



Salt Spring Island Water Preservation Society

SEPTEMBER 2014 NEWSLETTER

Update on Condition of St. Mary Lake

From Meghan McKee at the North Salt Spring Waterworks District:

Toxins in St. Mary Lake peaked in June of 2013 and then declined sharply. No toxin has been detected in the raw lake water since October 2013.

The abundance of *Aphanizomenon*, the genus of cyanobacteria responsible for the 2011-13 bloom, has decreased significantly since then, and a greater diversity of phytoplankton has returned to St. Mary Lake.

Although total phosphorus levels were high after fall overturn, they declined in the spring and have remained relatively low for St. Mary Lake.

During the spring and summer of 2014, the water has been extremely clear, reaching the best-ever clarity in NSSWD records in June!



Red Columbine growing on the WPS Nature Reserve Above St. Mary Lake (photo R. Polden)

St. Mary Lake Watershed Protection - New Studies Underway

This article is to provide an update on the progress being made to address blooms of toxin-producing cyanobacteria in St. Mary Lake. Our new Trustees and Regional Director decided to address this problem by forming a new governmental entity, the SSI Watershed Protection Authority (SSIWPA). SSIWPA is a collaboration of elected officials and government agencies formed to coordinate activities of the individual members, to improve raw water quality and the long-term remediation, protection, sustainability and stewardship of Salt Spring Island watersheds.

One of their first actions was to form a Technical Advisory Committee (TAC). The TAC is composed of WPS member John Sprague and other scientists with impressive expertise in water quality-related fields. After reviewing existing studies, they determined that more data was needed and therefore planned three studies of St. Mary Lake which have now begun.

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New Studies Underway (cont'd)

One study will measure nutrient concentration in soil and flow rate from septic fields at three carefully selected homes on the lakefront. This will help quantify how much phosphorus is seeping into the soil and to the lake.

The second study will sample St. Mary Lake water at various locations and depths for algae, cyanobacteria, nutrients, plankton, and many other parameters to better understand biological and chemical processes going on in the lake.

The third study will be performed by a Masters student from UVic who will use computer modelling to help determine sources and amounts of phosphorus runoff to the lake from its watershed.

Recently, SSIWPA also formed a Public Advisory Committee (including a WPS representative) who will participate in three Structured Decision Making Workshops about St. Mary Lake. WPS has asked that these workshops be open to the public but it is not clear if SSIWPA will permit that. A public "Open House" is proposed for November. We will inform WPS members by email when public meetings will take place and we urge you to attend. If you do not have email, and would prefer us to contact you by phone, please inform Maxine at 537-1577.

WPS is attending SSIWPA meetings, often urging that all meetings be open to the public and that the community be allowed to participate meaningfully in decisions. See the sidebar on public participation. 

We hope a solution will be found that will restore the ecological integrity of our island's lakes for the long term, rather than a band-aid action that needs to be repeated in a few years. But real restoration may be expensive. This is why it is so important that the public be well informed, in order to understand and support a truly effective long term solution.

Public Participation Principles

Government decision makers should:

1 consult with the community BEFORE significant decisions are made. The community can easily tell when the decision has already been made and their input will not change it;

2 before a public meeting, provide the community in advance with alternative actions or solutions to consider, along with their costs, advantages and disadvantages;

3 at public meetings, allow ALL attendees to hear ALL the presentations and questions from other community members, experts, elected officials etc., rather than isolating people into small groups. Broad sharing of information allows the community to gain a deeper insight into the issues;

4 allow communications between the community and decision makers to go both ways. Decision makers and their advisors should answer questions and engage in discussion with presenters and community members before the assembled group; and

5 meetings should be held at times when most people can attend, such as evening or weekends.



Livestock in Watershed Zone

Way back in 1970, Salt Spring had a special watershed zone to protect our drinking water lakes. This zone, now called Residential Watershed 1 (RW1), clearly has a lower density than similar residential zones. But a notation in the current zoning bylaw was taken to mean that “agriculture” was only allowed in the Agricultural Land Reserve.



Last fall, we learned that the current Islands Trust staff is now interpreting our current RW1 zone as allowing agriculture, including livestock raising. Staff has said that livestock is limited to 4550 kg. per property. The table below shows roughly how many animals are allowed on all RW1 lots under this interpretation, even on very small lots less than ¼ acre, right next to our drinking water lakes and the streams flowing to them.

	Pounds each animal	Kg each	Number of animals in 4550 kg
Chickens	5 - 7	2.268 - 3.175	1,433 - 2,006
Sheep	99 - 220.5	45 - 100	46 - 101
Cows	1000 - 1500	453.6 - 680.4	7 - 10

Currently, it is not clear that even the 4550 kg limit applies. Either way, allowing even 4550 kg of livestock on each lot in the drinking lake watersheds is unwise. Livestock will trample the vegetation near lakes or streams which then allows considerable Erosion of urine/phosphorus-rich sediment into nearby lakes, thus promoting blooms of toxin-producing cyanobacteria.



Many BC government documents **recommend** that livestock be kept away from waterways and prevented from trampling the vegetation and soil. But there is presently no legal **requirement to do so**. Perhaps the Province assumed that local government would use their zoning powers to bar large numbers of livestock near drinking water lakes. This could still be done.

Some confusion has arisen because our zoning bylaw does bar **confined** livestock within 60 metres of Blackburn and Bullock Lakes, or 30 metres from several other island lakes. However, the bylaw defines “confined” as within a structure or non-grazing area etc. -- language which does not apply to animals roaming freely on a property.

WPS has met with the Agricultural Alliance to discuss this problem and we will continue to seek discussion with island farmers and farming groups to correct this perhaps unintentional oversight in our zoning bylaw. We welcome your input and assistance with this important challenge.

Marjorie Leckie - A Job Well Done!

The Board of WPS wishes to extend sincere thanks for a job well done, to Marjorie Leckie who is now retiring after faithfully recording our Country Grocer receipts for six years.

Like many of our existing members, Marjorie has been a member of WPS since it was founded in the 1980's. She told us that she remembers when WPS fought the successful battles to keep gas-powered engines off our drinking water lakes, and to protect the Maxwell Lake watershed. Marjorie says that she joined WPS because she knew then that water is a limited resource on Salt Spring and needs to be protected. She continues to support WPS because it is looking after this vital element of our island life.

Recording the receipts is an important job because the Country Grocer program provides a significant boost to our income, last year almost \$400. Marjorie says she would pick up the receipts from the WPS box #73 at Country Grocer when it was convenient, every couple of months and then add them up as she had time. Thank goodness for Marjorie and our other long-time supporters!



We truly need a new volunteer to carry on Marjorie's contribution of handling this easy and very important task. If you're willing to help out the Society in this way with a little of your time and energy, please call Penny Polden at [250-537-5082](tel:250-537-5082).



OUR EXECUTIVE

President	Maxine Leichter
Secretary	Penny Polden
Treasurer	John Borst
Directors-at-Large	Nolan Magnus
	Rodney Polden
	Usha Rautenbach
	Linda Steager

CONTACT US

E-mail ssiwps@gmail.com

Online ssiwaterpreservationsociety.ca

Please pick up a Thrifty Smile Card from us.



MEMBERSHIP

Membership dues are only \$15 for individuals or \$30 for a family/couple.

Additional donations are very gratefully received, and help to keep WPS active, effective and working hard to protect our island waters. Tax Receipts are issued.

Please consider providing us with your email address so we can notify you of WPS events that take place between the publication of newsletters.

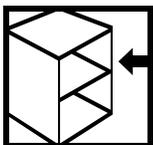
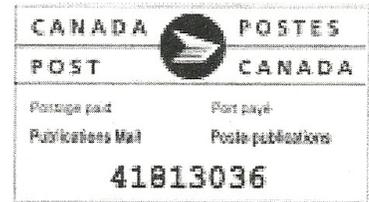
Current members - mail membership fee to:
Box 555, Ganges PO, SSI, BC, V8K 2W3.

New members - please request an application form to fill out and return.



SSI Water Preservation Society

Box 555, Ganges PO
Salt Spring Island, BC
V8K 2W3



COUNTRY GROCER TAPES

Please put your tapes in **BOX #73**