



One Tribe, One Earth

April 2021

Institute for Tribal Environmental Professionals

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Welcome to the Native Voices newsletter!

The April 2021 issue features:

- Smoke Readiness and Actions to Protect Health
- Respond to the TAMS Technical Needs Assessment
- Upcoming Events
- In case you missed it...

Let us know what you think:

<u>Submit your comments or</u> <u>suggestions.</u>

Smoke Readiness and Actions to Protect Health

By Kris Ray, Air Quality Program Manager, Confederated Tribes of the Colville Reservation

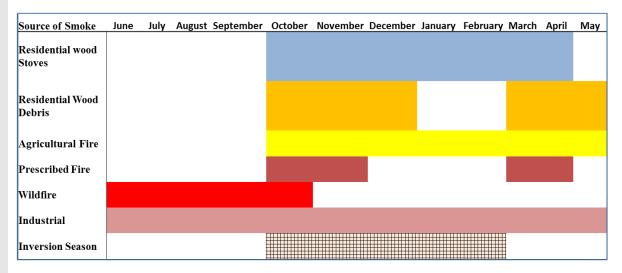


We should all prepare for possible natural disasters that may occur where we reside. Much of the country experiences extreme smoke from wildfires that impacts our personal, family, and community's health to the level of other types of natural disasters. Wildfire smoke at sustained levels in the Air Quality Index (AQI) category of Hazardous is not uncommon. In North Central Washington State, the Colville Reservation regularly experiences these high levels due to wind-driven fires and smoke from out of the area (Regional, Western

and World). Although wildfire smoke is our most pressing health-related air quality issue, all sources of smoke should be evaluated to determine yearly exposure.

To understand smoke impacts, we charted the sources (by month) based on monitoring and emissions inventory data. The chart below shows that wildfires could impact us from June through October, but the greatest number of sources are during the winter months.

Chart 1: Wildfire impact by month - Confederated Tribes of the Colville Reservation.



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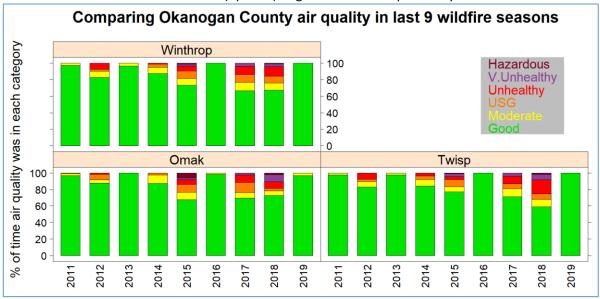
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For more information: **ITEP Training**

We worked with several partners to determine the prevalence of high smoke impact events for nine wildfire seasons. For five of the nine years, we measured the concentration at our Omak monitor; a large percent of the time, concentrations were in AQI's Unhealthy for Sensitive Groups category or worse. The smoke concentration in 2014 reached higher levels than the Omak monitor captured because the site was at the northern (upwind) edge of the area impacted by smoke.



Washington State Department of Ecology, 2020



Hazardous air from wildfire smoke, 2021.



Cold Springs Fire, before burning into Tribal Housing, 2021.

Colville community education and outreach

Actions an Air Quality program should take to become smoke ready need to be community-based and account for all sources of smoke on a yearly basis with the goals of preventing health issues. We use education and outreach as the main source of information dissemination, along with promotion of mitigation actions to lower our exposure.

To provide information during smoke events, we write air quality advisories and warnings to let community members know how and when smoke may affect them. We also coordinate closely with Air Resource Advisors, the Washington State Smoke Blog, and the National Weather Service to provide similar messages and recommendations. Many of the homes in the community do not have air filtration systems or air conditioning, so the recommendation of staying indoors with the doors and window closed becomes problematic. Box fan filters have become a popular strategy to help keep indoor air cleaner. We produced a video to explain safe construction and use of these DIY filters along with some air quality basics.

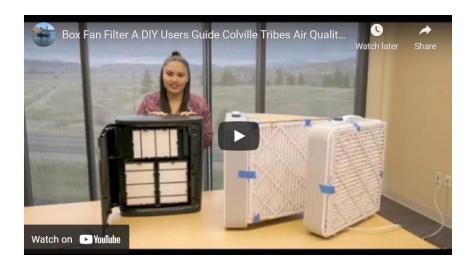
Indoor Air Quality in Tribal Communities

ITEP Climate Change Program

National Tribal Air Association

ITEP Videos & Media

EPA Tribal Air and Climate Resources



We address non-wildfire smoke by implementing a woodstove replacement program, stove buy-back events, and promotion of using dry firewood to reduce emissions. Our program and several partners combined efforts to promote community cleanup days where leaves and branches are collected twice a year. These efforts prevent up to 60 tons annually from being burned. The group also promotes composting of backyard vegetation debris as another alternative to burning. We have created multiple projects that will be implemented for years to come.

Becoming smoke ready as an individual, family, business, or community can take many years. It is a complex process that encompasses cultural, social, economic, and mental and physical health concerns into an action plan that minimizes individual exposure to smoke. The effort will decrease hospital visitations and lost work. In addition, it will make people happier and keep our air cleaner.

For more information, contact Kris Ray, Air Quality Program Manager, at <u>kris.ray@colvilletribes.com</u>.

Respond to the TAMS Technical Needs Assessment

The Tribal Air Monitoring Support (TAMS) Center developed an online Technical Needs Assessment form to identify the technical support requirements of tribal air quality programs nationwide. The goal of this Needs Assessment is to aid in the development of services that better meet tribal air program goals and objectives. The form asks for specific information related to both ambient air quality and indoor air quality concerns that affect Tribes. Input obtained through this online questionnaire will help identify focus areas and support needs so that future technical training and support can be tailored to Tribes. Complete the form online by April 30, 2021.

If you have questions, feel free to contact either of the TAMS Co-Directors, Christopher Lee (Christopher.Lee@nau.edu, 702-784-8278) or Hayden Hardie (Hayden@epa.gov, 702-784-8232).

Upcoming Events

National Tribal Forum on Air Quality (NTFAQ) – May 17-21, 2021, Virtual Registration is open and free!



In case you missed it...

Webinars hosted by the Institute for Tribal Environmental Professionals:

- September 23, 2020: ITEP Research Education on Air and Cardiovascular Health (REACH)
- September 29, 2020: Planning an Air Quality Project
- October 13, 2020: Emission Inventories, Your Questions Answered
- October 26th to November 20, 2020: Reviewing Air Quality Permits
- November 11, 2020: Road Dust Webinar #4: Sharing Community Experiences (Part 2)
- November 12, 2020: Introduction to Air Monitoring and Remote Professional Assistance
- December 1, 7, 15, 2020: Webinar Series Woodstove Operation and Maintenance in Indian Country

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