

Red Cliff Band of Lake Superior Chippewa

Treaty Natural Resources Division Newsletter

Volume 11, Issue 2, Niibin Summer 2022

Ganawenjigaade

It is taken care of, protected . . .

We take care of, protect, keep it.



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NIIBIN

It is Summer

AABITA-NIIBINO-GIIZIS

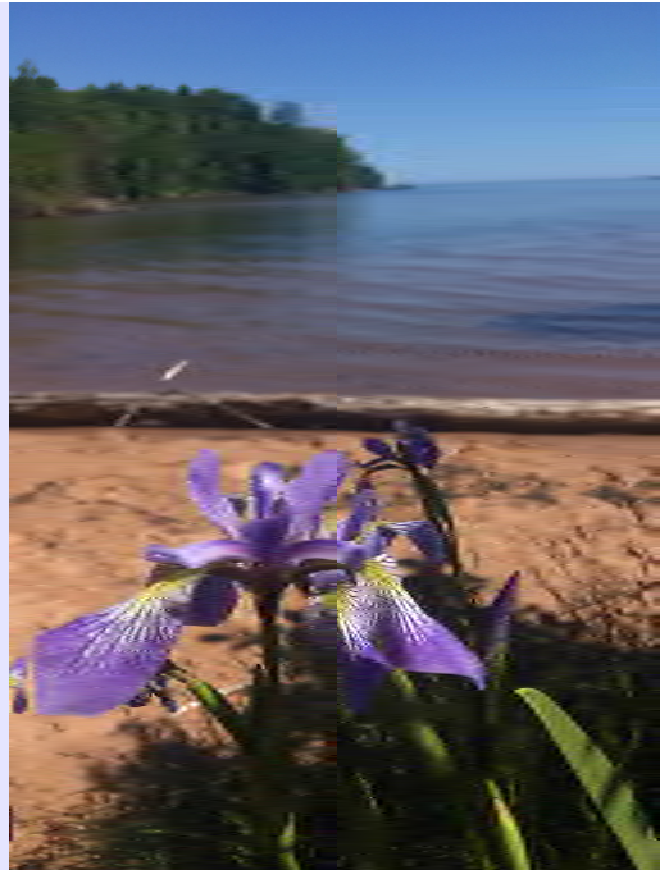
Half Way Through the Summer Moon

MANOOMINIKE-GIIZIS

Ricing Moon

WAATEBAGAA-GIIZIS

Leaves Changing Color Moon



MISKOMINIKAA

There are (many) raspberries

NIIMI'IDIWIN

A dance, a powwow

JIMAANIKE

S/he makes a boat/canoe

BIIDAASAMISHKAA

She/he paddles here

MIINAGAAWANZHIIG

Blueberry Plants

ZHAAWANONG

In, to, from the south

JIGEWEYAADAGAA

S/he swims along the shore

MANOOMINIKE

S/he goes ricing

GIIZHIKIKAA

There are (a lot of) cedars

BAGIDA'WEWIN

Fishing using a net

MITAAWANGAA

It is a sandy beach

WIKWANDIWIN

A feast; feast food



Red Cliff

Treaty Natural Resources Division

The Treaty Natural Resources Division is dedicated to the preservation, protection, enhancement, and sustainable stewardship of the Red Cliff Tribal Nation's natural resources in maintaining balance between healthy environment, economic goals, and future subsistence of all tribal members; ensuring that our future generations continue to enjoy the benefits of those places that are of significant historical, cultural, and environmental importance.

The Red Cliff Treaty Natural Resources Division has been involved with the stewardship of natural resources of the Reservation. The Treaty Natural Resources Division is responsible for the oversight and stewardship of the natural resources within the boundary of, and in the ceded territory of the Red Cliff Band. The Tribe operates a transfer station, fish hatchery, conservation enforcement program, water resources program and other natural resource stewardship efforts are on-going.



Chase Meierotto is TNR's Division Administrator. Chase is looking forward to continuing the work of the TNR division along with the rest of the tribe to protect treaty rights and the natural resources for the coming generations.

Red Cliff Treaty Natural Resources Division includes:

- Mino Bimaadiziiwin Gitigaanin (Red Cliff Tribal Farm)
- Red Cliff Fish Company
- Wildlife and Forestry Department
- Fish Hatchery Program
- Fisheries Department
- Environmental Department
- Tribal Conservation Department



Mino Bimaadiziiwin Gitigaanin



Mino Bimaadiziiwin Gitigaanin, or the Red Cliff Tribal Farm, grows a wide variety of vegetables, tends medicine beds, raises a flock of laying hens, cares for the apple orchards, runs an annual sugarbush, and composts fish remains from the Red Cliff Fish Company. These foods and medicines are distributed in a variety of ways to the community and tribal programs in order to increase our community's access to healthy foods. Mino Bimaadiziiwin Gitigaanin strives to support the community's food sovereignty goals and works with many different tribal programs to advance those goals.



Allissa Stutte is the Farm Manager / Food Systems Coordinator. Allissa organizes and oversees daily farm operations, along with supporting the larger food sovereignty goals of Red Cliff and planning for the continued growth of the farm in future years.



Jen Dale is the Farm Specialist. Jen assists in all happenings at the farm including a variety of food sovereignty efforts.



Shea Schachameyer is the Food Sovereignty Coordinator. Shea supports food sovereignty efforts by helping with farm operations, increasing community outreach and engagement, and collaborating with other Tribal programs to further Red Cliff's food sovereignty.



Tony LiDestri is the Farm Technician. Tony helps with all day-to-day farm operations like caring for plants and chickens.

Mino Bimaadiziiwin Gitigaan Update



The transition from spring to summer has stayed busy at the Red Cliff Tribal Farm!

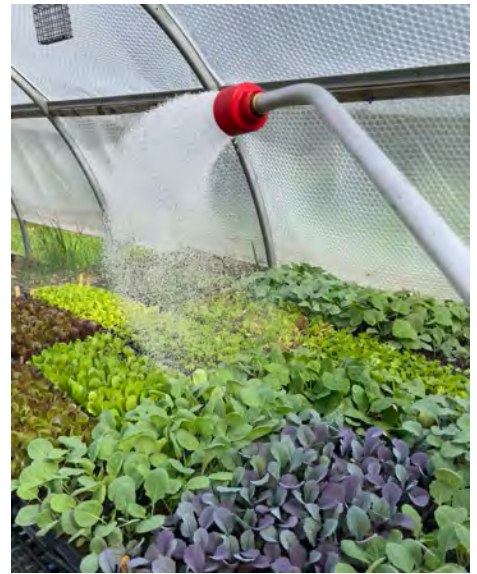
When the snow melted from the fields, it signaled the time to begin field prep and planting outdoors. The greenhouse, high tunnels, and fields are now full of plants who are enjoying the warm weather and lengthening daylight hours. Throughout the season, crops grown at the farm will be distributed to Food Distribution, other tribal programs, our CSA (Community Supported Agriculture) Program, the Bayfield School District, and available at local grocery stores and our Friday Farm Stand (beginning in July).

Along with planting vegetables in the fields, Farm staff planted twenty new apple trees up in the orchard. We plan to continue caring for the resilient, existing trees while simultaneously adding new trees in open spaces and as the old trees succumb to disease pressure or old age.

The annual Plant & Seed Sharing Event took place in early June. Over 3200 plants were available and over 200 families received plants or seed packets for their home gardens. Chi-miigwech to everyone who helped carry on this tradition!

A major native planting was also completed in early June. In a low-lying area of the farm, a large plot was converted from vegetable beds to a native planting full of pollinator-friendly species who thrive in wet conditions (unlike vegetables who like well-drained soils). This project was completed with the help of the Xerces Society, students from Bayfield High School, and TNR staff, along with staff and interns from GLIFWC.

Our CSA Program begins on June 21st, and our Friday Farm Stand will begin in early July. Hope to see you there!



Above: Planting new trees in the apple orchard. Watering vegetable starts in the greenhouse.

Below: Blossoms on ode'iminan (strawberry) plants. Community members at the annual Pland & Seed Sharing Event.





Red Cliff Fish Company



The Red Cliff Fish Company is your local source for the best fish the Great Lakes have to offer. Entirely owned and operated by the Red Cliff Band of Lake Superior Chippewa, we're proud to share our catch with you, because fishing is more than what we do - it's at the center of who we are.



Daniel Grooms is the Business Manager for the Red Cliff Fish Company. Daniel is responsible for showcasing what Red Cliff Fish Company has to offer and to provide a quality product to not only Red Cliff but also to the surrounding area.



Nick DePerry is the Operations Manager for the Red Cliff Fish Company. Nick directs all production operations for the Company.

Paul Cadotte is a LTE for the Red Cliff Fish Company. Paul helps with day to day operations and fish processing.

Ethan Chambers is a LTE for the Red Cliff Fish Company. Ethan helps with day to day operations and fish processing.

Kelly Holcomb is a LTE for the Red Cliff Fish Company. Kelly helps with day to day operations and fish processing.

LeAngelo LaPointe is a LTE for the Red Cliff Fish Company. LeAngelo helps with day to day operations and fish processing.

WE'RE HIRING! Please visit recliff-nsn.gov to apply



Wildlife and Forestry Department



The wildlife and forestry program conducts monitoring and research involving a variety of wildlife species both on and off the Red Cliff Reservation. Staff also review pending changes in policies or regulations, proposed development projects, and actions like planned timber sales for potential impacts (both positive and negative) to our wildlife and forest resources.



Andy Edwards is the Wildlife Biologist. Andy also handles supervisory duties for the fisheries, hatchery, and wildlife/forestry staff.



Ron Nordin Jr is the Wildlife and Forestry Technician. Ron's job duties include maintaining trail camera stations as well as live trapping and tracking our wildlife for a better understanding of their territories.

TIDBITS FROM THE WILDLIFE DIVISION



Photo to left: Our ma'iingan monitoring program is paying off. Right now we have GPS collars on 2 adult wolves, both breeding females, one in the Echo Valley pack which is one of two resident packs here at the Reservation, and the other in the Twin Lakes pack west of Washburn. Monitoring those animals' locations enabled us to get out and confirm successful reproduction for both of the packs. We were able to capture, PIT tag (microchip), and collar 2 of the 3 pups in the Echo Valley pack. TNR Division Administrator Chase Meierotto even managed to get away from his desk that morning and lend a hand. The pups were about 5 weeks old (female denned on April 10th), and weighed about 6 pounds.

Photo to right: A couple of USFS staff and Professor Erik Olson and his wildlife techniques class at Northland College joined Ron and Allie for the pup search for the Twin Lakes pack. They found, PIT tagged, and collared 4 pups ranging from 6-10 pounds at only 4 weeks of age (that female denned on April 17th). We are checking the collar signals from a distance at least once a week and are happy to report that all of the pups in both packs were still alive as of this writing (June 15th).



Unfortunately at this time we don't have any collared adults in the Miskwaabikaang pack which is our other resident pack. The only GPS collared adult we had in that pack was shot and killed between Bayfield and Washburn in mid-April. Although she was not the breeding female we were hoping that her movements would give us some idea of where to look for pups. We will have to increase our other efforts to use tracks and trail cameras in hopes of confirming reproduction this year.

TIDBITS FROM THE WILDLIFE DIVISION



Photo to left: You may have spotted Ron or Andy heading into or out of the woods the last few weeks all covered up with bug netting. We are in the third field season of a cooperative project with the University of Wisconsin and the Apostle Islands National Lakeshore looking at population size and connectivity of makwa, or bear, on the mainland Reservation and the islands. Small barbwire corrals are laid out in a grid network (23 on the mainland that we check) and baited with fish and anise oils. When bears investigate, they leave behind hair, which we then collect and provide to a graduate student that conducts a genetic analysis of the sample. Using this hands off technique, she is able to identify individual bears, understand their familial relationships, and get a minimum population estimate. At least 30 individual bears were confirmed on the Reservation in 2020 and 2021, and she documented multiple instances of bears moving between the mainland and some of the islands last summer.

Our role the last few years has been to monitor the mainland corrals, removing hair from the wire every 9-12 days from May through July. Despite our best efforts, we also do a pretty good job feeding the local mosquitos and black flies while we're out there.

We received word a few weeks ago that we have received additional Great Lakes Restoration Initiative funds to follow up this project (also funded by GLRI) with another cooperative bear project. In that project we will work with the University to design and test a trail camera monitoring system designed to provide us with annual estimates of the bear population here on the Reservation. Much of the work from the current project will be incorporated in designing and calibrating the trail camera population monitoring technique. Bottom line? Ron and Andy will be feeding bugs for a few more years at least while trying to better understand our local makwa population.

TIDBITS FROM THE WILDLIFE DIVISION



Photo to left: Although busy schedules have put a dent in our trapping efforts this spring, we have managed to GPS collar and release two more Wiisagai-ma'iinganag (coyotes) and a Gidagaa-bizhiw (bobcat) in the last two weeks.

Currently we have 3 collared coyotes, 3 collared bobcat, 1 Waabizheshi (marten), and 2 adult ma'iinganag on the air. We also have expandable, breakoff, VHF collars on 5 wolf pups at this time.

A focus over the rest of the summer will be to try and get 1-2 GPS collars out in the Miskwaabikaang wolf pack to round out our abilities to monitor our local resident wolf packs along with the coyote, bobcat, and marten monitoring.

Busy but fun times.



Left: A pink ladyslipper along the Superior shoreline.



Right: A sandhill crane between Herbster and Cornucopia.



Fish Hatchery Program



The Red Cliff Tribal Fish Hatchery raises Coaster Brook Trout in the hatchery and Walleye in the outdoor ponds. Walleye are raised to bolster populations in inland lakes where tribal members spear in the spring. All walleye are raised to extended growth size, meaning the walleye usually range from 5 – 9 inches when released in the fall. Raising walleye to extended growth size substantially increases survival after release. The Red Cliff Hatchery maintains brood stock of coaster brook trout in its hatchery. The purpose of the coaster brook trout program is to restore the species to historical levels in nearshore areas of Lake Superior.



Lance Bresette is the Hatchery Specialist. Lance oversees the hatchery and walleye ponds and makes sure the fish are happy and well taken care of.



Francis “Fran” Cadotte is the Hatchery Technician. Fran’s duties are cleaning tanks and feeding fish daily, clipping fins, conducting sample counts monthly, ordering fish food, stocking fish and keeping the fish as happy as possible.

Hatchery News

Over the past few months, the Red Cliff Fish Hatchery has been gearing up for the spring stocking of coaster brook trout. Hatchery staff were busy fin clipping fish and implanting PIT tags before fish were to be stocked in Lake Superior. With the help of many gracious volunteers 15,938 Brook Trout were fin clipped and stocked. The Wild Rivers Trout Unlimited Chapter volunteered many hours to assist in the fin clipping and we are very grateful for their assistance.

The hatchery also worked with the Iron River National Fish Hatchery and stocked an additional 7,000 coaster brook trout. These fish were all fin clipped and coded wire tagged. Fish were scatter stocked off the TNR research vessel into Lake Superior as well. Building great partnerships has been an emphasis of the fish hatchery and we are very grateful for those that have been willing work with us now and into the future!

Chi Miigwech.



Pictured Above and Left: Trout Unlimited Volunteers fin clipping Brook Trout.



Pictured Above: Hatchery Staff scatter stocking coaster brook trout off of the TNR Research Vessel.



Pictured Left: TNR Staff loading the last of the Brook Trout from the stocking truck to the Research Vessel.



Fisheries Department



The Fisheries Department at the Red Cliff Treaty Natural Resources Division conduct fish assessments in the Wisconsin and Michigan waters of Gichigami and the streams on Reservation, monitor commercial fishing activities on Gichigami, issue licenses and fish harvest tags, and summarize the information we collect into reports. Fisheries staff also serve on several committees, working groups, and collaboratives where many agencies around Lake Superior work together to solve problems of mutual concern.



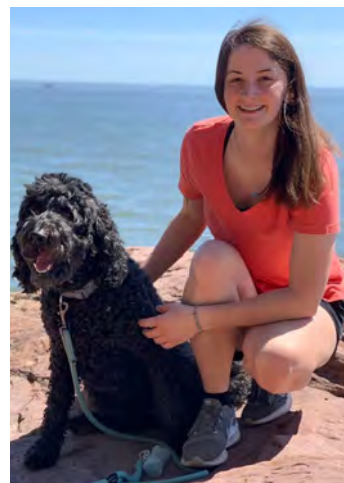
Ian Harding is the Fish Biologist . Ian helps conduct fish assessments in the Wisconsin and Michigan waters of Gichigami, on reservation streams, and develops reports from those assessments.



Michelle "Shelly" Gurnoe is the Office Manager. Shelly issues commercial and home use licenses, data entry of commercial and home use fishing reports, and has various office related responsibilities.

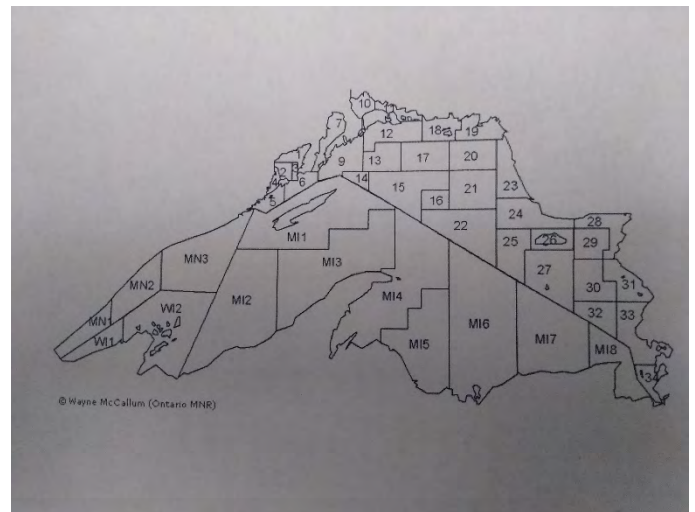


Reed Saam is a Fisheries Technician. Reed helps monitor commercial fisherman and conducts fisheries surveys on Lake Superior and on reservation streams.



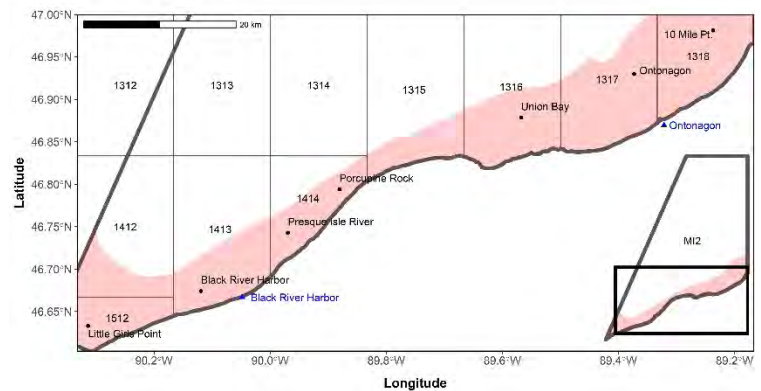
Paige Sutton is a Fisheries Technician. Paige helps monitor commercial fisherman and conduct fisheries surveys on Lake Superior and on reservation streams.

Boozhoo! The TNR fisheries department recently completed our annual Namegos (Lake Trout) survey in Namegos management unit MI-2. This survey is part of a collaborative lake-wide survey and participating agencies survey the other Namegos management units around Gichigami (Lake Superior). We set gillnets during the spring at seven locations for the purpose of catching Namegos to measure their abundance and for observing how many Sea Lamprey wounds they have.



Namegos management units in Gichigami

Sea Lamprey are a boneless parasitic fish that is native to the Atlantic and possibly Lake Ontario. It is thought that the Welland Canal, a manmade canal which bypasses Niagara Falls (a natural barrier), allowed Sea Lampreys to invade the upper Great Lakes. By 1938 Sea Lamprey were throughout the Great Lakes, including Gichigami. Sea Lampreys feed on other fish by suctioning to their side, rasping a hole with a sharp tongue, and feasting on body fluids. It is estimated that a single Sea Lamprey can kill up to 40 pounds of fish during their 12-18 month feeding period! Therefore, it is no surprise that populations of native fish, like Namegos, crashed after Sea Lamprey became established.



TNR Namegos survey locations in western Michigan



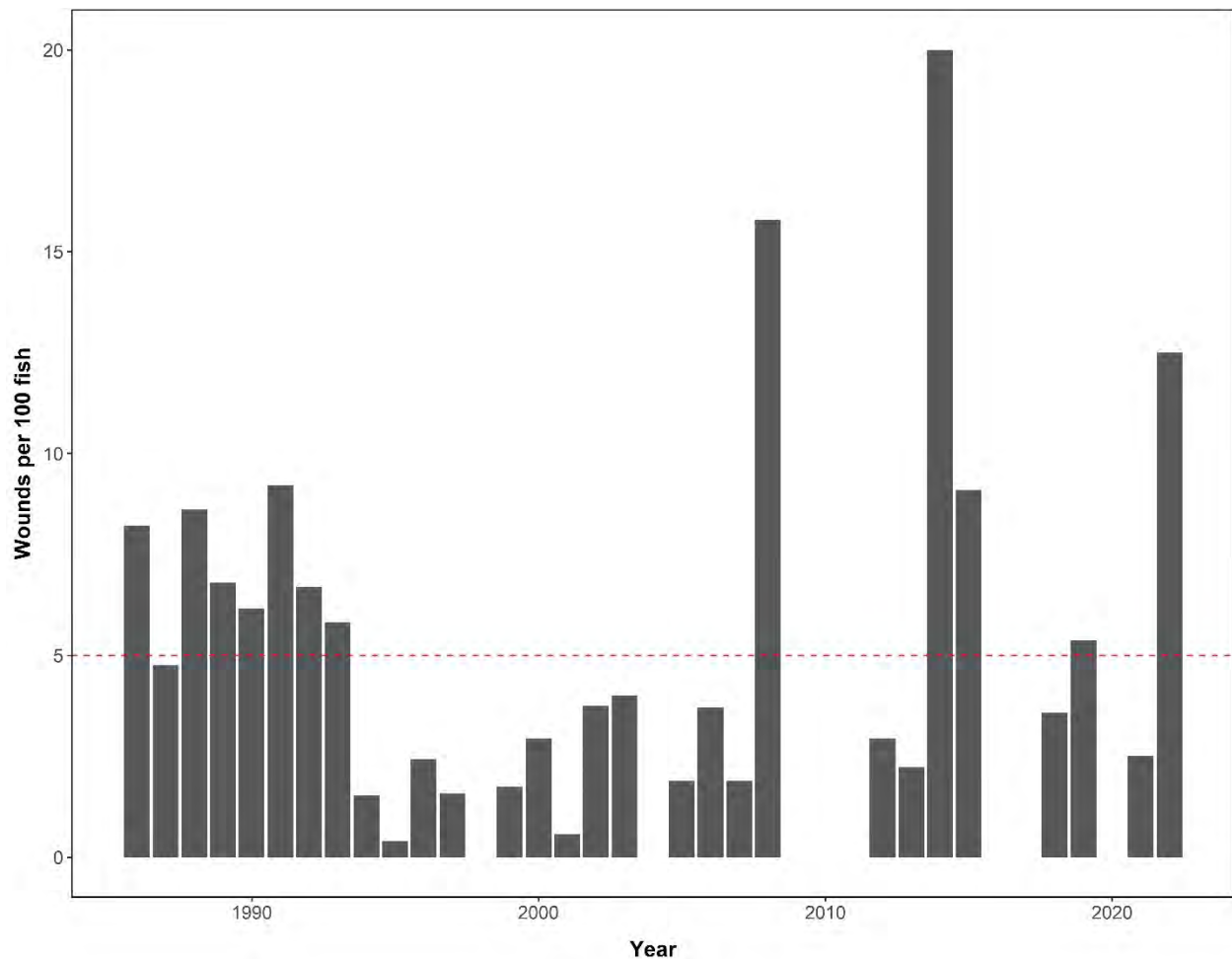
Adult Sea Lamprey

A Great Lakes basin-wide Sea Lamprey control program was initiated in 1958 and it has been successful at reducing Sea Lamprey abundance. This control program and other actions helped fish, like Namegos in Gichigami, once again thrive. The control program is expensive, and the size of the Great Lakes is daunting, so participating agencies conduct a variety of surveys to better understand Sea Lamprey abundance across the landscape and allocate resources intelligently.



Namegos caught during a TNR survey with an attached Sea Lamprey and wounds.

Our Namegos survey is one such survey and the TNR fisheries department has been observing Sea Lamprey wounding on Namegos in western Michigan since 1986. The goal of agencies around Gichigami is to observe less than 5 wounds per 100 Namegos greater than 20 inches in length. This should signify low Sea Lamprey abundance and low Sea Lamprey caused mortality on valued fishes. Our index of Sea Lamprey wounding has been mostly less than the threshold since 1994, but every few years we will see a pulse of higher wounding such as this year.



The index of Sea Lamprey wounds from the TNR Namegos survey. The horizontal dashed line is the Gichigami target of fewer than 5 wounds per 100 fish.



Environmental Department



The Department houses a variety of programs, which in turn administer services that directly benefit the Red Cliff community. The programs include: water, air, environmental justice, solid and hazardous waste (Transfer Station), environmental response, manoomin (wild rice) stewardship, and previously the Native American Lands Environmental Mitigation Program. Examples of projects include: Lake Superior Barrels Project, riparian buffer restoration, water quality monitoring, air quality monitoring, pet waste stations, hazardous waste disposal events, annual spring clean-up, reseeding of the wild rice, legacy dump sites, raised garden beds, environmental outreach and education, tire collection events, rain barrel workshops, permits, and coordination with a variety of programs within the Tribe to promote sustainable practices.



Linda Nguyen is the Environmental Director. Linda supports the development and maintains oversight of core environmental programs, develops proposals for environmental grants, and fosters compliance with federal environmental statutes by developing and managing appropriate tribal programs, ordinances, and permits, and solid/hazardous waste disposal services.



Noah Saperstein is the Environmental Justice Specialist. Noah reviews documents related to mines and pipelines. Noah also supports food sovereignty initiatives.



Jessica Jacobson is the Wetland Specialist. Jessica will be developing and implementing a wetland monitoring program to increase understanding of the extent and quality of tribal wetlands.



Allie Rakowski is the Water Resources Program Manager. She analyzes the water quality data collected from streams and rivers on reservation. She also issues water quality warnings or advisories at popular swimming areas if E.coli counts reach unsafe levels.



Dan Duffy is the Transfer Station Manager. He helps the community keep clean by keeping the Transfer Station open.



Jacob Coe is the Environmental Technician. He helps monitor non-native plants and insects and supports the water program.

Come Join Our Team!

Air Quality Program Manager: Vacant

Environmental Health Specialist: Vacant

ENVIRONMENTAL DEPARTMENT IS HIRING!

ENVIRONMENTAL HEALTH SPECIALIST

\$23.00-\$25.00/hour

AIR QUALITY PROGRAM MANAGER

\$19.00-\$22.00/hour

For more information on job duties and responsibilities, required knowledge, and qualifications, please visit redcliff-nsn.gov and click on Job Listings.

Still have questions? Contact the
Environmental Department at
715-779-3650



Harmful Algal Blooms

Red Cliff Environmental Department

What are Harmful Algal Blooms?

Algae is a single-celled organism in lakes, streams, and other bodies of water that is typically too small to see individually. When there are high levels of nutrients, sunlight, and warm temperatures, algae can rapidly reproduce and create blooms or mat like structures. **Some of these blooms are harmless, but others contain toxins, chemicals, or other pathogens that are harmful to humans, animals, and aquatic life.** Blue-green algae are the most common algae to form harmful algal blooms.

What do Harmful Algal Bloom like like?

In Wisconsin, harmful algal blooms occur in the warm weather months between mid-June and mid-September. Blooms can look like floating paint or pea soup. They may also appear as discolored streaks on the water surface or like many green floating dots. Harmful algal blooms can be mistaken for pollen or duckweed.

What to do if you see a Harmful Algal Bloom?

If you think there may be a harmful algal bloom present, avoid the water! Contact with the bloom may cause illness. Do not swallow lake water or touch the algal mats.



Do Harmful Algal Blooms affect pets?

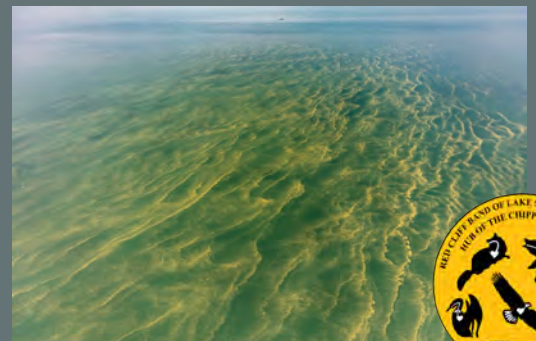
Yes! Pets should be kept away from Harmful Algal Blooms. A safe rule is to keep them out of any discolored water. When pets, especially dogs, swim and play in water, they tend to swallow water. Because they have smaller bodies, even a small amount of unsafe water can make them sick. Do not let pets wade in algal scum or mats or lick any algae off their fur.

Be Alert! Avoid Water that looks like this



To Report a Bloom:

If you see a bloom, call Red Cliff Environmental Department at 715-779-3650. Provide size, duration, detailed location, and take a picture if possible.



SWIMMER'S ITCH

Red Cliff Environmental Department

What is Swimmer's Itch?

Swimmer's itch is caused by an allergic reaction to microscopic worm-like parasites that can be picked up from swimming in shallow water. These parasites infect ducks and other waterfowl so that when the birds poop, parasite eggs are released into the water. The eggs then hatch and infect snails where the parasite grows larger and more mobile before being released back into the water where they may come into contact with people. The parasite burrows into the skin causing red, itchy, welts. However, people are not a suitable host and the parasite cannot survive in the human body, so the welts are actually an allergic reaction, not the parasite living in or under your skin!



HOW TO SOOTH SWIMMERS ITCH SYMPTOMS

Once the parasite has penetrated your skin, little can be done to treat it but you can treat the symptoms which are red, itchy, welts that resemble bug bites or blisters. These may show up in minutes or days after swimming in infested water.

Applying a soothing balm or lotion such as chewed/bruised plantain leaf or calamine lotion may help ease some of the itching.

HOW TO PREVENT SWIMMERS ITCH

- **Chose swimming locations carefully:** Avoid marshy areas with lots of vegetation where snails are commonly found.
- **Avoid the shoreline if possible:** You may be more likely to develop swimmer's itch if you wade or spend lots of time right on the shoreline.
- **Towel off Immediately:** This will help crush and remove the parasite before they can penetrate skin.
- **Rinse after Swimming:** Rinsing help remove parasites and don't forget to wash your swimsuit often.
- **Use waterproof sunscreen:** While not proven, it may help protect your skin by adding an additional barrier.

Questions? Contact Red Cliff Environmental Department: 715-779-3650



Miskwaabekong's Boat Cleaning Station



This summer, TNR will be placing the boat cleaning station, shown above, at Legendary Waters for users of the boat ramp to decontaminate their boats between trips.

The CD³ (Clean, Drain, Dry, Dispose) station is equipped with an air hose, vacuum, plug wrench, scrub brush, weed grabber tool, and both overhead and underneath lights so that boaters can easily clean/dry their boats to prevent the spread of non-local beings in the area's *nibi*. It is important to prevent the spread of non-local beings, also referred to as aquatic invasive species (AIS), to protect those relatives living in Anishinaabe Gichgami and nearby bodies of *nibi*.

To put a stop to aquatic hitchhikers: CLEAN, DRAIN, DRY!

- ⇒ **CLEAN** any mud, debris, plants, and animals from your boat, trailer, and equipment.
- ⇒ **DRAIN** all water from the boat, fish boxes, live wells, and equipment after leaving the *nibi*.
- ⇒ **DRY** boat, trailer, and all equipment.

Stormwater Runoff

What is running off your yard, driveway, and street and into our streams and Lake Superior?

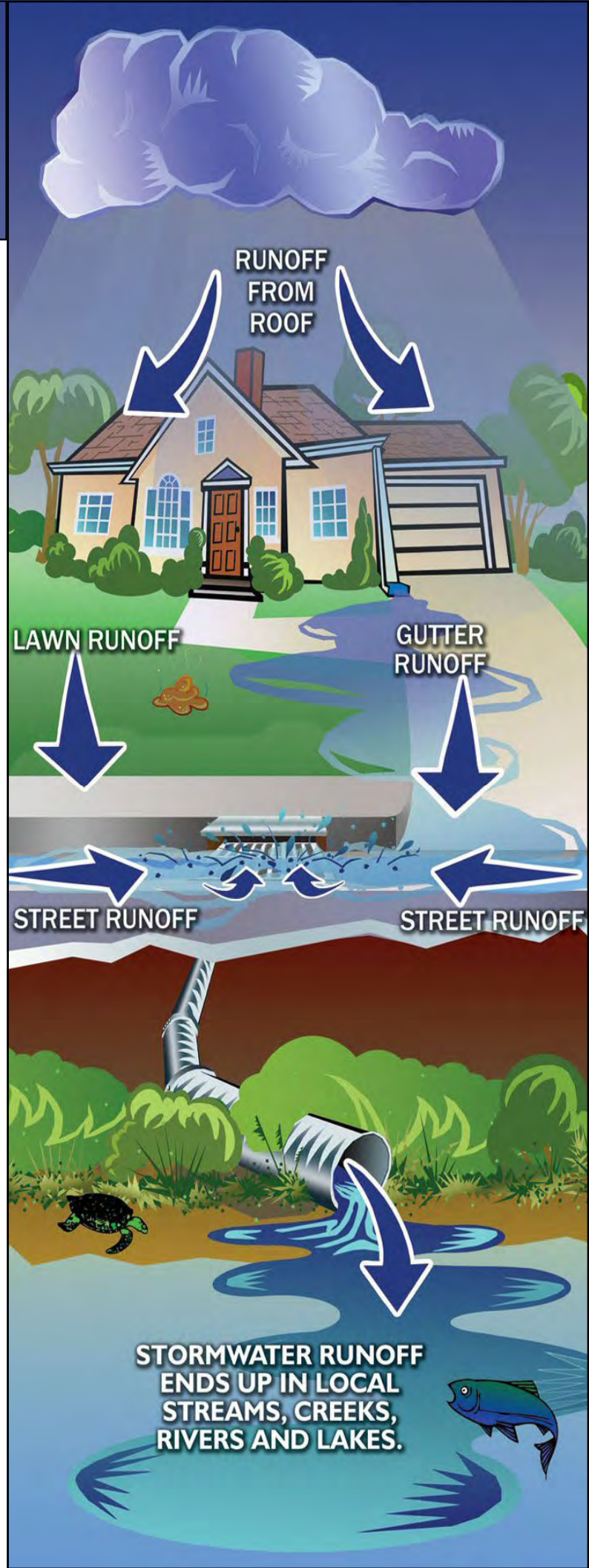
Residential areas tend to have high amounts of impervious surfaces (areas where water cannot get into the ground due to solid structures such as rooftops, driveways, roads, etc.). High amounts of impervious surfaces allow water to run off the land at a faster rate and in turn, the water is able to carry more pollutants into nearby streams and to Lake Superior. Water also moves more rapidly, causing erosion problems and depositing sediment into streams, which damages water quality and fish habitat.

Some common pollutants coming from our yards and streets include:

- ♦ Heavy metals (from cars and shingles)
- ♦ Road salt and sand
- ♦ Toxic substances such as antifreeze from cars
- ♦ Oil/grease/gasoline
- ♦ Debris such as garbage
- ♦ Pesticides/fertilizers from treated lawns/gardens
- ♦ Viruses, bacteria, and nutrients from pet waste
- ♦ Thermal pollution (water warms up from dark surfaces such as blacktop)

All of this non-point source pollution can have very negative impacts on the environment, including:

- ♦ Harm fish and wildlife
- ♦ Kill native plants
- ♦ Foul drinking water
- ♦ Make recreational and swimming areas unpleasant



KEEP OUR BEACHES AND WATER CLEAN THIS SWIMMING SEASON!

RED CLIFF ENVIRONMENTAL DEPARTMENT

Properly dispose of trash

- Make sure to bring a garbage bag to pack out trash if a receptacle is not available
- Consider picking up litter left behind by others

Pick up pet waste

- If you bring your pet to go swimming, be sure to pick up and properly dispose of it's poo.
- Pet waste contains excess nutrients and disease causing bacteria that is harmful to both humans and aquatic life
- Pet waste stations can be found at the Casino, Raspberry, and Point Detor Campgrounds

Reduce Plastic Use

- Reusable bags and containers are a great way to carry towels, store your lunch, and to ensure you don't leave plastic behind at the beach.



Questions?

Contact Red Cliff's
Environmental
Department at
715-779-3650



Remember to



this spring!

Cleaning products are everywhere in our homes and offices: on dishes, countertops, furniture, clothes, floors, windows, and even floating through the air. But most of the conventional cleaning products we all grew up with can have negative health and environmental impacts.

Health Effects

- ◇ Skin and lung irritation
- ◇ Watery eyes, sneezing
- ◇ Headaches
- ◇ Chemical burns
- ◇ Hormone disruption (& possible birth defects)
- ◇ Some products can cause cancer in the long term.

Environmental Effects

- ◇ Toxic to fish and wildlife
- ◇ Can cause excess algae growth
- ◇ Many products are oil based: contributing to the overuse of oil
- ◇ Oil based bottles are usually non-recyclable



Check out these cheap, easy, and toxic free cleaning recipes to try at home!

All Purpose Cleaner

4 cups water

1/4 cup vinegar

2 tsp borax

2 drops essential oil of your choice

Disinfectant

2 tsp borax

4 Tbsp

3 cups hot water

For stronger cleaner power, add 1
tsp castile soap

Window/Glass Cleaner

2 cups water

1/4 cup isopropyl alcohol

2 drops essential oil of your choice

Mold & Mildew

Use white vinegar or lemon juice

Tub and Tile Cleaner

Rub in baking soda with a damp
sponge and rinse. For tougher
jobs: rub down with vinegar first.

Floor Cleaner/Polish

Linoleum: 1 cup vinegar, 1/4 C
borax, few drops baby oil, 1 gallon
hot water

Wood: apply a thin coat of 1 part
vegetable oil and 1 part vinegar

Brick/Stone Tile: 1 cup vinegar
and 1 gallon water, rinse with
fresh water

Drain Cleaner

1/2 cup salt with a gallon water,
heat and pour down drain

Toilet Bowl Cleaner

1/4 cup baking soda

1 cup vinegar

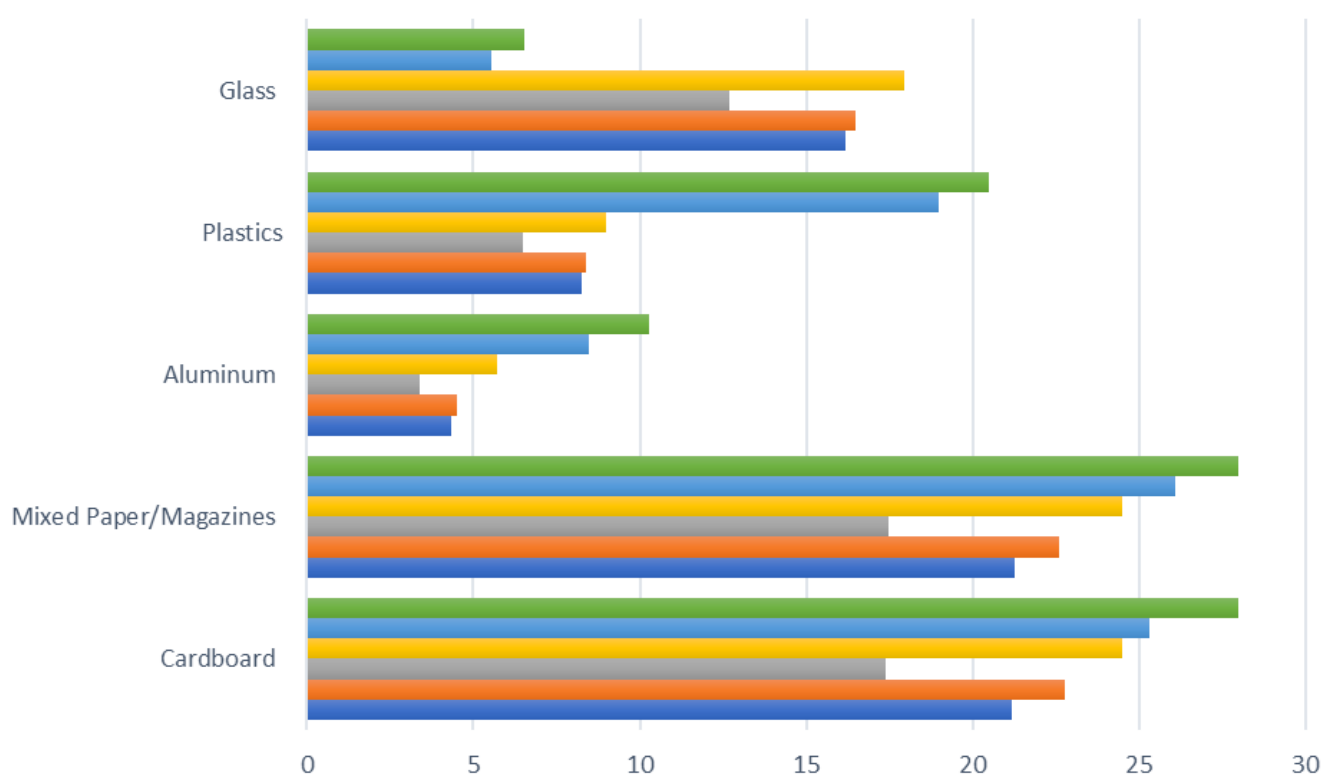


Stop by or call the Environmental Office with
questions or for more recipes!

Did You Know...

This is how much recycling was brought into the Red Cliff Transfer Station from 2016 to 2021! The Transfer Station is eager to announce, the Red Cliff community has diverted a total of 93.24 tons of recyclable materials from landfills in 2021!

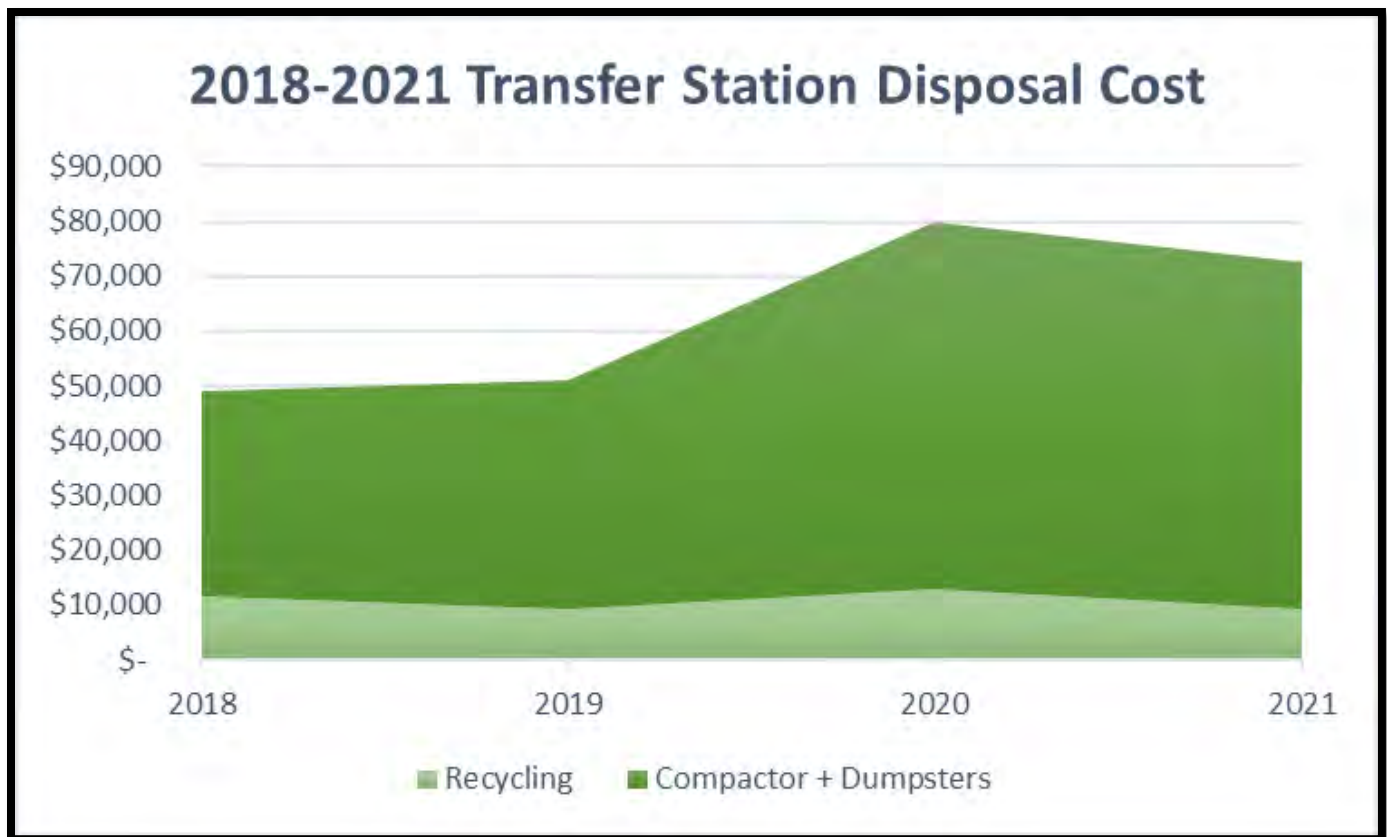
**2016 - 2021 Red Cliff Transfer Station Recycling
(Tonnage)**



	Cardboard	Mixed Paper/Magazines	Aluminum	Plastics	Glass
2021	27.97	27.97	10.26	20.51	6.53
2020	25.33	26.11	8.45	19	5.53
2019	24.48	24.48	5.71	8.98	17.95
2018	17.39	17.47	3.37	6.47	12.68
2017	22.76	22.6	4.5	8.38	16.48
2016	21.2	21.27	4.34	8.25	16.18

The cost of recycling and waste has increased over time. To help ensure we keep our cost as low as possible, please recycle and disposal of waste correctly!

Recycling reduces waste going into landfills and is a free service provided to the community. However, contractor fees are still incurred to remove recycling. This is the cost that the Environmental Department absorbs. Landfill space is limited, and pricing is expected to increase as landfills run out of space and Red Cliff's population grows.



If there are any questions, please don't hesitate to contact the Red Cliff Transfer Station at 715-779-0171 or Red Cliff Environmental Department at 715-779-3650!

Miigwech!



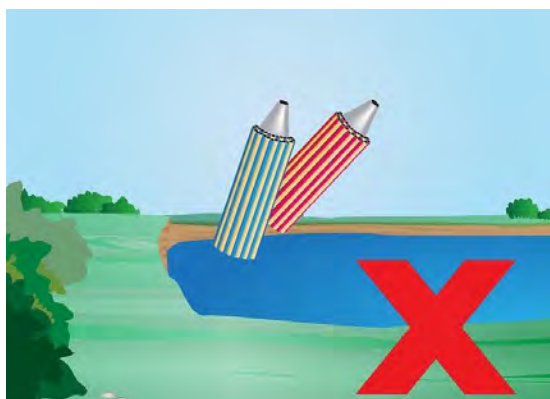
July 4th: Fireworks and Safe Disposal

Fourth of July festivities are just around the corner! If you have unused, misfired, or "dud" fireworks, following these safe disposal steps will minimize fire hazards and help ensure the protection of you, your family, and waste haulers when handling. If you are disposing fireworks at the Red Cliff Transfer Station, please do the following:

- **Completely submerge fireworks in a large bucket of water and soak until thoroughly saturated. This may take a few minutes for small fireworks or as long as overnight for larger ones.**



- **Double wrap the completely soaked fireworks in plastic wrap or two plastic bags so they do not dry out.**
- **Place the double-bagged fireworks in the household trash or take them to the local solid waste facility.**
- **Please avoid dousing fireworks in lakes, ponds, or rivers because the chemical compounds can be harmful to the ecosystem.**



If you plan to store unused fireworks that have not yet expired, keep them in a cool, dry place such as a garage and out of the reach of children. Never place fireworks on top of an electrical appliance, such as a refrigerator or freezer. The appliance could be struck or damaged through extreme weather events such as lightning or power surges, resulting in the possible ignition of the fireworks. Please also follow any other instructions accompanying the firework products.

If there are any questions, call the Red Cliff Environmental Department at 715-779-3650 or Transfer Station at 715-779-0171!

ATTENTION VISITORS:

To ensure public health and safety, the Red Cliff Environmental Department is limiting visitors to the office. If you need any of the following permits:

- Burn Permit
- Small Harvest Permit
- Wood Cutting Permit
- Environmental Change Permit
- Environmental Activities Permit



Please call 715-779-3650 (ext. 4310 or ext. 4314) or 715-209-3955 or email linda.nguyen@redcliff-nsn.gov . Permits will be issued over the phone or by email. Miigwech for your patience at this time.



When Burning is Allowed?



The following chart shows:

- When you need a burn permit
- What you can burn
- When you can burn

Permit Required	WHAT CAN BE BURNED	Low	Moderate	High	Very High	Extreme
YES	Grass, Brush, Wood	Burn		Do Not Burn		
NO	3x3x3' Ring for Cooking/Warming	Burn			Do Not Burn	
NO	3x3x3' Ring for Ceremonial	Burn				

Ceremonial fires will be allowed during high to extreme conditions, but shall be in compliance according to Red Cliff Tribal Council Resolution 4-16-2015 A, which includes having a fire keeper monitoring the fire at all times.

The current fire danger can be viewed at :

<http://dnr.wi.gov/topic/forestfire/restrictions.html>

Or call:

1-888-WIS-BURN (947-2876)

If you have any questions or would like a burn permit, please contact the

Red Cliff Environmental Department at 715-779-3650.

If you come across a fire that needs to be reported, please contact:

Red Cliff Tribal Wardens at 715-779-3732 or

Bayfield County Dispatch at 715-373-6120.

Environmental Department Permits FAQ

The following information is provided to answer general questions about *non-project related* permits issued by the Red Cliff Environmental Department. These permits do not grant authorization to trespass. Permit holders must retain their copy of the permit while engaging in the permitted activity. If there are any questions, please contact the Department at 715-779-3650 or visit our location at 37295 Community Road!

Burn Permit

A Burn Permit authorizes the permit holder to burn grass, brush, and untreated and unpainted wood if weather conditions do not pose a fire hazard and during designated times. Conditions are outlined on the permit upon issuance. You can find current fire conditions by visiting <https://dnr.wi.gov/topic/forestfire/restrictions.html> or by viewing the Smokey Bear signs, located outside the Environmental Department and at the intersection of Highway 13 and Blueberry Road.

Duration: This permit is valid for seven (7) days and is required at all times of the year.

Charge: There is no fee for this permit.

Small Harvest Permit

A Small Harvest Permit authorizes the permit holder to harvest designated amounts of the forest products listed below. Harvest of amounts less than those listed do not require a permit.

- Birch Bark for more than twenty (20) trees and in compliance with RCCL 11.7.3.
- Conifer Boughs in the amount of more than one hundred (100) pounds and in compliance with RCCL 11.7.5.
- Lodge Poles in the amount of more than sixty (60) trees and in compliance with RCCL 11.7.6.
- Ginseng harvest requires a permit for any amount, but not more than ten (10) plants may be harvested per season (September 1st – October 31st) and in compliance with RCCL 11.8.2.
- Leeks in any amount used for commercial purposes and in compliance with RCCL 11.8.3. Harvest of leeks for personal use does not require a permit.

Duration: This permit is valid until the end of the calendar year for which the permit was originally issued.

Charge: There is no fee for this permit.

Wood Cutting Permit

A Wood Cutting Permit authorizes the permit holder to collect standing dead trees for firewood on trust lands and harvest of living trees within designated woodcutting lots up to the amount of five (5) logger's cords. These zones are outlined on the permit. Any person seeking to cut more than permissible amounts must receive advance approval from the Red Cliff Tribal Council. This permit does not allow for sale of firewood or other wood products.

Duration: This permit is valid until the end of the calendar year for which the permit was originally issued.

Charge: There is no fee for this permit.



Gi-Ganawemaanaan Nibi: We Are Protecting the Water

July 2022

Nibi Akawe Mashkiki, water is the first medicine. **Nibi Bimaadiziwin**, water is life. Any threat to water is a threat to all life, the Anishinaabeg, **giigoonh** (fish), **mashkiki** (medicines) and all of our other **indinawemaaganag** (relatives). As industry continues to try to destroy the **aki** (land) and **nibi** (water) people continue to resist.

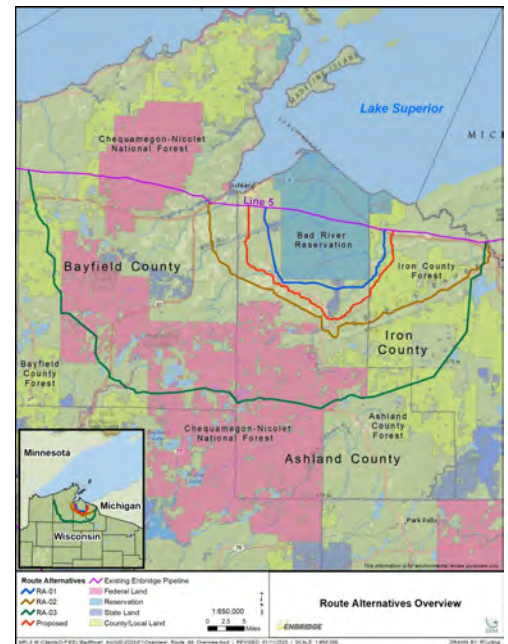
Line 5 1836 Territory Updates:

- Enbridge continues to operate Line 5 in the Straits of Mackinac even though the State of Michigan revoked the pipeline's Right of Way.
- The Army Corps of Engineer will conduct an in depth environmental review for the proposed Line 5 Tunnel under the Straits of Mackinac. This review is expected to be completed by June 2024. After that, the Army Corps of Engineers could either deny the permits or begin drafting permits. Construction is estimated to take 5-7 years.



Line 5 1842 Territory Updates:

- Bad River continues to be entrenched in a legal battle with Enbridge to remove Line 5 from their reservation. Enbridge is making every effort to ensure oil flows under the Bad River. Enbridge is trying to conduct on-reservation maintenance and build the proposed Reroute.
- The Bad River-Enbridge trial is expected to begin this fall. Unlike in Michigan, Canada has chosen not to engage in this case. News reports indicate that this decision was supported by Enbridge.
- Expert testimony submitted in the Bad River-Enbridge court case have indicated that shutting down Line 5 would lead to a \$0.05 per gallon increase in fuel in Michigan and Wisconsin.
- The Wisconsin DNR released a draft Environmental Impact Statement (EIS) in December 2021. Tribes, environmental groups, community members, and federal agencies determined the document to be inadequate and lacks the necessary information to assess how the project would impact the environment and Treaty Rights.
- The portion of Line 5 that crosses the Chequamegon National Forest has been unpermitted since in 2013. Enbridge applied to renew their expired permit in 2017. GLIFWC created a website that shows how Line 5 has impacted the Chequamegon Nicolet National Forest and ceded territory to help the Forest Service better understand tribal concerns with Line 5. To view this website, go to: <https://tinyurl.com/L5storymap>



Gi-Ganawemaanaan Nibi: We Are Protecting the Water

July 2022

Husky Refinery Updates:

- The Husky Refinery is a petroleum refinery that predominately produces asphalt from Enbridge provided oil. They had a major explosion at the refinery in April 2018.
- Documents obtained by Wisconsin Public Radio showed that Husky Energy Inc., the former owner of the Husky Refinery in Superior, Wisconsin, was aware that a key valve was known to leak since 2008. The company chose not to replace the valve, which later caused the 2018 explosion.
- The company was fined over \$83,000 for failure to protect their workers and take actions to prevent the explosion. The company reached a settlement of approximately \$70,000.
- The refinery has since been sold to Calgary, Alberta based Cenovus Energy Inc.



Line 3 Expansion Updates:

- Enbridge completed their newest pipeline. The Line 3 Expansion (now named Line 93) transports 760,000 barrel per day of tar sands.
- The construction of this pipeline led to several aquifers being breached releasing hundreds of thousands of gallons of water per day. There were at least 28 incidents where drilling mud mixed with chemicals was released into wetlands and waterways. Several of these incidents occurred near the headwaters of the Mississippi River (pictured right). These incidents are used as examples of how the Line 5 project around Bad River could devastate the territory.
- Enbridge has applied for water appropriation permits to restore some construction sites and conduct maintenance on the Line 3 Expansion project. The permit would allow Enbridge to remove 158.3 million gallons of water to be removed from various work spaces.
- The old Line 3 pipeline is still in the process of being decommissioned and needs to be disconnected from several pump stations. Enbridge has applied for water appropriation permits to remove 3.5 million gallons of water from the various proposed work sites.

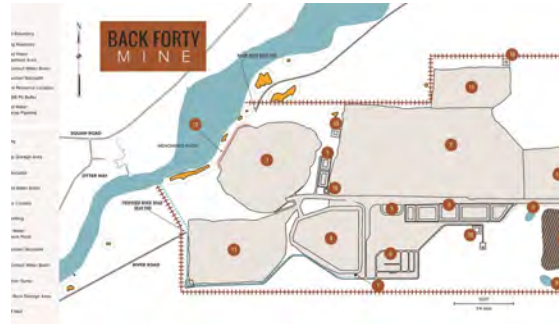


Gi-Ganawemaanaan Nibi: We Are Protecting the Water

July 2022

Back 40 Mine's Updates:

- Aquila Resources has been purchased by Gold Resources (GORO). GORO has not submitted any new permit applications, but claims they are designing a fully underground mine.
- Michigan is still in the process of adding Menominee burial sites and ancient gardens along the Menominee River to National Register of Historic Places. Portions of this site are adjacent to and within the property owned by the mine company.
- The Michigan Department of Environment, Great Lakes, and Energy (EGLE) is beginning the initial phases of an environmental review process for the proposed mine project.



Copperwood Mine Updates:

- The Copperwood Mine is Highland Copper's proposed copper mine near the shores of Anishinaabe Gichigami.
- Michigan regulators are planning to reissue a water discharge permit (NPDES) for the proposed mine. This permit would allow the project to release up to 500,000 gallons of water per day from mining operations into the West Branch of Namebinag Creek, which flows into Lake Superior. An additional 4.2 million gallons of water would be released each year from waste water lagoons.
- The only other component of the project that hasn't been permitted is the Water Intake Structure. This would pump 500,000 gallons of water per day from Lake Superior to be used in the mining process. The Army Corps expects to begin drafting an Environmental Assessment (EA) for the proposed project after tribal consultations conclude. The Army Corps has refused to review the mine itself. They expect to only draft an EA for the water intake structure.



Kristle KLR Updates:

- Kristle Majchrzak, owner of Kristle KLR, wants to bottle artesian water from a well in Herbster. The water would then be trucked to Superior, WI for bottling, and sold in the Twin Cities.
- Kristle Majchrzak's Bayfield County zoning permit was denied. Kristle Majchrzak appealed this decision in the Circuit Court and lost. The Circuit Court ruled that that Bayfield County appropriately denied the applicant's zoning permit.



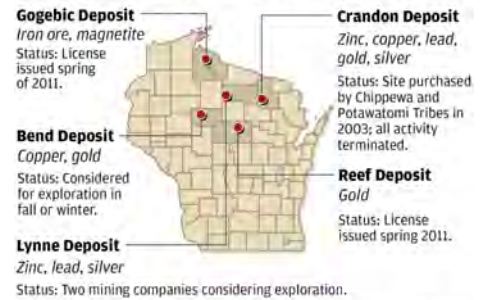
Gi-Ganawemaanaan Nibi: We Are Protecting the Water

July 2022

Green Light Metals Updates:

- Green Light Metals is owned by individuals associated with Aquila Resources (the former owner of the proposed Back 40 Mine on the Menominee River). Green Light Metals plans to continue exploratory drilling at the Bend and perhaps Reef Deposits this summer.
- Marathon County recently informed Green Light Metals that their prospecting permit application is incomplete. Green Light Metals does not have any of the necessary permits to resume prospecting activities.

Metallic mining in Wisconsin



PolyMet Updates:

- The Army Corps held a hearing to hear the EPA's and Fond du Lac's objections to a water permit for the proposed PolyMet Mine. The permit would violate Fond du Lac's water quality standards. This is the first time this type of legal challenge has occurred.



Talon Metal Mine's Update:

- Talon Metals is a proposed nickel mine is that would be between Mille Lacs and Fond du Lac. This proposed mine has been touted as an environmentally friendly project that would supply nickel for electric vehicles such as Tesla.
- The proposed mine is still in the planning phases and many details have not been figured out.



USGS's 2022-2027 Mineral Survey:

- The US Geologic Survey (USGS) plans to conduct 2022-2027 mineral surveys across the Great Lakes region. This project is receiving funding from the infrastructure bill and under Biden's executive order promoting energy independence.
- It is unclear what the US will do to protect sacred sites and landscapes or how far surveys may occur from reservation boundaries.



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Want to get involved and protect the Nibi?

Opportunities to Comment to the Federal or State Agencies:

- The U.S. Forest Service is **still** accepting public comments regarding Chequamegon-Nicolet National Forest's expired Line 5 Special Use Permit, for details go to: <https://www.fs.usda.gov/project/?project=44889>
- The WDNR is accepting public comments on the draft Environmental Impact Statement until April 15th, 2022. For more details, go to: <https://dnr.wisconsin.gov/topic/EIA/Enbridge.html>
- To get updates on Michigan's process for the proposed Line 5 Tunnel or to submit comments, go to: <https://www.michigan.gov/line5/>

Want to join the Frontlines?

- Need help figuring out the best way for you to get involved in the fight against Line 5? Reach out to Red Cliff's Environmental Justice Specialist! Contact info below.

For more information about any these projects, please contact our Environmental Justice Specialist at (715) 779 3650 ext. 4315



Tribal Conservation Department



The Red Cliff Tribal Conservation Department provides a variety of services to the community and it's members including: Issuance of permits for all on and off reservation treaty based harvest activities. Provide regulatory information and educational resources to the public on treaty based harvest activities. Monitor tribally licensed commercial fishing and fish marketing activities through enforcement of Tribal Commercial Fishing regulations. Patrol, monitor and protect the Red Cliff Area, public and its resources through enforcement of trapping, hunting, fishing regulations, ATV/Snowmobile enforcement, trespass codes, animal control regulations, nuisance wildlife concerns and environmental regulations.



Mark Duffy is the Chief Warden. Mark oversees all aspects of the Conservation Department.



Zach Peterson is a Deputy Warden in the Conservation Department. One of Zach's main job duties is enforcing the Tribe's commercial fishing regulations.



Lucas Cadotte is the Assistant Chief Warden in the Conservation Department. Lucas assists with all the day to day operations of the department. Lucas also works with the Environmental Department with enforcement of the tribes environmental regulations.

HELP! I HAVE A BEAR PROBLEM!

It is that time of year when encounters with black bears in residential areas are increasing. At this point, many of you may have had encounters or have at least seen bears near your homes. But before you contact the Wardens and request attempts be made to remove the bear, there are some things to think about.



As both human and bear populations increase on the reservation, so will the bear/human conflicts. Seeing and encountering bears in residential areas is becoming more normal and may be unavoidable. There are ways to reduce CLOSE encounters with bears near your home.

In almost all cases, nuisance wildlife, in the spring and summer seasons are looking for food. If you have a dumpster at your home, you have a bear's equivalent to Thanksgiving dinner sitting in your driveway. You may want to consider having the dumpster removed

for the spring and early summer months. You may also want to consider upgrading to a "bear proof" dumpster with a metal lid. These types of dumpsters are highly effective in keeping out unwanted pests and are usually available for an additional fee. If this is not a viable option for you, then you may want to consider other means to secure your dumpster such as placing boards under the lids and securing them with straps or chains. **It is important to remember that no attempt to "bear proof" a dumpster is 100 percent effective. "Bear proof" dumpsters can still attract bears even if they cannot access its contents and the only way to eliminate the problem is to have the dumpster removed.**



Also, if you have a grill that is stored outdoors, a bird feeder or garbage that is left outside, YOU ARE attracting bears. This also applies to other nuisance wildlife such as raccoons and skunks. Do not store



garbage outside for even a short period of time. Go to the dump frequently. The Red Cliff transfer station is open three days a week (Tuesday, Thursday and Saturday). Something as small as a discarded juice box or empty tuna can may be enough to attract the attention of unwanted wildlife.

Sadly, some wildlife have or will become dependent on humans for food, can destruct property and can become a threat to public safety. If you are continuing to have animal issues, call the Red Cliff Wardens. The Wardens can help you by providing additional information to help you reduce or eliminate your animal problem and if needed, remove them.

THE WARDENS WILL BE DEPLOYING A BEAR TRAP NEAR SOME RESIDENTIAL AREAS VERY SOON. IF YOU SEE THE TRAP, PLEASE STAY CLEAR AND KEEP PETS AND CHILDREN AWAY. THE TRAPS HEAVY STEEL DOOR COULD CAUSE SERIOUS INJURY IF TRIPPED UNINTENTIONALLY.

THE RED CLIFF WARDENS CAN BE REACHED AT 715-779-3732 OR BY CONTACTING BAYFIELD COUNTY DISPATCH AT 715-373-6120. IF YOU HAVE AN EMERGENCY DIAL 911.

NIIBIN - It is summer

MAWINZWAA - Berries picked

ANDAWAWINZ - s/he goes to look for berries to pick

DANAWINZO -s/he picks berries in a certain place

GIDAAN -eat all of it, eat it up

SUMMERTIME WORD SEARCH

M B T E F R C H P N N T V P B X W Q E M
I M A D G X A Y N W T W L I Q I G K O I
T G Z G Q N R A I I J H I W K T I E Z I
A R K K I Q O D K L I D A W A N D U N N
A J H I Q D I N Q I A B A L I H A V I A
W F J S Z I A L A A N N I M W W A X W G
A W E N M O K W S W D I O N G T N Y A A
N A Z I F Z U A E I A O M F Q S D V N A
G U N J F N M T W W N A A O B W O L A W
A N R Y B I K I A A I A H S K B R X D A
A D Z I S W N O M H F N U Z D S Y G Y N
F M T H A A G A D A A Y E W E G I I J Z
I K K Z I W G I I Z H I K I K A A M W H
K A J I M A A N I K E N K S Y W P N J I
A F G Z C D E D H Q H L I T O E U R E I
N O Y P S N Q E C A S F B Y U Q Z W J G
G M R F A A Q Z H H Q B B A L S W P C V
O Q V L Q C T Z G S S W T S F F N N Y U
P A G K F A A I C R N A A W Z N I W A M
P D C O K R I U D G F J A J B S N F P W

niibin

mawinzwaan

andawawinzo

danawinzo

gidaan

miskominikaa

nimiidiwn

jimaanike

biidaasamishkaa

miinagaawanzhiig

Zhaawanong

jiigeweyaadagaa

manoominike

giizhikikaa

bagidawewin

mitaawangaa

wikwandiwin



RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA

Treaty Natural Resources Division



Fisheries

715-779-3750

Environmental

715-779-3650

Natural Resources

715-779-3795

Transfer Station

715-779-0171

Conservation Wardens

715-779-3732

Mino Bimaadiziiwin Farm

715-779-3782