

Fall

2016



BAD RIVER NATURAL RESOURCE

Common Ground

Bad River Community Meeting about Pipelines on the Bad River Reservation



Photo Courtesy of the BRNRD. Photo shows section of Enbridge pipe laid on the Bad River Reservation 1953.

Over 60 years ago pipelines carrying different petroleum products were starting to be installed in pathways called rights of way across the Bad River Reservation. At the time, the Tribe and landowners along the rights of way entered long-term lease agreements that allowed the pipelines to be used for decades. Those leases are about to expire, which means the Tribal Council and the Bad River community needs to decide whether to renew a new set of lease agreements. The three pipeline companies include Enbridge Energy, Northern Natural Gas, and TransCanada's Great Lakes Transmission Gas Line.

This fall, Bad River Natural Resources Department (BRNRD) staff and the Tribal Council will be hosting a series of informational meetings about the pipelines that cross the Reservation. These meetings are specifically for Bad River community members so they can ask questions and learn about the types of products in the lines, who owns them, why they are here, whether there are risks, the possible future of the pipelines, the Tribe's right of way lease process, and other related issues.

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- *Wild Parsnip on the Bad River Reservation*
- *2016 Flood Debris: Kakagon Sloughs*
- *Erv Retreats back to Nature!*
- *New Conservation Warden*

Bad River Community Meeting about Pipelines on the Bad River Reservation *Continued*

By Lissa Radke, Environmental Specialist

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The Tribal Council and BRNRD are analyzing fact-based information about the rights of way, past leases, impacts and risks, and other information necessary to consider whether future right-of-way leases will be developed. These informational meetings will be designed to bring community members information that helps the community make the best decisions for the future.

The first meeting is scheduled for Thursday, December 15 at 6:30 PM at the Bad River Casino and Convention Center. BRNRD staff will give an overview of the three pipelines, but the main purpose of this first meeting is to listen to the comments, questions, and issues that Bad River community members have about these pipes. Future meetings to be scheduled in January and February will focus on offering

responses to Bad River members' comments, answer questions fully, and offer opportunities to talk directly with representatives of the three pipeline companies.

To help answer Bad River community members' questions, BRNRD is developing a web page that offers a wide variety of materials including maps, factsheets, photographs, and other handouts. Go to <http://badriver-nsn.gov/tribal-operations/natural-resources> to download materials. We will be continually adding to that site as more materials are available.

We'll be sending announcements about all upcoming meetings on the Tribe's and Natural Resource Department's web pages, email, posters, and social media sites. You can request your name and contact information be added to a new mailing list by calling the Department at 715-682-7123.

Save the Date!

Natural Resources Department Hosts Open House on March 15, 2017

The Bad River NRD will host its fourth biennial environmental open house called "It's Easy Being Green!" on Wednesday, March 15, from 2 to 7:00 PM at the Bad River Casino and Convention Center. This event is free and open to the public including kids and adults of all ages in Bad River and other communities.

BRNRD staff are planning fun and informational programs and activities that:

- Encourage the community to learn what the Department is working on to protect resources on the Reservation
- Show how community members can get involved in environmental protection on the Reservation
- Encourage kids and others to become involved in environmental jobs and careers.

For more information call 715-682-7123.

(Flyer on back cover)

NRD Staff Member is a Speaker at National Tribal Conference



(From left to right) John Prohaska, Bad River NRD; moderator Jane Neumann, Second Wind Consulting; and Elizabeth Wakeman, Flan-dreau Santee Sioux Tribe, a speaker on the same panel.

Recently John Prohaska, the NRD environmental compliance specialist, represented Bad River Band at the 2016 annual national conference of the Indian Tribal Environmental Professionals (ITEP) held at Mohegan Tribe of Connecticut's casino in Uncasville, Connecticut. Representatives from over 200 tribal nations attended, including Bad River.

John made a presentation called "Using Student Interns—Results Today, Investment for the Future," about his experiences hiring interns to help him do his work in the environmental compliance program. John also attended numerous sessions during the four-day conference to learn about many aspects of hazardous materials management, remediations (cleanups), toxicology, and other topics.

Wild Parsnip on the Bad River Reservation

By Lorrie Salawater, Invasive Species Coordinator



Wild parsnip is an invasive species that has been documented on the Bad River reservation. To some people Wild Parsnip is a beautiful flower that looks like a yellow Queen Anne's lace. Wild Parsnip likes to grow along roadways, savannas, pastures and fields, weedy meadows, areas along railroads, vacant lots, and waste areas. Wild Parsnip grows in many different habitats but it will not grow well in the shade. It starts out as a small patch but once it gets established it will rapidly grow to take over an area in a short period of time.

Wild Parsnip is a plant that looks pretty but it isn't the kind of plant that you want to touch. Once you come in contact with the plant you should shower as soon as possible. If the sap on your body comes in contact with the sun it will create sunburn. The Wild Parsnip sap you can give you burns that blister and last for weeks but the scars from the burns can last a lifetime.

How to Identify Wild Parsnip

- Grows up to 1.5 meters tall.
- The single green stem is two to five centimeters thick and smooth with few hairs.
- Compound leaves are arranged in pairs, with sharply toothed leaflets that are shaped like a mitten.
- Yellowish green flowers form umbrella-shaped clusters 10 to 20 centimeters across. Seeds are flat and round.

What should you do if you see some Wild Parsnip on the reservation? Call the Natural Resource Department and let us know where it is so we can treat it before it spreads. 715-682-7123 Ext. 1558



2016 Bad River Flood Debris: Kakagon Sloughs

Photos Courtesy of the BRNRD

The NRD has continued to pick-up flood debris and address post-flood clean-up issues. The project was funded through the BIA: Great Lake Restoration Initiative. Pictures show some of the large debris that was pulled out of the Kakagon Sloughs. 500 pounds of debris were taken out of the Sloughs on the day of the photos.





Geospatial Collaboration, Communication, and Coordination for Future Generations

Highlights from National Tribal GIS Conference 2016

By Suzi Smith, GIS Specialist

For the past seven years, GIS professionals across Indian Country annually gather in Albuquerque, New Mexico to exchange information and participate in interdisciplinary dialogues. Representatives come from a wide variety of backgrounds and areas of expertise, including industry, academia, and federal agencies. Typically it is Tribes from the southwest that have the biggest presence at the conference, but it is constantly growing and becoming a source of inspiration that guides geospatial programs across the country. This year over 200 participants were in attendance, with good representation from Alaskan Native Communities, Midwestern Tribes, and, for the first time, a Tribal Historic Preservation Officer from the East Coast (Narragansett of Rhode Island).

Location of the Conference

Every year, the conference is hosted by the Southwestern Indian Polytechnic Institute (SIPI). It is a national Indian community college and land grant institution. We are probably most familiar with another land grant college, the Lac Courtes Oreilles Ojibwa Community College (LCOOCC), of course. LCOOCC and SIPI, as far as I know and I don't claim to know much, are the only two Indian community colleges that offer certificates in GIS. Both colleges offer great opportunities for Native youth to gain the hard skills they need to be employable in technical fields, especially in natural resources conservation. Native youth involvement in governance and resource protection, through the lens of GIS, is always on the forefront of discussions at our annual conferences. The setting, therefore, constantly provides the appropriate context for our discussions of the current state and future of GIS in Indian Country. While focused on GIS, the conference is open to anyone interested, so if you'd like to learn more about the Tribal GIS network and/or gaining an education or training in GIS please contact me.

Workshops

The conference does not last for an entire week, but in the days leading up to the opening ceremony we are not unproductive. I took in two workshops this year, one on remote sensing and the other dealt with ArcGIS Server. The remote sensing workshop was taught by earth scientists who work for NASA, so it was nice to get a refresher on satellite imagery techniques straight from the source. The Landsat program is probably the best known remote sensing platform managed by NASA, but other satellites and remote sensing agencies were also covered. We learned how to search, access, and download satellite data products and imagery, as well as methods to visualize, interpret,

and analyze satellite imagery using web-tools and ArcGIS software. Applications of remote sensing for natural resource management and climate change assessment were also covered, including: wildfire, water quality, vegetation health, drought, and (of particular interest) flood applications. I have copies of all the materials needed to complete all the exercises I completed in this workshop, as well as the software. Anyone interested in trying out remote sensing, even for the very first time, can come to me and I'll be excited to share this science of seeing the invisible (you'll find out what that means too). NASA also runs internship programs focused on tackling a wide range of real-world earth science issues through remote sensing projects.

Presentations and Discussions

I won't bore you with the details of presentations and discussions (though they were hardly boring to me!), but some of the topics covered included:

- Choctaw Nation Historic Preservation records management digitization and integration with GIS
- BIA Branch of Geospatial Support's update on Indian lands dataset (I'm keeping a close eye on this project)
- BIA Tribal climate resilience program, accessing and using EPA's geospatial portals
- an assessment of drought induced oneseed juniper die-off using remote sensing and GIS mapping techniques on the Pueblo of Santa Ana
- 2020 Census partnerships
- maintaining housing demographics in the Sicangu Wicotti Awaynkapi Corporation (by Rosebud Sioux)
- place name studies and collaborations in the Yukon-Kuskokwim Delta region of Western Alaska
- Tribal need to map land based ceremonial stone landscapes and submerged Paleo-cultural landscapes

Taking in these presentations and participating in discussions brought valuable insight and diverse perspectives on projects Bad River Natural Resources Dept is currently working on, as well as inspiration for potential solutions for the future. If anyone is interested in learning more about what other Tribes are doing with GIS and thoughts on how that can be applied here, feel free to drop me a line or stop by the office.



Improperly Abandoned Drinking Water Wells Should be Properly Closed

By Ed Kolodziejewski, Water Resources Technician



Unused and improperly abandoned wells are a significant threat to groundwater quality. If not properly filled with impermeable materials (commonly sodium bentonite or cement grout), abandoned wells can directly channel contaminated surface or soil water into the groundwater aquifers. Water that gets into abandoned wells bypass the purifying action that normally takes place in the upper layers of the soil. Many thousands of improperly abandoned wells are threatening the groundwater in Wisconsin.

How improperly abandoned wells can threaten groundwater

- Contaminated surface water can enter a well if the casing pipe does not extend high enough above the ground surface and the well cap has been broken or removed; or if there are cracks or holes in the casing due to damage or deterioration with age.
- Contaminated surface water can seep down along the casing pipe of an improperly abandoned well.
- Open wells offer tempting disposal receptacles for liquid and solid wastes (such as used motor oil). The disposal of any pollutant or wastewater in a well is prohibited by State Codes.
- Even artesian wells can function as conduits for contamination. If the pressure of an artesian system drops enough, the flow may reverse its direction and 'suck' water or other liquids down into the aquifer.
- There are also safety concerns when it comes to improperly abandoned wells. Wells of a sufficient diameter can allow for people or animals to injure themselves, by either catching a foot/leg or even fall in (in the case of small children). There was an improperly abandoned well on the Bad River Reservation that was down into a cement 'box' that was

about 8' underground. Over the years this well filled with water, and if anyone were to fall in it would be quite easy to drown as there was only a small opening enough for a person to get in and all sorts of pipes, pumps and such to get caught on.

Improperly abandoned drinking water wells are also often classified as Class V Injection wells, under the Underground Injection Control. This basically means that it is a well that can act as a conduit for injection of non-hazardous fluid into the ground. As noted above it can be used for illegal injection of both hazardous and non-hazardous fluid.

The Bad River Natural Resource Department, funded by the Natural Resource Conservation Service (NRCS), began a Well Abandonment Project in 1996. Of the 50 confirmed and identified improperly abandoned wells known by the Bad River Water Resources Program, 48 of them have been properly closed. The method used by the Water Resources Program to close these wells is to seal up the well casing with sodium bentonite. Sodium bentonite is a clay, native to the Western United States. When exposed to water the dried bentonite chips it will absorb the and expand forming an impermeable barrier that will function even if the well casing were to corrode completely, which it will eventually do over time. As a measure of safety all exposed well casings will also be cut down to below grade and buried. In the case of the cement 'box' well mentioned earlier, the space was collapsed using earth moving equipment and then buried so that no one could fall in and injure be injured.

The above picture shows an example of an improperly abandoned well that has been allowed to deteriorate to a degree that water is leaking near ground level. During time of flood, which are relatively frequent for the Bad River Reservation, it could allow contaminants to get into the drinking water aquifer.

If you have questions or have information about locations of improperly abandoned wells you can contact Edward Kolodziejewski at the Bad River Natural Resource Department. Phone number :715-682-7123 x1565 Email: wrtech@badriver-nsn.gov.

Indoor Air more Polluted than Outdoor Air?

By Daniel Wiggins, Air Quality Technician

Scientific studies have proven some indoor environments are more polluted than any outdoor environment, which health concerns can vary from home to home, can be related to allergies or asthma, and can cause cancer and even death.

Indoor air pollution is sometimes not contributed solely by one source, but rather a combination of sources or factors. There are a variety of things that can contribute to indoor air pollution and is usually associated with sources that release gases or particles into the air. It can be related to specific use of certain chemicals and cleaning agents or traced back to a malfunctioning gas-appliance, such as a furnace. Other issues can be directly related to how the home was built or the deterioration of the structure overtime. "Leaky" homes have a tendency of being less energy efficient and may allow excessive moisture to enter, eventually contributing to moisture damage and the development of mold. Controlling or eliminating sources to minimize can improve indoor environments; however, locating and identifying these sources are not always simple. Reading labels and understanding proper usage of cleaning agents or other household chemicals should be done before use and may help limit some pollutants. Allowing an adequate amount of outdoor air to be introduced into the home can often avoid a build-up of many indoor pollutants.

Other pollutants may be more difficult to control and may even require a sort of testing to identify. Radon is naturally occurring, odorless, cannot be seen, and may cause the development of lung cancer. A test kit placed in the home is the only way to determine the indoor radon concentration. Depending on the recorded level of radon a home may require radon reduction system to be installed to lower the levels. Other pollutants, such

as carbon monoxide are also odorless, cannot be seen, and can cause death. Maintaining and understanding the proper usage of gas appliances can help avoid a build-up of CO and CO detectors are important in every home and building to avoid being present during threshold levels.

Methamphetamine usage has brought to light additional indoor air issues. Previous homes used as "meth labs" or from the "use of methamphetamines" may still contain residues and chemicals that can contribute to indoor health concerns if breathed in or come in contact with.

Health effects associated with certain pollutants are more difficult to pinpoint. With multiple household chemicals being present in today's homes, along with each person reacting differently to certain pollutants, establishing precise concentrations related to the development of certain symptoms are drastically harder to determine. Regular wheezing, colds, and irritation of asthma can often be signs of elevated pollutants. It is important to notice time and place of symptoms and if they lessen or go away once leaving the home.

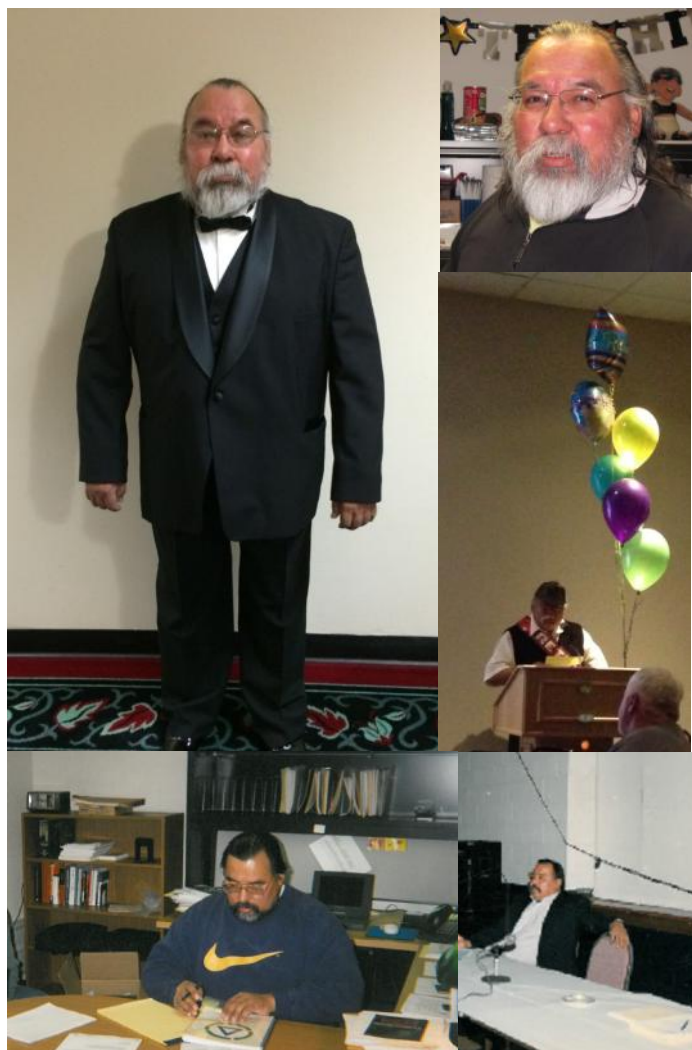
Not all indoor pollutants will be noticed immediately, which exposure to some pollutants overtime can contribute to cancers, respiratory illness, or heart disease. This is why it is important to identify pollutants, such as radon. The United States Environmental Protection Agency (USEPA) has this and additional information that can be found related to IAQ, at <http://www.epa.gov/iaq/index.html>. Information can also be found on the Bad River Tribes website at <http://www.badriver-nsn.gov/tribal-operations/natural-resources/nrd/air-nrd>.

FREE RADON TESTING to Begin in January!!!

Radon does cause lung cancer and can be prevented if addressed properly. The Tribal Air Office offers free radon testing and IAQ monitoring services every year. It is easy and takes a very short period of time to test your home. If you would like to schedule testing please use the contact information below and set a date to test your home.

Daniel Wiggins, Air Quality Technician
72682 Maple Street
Odanah, WI 54861
Phone: 715-682-7123 ext. 1553

Out with the Old...in with the New!



Erv Retreats Back to Nature!

Ervin Daniel Soulier is a Bad River Tribal Member and has now retired as the Bad River Natural Resources Department (BRNRD) Director of 30+ years and nearly 40 years within the Bad River Tribe. Erv also recently retired as the Bad River Tribal Judge serving both positions for many years. The NRD Director is the personnel manager of the BRNRD and oversees the Water, Air, Environmental, Fish & Game, POWTS, Leasing, Wildlife, GIS and other technical staff. In addition, the NRD Director may act as an ambassador for the Bad River Tribe, many times scheduling, hosting and attending meetings with the EPA, USGS, USFS, and many other federal agencies and Tribes.

During his tenure as Director he has had to address a multitude of tribal issues, which included: fishing rights for both tribal and commercial fishing, forestry topics ranging from logging to EAB, establishing and enforcing wetland and water resource codes, Treatment As State (TAS) or as Erv would have liked to hear it called as "Treatment As a Sovereign Nation" for both water and air, updating outdated hunting, gathering, and fishing codes, mining in the Penokees, and the list can keep going.

With the many accomplishments and we must say some....very little....ok no failures, Erv has always maintained strong view points on tribal sovereignty and the responsibility of both the Bad River Tribe and the United States Government to uphold that sovereignty. Erv has represented the Bad River Tribe countless times and has been able to conduct himself respectfully while being criticized and many times brought into the spot light without choice. Not only has he spent nearly four decades within the Natural Resource Department, but he has also solidified himself in the Bad River history books retiring as the first Natural Resource Director. Erv will be missed..... well kind of missed!!!



New Bad River Conservation Warden

Joseph Cadotte

Boozhoo, my name is Joseph Cadotte and I am a Bad River Tribal Member. I enjoy working with, educating, and encouraging our Bad River youth to learn our beautiful language, participate in our treaty rights, and learn our other traditional practices. I have worked with the Bad River Youth Outdoors Program and recently transferred from the Birch Hill Community House to work as the Bad River Tribal Conservation Warden. I look forward to working with the Bad River Community. Migwitch!

Pictured from left to right: Robert Balnchard, Tribal Chairman, Joseph Cadotte, Bad River Tribal Conservation Warden; Bob Wilmer, Chief Tribal Conversation Warden



BAD RIVER NATURAL RESOURCES

Bad River Natural Resource Department

Chief Blackbird Center

72682 Maple Street

Odanah, WI 54861

Phone: 715-682-7123

Fax: 715-682-7118

We're On The WEB!

Www.badriver-nsn.gov

BAD RIVER COMMUNITY INFORMATIONAL PIPELINE MEETING

Open to
Bad River
Community
& Tribal
Members



**THURSDAY
DECEMBER 15, 2016**

***6:30 PM**

BAD RIVER CASINO CONVENTION CENTER



Bad River Natural Resources Dept.
Chief Blackbird Center
72682 Maple Street, P.O. Box 39
Odanah, WI 54861
(715) 682-7123

Webpage under development:

<http://badriver-nsn.gov/tribal-operations/natural-resources>

Save the Date!

Bad River Band 2017 Environmental Open House
"It's Easy Being Green!"

Bad River Casino Convention Center
Odanah, Wisconsin

Wednesday,
March 15
2 to 7 PM

Free and
open to
the
public!



Kid and family friendly! Displays, games, free prizes,
demonstrations, movies, live animals, food!

-MISSION STATEMENT-

The Department strives for resource management which both conserves the natural resources for the future generations and provide for the needs of the present. The departments existence reflects the importance the Bad River Tribe places on its right and ability to exercise sovereignty, self-determination and self-regulation in the area of natural resource management.