



ST MARY LAKE WEIR

The Water Preservation Society fully supported Michael Larmour in his presentation at Water Council and his article in the GI Driftwood. His concerns were that raising the spillway crest at the St Mary Lake dam by .3 M (1foot) would lead to prolonged flooding and bank erosion of certain shorelines with subsequent lifting of soil borne nutrients from septic fields as well as the risk of legal action by lakeshore owners.

His presentation included some compelling figures regarding our past, present and future water demand from St Mary and Maxwell Lakes.

He concluded by saying, "The NSSWD is experiencing rapid and unsustainable growth in water demand and has run out of additional large, feasible water sources. The consequences of a failure to stop growth are future water shortages, high costs of water supply and degraded water quality. We may well destroy our lakes as we know them, turning them into muddy, smelly reservoirs."

Recommendations for Watershed Protection and Riparian Area Act Regulations (RAR)



Guest Speaker -
Maxine Leichter

ANNUAL GENERAL MEETING

February 18, 2010 7:00 P.M.
Harbour House Hotel – Crofton Room

Directors will be recommending that we amend the Constitution for the Society at the AGM. The list of proposed changes can be sent to interested members by contacting Rick at randjlaing@yahoo.ca

Please mark **Feb 18** on your calendar and join us
OR complete the enclosed proxy.
It is essential that we have a quorum at this meeting to continue the important work of the Water Preservation Society.

Grant Received

We wish to thank the Salt Spring Island Foundation for their generous grant of \$1000 to assist in the upgrade and maintenance of the St Mary Lake watershed lands.



MAXWELL LAKE IN SUMMER



Walden

"A lake is the landscape's most beautiful and expressive feature.

It is the earth's eye; looking into which the beholder measures the depth of his (or her) own nature."

Henry D Thoreau, 1854



ECO-EFFECTIVE WATER USE

The John Jevans principle was first advanced in 1865 after he predicted that improving coal efficiencies in order to save coal would in fact lead to greater coal use as the efficiencies lead to more economic uses for coal. This principle has proven to be true in many aspects of modern life with overfishing, factory farming and compact cars as examples and can easily be applied to our use of water.

Actions such as improving pumps and delivery systems, increasing the heights of dams, building high end water purification plants and half hearted water conservation programs only mask the real issues that we as individuals are indiscriminately using too much water and as a society refuse to accept that running household drinking water through a sewer or septic tank and then back into the environment is a bad idea that has no future. Our current water system was chosen back in the old days because it was simple and cheap and no one imagined that the future was toxic chemicals and antibiotics in water supplies and dwindling natural resources.

According to its Watershed Management Plan, there are 55 water licenses on St Mary's Lake with the legal right to draw considerable amounts of water for their own use. Allowing for the development still slated for Channel Ridge and other areas and the even dryer summers forecasted over the next decade, it is time for the CRD to re-think and re-design the household water cycle, particularly for the Ganges, Cusheon Lake and St Mary's Lake residents.

The ground breaking book "Cradle to Cradle" by McDonough and Braungart, challenges the belief that human industry must damage the natural world and explains that by replacing "efficiencies" with "eco-effectiveness" we can use the existing models found in nature for guidance. Water catchment for irrigation, separating grey and black water systems, small scale solar aquatics and methane extraction as well as increased watershed and lakeshore protection are examples.

As any grower knows, phosphate, the trouble maker in our lakes, is absolutely necessary for crop production and more essential than oil for a sustainable future. There are methods of pulling phosphorus and nitrogen from sewage so let's do it. As a reality check, one flush of a standard Canadian toilet represents the amount most people throughout the world use in an entire day for drinking, washing, cooking and cleaning – if they can get it at all! *Rick Laing*

KNOWING ABOUT WATER: SURFACE WATER ON SALT SPRING ISLAND

Part 3 of a series by Tom Wright

As described in Part 2, much of the rain falling on our island finds its way as runoff into the creek system, and thence into the ocean. Low areas along some of the creeks allow water to collect into lakes and ponds. The creek flow is thereby slowed down, giving us extended access to some of the water. Three large lakes, St. Mary, Maxwell and Cusheon, are of sufficient size to lend themselves to significant water withdrawal for domestic purposes.

Some of the smaller lakes, such as Stowell, Weston and Blackburn, are of marginal size and quality for domestic water withdrawal, and a dozen or so even smaller lakes,

including Bullock's, Ford, Roberts, Rosemurgy and others unnamed are too small, too hard to access or they have less than adequate quality to provide significant water.

While it takes nearly 15 years for water to pass through St Mary Lake, Cusheon Creek passes through Cusheon Lake in less than a year, and Ford and Blackburn are traversed in a little over one month.

Some rain and surface water trickles down into fractures in the underlying rocks, and then moves slowly through them towards the sea, as groundwater. More on groundwater next time. *Tom Wright*



BIRDS BREEDING ON SALT SPRING ISLAND LAKES

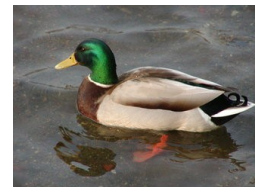
If you live near the ocean or any body of water on Salt Spring, the season around the winter solstice brings an abundance of birds to the water. If we include a handful of Gulls, the number of species that may be encountered by a keen observer at this time of year, might be 70 or more. Of these maybe 10 have a record of nesting here, primarily because most of our winter visitors have breeding areas that are far removed from our island.

Of the water birds that are known to nest here, only the Mallard and the Canada Goose nest "on the water", actually on protected pieces of floating vegetation or on small islands. There are few such quiet places remaining on our larger lakes. Hatchlings of these species take to the water immediately and the developed, manicured shorelines of these lakes provide little cover for young birds subject to predation from eagles as well as domestic dogs and cats.

The remaining nesting birds here are cavity nesters. Wood Ducks, Buffleheads and Mergansers all nest in hollowed trees and in nesting boxes provided by people alarmed by the loss of natural habitat for all breeding birds. Many old, dead, hollow trees that used to provide natural nesting cavities have been "cleaned up" by landowners unaware of their importance as wildlife trees.

Local information on birds can be found from the Salt Spring Island Conservancy, John Neville's "Bird Songs of Canada's West Coast" CD (www.nevillerecording.com), and volunteering for the Annual Christmas Bird Count.

John De Haan

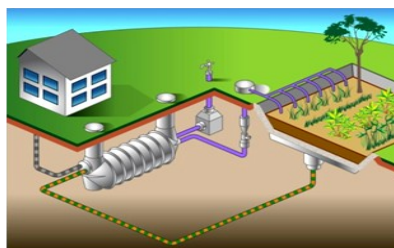


SOLAR AQUATIC SYSTEMS

Aquatic plants, marshes or wetlands are Nature's way of absorbing overflows of water borne nutrients and are now being used to process wastewater from communities throughout the world. Solar Aquatic Systems (SAS) is a biologically integrated technology that treats sludge, sewage and industrial wastewater to high quality specifications at low cost. Using plants and micro organisms in greenhouses to filter and consume contaminants, the water is purified and can be re-used.



A related system is the Ecocyclet (see below) which collects, stores, aerates and transfers leachate to a lined bed planted with valuable plants. In Scandinavia, fast growing willow species that can be harvested are used and the effluent stored over winter and then used during the growing season.



Here in North America, SAS water is typically discharged or used for irrigation. An exciting project in Bear River, Nova Scotia, handles the community's

waste water and serves as an educational tool as well. This facility is 2400 sq. ft and contains a dozen solar tanks and a solar pond that are home to a variety of plant life as well as bacteria, snails and fish. It is designed to process 15,000 gal of wastewater/day and has been in operation since 1996.

Much closer to home is Beausoleil Solar Aquatics Water Reclamation System near Errington, Vancouver Island. It was built after the septic system for the 48 mobile home community that failed and polluted the ground water.

More information?
www.greenbuildingsbc.com



WHO WE ARE

The **SSI Water Preservation Society** was founded in 1981. It owns 272 acres of St Mary's Lake watershed and 20 acres of Maxwell Lake watershed.

We are a volunteer, non-profit group that promotes the protection of the sources of potable water on SSI and the increase of public awareness of the value of water resources.

Memberships, donations and volunteers of all ages are essential to the survival of our Society just as clean drinking water is essential to humans and ecosystems so please keep the cheques flowing.

Our website is where pertinent information regarding our history, purposes, bylaws etc are found. Volunteers are always appreciated: for fundraising, writing brief articles, annual broom cutting and serving on the Board.



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OUR EXECUTIVE

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Member-at-Large	Rodney Polden
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Memberships: Individual \$10, Family \$20

COUNTRY GROCER TAPES -

Please put your tapes in box

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