TAMARACK WATER ALLIANCE

Tamarack Water Alliance Community Zoom Meeting Wednesday, February 7, 2024 10am CT

Hello from the Tamarack Water Alliance! If you are new to our email list we welcome you. Local residents who volunteer with Tamarack Water Alliance compile and send this monthly newsletter to share updates, invitations, and informational articles.

Everyone is invited to attend our open community virtual Zoom meeting on **Wednesday, February 7, 2024 at 10am CT.** Protecting **Minnesota's Shallow Lakes & Wild Rice Heritage** is our topic. Our speaker is **Ann Geisen, BS, Wildlife Specialist with the Minnesota DNr's Shallow Lakes program**, with twenty years surveying, planning, and implementing projects and monitoring results.

Shallow lakes are a rich resource in Minnesota providing wildlife habitat, water quality benefits and recreation opportunities, and account for one third of the 11,000 lakes in our state. Fish, wild rice, and waterfowl are at risk if shallow lakes are not protected.

Download Tamarack Water Alliance fact sheets **here (https://www.tamarackwateralliance.org/resources.html)**

Sign-Up To Receive Updates from the DNR on Talon Metals Environmental Impact Statement **here**

If you believe nickel-sulfide mining is too risky in Aitkin County, Tamarack Water Alliance has yard signs with this messaging available. Your $6 donation helps defray costs. Email **waters@tamarackwateralliance.org** to arrange pickup of your sign.

Volunteer with the Tamarack Water Alliance. Send us an **email** at **waters@tamarackwateralliance.org.**

Encourage your friends, family and neighbors to sign up for the monthly Tamarack Water Alliance **email newsletter** (http://eepurl.com/hOboEb).

Minnesota's Shallow Lakes & Wild Rice- A Deep Heritage

(Excerpted from Shallow Lakes-Minnesota's Natural Heritage brochure by Nicole Hansel-Welch, MN DNR and Scott Kudelka, Water Resource Center, MSUM)

Shallow lakes account for about one third of the 11,000 plus lakes found in Minnesota. Many shallow lakes were lost to drainage prior to the 1970s. They have not received the respect or attention given the deeper lakes found "up north". This is unfortunate because shallow lakes are a rich resource providing wildlife habitat, water quality benefits and recreation opportunities.

Difference Between Shallow Lakes, Deep Lakes, and Wetlands
A healthy shallow lake is characterized by water clear enough to see to the bottom, with fairly thick weed beds used by fish and other aquatic organisms for food and protection. Shallow lakes fall on a spectrum between deep lakes and wetlands. Sunlight reaches the bottom of shallow lakes, allowing aquatic plants to grow over most of the lake bed, rather than being confined to a ring around the shoreline as commonly seen in deep lakes. A good example of this in Aitkin County is Lake Minnewawa where wild rice thrives in abundance across the western part of the lake.

Water in shallow lakes doesn't stratify like it does in deep lakes during the summer. That means that in shallow lakes the water mixes with the nutrients from the lake bottom during the growing season,. Wetlands dry out more frequently than shallow lakes and usually don't have standing water. Shallow lakes may have vegetation like cattails and bulrush, but often not as much as wetlands. You can identify a shallow lake if you see aquatic plant growth under the surface of the water. This lush growth of aquatic plants is due to the abundant level of sunlight and nutrients in the shallow lake. Where these plants are absent, the high nutrient level in the water can result in water thick with algae, indicating poor water quality.

Aquatic Plants Thrive in Shallow Lakes
Aquatic plants protect the bottom sediments from wind and provide food and a habitat for fish and wildlife. Growing around the shoreline are cattails, bulrushes and reeds and stands of submerged plants like wild celery and sago pondweed. Insects thrive in this environment and are an important food source for waterfowl and fish. The fish species tolerant of low oxygen levels in shallow lakes are northern pike and bullheads. Wild rice growing in shallow provides food for many fish, waterfowl, and wildlife in addition to being an important food source for humans.

Wild Rice and Shallow Lakes
Shallow lakes can vary across Minnesota due to the differences in geology, soils and precipitation patterns across the state. In northeastern Minnesota prime wild rice grows in many shallow lakes, harvested for centuries by Native Americans. Tribal people embrace wild rice or manoomin as sacred to their culture and way of life. It is also prized for its high protein content and indefinite shelf life. Wild rice growing in a shallow

lake provides food for many fish, nourishment for waterfowl on their fall migration, and the stems of wild rice provide nesting material for many birds and wildlife species. Minnesota has a sulfide standard of 10ppm .to protect wild rice.

Benefits of Shallow Lakes

There are many benefits to shallow lakes. They lessen the damage of flooding by storing water, and slowly releasing it throughout the year. They have a beauty and value that other water bodies can't begin to duplicate. They support a diversity of plants found in the water and shoreline, creating a flowering bonanza throughout the growing season. One only has to be amazed to see the green grass (wild rice) carpeting a wild rice lake like Lake Minnewawa. Or, observe a floating pattern of white water lilies or yellow Spatterdock, or a stand of shoreline purple pickerel weed or blueflag iris. Wildlife can be enjoyed year round on a shallow lake, as communities and sportsman's clubs have discovered.

What happens to these sensitive lakes and the wildlife and plants they support if the proposed Talon Metals/Rio Tinto sulfide mine leaches sulfide toxins into the water over an extended period of time? Will hunters have any waterfowl to hunt? Will Native people be able to harvest wild rice, protected by the 1855 and 1854 treaties, and sacred for their way of life? How will visitors and property owners enjoy our inland lakes if the flowering water lilies, fish who thrive in these waters and other native plants are gone? Protecting and managing shallow lakes ecosystems matters so that water quality is protected.

Recognize Deceptive Marketing

Lets put our thinking caps on and recognize deceptive marketing for what it is. Talon Metals/Rio Tinto marketing machine would have you believe that Talon is a major mining company that will start mining in Tamarack in 2025. The facts tell a different story.

Talon's stock price closed at the end of 2023 at 13.61 cents per share. What can you buy for 13 cents? Thirty sheets of toilet paper? They are not even a two- bit stock, more like a one-bit stock. Talon's financial statements also indicate that it will run out of money sometime early to mid 2024. The company certainly doesn't have the $800 million or so required to build and operate a mine and processing plant...

...Talon has not yet passed step one of the permitting process, a grave concern given the environmental damage a mine would inflict on the area. Talon Metals/Rio Tinto EAW states it wants to pump at least 2.3 million gallons of water out of our aquifers daily. This could drain aquifers, affect lake water levels, jeopardize wells and kill our prized wild rice...

..Talon/Rio Tinto hasn't released any studies that prove sulfide particles and other heavy metals will not leach into the interconnected rivers, lakes and wetlands, and air reaching the Mississippi River or downstream communities of the St. Croix River, contaminating the drinking water of the Twin Cities and Lake

Superior...

...The mine permitting process will take 5-10 years. By that time, any agreement Talon might have with Tesla will be long expired. Talon's federal grant for a North Dakota ore processing plant will have also expired. These are marketing statements that Talon has no ability or intent to fulfill.

Who We Are

Tamarack Water Alliance (tamarackwateralliance.org) is a group of local residents and landowners working together with others from across Minnesota to protect water and community health from the dangers of sulfide mining near our beloved lakes and wild rice beds, at the headwaters of the Kettle River and in the Mississippi River watershed.

A proposal by a foreign owned mining company to mine nickel and other metals near Tamarack in Aitkin County threatens the health of our communities. This kind of sulfide mining, especially in water-rich environments, has never been done without severe impacts to water and the health of those downstream. Mining here is also a threat to environmental justice and the long-term economic security of nearby native and rural communities.

Review our community slide presentation, (**tamarackwateralliance.org/docs/TamarackMineConcerns-Consolidated.pdf**)

Download informative flyers: (**https://tamarackwateralliance.org/resources.html**)

- Talon Mine Risks,
- Geology of Aitkin County,
- High Sulfide Mines Create Acid Mine Drainage,
- Nickel Not Needed for Future EV Batteries,
- Minnesota's Prime Wild Rice Lakes Under Threat,
- Minnesota Regulators Poor Record In Protecting The Environment,
- Eagle Mine Environmental Report & Saving Our Meager Nickel Reserves

We will be sending this monthly newsletter to keep you informed about this project, to share information and opportunities to act, and to invite you to gatherings where you can connect with others who share a passion for clean water and community health.