

## EVERY DROP COUNTS! Tips for Conserving

- Fix leaky fixtures and hoses Take shorter showers (saves up to 560 litres per month/per capita)
- Turn the tap off while brushing your teeth, washing dishes
- Completely fill dishwasher and laundry loads
- Fill a bowl or bucket to rinse dishes, fruits, etc.; reuse that water on plants
- Replace older toilets with new low flow models.
- Install low-flow shower heads, low flow toilets, energy efficient appliances (saves up to 2,840 litres per month/per capita on toilets)
- Plant fruit or nut trees downslope of your septic field to take up nutrients

### Get the FACTS!

Canadians are the largest water users in the world second to the United States.

The average Canadian uses 329 litres of water per day but believes they only use 79 litres.



- Average annual rainfall on Salt Spring is 959mm but may change with changing climate
- There are 11 Water Improvement Districts operating on SSI
- 55% of the population of SSI gets potable water from community water systems
- Demand for potable water during the period May – October is at or exceeding capacity of supply from most wells and community water district raw water sources
- There are over 1500 Salt Spring water connections in the North Salt Spring Waterworks district, which relies on both Maxwell and St. Mary Lakes

Groundwater Toolkit:

<http://www.islandstrust.bc.ca/media/259555/groundwater-toolkit.pdf>

# Watershed Stewardship on Salt Spring Island



photo: Kristine Mayes

Salt Spring Island  
Watershed Protection Authority  
[www.ssiwatersheds.ca](http://www.ssiwatersheds.ca)

Coordinator: Shannon Cowan  
[ssiwpacoord@gmail.com](mailto:ssiwpacoord@gmail.com)  
250-537-4847

Islands Trust \* CRD \* Island Health \* Ministry of Environment \*  
and Water Districts according to the watershed in focus, such as:  
North Salt Spring Waterworks District \* Fernwood-Highland Water District

### The 2015 Integrated Watershed Management Plan for St. Mary Lake Watershed:

<http://ssiwatersheds.ca/publications/st-mary-lake-integrated-watershed-management-plan/>

- Watersheds are ecosystems reliant on water as a precious resource
- Watersheds drain an area of land into a lake or the ocean
- Several lakes on SSI are used for drinking water
- Most drinking water lakes are naturally eutrophic: this means algal blooms are common and cyclical
- Helping to reduce major blooms can benefit our raw drinking water quality, and to protect many aquatic species such as fish, and invertebrates
- Some algal blooms are cyanobacteria that are able to produce toxins harmful to human health
- Climate change may be bringing more intense periods of rainfall, where the total amount falls over a shorter period of time
- More intense rainfall means more erosion of exposed soil, like dirt roads
- Phosphorus is a naturally-occurring nutrient in soil, vegetation, animals, algae and animal/human waste; it also occurs in road runoff, septic effluent, rainfall, groundwater, and lake sediments
- Halting or minimizing phosphorus inputs to lakes contributes to better water quality by reducing potential algal blooms
- Your actions in a watershed, even far from the shoreline, do impact the water quality in ditches, creeks, streams and lakes

## “I LOVE My LAKE” Tips:

1. Never direct greywater into a ditch or creek that empties into a lake
2. Keep pets and animals away from ALL creeks, streams, ditches and lakes to avoid manure deposition
3. Shrubs and trees take up more water and nutrients than grasses or herbaceous plants – they are the most useful buffer zones to capture nutrients
4. Collect rainwater from metal roofing and store in approved rainwater collection cisterns
5. Eliminate erosion!! Landscape with the goal to “Sink and Spread”:
6. Build swales, like little bowls or mini valleys, to let sediment remain as water sinks in, nurturing your vegetation, and your well if you have one.
7. Maintain native vegetation in ditches, low areas and shorelines (can prevent up to 75% of phosphorus in runoff)
8. Eliminate impermeable surfaces: use gravel or interlocking brick/stones instead of pavement for pathways
9. Irrigate deeply, less frequently (every 2 days for annuals, weekly for larger perennials encourages drought tolerance)
10. Mulch everything with straw, woodchips or other organic materials
11. Use drip irrigation or hand watering, avoid sprinklers
12. Xeriscape in place of a lawn or seed it with drought-tolerant grasses

### Some NATIVES

**Groundcover:** Wild ginger (*Asarum caudatum*) for wet areas, Oregon Grape (*Mahonia nervosa*) for drier hillside ditches

**Shrubs:** Hardhack, Willow, Red Elderberry, Indian plum, Dogwood, Flowering Currant

**Aquatics:** Bulrush (*Carex*), or Cattail (*Typha*)

**More at:** [www.npsbc.ca](http://www.npsbc.ca)  
(Native Plant Society of BC)

## St Mary Lake RESEARCH SHOWS...

Septic is not a significant source of phosphorus input to St. Mary Lake (5kg/year or less in total from all properties around the lake);

- Stormwater runoff may be contributing more phosphorus than previously estimated; research ongoing
- Sediments release phosphorus in differing amounts year over year, and the extent to which that phosphorus is available for algal growth remains unclear; research ongoing
- Introduced (non-native) fish species may be harmful to natural food webs (eg. yellow perch) but altering the system with introduction of any other fish is likely to have unintended consequences greater than potential benefits
- Bird waste is likely a greater phosphorus contributor than septic, but compared to lake sediment and runoff sources, it is minimal

## Be INNOVATIVE!

Greywater can easily be filtered through a bucket of straw, with a hole in the bottom that is fitted to a hose and delivered directly to your plantings!

Always use greywater wisely: only on plants, not for human or animal ingestion.

Never store greywater for later use, it can harbor microorganisms harmful to animals and humans.