



SSIWPA Monthly Meeting February 19, 2016 Addendum

Item A1. TWG request that some monthly meetings of Steering Committee be extended when TWG member(s) will give a presentation on technical issues. (20 mins.) TWG will aim to provide 14 days' notice for extension of steering committee meetings.

Item A2. Cusheon Watershed pilot survey and letter - *attached for information*

This item was sent to Cusheon Lake Stewardship Committee on February 18, 2016. Results will be coded and analyzed and presented to TWG in March. Next steps to be added to workplan: Survey and letter in mailout to entire Cusheon watershed resident list, including Beddis ratepayer list (April).

A2 attachment. Cusheon Pilot Survey link and letter.

Dear Cusheon Lake Watershed Resident and Beddis Water Service User;

This letter is to inform you that the Cusheon Lake Stewardship Committee (CLSC) in cooperation with the Salt Spring Island Water Protection Authority (SSIWPA) is conducting a watershed survey to obtain more information about land use and water use practices.

We were all impacted by the drought this past summer. Some people may have been impacted more than others. For example, Cusheon Lake suffered a toxic cyanobacteria bloom from mid September to mid November, and all those drawing water directly from the lake were significantly affected.

Please take 10 minutes to answer this survey! [CLICK HERE](https://www.surveymonkey.com/r/WMNN3SP) (or cut and paste this address into your web browser: <https://www.surveymonkey.com/r/WMNN3SP>).

The survey is intended to collect information about how residents use and treat groundwater and lake water (quantity, quality data). It also aims to determine which “Best Management Practices” regarding land use and water resource conservation are well understood (and in practice), and which require more public education and, possibly, legislative support. If the response rate is statistically significant, information gathered will assist the Cusheon Lake Stewardship Committee and the Salt Spring Island Watershed Protection Authority to estimate and take action on actual information gaps and needs in this particular watershed.

We realize that restoring the Cusheon Watershed to a healthier ecosystem is not going to happen through monitoring, regulation and government action alone. Also, legislative changes are only effective if they can produce measurable improvements, and if the community is in support of their ability to make a difference. We also aim to increase the health in the watershed by engaging community members to work on the stewardship team in their own backyards!

Working together we can all help to improve the Cusheon Watershed!
We look forward to meeting with you.

Sincerely

Doreen Hewitt

Chair Cusheon Lake Stewardship Committee

and

Shannon Cowan

Coordinator, Salt Spring Island Watershed Protection Authority

Cusheon Watershed Survey

{This survey of Cusheon Watershed residents will serve as a pilot – if successful, SSIWPA intends to survey all of Salt Spring Island for the same information.}

Purpose: The survey is intended to collect information about how residents use and treat groundwater and lake water (quantity, quality data). It also aims to determine which “Best Management Practices” regarding land use and water resource conservation are well understood (and in practice), and which require more public education and, possibly, legislative support. If the response rate is statistically significant, information gathered will assist the Cusheon Lake Stewardship Committee and the Salt Spring Island Watershed Protection Authority to estimate and take action on actual information gaps and needs in this particular watershed.

Survey responses are anonymous. You are not required to provide name or address or contact information, and your responses will not be attached in any way to you, personally. The results of the survey will not be used for enforcement of any bylaws.

Please answer the survey only once per household. Reliance upon these data to make decisions about watershed management actions requires the survey-makers to assume that you will please answer ALL of the survey questions that pertain to your situation.

Ownership:

If you own/rent more than one property in the watershed, please fill out a survey for each.

1. Please select the one that is most correct for your situation:
 - i. I am the owner or co-owner of the property for which I am answering this survey, and I occupy the premises year-round.
 - ii. I am the owner or co-owner of the property for which I am answering this survey, and I occupy the premises part-time. If you select this answer, please note the number of weeks per year that you occupy the premises, on average.
 - iii. I am renting the property for which I am answering this survey.

Household/Water Use:

1. How many people are in your household?
2. What is your source of drinking water? Check all that apply.
 - i. Well
 - ii. Lakewater – direct, licensed to my property
 - iii. Beddis Water Service Area
 - iv. Other (please specify)
3. If you personally treat your own drinking water, please check all that apply:

Potable water used in my household (cooking, drinking, dishwashing) is:

 - i. Filtered and treated with chlorine (or other chemical)

- ii. Filtered only (ie. sand filter)
- iii. Filtered and treated with UV light
- iv. Filtered by reverse osmosis only
- v. Other (specify in comment box)

4. Do you practice rainwater harvesting and use?
5. If you answered no, for question #4, do you plan to harvest rainwater next year?
6. Do you use untreated water for indoor non-potable uses? (e.g. toilet flushing, laundry):
- i. Yes, lake water
 - ii. Yes, well water
 - iii. No
7. Do you use any untreated water for outdoor non-potable uses? (e.g. garden or lawn watering, washing structures/vehicles)
- i. Yes, lake water
 - ii. Yes, well water
 - iii. No
8. Conservation in the home. Please check all that apply:
- rainwater harvesting system for outdoor non-potable uses
 - only low-flush toilet(s)
 - only low-flow shower head(s)
 - some low-flush, and some conventional volume toilets
 - use shower timer during droughts

re-use of grey water for toilet-flushing using a system built to code

9. Check all that apply. I have:

- i. a home-based (non-farm) business that uses water
- ii. a farm business operation that uses water
- iii. a non-business farm-related use of water (e.g. laying hens or equestrian)

Comment. If you answered yes to any of the above questions, please indicate the type of business operation briefly in the comment box below (e.g. irrigation of hay, watering animals, cheese-making, etc.).

10. Daily non-domestic use: If you checked yes for any above (question 9), please indicate the best approximation of your average daily water usage for all of the above combined that apply to your household. (Please do include seasonal variation when calculating annually to come up with a daily average over the year.)

- i. Less than 4L/day (1.06 USGal/d), up to 1.5 m³/y (397 USGal/y)
- ii. 4 - 200 L/d (1.1-52.83 USGal/d or 0.2 m³/d), 1.46 – 73 m³/y (386.75 -19285 USGal/y)
- iii. 201-1000 L/d (0.2 – 1 m³/d, 52.83 – 264.17 USGal/d), 73.3 – 365 m³/y (19,647 – 96,422 USGal/y)
- iv. More than 1000L/d (> 1m³/d,), >365 m³/y (> 96,423 USGal/y)

11. If you checked yes for 9b), do you have Environmental Farm Plan status?

[link <https://www.bcac.bc.ca/ardcorp/program/environmental-farm-plan-program>]

Policy/Land Use:

12. What is your land use zoning classification?

[link http://islandstrust.bc.ca/media/282559/lub_sheet_3.pdf]

Drop down list: A1, A2, R (Residential) , R1, R3, RW 1, RW2, Shoreline 6, Shoreline 8, Commercial Accom 3, RU1 (rural uplands), F2 forest

13. Do you abide by the land use restrictions for your property's zoning?

- i. Always,
- ii. Generally Yes,
- iii. Generally No,
- iv. Not applicable (I rent).

14. If your property falls into Development Permit Area 7

(<http://www.islandstrust.bc.ca/media/328027/ocp-28.pdf>), do you follow the riparian area regulations (bylaw 480)? (i.e. conservation practices within 30m of watercourses and ditches, and/or a making a successful qualifying development proposal for any development on land in that 30m zone) (<http://www.islandstrust.bc.ca/media/312024/ss-bl-480-adopted.pdf>).

15. Check the 1 answer that most accurately describes your situation:

- a. Part or all of the land on my property is covered by, or abuts land covered by [Development Permit Area 7 \(Riparian Areas\)](#) (link to: <http://islandstrust.bc.ca/media/314005/ss-bl-355-consolidation-version-july-2015.pdf>) and I follow provisions in the [Salt Spring Island Official Community Plan Bylaw 355](#) (link to: <http://islandstrust.bc.ca/media/314005/ss-bl-355-consolidation-version-july-2015.pdf>) when applying any land-use, vegetation or water management, or building modifications to my property.

- b. Part or all of the land on my property falls into [Development Permit Area 4 \(Lakes, Streams, Wetlands\)](#) (link to: <http://islandstrust.bc.ca/lrc/ss/pdf/ssocpdpa4hazmap21.pdf>) and I follow provisions in the [Salt Spring Island Official Community Plan Bylaw 355](#) (link to: <http://islandstrust.bc.ca/media/314005/ss-bl-355-consolidation-version-july-2015.pdf>) when applying any land-use, vegetation or water management, or building modifications to my property.
- c. I don't know whether any land on my property falls into DPA 7 or DPA 4, at this time.

16. Do you have a government license for water removal from a lake or pond?

Y/N

If so, please indicate: maximum rate of removal indicated in your license, 2) average rate of removal, and 3) if the license is for irrigation? (comment box)

17. If you have streams, ponds or wetlands on your property, please indicate any of the following uses that apply:

- Irrigation of gardens, hay or ground crops
- Irrigation of animals
- Water retention to assist with slowing and spreading runoff
- Seasonally filling cisterns for domestic, non-potable uses
- Natural environmental values such as wildlife habitat
- Aesthetic purposes
- Other, including any commercial use (please specify)

18. Do ponds dry up in summer on your property? Y, N, n/a

19. Please check all that apply about stream(s) or water in ditches that cross your property:

It/they fill a pond on my property

Surface water runs off the property

Water runs year-round

Water flows in winter, wet season only

n/a

Please select any of the following that best illustrate the state of erosion on any part of your property:

- i. Stream running with little erosion <http://library.ssiwatersheds.ca/?mdocs-file=605&mdocs-url=false>
- ii. Stream to lake erosion with no vegetation <http://library.ssiwatersheds.ca/?mdocs-file=609&mdocs-url=false>
- iii. Ditch water with eroded sediments visible <http://library.ssiwatersheds.ca/?mdocs-file=611&mdocs-url=false>
- iv. Pond or lakeshore with healthy vegetation <http://library.ssiwatersheds.ca/?mdocs-file=613&mdocs-url=false>

Septic:

20. Check all that apply.

I know where my septic tank and field are located,

I follow [guidelines for septic tank maintenance](#) (make observations, and professional inspection & pump out every 2-5

yrs)(<https://www.crd.bc.ca/docs/default-source/septic-pdf/septic-savvy-household-information-kit-.pdf?sfvrsn=0>)

I have an effluent filter on my septic tank's discharge.

My property is serviced by municipal wastewater treatment.

Water Quality/Lakes:

21. Are you aware of activities that cause nutrients like phosphorus and nitrogen to enter surface waterways on or near your property (e.g. soil erosion, vegetation removal, movement of nutrients in rain or soil-water from human and animal waste)? Y/N (I would like more information)

22. Are you aware that nutrient-loading of ditches, streams and lakes affects the presence of algal and cyanobacterial blooms, which can result in

cyanotoxins that are detrimental to human and animal health? Y/N, I'd like more info

23. Do you notice livestock watering at streams, ditches or lakes, or any other agricultural impacts on surface water and groundwater resources in your area? Y/N (Comment)

24. If applicable, how do you ensure that nutrients from any poultry or livestock manures and chemical fertilizers are kept from surface waterways in your area? Comment.

Vegetation and Trees:

25. We acknowledge the property-owner's right to make decisions about cutting and use of trees and wood resources on their property. How do you manage your property to demonstrate that trees and shrubs are essential for soil stability, nutrient-retention and pollution reduction? (Comment box)

26. Do you have any of these invasive plants on your property or in nearby waterways? If yes, please contact CLSC for assistance with their removal.

- i. scotch broom - <http://library.ssiwatersheds.ca/?mdocs-file=615&mdocs-url=false>
- ii. Yellow flag iris - <http://library.ssiwatersheds.ca/?mdocs-file=619&mdocs-url=false>
- iii. fragrant water lily - <http://library.ssiwatersheds.ca/?mdocs-file=617&mdocs-url=false>

27. Summer droughts increase risk of wildfires. Do you carry out the following Fire Smart activities? (<http://bcwildfire.ca/prevention/docs/homeowner-firesmart.pdf>)?

- i. Space trees so crowns are 3-6 m apart
- ii. Remove some or all evergreen trees (these are purportedly more combustible than deciduous)
- iii. Thin or reduce shrubbery and understory plants

If you answered yes to any or all of the above, would you please comment about the location of FireSmart activities, with reference to any watercourses on your property? Comment box.