

EPA Tribal Science Bulletin



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NATIONAL EPA-TRIBAL SCIENCE COUNCIL (TSC)



Welcome to the latest issue of the bulletin. I am Curtis Munoz, the Kiowa Tribe of Oklahoma Environmental Director and TSC Tribal Co-Chair. This issue has an “air” theme; as such, I wanted to share a few thoughts with you about the 2016 National Tribal Forum on Air Quality held at the Seneca Nation Resort in Niagara Falls, New York, during the week of May 16, 2016. Several TSC members, including myself, participated in the forum. Jeff Mears, Region 5 Tribal Representative, was part of a discussion panel on opening day that addressed air quality, and I presented during the Indoor Air Quality (IAQ) Breakout Session about the impact of mold and mycotoxins on tribal health.

This topic is a continuation of the national tribal science priority identified by the TSC in 2006. Ten years since the TSC identified mold and mycotoxins as a high-priority tribal issue, I am pleased to see that IAQ is being recognized as an environmental issue eligible for General Assistance Program funding.

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TSC Member Named “White House Champion of Change for Climate Equity”



Mike Durglo, a member of the Confederated Salish and Kootenai Tribe (CSKT) and Region 8 Tribal Representative to the TSC, was recognized on July 15 as a White House Champion of Change for Climate Equity. Mike earned this honor by overseeing a wide

variety of environmental initiatives and leading his tribe in developing a climate change strategic plan to address climate change effects on the Flathead Reservation. The strategy includes a tribal ecological knowledge component derived from extensive input from CSKT elders. He has set an example for other tribes as they work to develop strategies to protect their cultural

and environmental resources. Mike works closely with his community's youth on sustainability projects and helped to establish the Environmental Advocates for Global Logical Ecological Sustainability Program.

Mike has served his tribe in a number of vital capacities—including tribal police officer, wildlife

conservation officer, wetland conservation coordinator and water quality regulatory specialist—before serving in his current capacity as Environmental Protection Division Manager. He also was elected to the CSKT Tribal Council and served from 1996 to 1999.



TSC Member Spotlight: Region 8 EPA Representative

Patti Tyler is the Science Advisor and Science Liaison to the Office of Research and Development in EPA's regional office in Denver, Colorado. She has represented EPA Region 8 on the TSC since 2003. Patti holds a B.S. and M.S. in botany and has worked for EPA for more than 25 years.

She has 20 years of field and laboratory experience and taught a wetlands ecology course for 10 years at Shoals Marine Laboratory. Patti finds great pleasure in environmental problem solving through establishing collaborative partnerships, such as the

support she provided to the American Indian Environmental Office with the implementation of its Tribal ecoAmbassador program. She held an integral role coordinating with EPA's Office of Chemical Safety and Pollution Prevention and Region 8's tribal programs

to establish the Center of Excellence for Tribal Environmental Health at



Salish Kootenai College.

SCIENCE UPDATE

2016 White House Tribal Nations Conference

The White House hosted the 2016 White House Tribal Nations Conference on September 26–27, 2016, in Washington, D.C. Tribal leaders from the 567 federally recognized tribes had the opportunity to interact directly with high-level federal government officials and members of the White House Council on Native American Affairs (WHCNAA). Each federally recognized tribe could send one representative to the conference, which builds on President Obama's commitment to strengthen the government-to-government relationship with tribes, support self-determination for tribes, and improve the lives of

American Indians and Alaska Natives.

Similar to previous conferences, this year's conference consisted of plenary sessions. New this year was the opportunity for tribal representatives to attend WHCNAA Subgroup meetings. These subgroups comprise high-level inter-agency officials who work on initiatives, policies and deliverables to promote and sustain prosperous and resilient tribal nations. The subgroups address health, economic development and infrastructure, energy development, public safety and justice, energy, education, and climate change and natural

resources as referenced in Executive Order 13647.

Native youths who have taken the Generation Indigenous (Gen-I) Challenge were broadly represented and participated in the conference. Gen-I, announced at the 2014 White House Tribal Nations Conference, is a Native youth initiative focused on removing the barriers that stand between Native youths and their opportunity to succeed. The initiative uses a comprehensive, culturally appropriate approach to help improve the lives and opportunities for Native youth. ○



THE CONFERENCE PROVIDES TRIBAL LEADERS FROM THE 567 FEDERALLY RECOGNIZED TRIBES WITH THE OPPORTUNITY TO INTERACT DIRECTLY WITH HIGH-LEVEL FEDERAL GOVERNMENT OFFICIALS AND MEMBERS OF THE WHITE HOUSE COUNCIL ON NATIVE AMERICAN AFFAIRS.

Sensor Technologies: EPA's Ongoing Efforts in Discovery and Application

EPA's Emerging Technologies Research Program is determining how the Agency can use low-cost sensors and move technology forward for stakeholders such as tribes, states and citizen scientists. The program is investigating emerging technologies and their potential to meet future air

quality monitoring needs as well as facilitating knowledge transfer through hands-on sensor deployment activities. The program has engaged in a number of activities to accomplish its goals, including holding workshops, creating tools such as the Citizen Science Toolbox, and developing

sensor data tools. The program also works with local, tribal and state governments to evaluate sensors.

For more information, contact Ron Williams at 919-541-2957 or williams.ronald@epa.gov or visit EPA's online [Air Sensor Toolbox for Citizen Scientists](#). ○

EPA'S EMERGING TECHNOLOGIES RESEARCH PROGRAM WORKS WITH TRIBES TO DEVELOP AND RELEASE TOOLS.



KEY DATES & EVENTS

- Region 1 Tribal Leaders Meeting and Tribal Environmental Conference, October 18–20, Falmouth, MA
- Region 9 Fall RTOC Meeting, October 24, San Francisco, CA
- [USET Sovereignty Protection Fund Annual Meeting](#), October 24–26, Cherokee, NC
- [Region 9 Annual Tribal/EPA Conference](#), October 25–27, San Francisco, CA
- National Tribal Toxics Council Meeting, October 25–27, Anchorage, AK
- [National Atmospheric Deposition Program 2016 Annual Meeting](#), October 31–November 4, Santa Fe, NM
- Region 6 RTOC Meeting, November 30, Tulsa, OK

SCIENCE UPDATE

Coldwater Fish Habitat Monitoring in Michigan's Upper Peninsula

The Keweenaw Bay Indian Community (KBIC), located in the Upper Peninsula of Michigan, is a federally recognized Ojibwa (Chippewa) tribe. Many coldwater streams are present in the heavily wooded area surrounding the reservation. The tribal community has undertaken a water temperature monitoring project because of the cultural, recreational and economic importance of its fisheries. Coldwater species are very sensitive to temperature increases, which can be caused by climate change and upstream land-use activities.



Long-term continuous water temperature profiling devices have been deployed in water bodies throughout the community's home territory near Lake Superior's Keweenaw Bay. Valuable data have been collected, and the findings will help to guide future fish-stocking efforts and harvest times for brook trout and walleye.

An additional outcome of the research is student engagement; students from the Keweenaw Bay Ojibwa Community College (KBOCC) earn stipends and internship credits for their work on the research project, have been able to develop their required Capstone projects, and have presented their work at a conference. The research has contributed to the development of curricula for several courses at KBOCC, including a fisheries biology and management course.

The community members also have benefited from the research. Fishing is an important tradition for KBIC families, many of whom rely on productive fisheries for income or sustenance. Furthermore, fishing represents an exercise of treaty rights, and fisheries management represents an expression of sovereignty.

The next steps for the project are to collect and analyze critical warm-weather data from summer 2016 and re-deploy the instruments to collect data during the fall of 2016. The goal is to expand the project to include a greater emphasis on offshore and nearshore monitoring. For more information, please contact Andrew Kozich at andrew.kozich@kbocc.edu.

THE RESEARCH

FINDINGS WILL HELP THE KEWEENAW BAY INDIAN COMMUNITY TO GUIDE FUTURE FISH-STOCKING EFFORTS AND HARVEST TIMES FOR BROOK TROUT AND WALLEYE.



SPREAD THE WORD ABOUT EPA'S SMART CITY AIR CHALLENGE!

EPA is conducting the [Smart City Air Challenge](#), which encourages communities, including tribal communities, to collect data using hundreds of air quality sensors and make the resulting data open. To qualify for the challenge, communities will need to submit plans for deploying hundreds of air quality sensors and managing the data they collect. Local and tribal governments will partner with sensor manufacturers, data management companies and others. Together, they'll create strategies for collecting and using the data. EPA will award prizes of up to \$40,000 to two communities based on their strategies, including their plans to share their data management methods so others can benefit. The prizes are intended to be seed money, so the partnerships are essential. After a year, EPA will evaluate the accomplishments and collaboration of the two communities and award up to an additional \$10,000 to each community. The challenge is open until October 28. Please spread the word.

For more information, visit the [Smart City Air Challenge](#) website or write smartcityairchallenge@epa.gov.

NATIONAL TRIBAL AIR ASSOCIATION (NTAA) UPDATE

NTAA has been busy working on several tribal air quality issues in 2016, providing a strong voice for tribes.

VW Settlement. On June 28, 2016, the United States lodged with the court a settlement with a collective of Volkswagen (VW) automakers. The settlement partially resolves allegations that VW violated the Clean Air Act by the sale of motor vehicles containing engines equipped with “defeat devices.” In response, NTAA and the Tribal Air Monitoring Support Center wrote a letter to EPA recommending how settlement funds can be distributed to tribal air programs. Tribes will be eligible for more than \$50 million as beneficiaries. NTAA created a policy response kit for tribes to help them understand the settlement and to respond to requests for comments and consultation from the U.S. Department of Justice. NTAA also is establishing a VW Settlement Work Group to ensure that tribes maintain an important voice in shaping the rollout of the VW Settlement. A webinar on the settlement is available at www7.nau.edu/itep/main/ntaa/Resources/NtaaVideo.

Clean Energy Incentive Program (CEIP). EPA has been active in moving forward with the CEIP, which was developed as a mechanism to encourage early investment in zero-emitting renewable energy generation to help achieve Clean Power Plan (CPP) goals. The CEIP will provide incentives for states and tribes to reduce greenhouse gas emissions by developing renewable sources of energy; the incentives are in the form of Emission Reduction Credits (ERCs) for eligible renewable energy and energy efficiency projects. Tribes with affected sources (e.g., power plants affected by the CPP) may develop plans and elect to participate in the program. Tribes without affected sources may also participate in the CEIP; however, this depends on their states first implementing a State Implementation Plan and opting-in to the CEIP. NTAA has prepared a policy response kit on the 2016 CEIP for tribes to use to provide comments to EPA by November 1, 2016. In 2015, NTAA provided early comments to EPA about the CEIP. A webinar on the CEIP is available at www7.nau.edu/itep/main/ntaa/Resources/NtaaVideo.

Indoor Air Quality (IAQ) Needs Assessment. IAQ is a growing concern for Native American communities, as Native Americans are more likely to have compromised health resulting from asthma and other respiratory ailments. Good IAQ practices are critical to protecting public health in tribal communities. NTAA formed an IAQ Work Group, which conducted the National IAQ Needs Assessment for Indian Country to provide federal and tribal policy makers with a national snapshot and better understanding of the IAQ needs of tribal communities. The needs assessment was released to all federally recognized tribes on December 3, 2015. In May, a report was published on the results from 83 tribes. The national needs assessment has been reopened, and federally recognized tribes will be sent the second needs assessment. It is open for tribes to submit their information until January 31, 2017. For more information, please visit www7.nau.edu/itep/main/ntaa/Resources/IAQNeedsAssessment.

Moving forward, NTAA will continue to address air policy needs for tribes in 2017 with more policy response kits, NTAA work group meetings and efforts, and publication of the annual *Status of Tribal Air*

DO YOU HAVE QUESTIONS ABOUT THE TSC OR THE NEWSLETTER? CONTACT MONICA RODIA, TSC EXECUTIVE SECRETARY, EPA OFFICE OF SCIENCE POLICY, AT RODIA.MONICA@EPA.GOV OR (202) 564-8322.