



SAVE LAKE SUPERIOR ASSOCIATION 45TH ANNUAL MEETING CELEBRATES PAST AND PEERS INTO FUTURE

Oh were the future so bright we need to wear shades! The membership celebrated another productive year on a beautiful day on the shores of Lake Superior. A mixture the old and new listened to Professor Pastor define a changing mix of forests in our watershed as temperatures gradually rise. Our spruce and balsam will become oaks and maples. Ground cover and animal inhabitants will also change accordingly. There will be fewer plants and wetlands to retain surface and ground water. He is concerned and exhorted us to become more actively involved to slow climate change and protect the lakes. "We do know enough to act."

Between speakers we presented our first annual "SLSA Excellence in Achievement Award" to reward the much deserving recipient, Lori Beth Andresen, for demonstrating what it takes to make a difference in "Preventing further degradation of the lake and promoting its restoration". Details are related in the article below.

Professor Minor explained how Lake Superior is actually becoming less productive as temperatures rise and mega rain events become more frequent. The lake water level rises dramatically with sediment decreasing light availability. Oxygen levels fluctuate causing small organisms to become a fluctuating food source for fish.

"Researchers at Large Lakes Observatory are studying how this and other phenological and episodic changes in the Lake Superior region will affect in-lake processes." Even though the lake is very large, it is susceptible to degradation due to changes in climate. But don't throw the shades away yet! The Climate Change movement is gaining momentum.

LeRoger Lind

On a Threatened Planet, There Is No NIMBY (Not in My Back Yard)

On August 14, 2014 the man-made tailings basin at the Mt. Polley copper mine in British Columbia failed. Some 3 billion gallons of polluted water spewed more than 75 miles downstream, contaminating drinking water, destroying forests and wildlife, and threatening the Coho salmon run. In EPA comments on its 2012 Draft Environmental Impact Statement (DEIS), PolyMet was warned that the tailings basin formerly owned by the now bankrupt LTV Taconite Mining Company, and purchased by PolyMet, is unstable and may not be able to sustain the weight of projected added tailings..

Existing taconite mines in northeast Minnesota use earthen dikes, by which they pile coarse tailings (ground up waste rock from the mining process) around the fine tailings deposited within the basin. The dike surrounding the former LTV tailings basin purchased by PolyMet consists of coarse tailings lensed with fine tailings. While the fine tailings absorb more water as part of the dike structure, shifting of weight can cause the fine tailings to

liquefy. This is the same dike construction used by Mt. Polley.

Environmentalists opposing the PolyMet project have been classified as NIMBY's (Not in My Back Yard) and their warnings have gone unheeded. Yet we now have a real time event--not a computer model--that demonstrates how quick and



devastating a breach in a dike can be. The instability of PolyMet's dikes is just one concern being put forth by environmental groups. Environmental and local grassroots groups are also concerned about the predicted 500 years of needed water treatment post closure at the plant site and 200 years at the mine site. At stake are the headwaters of Lake Superior. Minnesota is willing to put its waters at risk at the same time that states such as California and Arizona are facing severe water shortages. Even other parts of Minnesota are facing the drawdown of aquifers and contamination due to pollutants compounded by climate change.

We cannot continue to give copper, nickel, and other metals priority over water, food, clean air, and ecosystem sustainability. We need a new generation of leadership who will express the need for recycling, efficiencies, and life style changes that will reduce consumption.

For example, Polymet distributes a picture of a baby, claiming that any child born today will consume 3 million pounds of minerals, metals, and fuels in their lifetime. This is pure nonsense. There won't be enough metals for a world population of 7 billion, unless we find ways to recycle, re-use, develop new technologies of efficiency, and distribute resources in more equitable ways. Another example is the continual bombardment of public thinking with the phrase, "We all need these metals, and they will be mined somewhere. Better here, with our strong regulations." These are exactly the words of the Canadian government and Imperial Mining, prior to the failure at Mt. Polley.

We cannot continue to treat the planet as if composed of isolated ecosystems. The warming of the Arctic is disrupting global weather patterns while political leaders debate whether the climate is actually changing and whether man plays a role. So Nero fiddled while Rome burned. On a planet that is increasingly ruled by the 1%, our leaders appear willing to sacrifice the many for the few. On a threatened planet, we need leaders who will step forward to make decisions based on knowledge and integrity, in order to protect our own backyard.

ELanne Palcich

FIRST SAVE LAKE SUPERIOR ASSOCIATION ACTIVIST AWARD GIVEN

The SLSA Board of Directors, in response to Chairperson Le Lind's call for stimulating members' actions, authorized an Annual SLSA Award be given to the member "in recognition of his/her outstanding efforts" directed toward meeting SLSA's goals and objectives to preserve and protect Lake Superior.

The person selected for the first Annual SLSA Excellence in Achievement Award 2014 is **Lori Beth Andresen** awarded in recognition of her tireless efforts encouraging and assisting environmental groups and citizens to protect the environment of Lake Superior. Lori is instrumental in carrying forward SLSA goals and objectives in organizing and participating in reviews of major proposals affecting the environment including copper-nickel sulfide mining, wild rice protection, water quality standards revisions and public informational events.

Lori was educated in Minnesota and North Dakota and is a Duluth native. She is a longtime preservationist and advocate for the natural world, and is involved with many other environmental and conservation organizations. Members of organizations who care about the environment and are working to protect, restore, and improve the habitats for sensitive living organisms would do well to follow Lori Andresen's lead.



The annual award plaque is donated by Gary E. Glass in memory of Fayth Carlson Glass. Fayth was a member of SLSA since 1970. The award is presented in her memory to those members who demonstrate "excellence in achievement" in pursuing SLSA goals. Fayth practiced this trait supporting environmental work conducted over the past 45 years by hosting many scientists, lawyers and journalists in her home until she died from ovarian cancer in Dec. 2013. Fayth helped many



© Photo by Santi Visalli

others achieve their successes through her generous, friendly nature, hospitality and great cooking prowess, and loving character. She lives on in our hearts and memories having protected the sparkling purity of Lake Superior waters.

During the Reserve Mining Case Fayth played a significant roll in publicizing health hazards as shown in the New York Times Magazine, Nov. 24, 1974, "Life vs. Livelihood" by Wade Greene, and illustrated by Santi Visalli, award photo insert, Fayth, with friends, getting filtered drinking water, and Fayth in her kitchen using filtered drinking water. Fayth wrote letters to Dr. Selikoff to clarify his public testimony as reported in "This Vast Pollution..." USA vs. Reserve Mining Co., by T. Bastow, Green Fields Pub. 1986, 208 p.

POLITICAL CANDIDATES DO MORE HARM THAN GOOD WITH MINE PERMITTING PROMISES

The current political season is winding down with candidates grasping for straws and pandering to citizens who are unaware of the consequences of electing those who have limited a grasp of the causes of water pollution from mining. They are suggesting that, if elected, they would use political pressure to influence the decisions for permitting projects with the potential to pollute our air and water and significantly harm Lake Superior watershed. They would "Get PolyMet approved" and "Reign in the EPA". Experts explained in the recent St. Louis River Mercury Forum that mercury is transformed into toxic components in the fish food chain and that sulfates are a significant accelerant. Children's brain development is seriously affected during their first few months as a fetus and an infant if they are exposed to critical levels of mercury in nutrients they are fed. This creates serious personal and financial loss to those both directly and indirectly affected. The science is well established by the Minnesota Department of Health and the Minnesota Pollution Control agency. Unfortunately the media does not run "fact checks" on statements made by these political "Pied Pipers" on issues that are critical to the health and wellbeing of their potential constituents. Our so-called "strong environmental standards" are under constant pressure to be weakened or even removed. This is irresponsible behavior from candidates for public office. Voters should take heed that the costs of ignoring the value of clean water and air will be paid in the future by those we profess to value so highly.

LeRoger Lind

Membership Dues		
Please check your Newsletter mailing label for expiration date. If the year is not current, it needs to be updated. Repeat of new dues structure:		
<u>ALL EXCEPT LIFETIME ARE PER PERSON PER YEAR.</u>		
\$10 Fixed income	\$50 Sustaining	\$200 Lifetime
\$20 General	\$100 Benefactor	(per person)
\$30 Family		
The Lifetime option is only available to new members or members whose label is currently up-to-date.		
<u>Please designate your choice when you renew.</u>		
We appreciate your interest as well as your support.		



THEY CANNOT PROVE THAT COPPER NICKEL MINING CAN BE DONE SAFELY ANYWHERE

The Lake Superior watershed is experiencing legal permitting for its destruction. A "Social License to Mine" process is gradually taking effect around the Lake. This may be viewed as nothing new but it has become more pervasive with greater potential for water and air pollution now than at any time in the past. The list of existing and proposed mining, energy, shipping and industrial plans in our watershed is growing rapidly as is the mindless consumption of these materials and services. The media is flooded with high priced advertisements claiming loudly that are acting safely. Talk is not cheap!

As our awareness of the physical harm from pollution generated by new copper mines and old iron mines increases, permitting by states and provinces has become more difficult. But permits are now granted using more clever mitigation schemes for hiding pollution. Intense use of capturing the public's approval, no matter how long it takes, is the new norm. Global corporations have long term plans. In Minnesota, the PolyMet copper-nickel project has been in the design and permitting process for about 9 years. State officials, politicians and local units of government say "it's taking too long to get done". Their assumption is that the project should be permitted based upon time in the review process rather than on the quality of the mine design and its pollution potential.

Save Lake Superior Ass'n
P.O. Box 101
Two Harbors, MN 55616

Non-profit Org.
U.S. Postage Paid
Duluth, MN
Permit No. 171

RETURN SERVICE REQUESTED

Corporations spend huge sums obtaining first social and then official license to mine and otherwise damage our watershed. These funds would be better spent in designing mines, equipment and processes that would not pollute and damage water and air for future generations. At this point they have not demonstrated either the ability or the will to mine safely and should not be permitted to until they do. A very least, "Prove It First". Show that sulfide mining has been done safely in a water-rich environment anywhere. The Minnesota Legislature will not even consider a real debate on this proposal even though Wisconsin passed similar legislation and has not been able to find one mine that meets the criteria laid forth. Even the Flambeau extraction pit is still leaking toxic pollutants many years



Please send us your change of address when applicable.

Your SLSA Board Members

- LeRoger Lind (Pres.),
- Dan Rau (Vice Pres.)
- Will Munger Jr., (Sec.),
- Alice Pierce (Treasurer),
- Arnold Overby,
- Sally Munger,
- Lori Andresen,
- Gary Glass

after the end of a small mining operation. This is a glaring example of the power of this proposal and the fear of its enactment in Minnesota, Michigan and the Provinces. Money talks until citizens balk. It takes about \$100,000 a year to pay for the care and education of a child poisoned by toxic metal or mercury in its first few months of life as a fetus and infant. Where is the social outrage about passing this potential cost on to our children?