



THE FUTURE OF MINNESOTA'S ARROWHEAD AND THE SHORES OF LAKE SUPERIOR IS NOT SIMPLY A MATTER OF ECONOMIC CHOICES

Contrary to commonly held beliefs, the future of Minnesota's Arrowhead and North Shore is not just a matter of economics. It is blatantly obvious that a comprehensive plan including all economic and environmental impacts is required to prevent the destruction of the goose that is laying our golden egg.

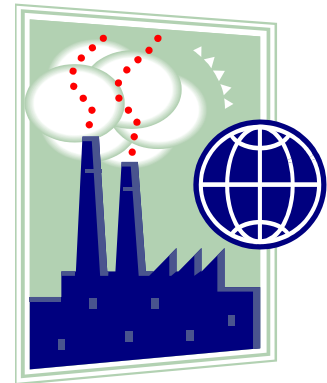
We must first step back and understand where we are now with respect to the capacity of this area for growth. Should permits for a huge new mining district and attendant gigawatts of power generation facilities be handed out without considering their impact on the entire region? The answer is a resounding "NO" when residents are polled.

We may not be able to survive the long term effects of the existing pollutant stream unless the sources of pollutants are fully identified and mitigated. The existing deposits must be cleaned up and not just buried in cap and run exercises. A list of existing problems is staggering in its breadth and potential for cleanup costs. Leaking taconite waste ponds, leaking garbage landfill sites, sediment filled rivers and streams, forests covered with acid rain components and toxins such as mercury, aquatic invasive plant and animal species, sewage overflows, sewage plant discharge toxins and destroyed wetlands are just a few of the pollutant sources now in existence.

Many participants in two recent Arrowhead Economic Forums held in Duluth, MN suggested that the future will be bright if we just do more of the same economic activity unbridled by environmental standards! Even those who promoted "green" businesses and occupations failed to consider the fact that we may need to do some cleanup before we move forward in a significant way.

The Minnesota Department of Natural Resources (and other equivalents in linking states and provinces) has the authority and responsibility to initiate Cumulative Impact Analyses. The Minnesota Pollution Control Agency can no longer be satisfied with issuing toothless pollution permits and monitoring pollution. These scenarios apply to all three states and provinces surrounding Lake Superior. We must be more than economic robots to survive on this planet!

LeRoger Lind



We all love sunny summer weather but can use a lot of rainfall

The water level in Lake Superior decreased by two inches during the month of March—twice the expected decline! The rain and snowfall from the watershed was less than expected and this factor resulted in an overall decrease of nine inches compared to March of last year. It also registers 15 inches below the long term average.

This status could, of course, change for the better if heavy rains in coming months make up the difference. If not, the shipping industry might have to adjust to the shortage by loading fewer tons of cargo to avoid going aground, a condition that would exist primarily in Great Lake ports.

"Lost" Island in the St. Louis River watershed regained.

Realistically, we can't expect to ever see the estuary restored to its primeval beauty. The ravages of industrial waste disposal and large scale land mismanagement have, however, been remediated to a rewarding degree.

Such is the case of Tallus Island. It's an obscure bit of real estate you have probably never heard of—and with good reason. (By boat it would be quite easy to find or could be accessed by foot, if able bodied, by hiking from 85th Avenue West due south, crossing Bayhill Drive and then following Knowlton Creek to its mouth.)

For the past four decades it has not been an island but became a peninsula thanks to Knowlton Creek that carried 53,000 cubic yards of sediment that fused the western tip of the island with the mainland and turned it into a peninsula.

The water depth between the peninsula and mainland was reduced from five feet to only two feet, thus greatly limiting its value as a fish habitat. With the urging of the Minnesota DNR, restoration of the habitat was begun under the aegis of the St. Louis River/Interlake/Duluth Tar Superfund site (SLRIDT.)

The deep sediment accumulation from over the 41 years of Knowlton Creek deposits were removed by an hydraulic dredge and placed on top of the narrow strip of land. Unlike the revolting toxic tar residue brought up from Stryker Bay, the pollutants at Tallus Island are not significant and wetlands are expected to grow on its surface. Native plants and birds should return to the site while the backwater could become a MNDNR Fisheries Aquatic Management Area. It would develop into spawning grounds for northern, muskies, bluegills and crappies. Curiously, about half of the island lies within Wisconsin's jurisdiction and the other half in Minnesota.

For further information, contact Minnesota Sea Grant by e-mail: seagr@d.umn.edu or read more in the agency's Seiche publication (December 2010) by Marte Thabes Kitson.



A "heads up" alert on a new area taconite project

SLSA and other western Lake Superior environmental groups will be monitoring developments in the evaluation of ore on 22,000 acres in Iron and Ashland Counties of northwestern Wisconsin.

A new company, Gogebic Taconite, announced last November that it purchased an option to lease the mineral rights on the twenty-two mile long property known as the Penokee Range in Wisconsin and Gogebic Range in Upper Michigan.. Underground iron mining was carried out in this area, off and on, since the 18 hundreds.

Because the Bad River and Lake Superior watershed are within the drainage basin, there could be a threat of pollution to these waterways, thus our concern. The company was scheduled to do test drilling starting in early April—creating holes two and a half inches in diameter and reaching depths from 350 to 1500 feet. Each will be filled with concrete after core removal..

It's possible that an operating mine will not come to fruition but the world-wide market for iron suggests otherwise. There's plenty of time to keep an eye on the project. Development would take several years.

Gogebic Taconite is a subsidiary of the Cline Group, a southern based company with holdings of coal reserves in the Appalachian region and in Illinois. It claims it may spend as much as a billion dollars on the Gogebic project.

Young fish become the victims of "acidification"

The impact of sulfuric acid on wild rice has recently been the center of attention in the PolyMet non-ferrous mining controversy. However, a solid scientific study completed more than a decade ago focused on fish kills from this pollutant. The conclusions of the work done by two Duluth scientists are troubling to say the least.

J. Howard McCormick of the EPA's "water lab" and Richard L. Leino of the UMD School of medicine in their definitive published report stated, "Typically, acidification progresses gradually over a period of years, and fish losses are usually restricted to the most sensitive early life stages or, in more northerly latitudes, to overwintering first-year juveniles."

The McCormick-Leino study was directed to the concern for acidic precipitation—acid rain—not the release of sulfuric acid leached from piles of mining waste flowing into area rivers and lakes. We had not heard of reports of fish kills except where low levels of oxygen in frozen lakes had occurred. But the lack of news on acid related die-offs should not lead us to believe they haven't happened. In fact, the report states, "many populations of fishes in fresh water lakes have been severely affected by environmental acidification."

(Their research, we hasten to note, was commenced before sulfide mining became an issue and, therefore, was not initiated by the mining dispute.)

As we interpret the technical report, the chemical is an insidious threat to fish populations in that, when first introduced into a water source, its effect can go undetected by casual human observations. No fish kill will be seen at first. "The loss of population, in such cases, becomes complete with the disappearance of the last of the more acid-resistant larger individuals, but is the ultimate result of successive years of age-1" fatalities, says the study.

It's our contention that the demonstrated lethal impact of acidification further underscores the obvious imperative; that sulfide mining permits be denied until and unless it can be proven, scientifically (not politically) that this industry will not damage our water resources.

by Glenn Maxham

Spring Update on PolyMet and Copper-Nickel Mining

Draft Alternative Summary

The most recent news from PolyMet is the release of a Draft Alternative Summary. According to this summary, PolyMet is downsizing its proposed operations. PolyMet originally planned to run its mine by producing copper wiring on site. PolyMet now says it plans to ship out copper as a concentrate. This would eliminate one stage of plant operations, requiring one hydromet rather than two, thus reducing a portion of toxic residues.

Although this alternative makes the mining less profitable, it may help simplify the permitting process for PolyMet. It is also possible that PolyMet could begin operations under this plan, and then make additions without having to go through another environmental process.

All of PolyMet's metal concentrates would need further processing /smelting. Current inquiries for these metals are coming from China, who has been stockpiling metals in all forms.

Streamlining Bill

On March 3, Governor Dayton signed into law the Streamlining Bill. Under this new law, proposers can draft their own environmental review. This applies to all industrial operations that require permitting in Minnesota. The law also removes citizen rights to use Minnesota District Courts for environmental law suits. All suits must now go through a more expensive Minnesota Appeals Court. Litigation is the only avenue granted to citizens as a means of seeking recourse when laws or regulations are not being applied or enforced. In addition, citizens are now allowed a maximum of 30 days for public comment, no matter how complicated the project.

The Streamlining Law also singles out the Iron Range Resources Board as being exempt from prohibition to perform actions to promote a project before environmental review is complete. This overrides the current MEPA law (Minnesota Environmental Protection Act). The IRRB had been served notice of intent to sue because a \$4 million loan to PolyMet was illegal per MEPA.

PolyMet has need of a loan in order to purchase land to exchange with the US Forest Service due to the fact the PolyMet's open pits would be within Superior National Forest. The USFS has the authority to refuse open pit strip mining on land originally purchased for watershed protection under the Weeks Act of 1911. Instead, the USFS is preparing an environmental impact statement for a land exchange that will be part of the PolyMet Supplemental Draft Environmental Impact Statement, scheduled to come out later this summer or fall.

Weakening Sulfate Standards

Northeast Minnesota legislator Tom Rukavina is pushing through an additional bill that would change the Minnesota standard of 10 mg/l to 50 mg/l of sulfate allowable in the watersheds. Due to lack of agency enforcement of the 10 mg/l standard, Range taconite tailings basins have been leaching sulfates for the past 30 years. As a result, the wild rice crop in area watersheds has been almost depleted and most area lakes have fish consumption advisories. Sulfates are part of a biochemical process that converts mercury into methylmercury which accumulates in fish tissue. Both taconite and power plants release mercury into the air.



Rukavina claims that taconite expansion would be curtailed if the sulfate standard is not weakened. US Steel claims that it could meet the 10 mg/l standard, but at additional cost. PolyMet plans to store tailings on the former LTV taconite tailings basin that is already leaching sulfates and other contaminants into the watershed. Weakening the sulfate standard would greatly facilitate all future copper nickel mining, as these metals are bonded to sulfide ores. When crushed, sulfur in the ores is released, combining with oxygen to form sulfates and with oxygen and water to form sulfuric acid.

Weakening Wetland Mitigation Regulations

Additional bills are also going through the current legislature to change Wetland Mitigation Rules. One bill would have the Rainy River Watershed and the St. Louis River watershed treated as one unit, thus allowing wetland mitigation to occur on a 1:1 ratio.

Since wetland mitigation can include wetland preservation, this would result in an overall loss of wetlands; some wetlands would be destroyed in exchanged for some being preserved. This goes against current state policy of no net loss of wetlands, which has been in place since the Arne Carlson administration.

School Trust Fund Lands

Representative Denise Dittrich of Champlin is spearheading legislation geared toward the state getting more money from its school trust fund lands. Of specific concern are state school trust lands locked within the borders of the Boundary Waters Canoe Area Wilderness. The legislature is seeking to exchange 1/3 of these lands for federal lands outside of the BWCAW. Representatives Rukavina and Dill are seeking to exchange state lands within the BWCAW for land where copper nickel exploration is taking place. The DNR Lands and Minerals Division is boasting that copper-nickel mining could produce trust fund royalties of \$2.5 billion over 30 years.

The result would be helping fund the education of today’s children at the expense of all future generations; once the land is mined it would be worthless.

Other

Other environmentally unfriendly legislation is also wending its way through the state legislature, including cuts in funding for all state environmental agencies and/or the combining of state agencies. There is also the possibility of a bill that would allow copper nickel mining companies to be responsible for minimal financial assurance protections.

Elanne Palcich

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The daunting task of counting ten minute specks in 260 gallons of water.

This is the requirement for scientists working on solutions needed to keep even the smallest of invasive spiny water flea from escaping ballast water dumped into the Great Lakes. Sharon Moen of Minnesota Sea Grant writes in its Seiche publication that the technical goal is to meet the standards of the United Nation’s International Maritime Organization; allowing no more than 10 living organism smaller than 50 micrometers (about the size of a speck of dust) in a cubic meter of water.

Says Moen, “Although it is conceivable that rogue individuals might be able to establish a new population, the premise is that nearly eliminating life from ballast water will dramatically reduce the risk of spreading aquatic invasive species through commercial shipping.”



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Please check your Newsletter mailing label for expiration date. If the year is not current, it needs to be updated.

Membership dues increased January 1, 2010.

Repeat of new dues structure:

ALL EXCEPT LIFETIME ARE PER PERSON PER YEAR.

- | | | |
|-------------------|------------------|----------------|
| \$10 Fixed income | \$50 Sustaining | \$200 Lifetime |
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The Lifetime option is only available to new members or members whose label is currently up-to-date.

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We appreciate your interest as well as your support.