, and the Madrean Sky Islands. Along with a number of diverse ecosystems, the Southwest region is also home to a diversity of Indigenous peoples and communities. Throughout history, Tribes of the Southwest have adapted to their environment in the face of many challenges and learned how to approach land management from the perspective of their local and Indigenous Knowledges. Tribes maintain unique and meaningful relationships with the natural world and utilize its resources for housing, food, and shelter, as well as for ceremonies, customary practices and traditions that are place based, and create connections between the natural world and Indigenous peoples.

In the Southwest, Tribes are experiencing a range of climate impacts that affect their communities and homelands. These impacts include changes in the quantity and quality of water resources, changes in regional fire regimes, changes in ecosystems services and access to natural and cultural resources, effects on human health, and effects on infrastructure (Fig. 1).

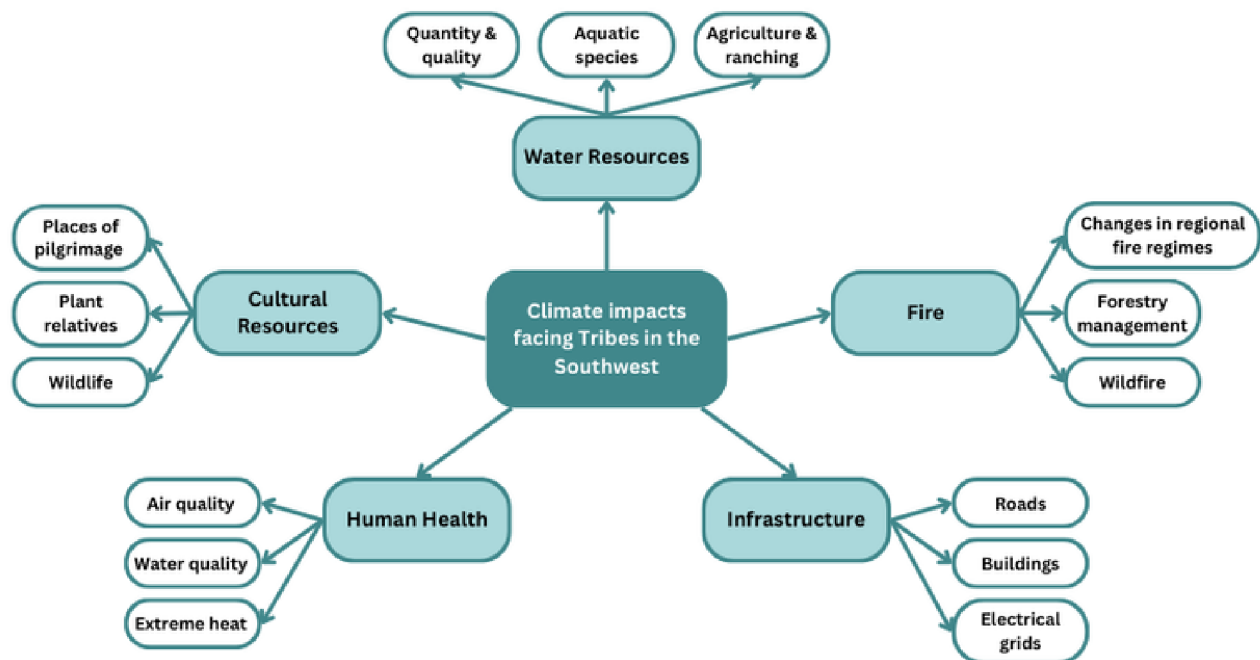


Figure 1. Examples of climate impacts facing Tribes in the Southwest

With respect to Indigenous peoples' practices and their relationships to the natural world, the Southwest Climate Adaptation Science Center (SW CASC) is committed to ensuring that the 4 R's - **Respect, Relationship, Responsibility, and Reciprocity** are centered in all of our Tribal engagement efforts (Wilson, 2008). Understanding how climate change impacts Indigenous peoples' ways of life also gives us the ability to continue to support resilience through adaptive measures, actions, and strategies for solutions.

Introduction

The SW CASC is one of nine regional Climate Adaptation Science Centers, and the region it serves encompasses California, Arizona, Nevada, and Utah. Since 2011, the SW CASC has worked with natural and cultural resource managers to identify the science and tools needed to adapt to a changing climate (Climate Adaptation Science Centers, n.d.). The SW CASC has partnered with a regional consortium to deliver high-quality useable science to managers and fund research supporting regional climate adaptation needs (Fig. 2).

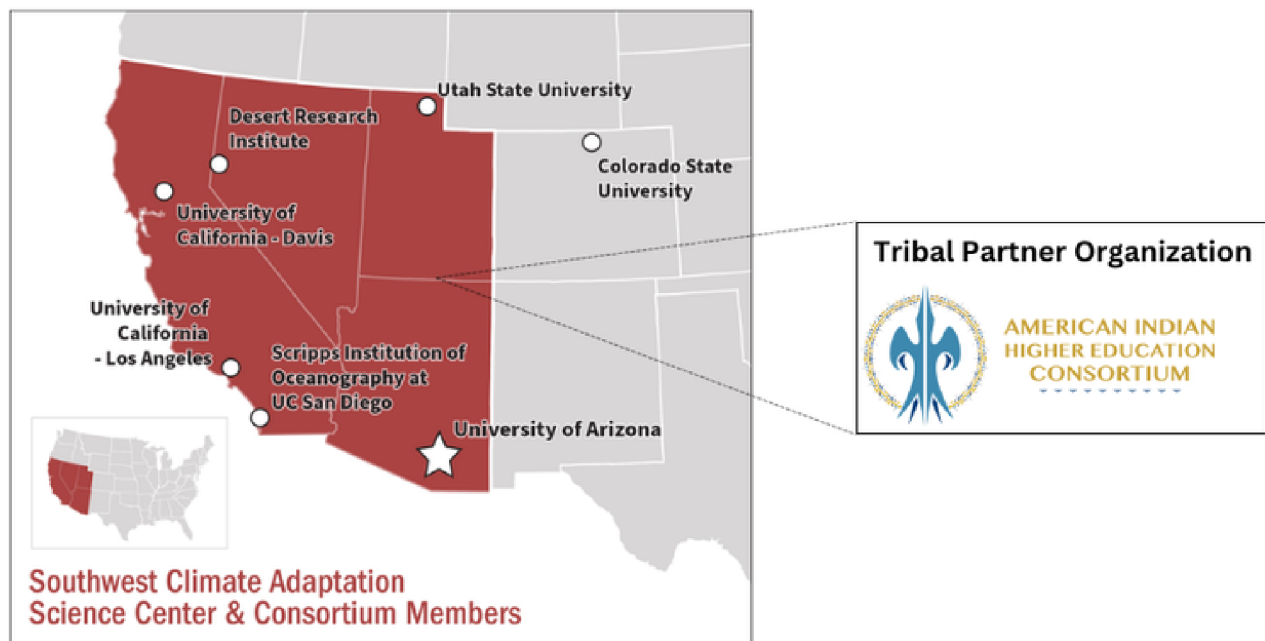


Figure 2. SW CASC Consortium Map

The CASCs work in partnership with the Bureau of Indian Affairs (BIA) Branch of Tribal Climate Resilience to host Tribal Climate Resilience Liaisons who help to build and support relationships between Tribes, Tribal organizations and Tribal colleges and universities (TCUs) and the CASCs, to ensure that the CASCs are engaging in thoughtful and equitable work around Tribal science needs. The Southwest Tribal Climate Resilience Liaisons are employed by the American Indian Higher Education Consortium (AIHEC) (Fig. 3).

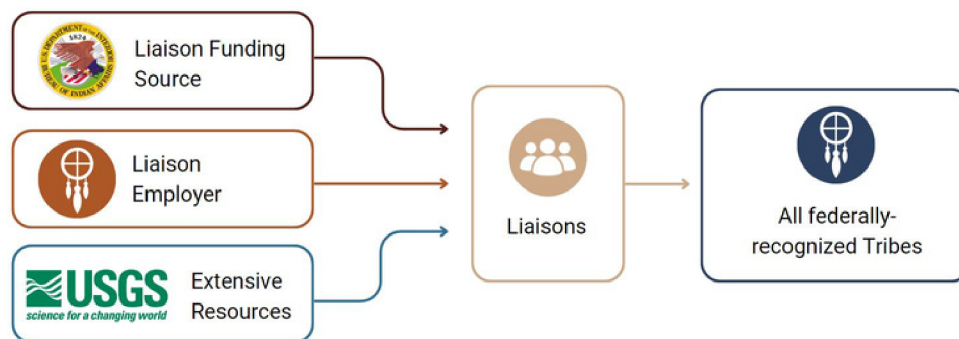


Figure 3. BIA Branch of Tribal Climate Resilience Liaison Structure

Background

Indigenous peoples are the original stewards of the lands that make up the SW CASC region, and they have maintained deep relationships with the land and the living and nonliving beings that also inhabit it. In this way, Indigenous peoples are at the forefront of recognizing and experiencing the impacts of climate change and are priority partners for the SW CASC. There are over 150 Tribal nations within the SW CASC region, all with unique and diverse geographies, land bases, populations, natural and cultural resources, and traditional practices (Fig. 4). Since its inception, the SW CASC has funded research in partnership with Tribes focusing on climate change vulnerability and adaptation planning, traditional knowledges, forestry, wildfire, cultural burning, keystone species, riparian ecosystems, invasive species, drought, rangeland management, and Indigenous data sovereignty.



Figure 4. Land Areas of Federally Recognized Tribes in the SW CASC region (Bureau of Indian Affairs, n.d.)

Purpose and Scope

The SW CASC Tribal Engagement Strategy provides some examples of Tribal climate adaptation and resilience efforts throughout the region and a roadmap for continued meaningful collaboration with Tribal partners. From 2024 to 2026, the SW CASC will work to accomplish the following four goals:

Tribal Engagement Goals

1. Increase awareness of SW CASC resources among Tribal Nations
2. Learn more about Tribal needs across the region
3. Provide technical assistance to Tribal Nations
4. Build capacity among Tribes, tribal colleges and universities, and researchers

Increasing awareness of SW CASC resources among Tribal Nations

The SW CASC will increase awareness of SW CASC resources by attending and presenting at Tribal environmental and climate conferences, workshops, and webinars. These events provide opportunities to share about the ongoing work of the SW CASC, network with Tribal environmental and natural resources researchers and professionals, and learn about how Tribes in the region are incorporating climate adaptation and resilience into their programs (Fig. 5). Additionally, the SW CASC will create updated outreach materials that outline the process of partnering with the SW CASC on research projects, consortium researchers' areas of expertise, examples of previously funded research that focuses on Tribal climate needs, and information on available climate science tools and models.



Figure 5. 2023 New Mexico Tribal Climate Camp (SW CASC, 2023)

Learning more about Tribal needs across the region

We will learn more about Tribal climate needs through the activities listed above and through Tribal representation on the SW CASC Advisory Committee, which provides opportunities for ongoing conversations on science priorities in the region. The SW CASC also maintains open lines of communication and welcomes suggestions about how to meet the needs of Tribes within the region.

Providing technical assistance to Tribal Nations

The SW CASC will provide technical assistance to Tribes by: 1) leveraging consortium and U.S. Geological Survey (USGS) partners and resources to produce science and data tailored to meet Tribal climate adaptation needs, 2) assisting in developing partnerships, projects and climate adaptation strategies, 3) creating tools that simplify the climate adaptation planning process, and 4) offering support and guidance for the development of vulnerability assessments, adaptation plans and proposals.

Building capacity among Tribes, tribal colleges and universities, and researchers

The SW CASC will work to increase Tribal resource managers' climate adaptation capacity by funding Tribal-focused research projects, facilitating connections and coordinating communication between Tribal and non-Tribal partners, and providing educational opportunities such as webinars and workshops focused on the fundamentals of climate change and climate adaptation (Fig. 6). Through our partnership with AIHEC, we will also focus our efforts on building the capacity of the next generation of Tribal climate adaptation professionals by addressing the needs of TCU faculty around incorporating climate science into their teaching and research, and by providing opportunities for TCU faculty and students to learn more about climate adaptation and resilience by collaborating with SW CASC consortium partners.



Figure 6. 2024 Southwest Adaptation Forum (SW CASC, 2024)

The SW CASC also strives to build the capacity of its affiliated non-Indigenous researchers to build relationships with Tribal Nations and Indigenous communities and develop their cultural competency by providing access to existing guidance documents and training materials developed by Tribal Nations and organizations as well as materials developed by the Department of the Interior, US Geological Survey, and the CASC network. Additionally, the SW CASC Tribal Liaisons can provide support and resources to non-Indigenous researchers for developing relationships.

Upholding Indigenous Data Sovereignty

The SW CASC supports the tenets of Indigenous Data Sovereignty which refers to the rights and interests of Indigenous Peoples in relation to data about them, their territories, and their ways of life (Caroll et al. 2020). There can be tensions between Indigenous Data Sovereignty and policies that regulate the publishing of federally funded data such as the OPEN data act and data management and sharing practices associated with FAIR (Findable, Accessible, Interoperable, and Reusable). Some of these tensions can be eased by incorporating the CARE (Collective Benefit, Authority to Control, Responsibility, and Ethics) Principles for Indigenous Data Governance into data collection, storage, and management plans. The SW CASC Data Steward can assist CASC-affiliated researchers in working through these tensions.

Researchers working with Tribal Nations and Indigenous communities and engaging with Indigenous Knowledges must follow Department of the Interior policies ([301 DM 7](#)). Researchers must receive free, prior, and informed consent from Knowledge Holders and the appropriate governing body, if one exists, before receiving, including, or applying Indigenous Knowledges to their study.

Free, Prior, Informed Consent (FPIC)

Free: Knowledge Holders should not be coerced or pressured into sharing Indigenous Knowledge with the Department.

Prior: Knowledge Holders should be involved at the earliest stage and consent should be received before Indigenous Knowledge is shared.

Informed: Knowledge Holders should be provided information regarding the bureau or office's request for Indigenous Knowledge and understand the potential risks and opportunities around sharing their Indigenous Knowledge.

Consent: affirms the right of Indigenous Peoples to say yes to participation, to decline or withdraw participation without any repercussions, legal or otherwise, or to say yes but with conditions.

Tribes are sovereign nations with their own governments, laws, and policies distinct from the rest of the United States. The U.S. government maintains a government to government relationship with Federally Recognized Tribes as well as a Trust Responsibility. Researchers affiliated with the USGS seeking to work with Tribes or on Tribal land should become familiar with the Department of the Interior's Tribal Consultation policy. The USGS Regional Tribal Liaisons can assist researchers should Consultation be required.

Researchers affiliated with universities should follow their institutional policies. For example, the University of Arizona has its own Tribal Consultation policy that researchers affiliated with that institution should follow. Researchers seeking to conduct human subjects research with Tribal Nations are required to submit their protocol to an Institutional Review Board (IRB). Research universities have IRBs that may review the studies of their affiliated researchers. Tribal Nations increasingly have their own IRB that researchers may be required to submit their studies to in addition to or in lieu of university IRBs. Researchers must be aware of processes and procedures required by the Tribal Nation they seek to work with before beginning work.

Interested in learning more about SW CASC Tribal engagement?

Visit our website

<https://www.swcasc.arizona.edu/>



Questions?

Please reach out to Cynthia Naha cnaha@aihec.org (*Senior Southwest Tribal Climate Resilience Liaison*) or Anissa McKenna amkenna@aihec.org (*Assistant Southwest Tribal Climate Resilience Liaison*). If you would like to set up a meeting, please fill out the [Tribal Liaisons Assistance Request form](#).

References

Bureau of Indian Affairs. (n.d.). U.S. Domestic Sovereign Nations: Land Areas of Federally-Recognized Tribes. <https://bia-geospatial-internal.geoplatform.gov/indianlands/>

Climate Adaptation Science Centers. (n.d.). CASC program vision (FY 2023-2028). CASC Program Vision (FY 2023-2028) | U.S. Geological Survey. <https://www.usgs.gov/programs/climate-adaptation-science-centers/national-and-regional-climate-adaptation-science>

Wilson, Shawn. (2008). Research Is Ceremony: Indigenous Research Methods.

