



Save Lake Superior Association - fall 2009

Dedicated to the restoration and preservation of this Great Lake

www.savelakesuperior.org

MEI Forum on “Non-ferrous Mining in Minnesota : What are the Issues and Opportunities”

The Minnesota Environmental Initiative brought 8 speakers together in a forum to discuss the potential impacts of granting permits to mine copper, nickel and other minerals in the Duluth Complex and other areas of the state. These are large, low-grade metallic sulfide ore deposits stretching from Duluth to the Boundary Waters and beyond.

The main theme of the project proponents and their consultants was that our need to consume large quantities of the products containing these materials justifies their exploration and mining in spite of the long history of water pollution from the mine and process waste. The intrinsic value of the metals was not disputed. However, experts from western states testified that when all costs are considered, the net value to Minnesota and especially the residents of the northeastern region would be much less than that claimed by the mining company spokesmen and UMD’s Natural Resources Research Institute financial analyst.

Corporate consultants claimed that mine permitting is a “values debate” and also that mitigation of problems caused by mining and processing is a “reasonable trade-off” to get the large quantities of the metals we want. There was no hint that consumption may be part of the problem. The costs to society and to the victims of water pollution were not part of their equation. Mercury and heavy metal ingestion are well-known causes of cancers and dementia in adults and mental disorders such as autism in children. Is this a “reasonable trade-off”?

The spokesman from MCEA best summed up the problem by stating that the nature of this industry creates environmental risk. Copper-nickel mining will never get to the point where “the problem is solved” based upon the current state of the mining plans and pollution controls. The reclamation rules in the Minnesota DNR statutes need to be updated to make it clear that the MNDNR has the right to say “no” to faulty mining plans. From SLSA’s perspective the “cap and run” strategy for waste storage is not effective in dealing with the millions of tons of toxic waste that would be generated by these mines as proposed.

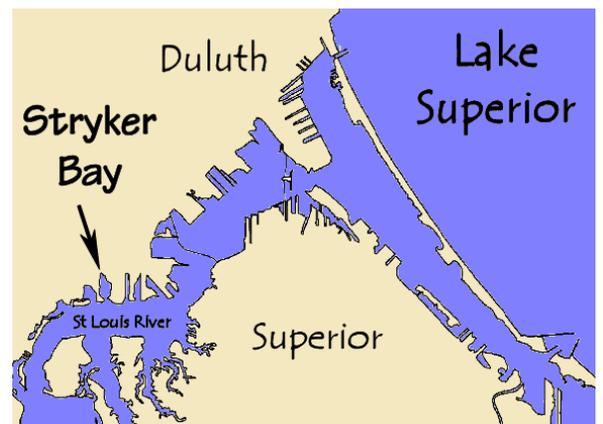
LeRoger Lind

Stryker Bay update

The U.S. Steel Superfund Site will need more work according to the MPCA's current review completed in September 2008, as required very five years. The report found quite widespread contamination which will require additional cleanup after further sampling to determine the source and scope of the contamination. It appears that the initial cleanup efforts have not been as effective as first thought.

Steel and coke were produced at the site from 1915 to 1979. Designation of the site as a Superfund Site came in 1983. Contaminates found on the site includes coal tars and heavy metals in the soil, sediment, surface water and shallow groundwater. A Record of Decision was developed in 1989, a remediation strategy was created and most of the land contaminates were removed.

Now since a number of new tar seeps and oil sheens have been discovered, the MPA staff is developing a schedule for data collection and response action plans. This information was presented by project manager Susan Johnson at the June meeting of Duluth-Superior Metropolitan Interstate Council’s Harbor Technical Advisory Committee.



Nancy Paisley

GREAT LAKES RESTORATION CONFERENCE

From September 10-12, several SLSA members attended the Great Lakes Restoration Conference held in Duluth, Minnesota. SLSA participated several ways in this three day meeting of environmental groups and government agencies. As conference sponsors at the \$250 level we were able to have display space and have handout material available for all attendees. LeRoger Lind and Todd Ronning manned the table for the better part of two days, meeting many people and distributing our information. Both agreed that conference sponsorship was good exposure for SLSA and well worth the expenditure.

SLSA members attending the conference were: Sally Munger (who played a large role in organizing the local volunteers), Will Munger, Glenn Maxham, Debbie Ortman, and Arnold Overby.

\$475 million is in the pipeline for Great Lakes restoration. Funding has to get through Congress and after that it must be determined how and where the money will be spent. With 15 federal agencies involved and 762 watershed units on the Great Lakes, some difficult choices will have to be made. Hopefully, some definite restoration can be achieved, which will enable future funding. With a President from a Great Lake state and an EPA Administrator appointed by him, future funding requests look fairly good.

Stressors creating problems in the Great Lakes include: invasive species, over fishing, toxic chemicals, shoreline development, nutrient loading, and altered biotic communities.

Several field trips were available Friday afternoon. The one taken by the writer included a stop at the Great Ships Initiative in Superior. The guide explained how the facility is experimenting with various ways to test the effectiveness of methods to kill invasive species in ballast water. A second stop included a hike to Newton Creek, a waterway that runs through a large petroleum refinery. Previously heavily contaminated, it has been restored due to an ecological restoration plan developed by the Wisconsin DNR and the company.

The 2010 Great Lakes Restoration Conference will be in Buffalo, New York.

Arnold Overby

Wild Rice: another potential casualty of sulfide mining?

Based on meticulous research by an outstanding retired biologist of western Lake Superior, Len Anderson, beds of wild rice would be seriously threatened if PolyMet sulfide mining is allowed to go into operations close to the Partridge River. In a recent report he made available to us, the Carlton County outdoorsman noted that, "John B. Moyle established the relationship between wild rice and sulfates back in the 1940's. He wrote in the Journal of Wildlife Management, 'No large stands of rice occur in waters having an SO₄ content greater than 10 p.p.m., and rice is generally absent from water with more than 50 p.p.m.' Minnesota has established a Wild Rice Standard that is approximately 10 mg/L.

On 9/16/09 Len and three others paddled the lower Partridge and adjacent reaches of the St. Louis River and describes the scene above the junction of these waterways at river mile 161, "The St. Louis River was full of high quality rice with several hundred waterfowl feeding and resting in the rice (and) it was tall and healthy with viable rice kernels in the heads."

Len's party then entered the neighboring Partridge River, where they did find stands of rice, but those stands were of very poor health. "The plants were so stunted that you could not bend the stalks over the side of a canoe to harvest the grain. The plants averaged about 10 inches in height and the color was more reddish than green. Most plants had no viable seed." The group also noted an absence of waterfowl on the Partridge River.



Sulfates stresses rice stands on the Partridge River

The Partridge River watershed hosts numerous taconite mining process facilities which have been discharging sulfates to this river for over 50 years, while the St. Louis River watershed is currently void of any historical or active mining activity.

Anderson found in the July, 2009 version of the PolyMet Environmental Impact Statement, "...a concerted effort to discredit the State Wild Rice Standard and an effort to cast doubt on the existence of wild rice stands in the Embarrass and Partridge Rivers." The DNR tested the water at the river junctions (noted above) for sulfate concentration in 2006 and recorded the reading at just 2mg/L! Like Anderson and his party, the DNR said "Wild rice dominates this reach (of the river.)"

Len concludes, "With concentrations of sulfates projected to be as high as 31.7 mg/L in the Partridge River and 63.4 in the Embarrass River at closure of the PolyMet operation, the area of influence will definitely extend considerable distance down the St. Louis River." Like Anderson, SLSA has long been deeply concerned about the eventual flow of the company's sulfates into Lake Superior. We commend this "environmentalist emeritus" for bringing this alarming news to the attention of the public and, we hope, it will register as a subject demanding an evaluation by the decision makers ruling on the PolyMet permits.

YOU CAN OFFER YOUR PUBLIC COMMENT ON POLYMET'S EIS

Please go to your computer and access the DNR home page address and express your concerns for the environmental damage that will further impair the Partridge and St. Louis Rivers and deliver sulfuric acid into Lake Superior from PolyMet's sulfide mining. Refer to PolyMet's NorthMet project draft Environmental Impact Statement. Dates will be provided on two public information hearings. One will be in Hoyt Lakes and the other in the Twin Cities metro area.

Thanks to lethargy, some invasive species have long been with us

Most of us were probably unaware of the zebra mussel infestation until a decade ago. Their presence in the Great Lakes, however, was known for almost a century before they were discovered in western Lake Superior. Sadly, little or nothing was done to evict them before they could become widespread and cause millions of dollars of damage throughout the waterway.

Credit goes to a grad student who came upon the first zebra mussel in the Great Lakes and did so by accident while working on an unrelated project in Lake St. Clair in 1988. Just a week later the pest's relatives were discovered in Lake Erie.

According to Great Lakes United, the appearance of this invasive critter was predicted 95 years before discovery proved the mussel was here. GLU stated, "With the discovery, experts knew that the ecology of the Great Lakes would be changed forever."



Memo to: State Invasive Species Plan committee

In the course of reviewing the draft of the State Invasive Species Plan it appears to me that a serious omission exists in the list of invasive species. I'm referring to the introduced non-native salmonids---steelheads, cohos, Kamloops, browns, et al.

Over the decades these exotics have had a measurable deleterious impact on Lake Superior and in the rivers along Minnesota's North Shore that feed into Lake Superior.

Historically, little scientific information was available on the scarcity of prey species in this oligotrophic water body when the stocking began. And I am unaware of any studies that suggest a niche existed that would provide food for the introduced salmonids without reducing forage for indigenous species.

Equally disturbing has been the destruction of waterfalls (referred to as "barriers" by the Minnesota DNR) on eight North Shore rivers solely to encourage the exotics, especially the steelheads, to migrate upstream as far possible. This action was taken without first conducting an analysis of the potential impact upon the native brook trout and other aquatic life. (To the best of my knowledge, such a study has never been done.)

To further enhance the environment for the introduced salmonids, the Fisheries Division of the DNR has an on-going program of destroying beaver dams on the streams that it believes denies the introduced species access to additional habitat. In the egregious domino effect, the release of millions of gallons of beaver-impounded water wipes out the wetlands on which the beaver, mink, amphibians, waterfowl, migrating songbirds and others rely. (The North Shore wetlands are notoriously lacking.)

I would be willing to provide additional specific information gathered for more than a decade on the forgoing. It would be immensely gratifying to learn that the failure to address the problem of the invasive exotic salmonids was simply an oversight and that it will be remedied and become an integral part of the identified invasive species list.

It would then be logical to assume that the stocking of these non-natives would be halted by the DNR.

Your SLSA Board Members

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SLSA

Raises Dues

This small but influential organization has accomplished much over its nearly 40 year history. Without the support of its dedicated members, this would not have been possible. Dues have always been low. In fact since SLSA began in 1969, dues were raised only twice and have held at \$5.00 per person per year for some 15 years.

As operational costs escalated, your Board of Directors decided in May, 2009 to bring dues in line with other organizations of similar size.

Beginning January 1, 2010 the dues structure will be:

dues per person per year,

\$10.00	Fixed income
\$20.00	General
\$50.00	Sustaining
\$100.00	Benefactor
\$200.00	Lifetime (no per year)

*The Lifetime option is only available to new members or members whose membership is currently up-to-date (2009 or later).

We hope you'll agree that raising dues will be an important step in expanding what SLSA is able to do for our precious Lake Superior. We encourage you to continue to pay your dues in a timely manner.