

EPA Tribal Science Bulletin

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NATIONAL EPA-TRIBAL SCIENCE COUNCIL (TSC)

GREETINGS FROM THE TSC TRIBAL CO-CHAIR



Chwent Awskeneh? Greetings. My name is Neil Patterson Jr., and I am serving a second consecutive term as the TSC Tribal Co-Chair. I am a citizen of the Tuscarora Nation, currently located in what is now called New York state. It's planting time in our part of the world, and I want to share a little story about the early seeds of the TSC and its connection to traditional ecological knowledge (TEK).

In 1996, I was asked by a Mohawk elder to attend a meeting of the National Tribal Operations Committee in Washington, D.C. I was 23 years old and had just been appointed director of my Nation's environmental program. I remember being nervous, and

somewhat confused, about how one person could conceivably represent the views of so many different Indian communities. Then there was the name—"Tribal Operations" sounded more like something medical than environmental. But EPA was a familiar acronym to me. They were involved with environmental remediation efforts in my own community. And they seemed to be listening, conducting annual leadership meetings with our Chiefs and Clanmothers. So this was my first meeting with the "big wigs in Washington."

I barely spoke at that meeting, but what I remember most was a discussion about how EPA could support Indigenous peoples conducting scientific research in their own ways, under their own terms, for their own purposes. The term "traditional ecological knowledge" hadn't even fully emerged in the scientific community yet. But there, in that posh hotel conference room, was a group of tribal folks telling EPA, "We have our own sciences," and that they should be able to work with that. A year or two later, EPA established the TSC.

More than 20 years later, the TSC will continue the TEK discussion at our next face-to-face meeting hosted by the Eastern Band of Cherokee Indians. We hope to build on our work we began in the Penobscot and Onondaga territories, especially in light of the new federal [guidance](#) on TEK issued by the White House last November. A debt of gratitude goes out to our host and long-time Region 4 Tribal TSC Representative, Katie Tiger, working tirelessly to bring the voices of Cherokee river cane and brook trout into the conversation as well. Ethkeke.

GATHERING TOGETHER IN PERSON AGAIN

The TSC is excited to gather in person this month at the Eastern Band of Cherokee Indians in Cherokee, North Carolina. We will focus on fostering Indigenous knowledge and learning about the tribe's cultural and natural resources. As we look forward to the upcoming meeting, we'd

like to briefly recap the TSC's last meeting. A [full summary](#) of the meeting is available on the [TSC website](#).

After successfully transitioning to virtual meetings in 2020, the TSC held its third Virtual Science Meeting in

KEY DATES & EVENTS

- Region 8 Regional Tribal Operations Committee (RTOC) Meeting, June 21–23, St. Michael, ND (Hybrid)
- [Tribal Climate and Health Adaptation Summit](#), July 13–14, Pala, CA
- Region 7 RTOC Meeting, July 18, Niobrara, NE
- [Tribal Lands & Environment Forum](#), August 8–11, Milwaukee, WI (Hybrid)
- [National Tribal & Indigenous Climate Conference](#), August 29–September 1, St. Paul, MN (Hybrid)
- [2022 Tribal EPA Region 9 Annual Conference](#), October 25–27, Lake Tahoe, CA (Hybrid)
- [The 5th National Adaptation Forum](#), October 25–27, Baltimore, MD

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GATHERING TOGETHER (CONTINUED)

May 2021 to bring an understanding of tribal lifeways to risk assessment and management approaches.

Kyle Whyte, University of Michigan, gave one of two keynote presentations, *Reflections on What Indigenous Research Means*, and explained that prior to First Contact, Native Americans cared for natural resources and fostered a future for generations to come using a knowledge system with rigorous checks and balances and reliable information. Colonialism weakened tribes' capacity to support, finance and engender their own education and knowledge systems. Recently, researchers have begun to consider Indigenous research and how to re-ground research in a way that comes from Native peoples and supports tribal communities. Indigenous research is not separable from Indigenous sovereignty, and Indigenous peoples define their own lifeways, which connect to research design and questions. Indigenous communities also must be involved in all steps of any research that affects them.

Jamie Donatuto and Larry Campbell, Swinomish Indian Tribal Community, gave the second keynote presentation, *What Is "Valued" in Tribal Risk Assessment?* The tribe is connected intimately to all species, health is connected to culture, and culture is connected to location. Jamie and Larry developed the Swinomish Indigenous Health Indicators (IHIs) to represent important aspects of Indigenous health: self-determination, education (elders passing knowledge to youth, the community's top indicator), resilience, cultural use, resource security and community connection. IHIs link why these aspects of health are important to the tribe with how to evaluate these aspects when they are at risk. IHIs can equitably inform risk assessments.

An Indigenized model of the Building Resilience Against Climate Effects (called I-BRACE) Framework includes a step modified for community priorities, and Jamie highlighted a community example. Swinomish researchers translated modeling data into an aerial image of a well-known location that supports three critically important tribal species—clams, salmon and crabs—so that the community could understand and connect with the image. Larry urged researchers to understand how the community talks, thinks and communicates with one another.

Western science and Indigenous knowledge can be represented as the European vessel and the Indigenous canoe in the Akwesasne Two Row Wampum, moving forward side-by-side. Tribes must work together with government agencies and academia to uplift and promulgate Indigenous knowledge and also must assess and uplift their own aspects of health. Larry echoed the importance of including tribal communities in all research aspects, communicating to them in a meaningful way, and allowing them to drive research priorities.

TSC Region 2 Tribal Representative Billy Longfellow of the Passamaquoddy Tribe of Pleasant Point (Sipayik) provided an overview of his tribe's environmental work to preserve, protect, restore and enhance all tribal lands, waters, air and human health and to monitor and enforce tribal environmental policies. Passamaquoddy refers to the people who spear pollock, and Pleasant Point is the tribe's traditional seasonal fishing village. The tribe has worked toward restoring alewife and other native species while addressing water quality issues in tribal waters.

EPA speakers included Chris Frey and Bruce Rodan of EPA's

Office of Research and Development (ORD), who reaffirmed ORD's understanding of the importance of obtaining tribal input on research affecting tribes. JoAnn Chase of EPA's American Indian Environmental Office discussed steps to improve implementation of the federal tribal consultation policy. Guidance for the Indian Environmental General Assistance Program is being revised to maintain and improve the integrity of the program for tribes. Attendees also learned from EPA about its *Exposure Factors Handbook*.

To synthesize the information presented during the meeting, attendees met in smaller groups in two different breakout sessions. The first session focused on tribal lifeways by media (air, land, water), including such tribal concerns as woodsmoke, cultural burnings, PFAS, tribal agriculture and wild plants, aquatic subsistence, and wild rice habitat. The second session, on tribal ecological risk assessment and management approaches, focused on special considerations for tribal lifeways related to land, air and water.

Finally, EPA Representatives Chris Taylor (Region 7) and Lon Kissinger (Region 10) were recognized for their service to the TSC in advance of their retirements. Thanks for a great meeting!



Waters of the Passamaquoddy Pleasant Point Reservation. Image courtesy Sipayik Environmental Department.

REGIONAL UPDATES

Region 5 Spring 2022 Tribal Meeting

On March 15–16, the Region 5 Regional Tribal Operations Committee (RTOC) held its spring 2022 meeting in conjunction with the annual Region 5 Tribal Environmental Program Management Conference. Region 5's RTOC invited staff from the American Indian Environmental Office to provide an overview of the [Memorandum of Understanding \(MOU\) Regarding Interagency Coordination and Collaboration for the Protection of Tribal Treaty Rights and Reserved Rights](#). Tribal representatives expressed support for the MOU and encouraged efforts to invite other federal agencies to join the 17 that have signed the document. Tribal representatives also urged the federal government to quickly begin to implement the MOU at the regional level, where tribes are already facing threats to treaty rights that involve multiple federal agencies. Two action items were identified for the Region 5 RTOC to pursue: (1) Discuss how to increase the use of Indigenous tribal ecological knowledge in EPA's regulatory actions, particularly during federal oversight of permitting decisions in tribal treaty areas. (2) Identify information on protecting treaty rights that could be shared with other federal agencies, as well as opportunities for tribal and interagency coordination.



Other items on the Region 5 RTOC spring meeting agenda included next steps for the Indian Environmental Gen Assistance Program Grant Guidance Evaluation, a report from the Region 5 Tribal Caucus on tribal environmental program budgetary issues, implementation of the Office of Water Tribal Action Plan in Region 5, and an update on the Region 5 Climate Change Adaptation Implementation Plan. The next meeting of the Region 5 RTOC is scheduled for summer 2022.

Region 8 Tribal Resource Center

EPA Region 8 created a Tribal Resource Center (TRC) to centralize EPA informational resources in one location to allow accessibility for all tribal nations within Region 8. The TRC provides regional and national information that includes EPA policy and guidance, media program information, legal resources, special topic issues and emphasis areas, EPA tribal grant funding, consultation and informational opportunities, important information on upcoming deadlines, and an events calendar.

EPA Region 8 is committed to enhancing communication with its tribal partners. The TRC is a space that brings together EPA's currently available tribal resources and information from multiple areas, such as the EPA website, providing online informational and learning opportunities, as well as consultation and information notices, letters and emails. The goal of the TRC is to gather this important information in one place for ease of access and help facilitate tribal participation in EPA's national and regional actions. EPA continually updates the TRC so that it reflects the most current information regarding EPA activities that may be of interest to tribal partners. To access the TRC or obtain more information, please contact [Benjamin Carlson](#) or [Andrea Trujillo Guajardo](#).



TSC MEMBER SPOTLIGHTS

DANA ADKINS, TSC REGION 3 TRIBAL REPRESENTATIVE



My name is Dana Adkins, and I am a citizen of the Chickahominy Indian Tribe, which is located in Charles City County, Virginia. I am proud to be the tribe's first Environmental Director and equally honored to be the first to serve as Chair of EPA Region 3's Regional Tribal Operations Committee and to represent Region 3 on the TSC.

A little about my tribe and its history—Chickahominy translates to “Coarse Ground Corn People,” and at the time of first contact with the European colonizers, my tribe inhabited several permanent villages along our namesake river. The Treaty of 1646 displaced the Chickahominy people from this area, and land was set aside for the tribe in the Pamunkey Neck area of Virginia. As the settlers prospered, they crowded the Chickahominy Tribe out of this area as well. The Chickahominy families then began a gradual migration to the area called

Chickahominy Ridge, where our tribal center is located only a few miles from one of our village sites dating back to 1607, Mamanahunt. Eighty-five percent of our citizens live within an hour's drive of our tribal center.

Recently, we were able to reacquire Mamanahunt, which is probably the most culturally significant of the documented Chickahominy village sites. The return of Mamanahunt is particularly exciting, as it is believed by experts to have been the seat of our tribal government during the period of first contact. Returning to Mamanahunt will give us the opportunity to take our youth into the field and give them a hands-on conservation experience and teach them about the vegetation, animal life and aquatic life that provided the food sources and tools that sustained our ancestors.

SHASTA GAUGHEN, TSC REGION 9 TRIBAL REPRESENTATIVE



Shasta Gaughen is the Environmental Director and Tribal Historic Preservation Officer for the Pala Band of Mission Indians in Payomkawichum (Luiseno) territory in what is now called San Diego County, California. She has worked for Pala since January 2005 and established Pala's Tribal Historic Preservation Office in 2008. Dr. Gaughen received her Ph.D. in anthropology from The University of New Mexico in 2011 and a Master of Legal Studies in Indigenous peoples law from The University of Oklahoma College of Law in 2021.

Dr. Gaughen taught in the Department of Anthropology at California State University San Marcos from 2006 to 2019. She is Chair of the National Association of Tribal Historic Preservation Officers, a member of the Advisory Council on Historic Preservation, Secretary of the Board for the Native American Environmental Protection Coalition, Chair of the Tribal Working Group for the Climate Science Alliance, and a member of the Institute of Tribal Environmental Professionals' Climate Change Advisory Committee. Dr. Gaughen oversees the Tribal Climate Health Project, a grant-funded education and outreach project that includes a website, resource clearinghouse, webinars, videos, and in-person presentations on climate change and health adaptation in tribal communities.

Shasta lives in Escondido, California, in a house that was built in 1919. She shares the house with three cats (Alfred, Charles and Olive) and shares the yard with four chickens (Opal, Agnes, Hannah and Wilhelmina).

DO YOU HAVE QUESTIONS ABOUT THE TSC OR THE BULLETIN? CONTACT MONICA RODIA,
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