



“The Official Newsletter of the Inter-Tribal Environmental Council”

**ITEC
MEMBER TRIBES**

- Absentee-Shawnee Tribe
- Alabama-Coushatta Tribe
- Alabama-Quassarte Tribe
- Apache Tribe
- Caddo Nation
- Cherokee Nation
- Cheyenne/Arapaho Tribes
- Citizen Potawatomi Nation
- Comanche Nation
- Coushatta Tribe of Louisiana
- Delaware Nation
- Delaware Tribe
- Eastern Shawnee Tribe
- Fort Sill Apache Tribe
- Iowa Tribe
- Jicarilla Apache Nation
- Kaw Nation
- Kialegee Tribal Town
- Kickapoo Tribe
- Kiowa Tribe
- Miami Tribe
- Modoc Tribe
- Muscogee (Creek) Nation
- Osage Nation
- Otoe-Missouria Tribe
- Ottawa Tribe
- Pawnee Nation
- Peoria Tribe
- Ponca Tribe
- Pueblo of Laguna
- Pueblo of Pojoaque
- Pueblo of Santa Clara
- Pueblo of Taos
- Pueblo of Tesuque
- Quapaw Nation
- Sac & Fox Nation
- Seminole Nation
- Seneca-Cayuga Nation
- Shawnee Tribe
- Thlopthlocco Tribal Town
- Tonkawa Tribe
- Wichita & Affiliated Tribes
- Wyandotte Nation
- Ysleta del Sur Pueblo
- Zuni Tribe

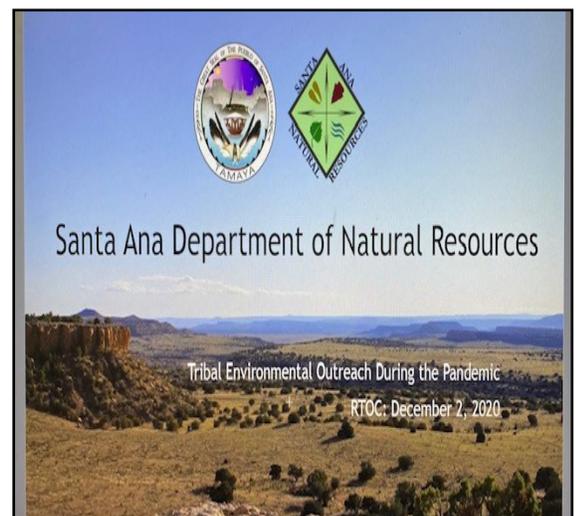
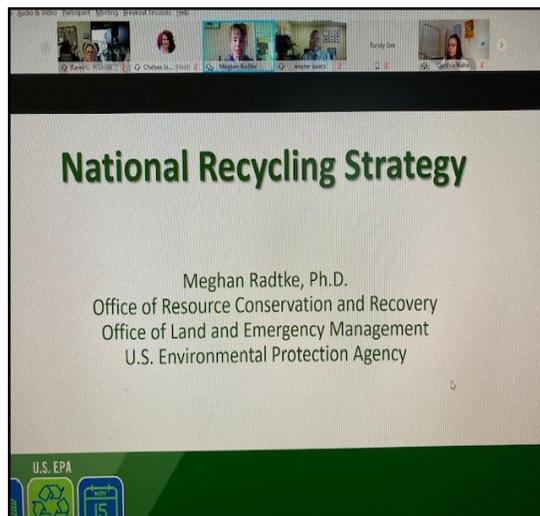
RTOC Meeting

Regional Tribal Operations Committee meetings were held December 1-2, 2020 in a virtual format. Approximately 135 representatives from Tribes and EPA attended both the tribal caucus and RTOC Meeting. Topics on the agenda included:

Roll Call and Declaration of Quorum, Approval of Minutes, Tribal Leader Roundtable Discussion, Action Items from Leadership Discussion, Tribal Recycling During the Pandemic, EPA Office of Land and Emergency Management (National Recycling Strategy), EPA Division Reports, Tribal Environmental Outreach During the Pandemic.

The following items were also on the agenda: the RTOC Charter Survey, COVID-19 updates, Transition Document, National Tribal Air Association (NTAA), Tribal Environmental Coalition of Oklahoma Report (TECO), Inter-Tribal Resource Advisory Committee (IRAC), Texas and Louisiana Tribes updates.

The Tribal Governance Group (TGG)/E-Enterprise Leadership Council (EELC), National Tribal Water Council (NTWC), Tribal Waste and Response Steering Committee, Tribal Science Council (TSC) reports. The RTOC and NTC nominations and voting, discussion of the RTOC Meeting/Annual Tribal Summit dates.





THE DIRECTORS CORNER:

By~Kristi Laughlin, Eastern Shawnee Tribe

Where is the Eastern Shawnee Tribe Community located?

The Eastern Shawnee Tribe Community is located in Northeast Oklahoma on the Oklahoma/Missouri border in Ottawa County, Oklahoma. Tribal headquarters sits right next to the Missouri State line by Seneca, Missouri. If you visit, you will find you can't get to headquarters without entering and exiting Missouri.

How many community members are served by the Environmental department?

The Eastern Shawnee Tribe has a current enrollment of 3,641 with tribal members located across the United States. The Environmental department uses a 50-mile radius service area and can assist all tribal members within the service area with environmental services.

How long have you been the Environmental Director?

Five amazingly fun years. I have had the privilege to be an employee of the Eastern Shawnee Tribe for 15 years. I started in the Environmental Department in 2005 and became the Environmental Director in 2015.

What are the primary environmental concerns that affect your tribal community?

The Tribe is located downstream of the Tar Creek Superfund Site and the Tri-State Mining District. Heavy metal contamination from historic mining is a concern for all residents in Ottawa County. Other prominent concerns include flooding, drought, extreme weather events, illegal dumping, private septic issues, agriculture land management and ag runoff, and aging rural infrastructures.

As an Environmental Tribal Director, tell us what you enjoy most about your work?

I love that every day is different, and the work is diverse. What I enjoy most is being able to work outdoors. Plus, I have a great team who work together well to get goals accomplished.

What are some of your current projects or future plans for your tribe's environmental programs to address tribal environmental needs or concerns?

The department has a wide variety of programs. Currently, the department manages the EPA PPG Grant consisting of the GAP, 106, and 319 grants; we operate two drinking water systems and one wastewater treatment plant; we operate the food sovereignty program consisting of 4 hoop houses that includes hydroponics; we operate Four Feathers Recycling; we conduct health and safety inspections; we manage property rentals and housing; and we assist tribal members with trust services.

This year the department has been able to start a new project to combat invasive species by starting a feral hog control program. We are in the first year of developing the program and are excited to see it grow. We have also received funding from EPA in our GAP Grant to purchase a new baler for Four Feathers Recycling. This was a needed addition to the program.





Has the Eastern Shawnee Tribe implemented any programs/projects due to the COVID-19 Pandemic?

The Eastern Shawnee Tribe has put several protocols in place to combat the spread of COVID-19 including taking temperatures, practicing social distancing, and wearing masks. Some office buildings are completely closed to the public, and visitors must follow established guidelines. The Tribe has placed plexiglass barriers for programs or departments who serve the public. The Tribe has a couple projects in development that will be able to help tribal members in the area as well as protect the employees.



(Staff left to right: Kristi Laughlin, Debbie Dotson, Justin Siebrandt, Tyler Hemphill, Jacob Bachman, Justin Morehead, front row: Kathleen Blanchard, Justin Burris)



Tribal Waste And Response

The Tribal Waste And Response (TWAR) Steering Committee has a new feedback form for our Priorities Document. We are beginning to work on the 2021 document, so if anyone has any comments, now is the time!

Feedback form:

https://nau.col.qualtrics.com/jfe/form/SV_8rjhWnloBQadlYh

2020 Document:

http://www7.nau.edu/itep/main/twarsc/docs/TWARP%20SC%20Priorities%20Document_2020.pdf

If you have any questions please contact:
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sking@quapawnation.com



Harmful Asbestos May Help Alleviate Carbon Gas Emissions

Hannah C., *The Science Times*

Asbestos is a natural mineral known to cause lung cancer called mesothelioma. In a recent report from MIT Technology Review, researchers determined that the carcinogenic mineral can be used as a new method to alleviate climate change.

Similar to forests, asbestos can be used as a carbon sink to absorb atmospheric carbon dioxide. After studying samples, scientists believe that closed asbestos mines have the potential to absorb carbon dioxide on a global scale. Before the mineral was used for industrial purposes, especially during the Industrial Age, asbestos fibers were used during the Stone Age as wicks for candles and lamps. During the time of the Ancient Egyptians, asbestos cloth was used to wrap Pharaohs for mummification.



Other civilizations used asbestos fibers to wrap pots and increase the fire resistance of vessels. By the Middle Ages, asbestos bags were filled with pitch and tar, set on fire, and were catapulted over city walls during a siege.

Wide Use of Asbestos

During the Industrial Revolution, asbestos was used as an insulator for steam engines, generators, and other parts due to its resistant properties against chemicals, extreme temperatures, electricity, and water. It also had malleable properties and was widely used as a commodity.

Eventually, it was discovered that the widely available mineral caused lung cancer and asbestosis, a type of lung disease. MIT's report said that the surface area of particular "types of asbestos... makes them particularly good at grabbing hold of the carbon dioxide molecules dissolved in rainwater or floating through the air."

Caleb Woodall from the Worcester Polytechnic Institute is one of the scientists testing samples of asbestos from the old mining site. He and other researchers are exploring ways that mining waste could alleviate climate change.

Carbon-Absorbing Properties

Asbestos in old sites do not have to be touched to absorb carbon, so scientists can avoid unnecessary exposure to the mineral. When asbestos compounds absorb carbon dioxide, it creates magnesites.

Roger Aines of the Carbon Initiative at Lawrence Livermore National Lab said that the use of old asbestos mines is a great "opportunity that could remove enormous amounts of CO₂." MIT wrote that researchers are still figuring out "effectively and affordably dig up minerals, potentially including asbestos, specifically for the purpose of drawing down vast amounts of greenhouse gas from the atmosphere."



In 2019, De Beers, a diamond company, Natural Resources Canada, and Woodall's team measured how much carbon dioxide mining sites can potentially capture. In one asbestos site in Vermont, Woodall estimated that about 30 million tons of waste can potentially absorb 12 million tons of atmospheric carbon. According to the National Academies, by-products of mining sites around the world capture about 40 million tons of carbon dioxide each year.



Chronic Wasting Disease

Disease Background: Chronic wasting disease (CWD) is a prion disease which is a unique family of diseases caused by a malformed protein. CWD infects animals in the cervid family (deer, elk, moose, and reindeer). The malformed prion protein accumulates in the brain and other tissues causing neurological signs, emaciation, and death. Once clinical signs are observed the disease is always fatal.



Geographic Range: CWD was initially identified in Colorado and Wyoming in the 1960s and 1970s but has since spread east across the United States and west as far as Utah. It has been detected in free-ranging or captive cervids in at least 24 U.S. states, two Canadian provinces, South Korea, and in European reindeer and moose. Translocation of wild, captive, and privately-owned deer and elk is an important contributing factor in human-mediated spread of CWD across the country and globe to new regions. Natural migration has also contributed to disease spread.

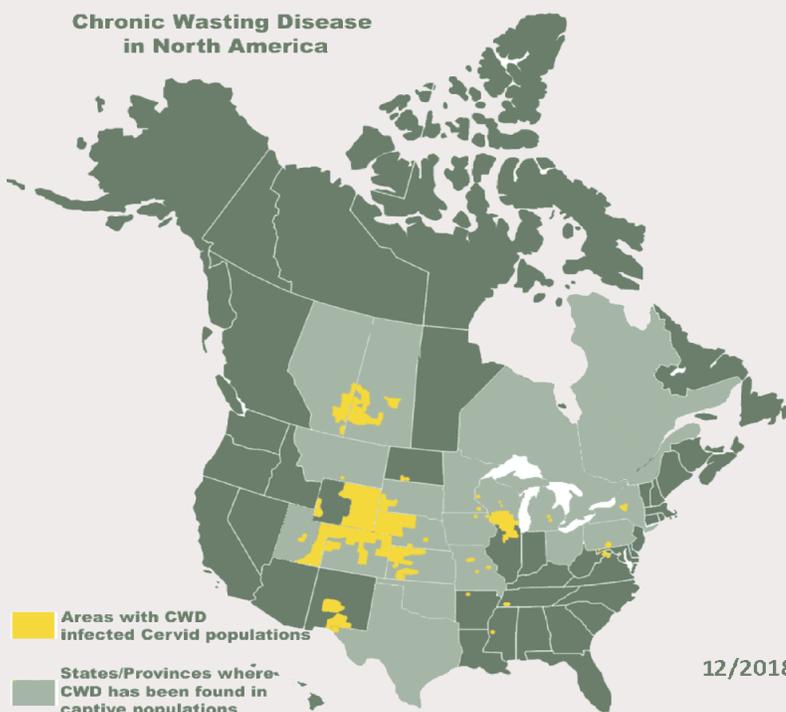
Transmission: Abnormal prions are shed in saliva, urine, feces, blood, and antler velvet from infected hosts (clinical or subclinical). The carcass of an animal that has died of CWD is also highly contaminated with infectious prion. Transmission occurs by direct contact with live infected animals or indirectly through contact with contaminated environments. Prions are extremely resistant to heat, ultraviolet radiation, and disinfectants allowing them to persist in the environment for very long periods of time (years to decades).

Species Affected: In North America, white-tailed deer (*Odocoileus virginianus*), mule deer (*Odocoileus hemionus*), elk (*Cervus canadensis*), and moose (*Alces alces*) have been documented with natural infection. There have been no documented cases of natural transmission in other species. **Clinical Signs:** Infected cervids lose weight and body condition, resulting in emaciation and death. Neurologic signs and behavior changes include depression, altered gait, head tremors, teeth grinding, hypersalivation, difficulty swallowing, circling, lowering of the head, drooping of the ears, and isolation from other animals.

Course of Disease: Depending on the host species, the incubation and pre-clinical period may be as short as 12 months but is often much longer (2+ years). During this time the animal can be shedding infectious prions. Since it is difficult to diagnose disease during incubation, management options are limited. Diagnosis requires collection of brainstem, lymph nodes, or rectal tissue for diagnostic tests run in a laboratory.

Prevention: There is no vaccine or treatment for CWD. The most important wildlife management tool to prevent the spread of CWD is limiting human assisted cervid movement across the landscape and preventing artificial congregation of cervids in infected or potentially infected environments (feeding grounds, bait stations).

Public Health Implications: There is currently no evidence that CWD can infect humans or domestic animal species. However, it is recommended that tissues from CWD infected animals not be consumed.



12/2018

<https://www.nps.gov/orgs/1103/upload/CWD-PublicInfoDoc-2.pdf>

<http://cwd-info.org/>



E-Enterprise Community Inventory Platform (EECIP)

Courtesy of: April Hathcoat, Cherokee Nation

EECIP is an online platform for state, local, tribal, and other environmental officials to securely and conveniently share project information and discuss their work. The site was conceived as a “24/7 virtual Exchange Network conference.” The primary components of the site have been the project database and discussion sections, but other enhancements were implemented based on suggestions from user testing, including specific communities of interest around major topics, and a metrics section where users can see curated site use analytics. Since the site launched in 2018, EECIP has accumulated more than 500 registered users and 2,000 projects from more than 200 agencies, including 66 tribal agencies.



You can use the discussion section to solve problems with collaboration, save time and money by searching the inventory for existing projects that are relevant, and build connections with other individuals. The database contains information regarding IT, process improvement, advanced monitoring, and exchange network data flows; anything related to streamlining and information exchange is welcome. The discussion component of this platform has been used to encourage conversations on a number of timely subjects, including low-code software development, expedited permitting, and public health emergency response to COVID-19.

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Enter Information Enter information about your agency projects, agency technical environment, and your own professional interests. Tagging your projects and expertise allows connections to your peers.
- 
Solve Problems Learn from and collaborate with colleagues and experts. Ask questions and other experts in the community can answer them.
- 
Save Time and Money Discover, reuse, or repurpose the work of others. Search for projects, agencies, discussion topics, and staff relevant to your work. EECIP helps by joining tagged content and suggesting connections.
- 
Build Community Find peer contact information and connect to share information about projects or to build new projects together.

To create an account, please visit www.eecip.net; click **Register** and input all contact information. Once you have registered, you will receive a confirmation email, and can then revisit www.eecip.net to log into your account.

***NOTE*- automated registration is only available for government employees. If you have an email address ending in “.com”, or encounter any registration issues, please email eecip@ecos.org.**





Upcoming ITEC Trainings:

- **Stream Ecology/Stream Characterization Training**—Rescheduled, date to be determined.
- **40 Hour HAZWOPER Training**— Rescheduled, date to be determined.
- **Phase I Assessment Training**—Date to be determined.
- **Open Dump Assessment Training**—Date to be determined.
- **Indoor Air Solutions Training**—Date to be determined.

*****Due to the pandemic some trainings may be virtual, dates for trainings will be sent out as soon as possible.***



For more information about ITEC trainings contact:

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BROWNFIELDS 2021 | SUSTAINABLE COMMUNITIES START HERE

We hope this message finds you well and healthy. EPA and ICMA are closely monitoring the Coronavirus (COVID-19) situation and are adapting our in-person conference experience in consideration of your health and safety. We look forward to seeing you at the National Brownfields Training Conference in Oklahoma City.

SAVE THE DATE: **OKLAHOMA CITY, OK | SEPTEMBER 27-30, 2021**





ITEC NEWS

“The Official Newsletter of the Inter-Tribal Environmental Council”

The Cherokee Nation Environmental Program (CNEP) publishes ITEC News each quarter. The mission statement is to protect the health of Native Americans, their natural resources, and their environment as it relates to air, land and water. To accomplish this mission, ITEC provides technical support, environmental services, and assistance in developing Tribal environmental programs to the member Tribes.

The viewpoints contained in this newsletter are not necessarily those of the USEPA or the CNEP/ITEC. Free and open discussion of all environmentally related issues is strongly encouraged. We also encourage submission of letters, comments, and articles from readers so as to promote a greater awareness among our people about environmental issues and to foster the free exchange of information, technology, and culturally relevant values of Tribal people.

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The *ITEC NEWS* gladly accepts and encourages your Tribal environmental information for upcoming issues and events. If you wish to contribute any articles in the next issue or for questions about this newsletter, please call 1-918-453-5109 or contact Karen Dye at: Karen-dye@cherokee.org.

