

RAINY LAKE CONSERVANCY

Preserving the Rainy Lake Watershed



Spring 2016 Newsletter

President's Message



This spring finds us working on three conservation easements in the South Arm – Red Pine Island (60+ acres), Copenhagen Island (50+ acres) and the Wilderness Islands (10+ acres). What a great boon to conservation this will be – thanks to the Sweatts, Lysnes and Martineau and Newhart families for pursuing easements on their properties! The growth of the land protection aspect of our mission is exciting and adds significantly to our ability to meet our mission of preserving and protecting Rainy Lake in all aspects – natural beauty, historic features, ecological and recreational values for present and future generations. Thanks to all of you for your support of this mission.

At the end of 2015, American Friends received a fee donation of a 3-acre island in the mouth of Haymarsh Bay just north of the causeway, which was a gift from Mat and Tammy McKitterick. This island will eventually be transferred from American Friends to Rainy Lake Conservancy. Our portfolio of protected properties is growing substantially thanks to the many years of effort you put forth to grow the Conservancy and help it to be in a position to promote and take on conservation easements.

This summer, we hope to have a training workshop for those who would like to be on the RLC Easement Monitoring crew. Once trained, you would be assigned one of our current five properties to visit, observe and provide a short written report on. Hopefully, you could monitor that property for years to come, so you could see if there are any changes. This can certainly be a family affair, but it is serious in terms of making sure that the terms of our easements are being followed.

The RLC Annual Meeting will be on Sunday, August 14th. I look forward to seeing many of you there.

Carolyn Wallis

Rainy Lake Conservancy Annual General Meeting

August 14, 2 p.m. La Place Rendez-Vous, Fort Frances



This year, following RLC's business meeting, members and the public will be treated to a presentation by Chris B. Hemstad, a local teacher, geologist and author of several publications including "*A Story Written in the Rocks, the geology of Voyagers National Park*".

Chris will give a talk (with slides) about the geological history of the South Arm and people can bring a rock or two from their islands for him to identify and explain how they were formed. He will also have signed copies of his book for sale. This talk will appeal to all who want to add to their knowledge of our natural environment and especially to learn more about the origins of our celebrated "ancient rocks" seen on the shorelines of Rainy Lake and throughout the district.

Tribute to a friend of Rainy Lake and long time supporter of the Conservancy



Friends of Karen Peterson Nelson who passed away March, 22nd, 2016, will miss her presence on Rainy Lake this summer. She was born March 4, 1939 in Denver, CO and started spending summers at Rainy Lake in her teens. As an Army brat and later Army spouse, the Lake was a constant, the place to get together with far flung friends and family each summer. Karen loved spending time with her brothers, cousin, children, nieces, nephews and friends at the Lake, but perhaps most of all loved introducing her grandchildren to the beauty of Rainy Lake. Karen supported RLC from its very beginnings; she was always ready to help out in any way she could. We will all miss her as a member of RLC and one who shared with us a deep love of Rainy Lake.

Networking News

Over the winter and spring, RLC committee members have continued to attend workshops and communicate by email with a number of local organizations and government agencies. In particular, Paul Anderson has been appointed as a member of the Rainy/Namakan Rule Curve Public Advisory Group and also attends the Rainy/Lake of the Woods Watershed March workshops in International Falls. In addition, members of the RLC Grants Committee attended two Ontario Trillium Foundation (OTF) workshops in Thunder Bay to learn about new criteria for grant applications, the importance of working with other community organizations to achieve common goals, and to network with a number of organizations from around the district. The information gathered from the OTF workshops will be very useful if/when RLC applies for another grant. RLC also continues to be a member of the local Cultural Heritage Tree Project, which involves Fort Frances High School students in a tree labeling and identification project, and RLC has a representative on the Fisheries Trust Board which is currently supporting fish research on Rainy Lake and the Experimental Lake Area.

Dale Callaghan

Environmental Research:

Namakan River Lake Sturgeon Project



It has been a busy year for research activities on the Namakan River population of lake sturgeon. This year represented the final year of Jim Burchfield's dissertation work, which began in January of 2012. His dissertation is based on fieldwork that concluded in August of 2015, and is currently in review by an Academic committee. Since beginning the collaboration between Lakehead University and the Rainy Lake Conservancy in 2013, the project has demonstrated the value of the Namakan River as a reference river for characterizing

the recovery of a lake sturgeon population in a relatively remote Canadian Shield stream. In the course of the study, no lake sturgeon mortalities nor any adverse reactions to the procedures were observed. That is a wonderful result to have observed!

The principal goal of this study was to determine which of the life stages of the lake sturgeon has the biggest effect on a population's ability to recover in a system like the Namakan that has historically been overfished. Jim used a combination of acoustic telemetry and non-lethal capture and sampling techniques to determine that the Namakan River supports sufficient adult lake sturgeon that spawning activities take place annually. His research showed that the Namakan's juvenile habitat is what determines the speed at which the population can grow. He was able to locate the habitat and food resources used by juvenile lake sturgeon within the system.

Work with Namakan River lake sturgeon population fits within the growing body of work on lake sturgeon conservation, and the results suggest that the protection and enhancement of juvenile habitat is likely to greatly enhance the recovery of the species. This work will hopefully be used to inform conservation and recovery efforts on the Namakan and elsewhere across the species' range.

Rule Curve – International Joint Commission Update



International Rainy—Namakan
Rule Curve Study Board



The International Joint Commission (IJC) announced last August the formation of the International Rainy and Namakan Lakes Rule Curves Study Board (Board) that will make scientifically-supported recommendations to the IJC for modifying or retaining the 2000 Rainy and Namakan Lakes rule curves after reviewing the wide range of hydrologic, hydraulic, cultural and environmental factors. New Rule Curve recommendations are scheduled for public review in 2017.

The Rainy and Namakan Lake rule curves provide upper and lower target elevations for those lakes, and are used in managing water levels and flows. The rule curves will be evaluated using socio-economic performance indicators, such as emergency high and low water levels, flooding damage to structures and cultural resources,

hydropower production, and tourism, as well as environmental indicators, such as wetland health (cattails, wild rice and submerged plants), loon nesting, and fish spawning.

The IJC has directed the Board to engage with the public throughout the duration of the evaluation, and the IJC will establish a Rule Curve Public Advisory Group, (RCPAG) to include representation from: lake/property owners associations; navigation interests; environmental organizations; First Nations, Métis and Tribes; tourism and recreation interests; hydropower companies or organizations; and other interested groups identified by the Board that would be affected by the Rainy and Namakan Lake Rule Curve evaluation. Our very own Paul Anderson was appointed to this RCPAG and will keep us up to date on what is happening.

Watershed Study

The Plan of Study, developed in 2015 identifies five themes of concern and strongly recommends funding for 32 projects and activities to support a balanced approach to water quality management, in response to concerns by governments, researchers, local residents and indigenous peoples about the Basin's ecosystem health. At a total estimated cost of \$8.4 million, these projects would support a broadly-based and coordinated binational approach to address specific challenges facing the Basin: Monitoring – 1 project to provide long-term, consistent data to track trends in nutrients, contaminants and aquatic invasive species. The Commission identified this project as a particular funding priority Nutrient enrichment and harmful algal blooms – 11 projects to improve their management, reduce their severity and frequency, as well as the risks associated with the algal toxins they can release. Aquatic invasive species – 7 projects to strengthen ongoing prevention measures and pursue control efforts to curb the negative effects of the many invasive species now residing in the Basin Surface and groundwater contamination – 7 projects to better understand contamination sources, assess the vulnerability of water resources and establish protective measures Capacity building – 6 projects to engage all Basin interests on water quality management and promote greater cooperation among agencies working in it. Funding approval for the Study by the governments of Canada and the US is expected soon.

Steep Rock Mine Rehab



The Seine River and Rainy Lake are at risk from any problems that develop on the site like flooding of the pits or failure in the many water management structures. Gordon Martin and Paul Anderson are tracking the project's progress. RLC recently submitted comments to MNRF summarizing our questions and concerns.

To-date, The Ministry of Natural Resources and Forestry (MNRF) has spent more than \$12 million on site cleanup, securing hazards to public safety, dam improvement and maintenance, and monitoring and conducting studies of soil, vegetation and water to help guide the ministry's long term remediation of the site.

In 2014, MNRF contracted a qualified engineering consulting firm with an extensive mine rehabilitation background to carry out site investigations and develop a series of possible approaches to the site's long-term rehabilitation. A recommended approach will become part of the Steep Rock Mine Conceptual Rehabilitation Report, to be released later this year. The report will also inform MNRF of additional information and studies that may be required to develop detailed rehabilitation and implementation plans going forward.

Rehabilitation of the site will unfold over a long period of time. Rehabilitation planning and implementation will require a flexible approach to be responsive to the complexity of the site and evolving conditions (e.g., advances in technology, changing climate, response of the environment to cleanup actions).

Paul Anderson

Membership in the Rainy Lake Conservancy

Thanks to the hard work of Stephen Challis, you can now join the Conservancy or renew your membership online at our website: www.rainylakeconservancy.org. Annual membership is \$40 for a family and \$30 for a single membership. Donations above and beyond membership dues are very welcome! Your dues and donations support our mission to preserve the ecology, culture and historic features of our watershed. If your membership has lapsed, please consider renewing and encourage your friends who might be interested in the Conservancy to go to our website and become a member.

Donations to RLC are tax deductible for Canadians. If you are a US member and would like to make a tax-deductible donation to support the work of the Rainy Lake Conservancy (much appreciated) you can do so by mailing a check to the Minnesota and Trust @ 2356 University Ave. N., Suite 240 St. Paul, MN 55114 with a notation that it should be directed to the "Rainy Lake Fund".

The Mission of the Rainy Lake Conservancy is to work with property owners, governments, and the local communities to preserve and protect the natural beauty, historic features, ecological and recreational values for present and future generations within but not restricted to Rainy Lake.

A pdf of this Newsletter can be viewed and downloaded at the RLC website, click on "Newsletters", Spring 2016.