

# Rez Recycler

## 2020 Spring/Summer Edition

Bozho Nikanek!

This water program related article is to inform the PBPN community about a proposed streambank stabilization project PEP and its partners are currently in the process of assessing on the Rez. The location we are looking to assess for this project is known to the community as, "Holcombs Crossing". The proposal as to what the engineers are looking to do to stabilize this site is; to realign the crossing on the west side of the stream, and stabilize the entry, exit and instream crossing site from its natural streambed to construct a hardened geo-textile foundation topped with gravel and rip rap.

### **What is the purpose of this hardened stream crossing?**

Two main reasons we chose this site to be addressed and assessed:

1. This will make the path more reliable and more accessible to those who do utilize the crossing to get down to the stream, or to cross and enter the fields across the creek. As many of you may notice when rain events occur, the soils on the north end of the crossing wash out and create deep trenches, creating an extremely difficult path down to the creek, whether in motorized vehicles or on foot. A hardened crossing is projected to rid of those muddy washout events and create a safer entry and exit to the stream.
2. The reconstructed streambed will be layered with gravel and rip rap to help slow the flow of the creek. Slowing the flow of the creek at the crossing site will help collect the flowing sediment and mitigate the extreme erosion happening on the east embankment, just downstream from the crossing; especially during high water flow events. It will slow the flow and allow the water to make that turn downstream, rather than streamlining the water directly into the east embankment. This will drastically reduce further erosion, sedimentation and loss of land mass above.

### **What is sedimentation and why should we address that issue?**

Sedimentation is the build-up of eroded soil particles that are transported in water runoff events from their site of origin and deposited in drainage systems downstream. The Environmental Protection Agency lists sediment as the most common pollutant in rivers, streams, lakes and reservoirs. Sedimentation has many negative effects on water bodies and the life that lives in them. A few major examples of those negative effects are: degrading water quality for drinking and for wildlife; affecting fish, egg and larvae development by constricting the available oxygen in the stream for aquatic species to adequately live off of; disrupts the natural food chain by destroying macroinvertebrate habitats that will lead to massive declines in fish populations; depositing excess nutrients attached to soil particles which can activate blue-green algae that releases toxins and can make swimmers and pets sick.

### **How will the site be affected in terms of wildlife and recreational purposes?**

Except for the removal of a few trees for the re-aligning of the crossing site on the west side of the creek; the habitat and wildlife will not be affected in any long-term negative ways. In fact, reducing sedimentation or deposition of soil particulates into the waterway will create a cleaner habitat for fish and macroinvertebrates to thrive in. Thus, increasing the health and population of all aquatic species in that area.

## Environmental Justice on PBPB Reservation

Approximately 17% of Prairie Band Potawatomi Nation (PBPB) Reservation residents utilize private wells to meet their drinking water needs. Contaminants in groundwater can cause gastrointestinal, reproductive, neurological illnesses. Reducing risk is particularly imperative for populations with compromised immune systems. In 2017, the PBPB received an Environmental Justice Grant aimed at reducing groundwater contamination and protecting the health of community residents. Some key activities within the project include drinking water well monitoring, updating a GIS well inventory, and increasing the technical capacity for PBPB equipment operators, who will then utilize adopted best management practices for well closure/wellhead protection, stormwater management and lagoon installation & maintenance.

As part of this project, the PBPB departments will also put the learned practices into action with a hands-on well closure demonstration activity, closing 5 abandoned and hazardous wells on the Reservation. Community members have inquired about the necessity of closing these wells. Abandoned wells not only pose a safety hazard, but they also threaten clean ground water. Normally, ground water flows through soil and bedrock formations, known as aquifers, which filter unhealthy organisms, minerals and other substances. Water that enters abandoned open wells bypass this purifying action. Contaminants enter the aquifer through the unsealed well and may eventually harm the water quality in other wells nearby.

The collaborative project, which ends in September 2020, requires the ongoing communication and information exchange within PBPB Tribal departments and with federal agencies such as Indian Health Services, USEPA, and Bureau of Indian Affairs. Additionally, the PBPB worked with contractors, Northeast Kansas Environmental Services and Tukah Technologies.

The pictures below display some of the valuable partnerships in action. PEP is pleased to work with the skilled professionals within the PBPB Road and Bridge Department and the Construction/Building Maintenance Department to acquire training and implement best management practices for source water protection.



**Waste Water Announcement:** Requesting homeowners maintain grounds around septic tanks or septic service pipes. Groundskeeping around septic tanks and pipes will eliminate over growth, decrease potential interference of roots with lines, and allow easier accessibility during services.

## What is the National Ambient Air Quality Standards (NAAQS)?

The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six criteria pollutants deemed to be harmful to public health and environment. The NAAQS consist of two types of standards - Primary and Secondary. Primary standards provide public health protection and secondary standards provide public welfare protection. EPA is required to review these standards every five years and revise them, if appropriate.

### Criteria Pollutants:

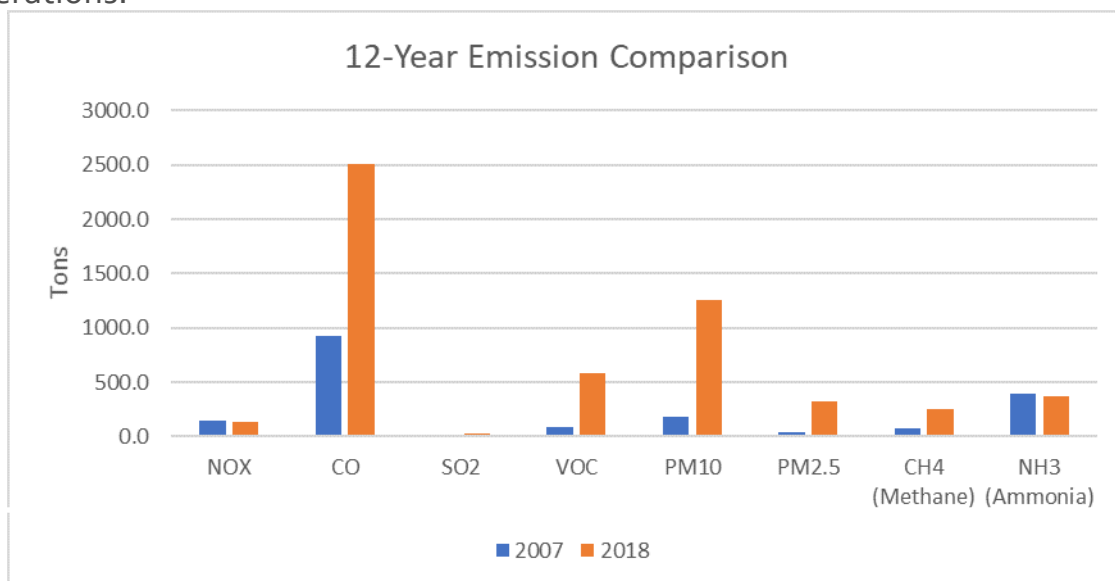
1. Carbon Monoxide (CO)
2. Lead (Pb)
3. Nitrogen Dioxide (NO<sub>2</sub>)
4. Ozone (O<sub>3</sub>)
5. Particle Pollution (PM<sub>2.5</sub> and PM<sub>10</sub>)
6. Sulfur Dioxide (SO<sub>2</sub>)

## Air Program Updates:

The PBPN's Air Program submitted public comments on EPA's proposed review of the National Ambient Air Quality Standards (NAAQS) for Particulate Matter (PM); in which, EPA proposed to retain the current NAAQS, despite evidence showing the adverse health effects associated with PM.

This will be the second public comment that PBPN has submitted. PBPN submitted comments in 2019 on EPA's proposed Reclassification of Major Sources as Area Sources, due to the proximity of major point sources.

Also, in 2019, the Air Program finalized the Nation's 2018 Emission Inventory (EI). The EI's local sources were categorized in six categories: Point Source, Non-Point, Biogenic, On-Road Mobile Sources, Non-Road Mobile Sources, and Fire. It is an assumption the Nation should expect emission increases as development continues and new sources enter the reservation boundaries or current sources expand operations.





# SOLID WASTE UPDATES



- Due to COVID-19 distancing requirements, Requests for Assistance applications can only be honored when items are outside of the residency. We will resume removing items from inside the home when PBPN and/or health officials have declared it to be safe.
- Napkins, paper towels, toilet paper, and Kleenex are not recyclable. Please throw these items in the trash and not in the recycle bin. With COVID-19, PEP will immediately discard recycle bags/boxes containing these items.
- The Public Trailer Application is for household waste only. Hazardous materials, tires, refrigerators/freezers, and A/C units cannot be placed in the trailer. The local dump does not accept these items. Call us for alternative services.
- PEP monitors weekly curbside disposal and recycling route logs to monitor efficiency, review field notes and other important communication to maximize customer service.
- PEP encourages customers to bring bins back to avoid potential damages associated with leaving by the road or to avoid lost or damaged bins.
- Plastic bags are not acceptable recyclable items. Plastic bags can be reused to bag recyclables or household waste. Boxes can be reused to contain recyclables, too.

*PEP is requesting to bag up kitty litter and other animal waste material for disposal to eliminate airborne fecal matter and pathogens that can potentially harm human health. The safety of the Solid Waste Operators is a priority of PEP and we appreciate your help keeping down hazards they face in the field.*

## THANK YOU!!

PEP would like to thank the Curbside Disposable and Recycling Customers for your recycling efforts, the positive feedback, support, and the occasional yummy snack! Thank you!!



Also, a huge thank you to the PBPN Language Department. They provided digital art for PEP use and helped design and translate PEP's 2020 t-shirt "resilient" theme which translates in Potawatomi to "We Make It Through". PEP will distribute t-shirts when we celebrate the annual Earth Day. COVID-19 postponed annual Earth Day and Community Clean-Up events. (below is the language on the shirts.)

*resilient resilient resilient*  
*k tē shabwimēn k tē shabwimēn*  
*resilient resilient resilient resilient*

# RECYCLABLE



All items except large cardboard must be bagged.  
Combining items in the same bag is acceptable.

- Aluminum & Tin Cans
- Plastic:  - 
- Mixed Paper
- Cardboard



# NOT

## Recyclable



- Plastic Wrap
- Tissues/Napkins
- Aluminum Foil
- Styrofoam
- Waxed products



Call 785.966.2946 for questions or for directions to our glass drop-off location.

## Community Orchard Woes

The PBPN community orchard is overcome with unruly pests this year. The blackberry bushes have bagworms and the apple trees have cedar apple rust. We're currently applying insecticide to the blackberries in an attempt to salvage some of the foliage. Unfortunately, the apple trees did not receive fungicide treatment within a timely manner and will not likely produce a healthy crop. This recent blackberry insecticide application marks an unusual milestone, as it is the first time in 20 years that we've ever utilized sprays of any kind (chemical or organic) in the orchard. Until this year, the orchard has remained entirely natural. We'll do our best to remain chemical-free and purchase organic treatments in the future. We do however, have a special request of the community. We

would like to invite any interested community members to volunteer their expertise, time, and green thumbs toward our orchard betterment. The orchard belongs entirely to the community and we would definitely welcome your involvement.

There's so much work to do! Please contact us if interested.



Cedar Apple Rust is a fungal disease that often attacks apples and crabapples

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**Important Updates Inside**

Resident  
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MAYETTA, KS  
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