CONCEPT NOTE

Water Scarcity in Indigenous Communities of the United States

Time: 3:00 PM - 4:15 PM EST
Date: Thursday, November 19, 2026
Platform: Zoom

Background:

Historical displacement and forced migration have significantly affected Indigenous Peoples' access to water resources in the United States. Many Native American communities were forcibly relocated to arid regions, limiting their access to reliable water supplies and disrupting traditional water management practices. These historical injustices continue to contribute to water insecurity in Tribal communities today. Heather Tanana, a professor at the University of California, Irvine, who researches Tribal water issues and leads the Universal Access to Clean Water for Tribal Communities Initiative, has reported that approximately 48% of households on Native American reservations lack access to clean water.

Water-related challenges vary among Native communities, ranging from drought and inadequate infrastructure to contamination caused by mining and agricultural activities. On the Navajo Nation, the Environmental Protection Agency (EPA) estimates that more than 15% of residents lack piped water in their homes. A 2007 assessment by the Indian Health Service found that 13% of homes surveyed in Indian Country lacked access to safe drinking water, compared with 0.6% of non-Native homes assessed nationwide. Additionally, many residents of the Navajo Nation depend on private wells contaminated with uranium and arsenic. On the Crow Reservation, approximately 39% of Tribal families' wells have been identified as unsafe for long-term consumption because of metals and/or nitrate contamination.

The legacy of uranium mining presents another serious threat to Indigenous communities. On the Navajo Nation, more than 500 abandoned uranium mines have contributed to groundwater contamination, making some traditional water sources unsafe and increasing concerns about long-term health effects. Meanwhile, Tribal communities in Oklahoma and Montana face surface water and groundwater contamination associated with agricultural fertilizers, pesticides, and wastewater management problems. Across the Pacific Northwest and the American Southwest, historical deforestation, industrial dumping, and resource extraction have also degraded watersheds and altered aquatic ecosystems, including the waterways that salmon depend on for spawning. Exposure to contaminated water containing arsenic, manganese, and uranium can increase the risk of serious health problems, including gastrointestinal illnesses, certain cancers, and chronic diseases. Together, these issues demonstrate how historical injustices, environmental

degradation, and inadequate access to safe drinking water continue to threaten the health, well-being, and cultural traditions of Indigenous Peoples in the United States.

This webinar aims to:

1. Discuss the ways in which water is life and why access to clean water is a human right.
2. Explore the many reasons for water scarcity among Native territories in the United States.
3. Talk about the efforts being taken to remedy the issue and what still needs to be done.
4. Start a conversation about ways in which Indigenous allies and faith leaders can help.

Panelists:

1. Shannon Seneca, PhD, REHS/RS, EIT (Mohawk) is a Haudenosaunee environmental engineer. She completed a bachelor of science in physics and then moved into civil engineering for her graduate studies. Seneca's master's work was focused on drinking water treatment, while she gained expertise in geochemistry, contaminant hydrology and groundwater remediation during her doctoral studies. Graduating in 2012, she was the first female Native American to earn her PhD in engineering at the University at Buffalo. Seneca obtained ecosystem restoration training and experience through the University at Buffalo's National Science Foundation IGERT Ecosystem Restoration through Interdisciplinary Exchange (ERIE) program.

   For almost a decade, she worked with the Seneca Nation and served as the Seneca Nation Health System's environmental health director. She briefly worked with the Center for Indigenous Cancer Research at Roswell Park Cancer Institute as an assistant faculty member to respond to Indigenous community desires to see more active environmental health cancer research.

   She brings in diversity as an Indigenous person and as an environmental engineer delving into environmental health to tackle the impact of environmental contaminants on human health. As a research assistant professor with the Department of Indigenous Studies, she strives to be a part of many interdisciplinary teams as each individual brings unique backgrounds to the table to solve large scale problems together.

2. Keely Joe is a member of the Navajo Nation, is a Project Coordinator at Universal Access to Clean Water for Tribal Communities (UACW), an initiative dedicated to ensuring every Native American household has reliable access to clean, safe, and affordable drinking water and sanitation. Her research broadly focuses on the environmental impacts on Indigenous communities regarding water and uranium mining. She previously worked as a Park Ranger at Craters of the Moon National Monument and taught Anthropology at Idaho State University. Keeley holds an M.A. in Cultural Anthropology from Idaho State University. Outside of work, she enjoys spending time outdoors and with her family.

3. **(PROPOSED)** Krystal Two Bulls, Executive Director of Honor the Earth, is an Oglala Lakota and Northern Cheyenne grassroots organizer with experience on the frontlines doing campaign development and management around social, racial and environmental justice. Krystal's identity as a Native American veteran is central to her organizing and storytelling. At the heart of Krystal's work is Sovereignty, LANDBACK, cross movement relationship building and a deep commitment to her People. In healing from her experience as a veteran, Krystal has dedicated herself to embodying what she views as the essential quality of a warrior: a commitment to the well-being of not only her People and their relationship to the land, but that of all Peoples.\

Moderator:

Ja:nos—Janine Bowen, a member of the Beaver clan of the Seneca Nation, currently directs Seneca Language Teacher Support and Community Outreach. She began her career, in 1997, as a teaching assistant for the English as a Second Language Department at Hiram College. She mentored international students and led class discussions on American culture and what it means to be Indigenous in the 20th Century.

In 1999, Ja:no's focused on Indigenous student support and became a programming assistant at the Harvard University Native American Program (HUNAP). While there, she wrote funding proposals and aided in the planning of events that would bring together faculty and students from across the university. In 2001, she continued to focus her career on Indigenous peoples by working as a research assistant at the Harvard Project on American Indian Economic Development (HPAIED). Her work there included managing and writing a case study on the Ojibwe Language Program of the Mille Lacs Band of Ojibwe, as well as developing reports to various U.S. Senators, Indigenous leaders, and foundations.

In 2002, Ja:no's decided to center her career on Seneca language reclamation. Consequently, she moved to the Allegany Territory of the Seneca Nation, where she began learning the language. She was quickly recruited to teach Seneca language and culture at the Salamanca City Central School District, where she worked for 13 years. During her teaching career, Ja:no's provided Seneca language and culture instruction to elementary and junior high school students and developed interdisciplinary lessons with her middle school colleagues. In 2015, she took on the role of Director of Seneca Language Teacher Support & Community Outreach at the Seneca Nation, where she advocates for Seneca language teacher development, community language promotion and outreach, and Seneca language resource development.

In order to effectively navigate the rocky terrain of politics, policy, and language education, Ja:no's received an Ed.M. from the Harvard University Graduate School of Education, an M.P.P. from the Harvard University Kennedy School of Government, and

an MS. Ed. from St. Bonaventure University. She currently resides on the Allegany Territory of the Seneca Nation and is working on obtaining an Ed.D. in Educational Leadership from D'Youville University.

Event Organizers:

1. G-20 Interfaith Forum Anti-Racism Initiative
2. International Academy for Multicultural Cooperation
3. **Possibly** the Seventh Generation Fund for Indigenous Peoples, **if they are interested**.
4. **Possibly** the G-20 Interfaith Forum Religion and the Environment Working Group, **if they are interested**.

References

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6. Hoover J., Gonzales M., Shuey C., Barney Y., Lewis J. Elevated Arsenic and Uranium Concentrations in Unregulated Water Sources on the Navajo Nation, USA. Expo. Health. 2017;9:113–124. doi: 10.1007/s12403-016-0226-6. [DOI] [PMC free article] [PubMed] [Google Scholar]
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