



Vermilion River above Wabagishik GS, Photo by Alan Oman



VERMILION RIVER STEWARDSHIP

2016 ANNUAL REPORT

ANNUAL GENERAL MEETING

8 March 2017

Prepared by:

Linda Heron, Chair



A BIG THANK YOU to the Basso Family for a wonderful hot lunch, and to all our volunteers for a successful 2016 Vermilion River Cleanup!



About the Vermilion River Stewardship

The Vermilion River Stewardship (VRS) is a grassroots Not-for-Profit organization serving the communities within the Vermilion River Watershed. It was formed in January of 2011 to address several development challenges that were posing a risk to the health of the Vermilion River. VRS incorporated as a Not-for-Profit in June of 2011.

Our Vision

“Community Supporting a Healthy, Natural and Sustainable River System”

Our Mission

The Vermilion River Stewardship will act as a voice for the Vermilion River and its Watershed, and work to build partnerships and strategic alliances with all other interested parties, communities, stewardships, organizations and industry to ensure clean and healthy water quality; and a balanced and sustainable ecosystem and natural habitat.

Stewardship of the Vermilion River is a responsibility shared by all those whose actions have an impact on its water quality.

Our Goals & Objectives

Acting on behalf of the Vermilion River for a healthy, balanced and sustainable ecosystem and natural habitat, this Stewardship will actively work to:

1. Encourage and promote cooperative stewardship;
2. Ensure its interests are fully represented and protected;
3. Preserve and protect its water quality, ecosystem, and natural habitat; and
4. Educate, promote and advocate for responsible and sustainable activities in the entire Vermilion Watershed

2016 Board of Directors:

Chair:	Linda Heron
Vice-Chair:	Sheri Johnson Purdon
Secretary/Treasurer:	Terry Little
Board Members:	Ron Basso
	Dale Kilbey
	Marc Samson
	Eija Hietaharju
	Byron Basso
	Marte Holouka

Vermilion River Concerns

VRS is concerned with all issues affecting the Vermilion River Watershed and its connecting lakes, rivers, streams and wetlands. The Vermilion River continues to be compromised by the cumulative effects of 10 waste water treatment facilities (WWTF) and their associated infrastructure, mining and industry releasing effluent and pollutants into our waterways, overdevelopment of our shorelines, and of course the most daunting of all, climate change.

All this, and a historical legacy of mining pollution, has resulted in diminished water quality and water quantity, contaminated sediments, blue-green algae, invasive species, endangered species, and threatened fisheries.

In the course of building alliances to advance VRS goals and objectives, we have membership and representation on the following:

- Ontario Rivers Alliance, Board of Directors
- Greater Sudbury Watershed Alliance, Board of Directors
- Great Lakes Protection Alliance, Working Member

What VRS is Doing to Address these Concerns

1. Vermilion River Clean-up – 2016

The VRS held its 2nd Annual Vermilion River Cleanup on the 15th of May 2016. It was a very cold and wet day and, in spite of that, we had about 30 people come out again this year to help clean up Ella Lake and the Vermilion River. It was an enthusiastic team with a great sense of humour, and laughter could be heard ringing out across the water.



One of our prize finds, which confirmed the importance of our cleanup efforts, was an almost full fuel oil tank that had washed up onto the shore of the Vermilion River where it enters into Ella Lake. Unfortunately, the tank was too heavy for our volunteers to move, so it was reported to the Ministry of Natural Resources and Forestry, and they removed it, but not until September. By the time it was removed over half of its contents had leaked out onto the ground.

A big thank you to all those who came out to help with the cleanup, and especially to the Basso family for providing all our volunteers with a hot lunch!

2. 4 Proposed Modified Run-of-River Hydroelectric Dams

VRS has engaged with the proponent, Xeneca Power Development Inc. (Xeneca), on many occasions over the last 6 years, to learn as much as possible about the proposed Vermilion River developments at McPherson, Cascade, At Soo Crossing and Wabagishik Rapids.

Right from the beginning the proponent exhibited an attitude that raised red flags and galvanized our community into action.

The VRS has always conducted itself in a very professional manner, followed government policy and process, and took advantage of every opportunity to make our concerns known to the regulators and the proponent. There has been a lot of documentation and correspondence generated, which [you can find on our website here](#).

When Xeneca submitted the Environmental Report (ER) for the Wabagishik Rapids Generating Station in November of 2013, VRS and the Ontario Rivers Alliance (ORA), along with twenty-one other local residents, made Part II Order requests to the Minister of Environment (MOE), setting out our concerns, and requested that the project be elevated to a much more rigorous Individual Environmental Assessment. In our opinion the ER did not meet the requirements of the Class EA for Waterpower.



Wabagishik Rapids, Vermilion River.

In May of 2016, VRS received a [letter from the Minister of Environment and Climate Change](#), to inform that the Wabagishik Rapids Environmental Report had been approved with conditions that were to be met throughout the permitting phase. Xeneca has 5 years in which to meet these conditions. The community was devastated at the news; however, we were encouraged that the Minister ensured that all requesters would be invited to be part of a Project Liaison Committee that would be involved and informed throughout this permitting phase.

Fortunately, Xeneca no longer has a power procurement contract, and cannot start construction on the Project until they receive one.

The other 3 projects upstream of Wabagishik are no longer a possibility as Xeneca terminated all their FIT Contracts. This was due to actions VRS and ORA and its members have taken over the years.

Actions:

- VRS received notice from the Minister of MOECC that Environmental Report was approved with conditions in May 2016
- FIT Contracts cancelled in 2015 - no power procurement contract – no construction
- VRS corresponded with the Minister protesting his decision in Jul 2016
- Attended a Wabagishik Project Liaison Committee Meeting in Oct 2016

3. Capreol Waterpower Proposal – FIT 4 Application

Water Power Group met with VRS in 2013 regarding a 1 MW waterpower proposal they were planning at Cedar Rapids, on the Vermilion River, in Capreol. It would have been a run-of-river operation with no fish passage, no fish friendly turbines, no decommissioning, and the dam would have had an 11-meter head (dam height). The project went nowhere until 2015 when the proponent applied for a FIT 4 Contract, proposing a 500 kW hydroelectric project.



Water Power Group was denied a Feed-in-Tariff Contract because the entire north is now constrained, with no more availability to the power grid.

Actions:

- Sent email to Mayor and Council expressing concerns, Oct 2015
- Staff agreed to notify VRS in future of any new waterpower proposals, Nov 2015
- VRS sent letter to Water Power Group expressing disappointment, Jan 2016
- A FIT 4 Contract was denied, Mar 2016

4. Sewage Bypass Events at 8 Municipal Waste Water Treatment Facilities

There are 8 municipal Waste Water Treatment Facilities (WWTF), 2 industrial (mining/smelters) WWTF, 3 sewage lagoons and numerous lift stations located within the Vermilion River Watershed that release treated, undertreated and untreated effluent into the

environment. 5 WWTF are on the upper arm of the Vermilion River, and upstream of a water intake located just below Cascade Falls, that services 13,000 people in Lively, Walden, Copper Cliff and Whitefish with their drinking water. The other 5 WWTF release into the lower arm of the Vermilion, through Junction Creek.

On the 4th of November 2014, City Council unanimously passed a Motion to develop a Sewage Bypass Alert process, where residents can register to receive alerts in real time when a bypass occurs. VRS and Jacques Barbeau were instrumental in making this happen, and later Michael Vagnini helped to iron out the finer details. Sudbury is the 2nd City in Ontario to adopt the Bypass Alert system, and is touted as the example to follow.

In March of 2016 there were several significant sewage bypass events. Even though they were mostly limited to the month of March, there were over 268,500 m³ (268,500,000 litres) of untreated and undertreated sewage released into the Vermilion River system.

Spring is a particularly challenging time of year when the ground is frozen, and heavy rains can overwhelm the sewers and wastewater infrastructure. The City must bypass the sewage when the system is overwhelmed or sewage could back up into basements and damage wastewater facilities. It is imperative that we all advocate to the City for upgrades to our wastewater systems, and for sufficient funds put in place to ensure illegal downspout hookups that drain into the sewer system are disconnected.

Sewage ByPass Alerts:

- This system of alerts has worked extremely well. Every time there was a bypass or malfunction, the public is alerted by email.
- City of Sudbury is only the 2nd city in Ontario to initiate a Sewage Bypass Alert – I recently had a Toronto lawyer say she heard it was the best model to follow
- The public can register on the City's website to receive Sewage Bypass Alerts

3. Mining Development

Vale has been the primary mining company operating in the Vermilion River Watershed for many years, and has taken important measures to reduce their environmental impact over the years. Totten Mine went into full operation as of the spring of 2014.

Glencore – Errington and Vermilion Projects:

Glencore is redeveloping two brown-field sites on the shores of the Vermilion River – the Errington and Vermilion mines – zinc, copper, lead, silver and gold. The ore will be processed on site, rather than trucked to another location.

There is no new information on the progress of this project.

Victoria Mine Project:

KGHM International is redeveloping the Victoria Mine, near Worthington. One of Sudbury's oldest and most prolific mines. Victoria Mine is rich in copper, nickel and precious metals, and is now under development. Ore will not be processed at this plant, and to date there are no major concerns.

4. Lower Vermilion Source Water Quality Monitoring Project

The Vermilion River and its connecting lakes experienced blue-green algae blooms on the entire lower arm of the Vermilion River in October of 2011, and again on Ella Lake in November of 2012, and through into ice break-up in the spring of 2013.

In the Spring of 2012, VRS applied for and received a \$103,200 Ontario Trillium Foundation (OTF) grant to undertake a two-year Lower Vermilion Source Water Quality Monitoring Project. The purpose of the project was to characterize the lower Vermilion River to identify all the negative inputs affecting water quality and water quantity, and to ultimately recommend a course of action to protect and restore water quality on the Vermilion River. VRS contracted with Conservation Sudbury to provide expertise in the technical aspects during the 3-year term of the project, and to undertake the infield water quality sampling.

Over the term of the study the project evolved and attracted new partners:

- University of Ontario Institute of Technology with a Master's Student
- Queen's University with a 4th year student
- 16 Lake Partner volunteers to transport our technicians out onto the river
- KGHM donated an funds to extend the project into 2015

Phytoplankton Sampling:

Carrie Strangway, a Master's student with the University of Ontario Institute of Technology, under Dr. Andrea Kirkwood, joined our study in May of 2013, to do a Master's thesis on Land use impacts on water quality and phytoplankton communities. Carrie analysed 336 phytoplankton samples, resulting in a Master's Thesis, at no additional cost to VRS.

Carrie has completed her Master's Thesis, "Spatial-determinants of deteriorating water quality in the Vermilion River", and has submitted it for eventual publication.

Sediment Sampling:

Zara Jennings, a Queen's University 4th year student, and her professor Brian Cummings, undertook sediment core sampling on Wabagishik Lake in September of 2013 - with minimal extra cost to the project. Zara submitted her 4th year Thesis, "Recovery of Chironomidae from metal contamination in a multi-stressor environment: a paleolimnological analysis of a circumneutral Sudbury, Ontario Lake". Results indicate that the heavy metal contamination has steadily improved over the years; however, several heavy metals are still in the "severe effect level" and very nasty contamination lies within centimetres of the sediment surface.

VRS was able to extend the Project for an additional year of sampling in 2015, as a result of a surplus left over from our grant, a generous \$15,000 donation from KGHM International, and an in-kind donation of labour by Conservation Sudbury.

VRS completed 3 years of sampling at the end of 2015, and in March of 2016 made a Final Report to the OTF which takes into account the reports from Conservation Sudbury, Carrie Strangway and Zara Jennings. VRS's Strategic Planning Committee has analyzed the data, prepared graphs and charts, and worked with Conservation Sudbury to complete our analysis. Total project value of the Project, including in-kind contributions: \$276,000.00.

The Committee is now working out a plan to follow-up on key areas of concern with the City, industry and government, and to communicate our findings to the public.

Conclusion

VRS has worked diligently to meet its Vision, Mission, Goals and Objectives as set out in our Constitution and Bylaws.

Our Board and volunteers will continue to work to build partnerships and strategic alliances with all other interested parties, communities, stewardships, organizations, industry and government to ensure clean and healthy water quality; and a balanced and sustainable ecosystem and natural habitat. VRS looks forward to another productive year.

The VRS Board of Directors would like to thank our many volunteers and members who have continued to help with our river cleanups, joined in advocacy campaigns, and supported our efforts through generous donations and memberships.

Yours in sustainability,



Linda Heron
Chair, Vermilion River Stewardship
VermilionRiverStewards.ca