

**Date:** August 28, 2015

**File No.:** 6500-20. Watershed Management

**To:** Salt Spring Island Local Trust Committee: For the meeting of September 3, 2015

**From:** Stefan Cermak, Regional Planning Manager

---

**Re: Watershed Management**

## Purpose

The Salt Spring Island Local Trust Committee (LTC) has identified watershed management on Salt Spring Island as one of its top priorities. The Watershed Program involves a multi-jurisdictional approach to the protection and management of freshwater resources on Salt Spring Island. The purpose of this report is to update the LTC on advancement of the Watershed Management Program including the development of a Water Conservation and Water Demand Management Measures Plan and Bylaw for Salt Spring Island.

## Background

### Integrated Watershed Management Plan for St. Mary Lake

The Salt Spring Island Local Trust Committee last received an update regarding the Watershed Program at their July 9, 2015 regular business meeting. Since that time the Salt Spring Island Watershed Protection Authority (SSIWPA) has met twice (July 17, 2015 and August 21, 2015). Agendas or minutes to those meetings are not attached to this report due to their size. Minutes for those meetings may be found on the [SSIWPA website](#). SSIWPA's agendas and minutes include updates from SSIWPA's technical and public advisory committee's during that time. SSIWPA continues to consider feedback for the draft Integrated Watershed Management Plan for St. Mary Lake. The final Integrated Watershed Plan for St. Mary Lake is anticipated for the Fall of 2015.

### Water Conservation and Water Demand Management Measures

The following is a brief timeline regarding the development of the terms of reference (ToR) and posting of the request for proposal (RFP) for a water conservation and water demand management measures plan and bylaw:

- Feb. 5, 2015: LTC directs staff to consult with SSIWPA to develop ToR
- Feb. 20, 2015: SSIWPA considers ToR
- April 17, 2015: SSIWPA considers amended ToR
- May 15, 2015: LTC approves in principle the drafted ToR
- June 19-July 17: Request for Proposal (RFP) posted
- July 27-Aug 5: Proposals evaluated. No service contract was issued as proposals received were significantly higher than budgeted.

## Funding

Funding for the service contract hiring a consultant to produce a water conservation and water demand management measures plan and bylaw was made available through unspent funds generated through the 2014/15 special property tax requisition. These funds have an estimated value of \$42,000. As per the [Islands Trust Special Property Tax Requisition Policy 6.3.ii](#) any funds, generated through the special requisition, which are unspent at the conclusion of the fiscal year, will be held in reserve for the Local Trust Committee's use in the subsequent fiscal year to:

1. Complete the previously approved initiative or program; or
2. Undertake a new program, subject to a further resolution of the Local Trust Committee to do so.

Further funding may be available to the LTC as the project funds are below the anticipated spending levels primarily due to a lack of staff resources. The LTC may consider requesting transferring funds from one or several of its projects although, even collectively, the funds would not be sufficient to meet the proposed contractor costs.

## Discussion

In order to produce a Water Conservation and Demand Management Plan and Bylaw in the current fiscal period the LTC should consider amending the terms of reference within the RFP. Any amendment to the RFP results in prioritizing either a step in the process or a specific geographical area. The RFP itself prioritizes reconciling water demand and supply in the North Salt Spring Waterworks District (see attached RFP, Sections 4.1 and 4.2). As such, staff recommend that the LTC consider directing staff to redraft the RFP to focus solely on the NSSWD area. Recommendations for other water districts and non-water district areas would follow pending available resources. No amendments would be required to the Watershed Management Project Charter.

## Recommendation

That the Salt Spring Island Local Trust Committee direct staff to amend the Request for Proposal for a Water Conservation and Water Demand Management Measures Plan and Bylaw for Salt Spring Island to address water demand and supply issues exclusively in the North Salt Spring Waterworks District area.

---

Prepared and Submitted by:

---

Stefan Cermak, Regional Planning Manager

---

Date

Appendix 1: 4014 RFP-2015.004 Extract

## Salt Spring Island Local Trust Committee and the Salt Spring Island Watershed Protection Authority

The [Salt Spring Island Local Trust Committee](#) (SSILTC) is comprised of locally elected officials who serve Salt Spring Island and make land use planning decisions on behalf of the Islands Trust. The Salt Spring Island Local Trust Committee was recently delegated additional authority by the Islands Trust Council through [Bylaw 154](#) under the Islands Trust Act. This authority was delegated to allow for the coordination of multiple agencies in addressing watershed management issues on Salt Spring Island. The SSILTC acts as a coordinating body for the Salt Spring Island Watershed Protection Authority (SSIWPA).

The [Salt Spring Island Watershed Protection Authority](#) (SSIWPA) is comprised of representatives from Provincial and local government agencies who have undertaken to protect and manage Salt Spring Island's watersheds. SSIWPA meetings, work plans, budgets, communications, grant applications, and general administrative and logistical duties are carried out by the SSIWPA Coordinator. The following agencies are participants:

- \* Salt Spring Island Local Trust Committee
- \* Capital Regional District
- \* Island Health
- \* BC Ministry of Health
- \* BC Ministry of the Environment
- \* North Salt Spring Water District
- \* Highland & Fernwood Water Commissions

### 3. Summary of Requirements

The Salt Spring Island Local Trust Committee (SSI LTC) has long been concerned about the issues of water quality and quantity in the Salt Spring Island Local Trust Area. , Islands Trust does not have jurisdiction to regulate water or wells and has limited authority to protect groundwater and surface water through land use planning tools and advocacy for better provincial water legislation.

Nevertheless the Salt Spring Island Local Trust Committee (SSI LTC) made watershed management a top priority work program in 2012 in order to address the quality of surface water drinking sources. This has now been expanded to include water quantity issues. To address the management of a finite supply of water:

**The SSI LTC is seeking proposals by qualified consultants to draft and implement a potable “Water Conservation and Water Demand Management Plan for Salt Spring Island.”**

Objectives of the project include:

- Determine water demand values based on actual data and industry standards relevant to the unique, dry climate of the Islands Trust area
- Evaluate current and long term water supply and demand on Salt Spring Island
- The conservation of finite water resources
- Reduce demand for ground and surface water resources; encourage rainwater catchment systems
- Provide analysis sufficient to provide confidence to undertake community and infrastructure planning
- Draft relevant SSILTC bylaw changes to regulate a water conservation and water demand plan

## 4. Scope of Work

### 4.1. Scope of Work

The scope of work includes:

- Inventory existing known water supply for lakes, streams, and groundwater
- Identify areas of water supply deficit, data gaps, and indicate level of certainty
- Starting with lands in the North Salt Spring Waterworks District (NSSWD),
  - Estimate build-out of undeveloped lands based on projected rate of growth (rate of growth provided through [previous studies](#))
  - Estimate water demand based on consumption standards versus actual metered data (where provided), and based on current permitted uses in the zones
  - Repeat above two points for remaining water improvement districts and community catchment areas together
- Recommend water demand values (consumption standards) relevant to the region and using local data where available
- Research water demand management measures which various agencies can implement according to their authority
- Recommend water conservation priorities based on supply and demand analysis
- Recommend and set water conservation targets
- Review and recommend water conservation measures and tools
- Draft water conservation and water demand management plan

### 4.2. Deliverables

Upon execution of a Service Contract, the successful proponent will undertake the following deliverables:

Proponents should note that the successful proponent will be supplied with contact information to all relevant agencies as well as extensive background research regarding water quantity in the Gulf Islands and on Salt Spring Island in particular.

### PART I Background and Research

1. Meet in person at the Salt Spring Islands Trust office with Islands Trust planning staff to coordinate resources, timing, budget and contacts.
2. Maintain regular, bi-weekly, communication with Planner managing the contract
3. The Islands Trust will provide a written letter of cooperation from chairpersons of Water Districts regarding data collection.
4. Extensive communication by phone and email with various agencies in order to retrieve necessary water related information, including but not limited to improvement districts data, well location and related data, and surface water allocation and permits.
5. Obtain and summarize well data. Identify data gaps. Follow up with relevant contacts (some provided) to reduce data gaps as much as feasible.
6. Create an inventory of existing water supply including the following:
  - a. Lakes and streams
    - i. Update source availability
    - ii. Licenced withdrawals
    - iii. Review and recommend updates to Community Surface Water Systems data in section C.3.2 of the Official Community Plan
    - iv. Identify areas of water supply deficit
    - v. Identify data gaps, level of certainty
  - b. Groundwater
    - i. Review and recommend updates to Community Surface Water Systems data in section C.3.2 of the Official Community Plan

- ii. Summarize known groundwater supply
  - iii. Summarize groundwater vulnerability and community catchment areas
  - iv. Identify areas of groundwater supply deficit (example evidence showing increasing water delivery to well users)
  - v. Identify data gaps, level of certainty
7. Draft a summary report for the above research.
  8. Draft summary will be reviewed by the Islands Trust Planner managing the contract for feedback and forwarded to the Salt Spring Island Watershed Protection Authority for review and comment. The Islands Trust Planner may request that the contractor revise the draft summary and/or respond to enquiries from SSIWPA.
  9. Briefly and verbally, by phone or electronic meeting software, summarize draft summary at a Salt Spring Island Watershed Protection Authority meeting which are held on the third Friday of every month.

## **PART II Research and Summarize Water Demand Management Options**

- a. Starting with the lands in the North Salt Spring Waterworks District (NSSWD):
    - Estimate build-out of undeveloped lands based on projected rate of growth (rate of growth provided through previous studies);
    - Estimate water demand for build-out of undeveloped lands based on consumption standards and current permitted uses in the respective land use zones as per the Land Use Bylaw. Provide comparison using actual metered data, where provided,
  - b. Repeat points above, prioritizing lands in other Water Improvement Districts and Community Water Catchment areas (community wells)
10. Recommend water demand values (consumption standards) relevant to the region and based on local data, where available
  11. Research water demand management measures that the SSI LTC could implement within their authority
    - a. With priority given to Ganges Village densification and the provision of affordable housing, identify land use planning options to reconcile potable water demand and supply in the NSSWD district.
  12. Recommend water conservation priorities based on supply and demand analysis
  13. Recommend water conservation targets
  14. Review and recommend water conservation measures and tools
  15. Draft a summary report for Part II
  16. Draft summary will be reviewed by the Islands Trust Planner managing the contract for feedback and forwarded to the Salt Spring Island Watershed Protection Authority for review and comment. The Islands Trust Planner may request that the contractor revise the draft summary and/or respond to enquiries from SSIWPA.
  17. Briefly and verbally, by phone or electronic meeting software, summarize draft summary at a Salt Spring Island Watershed Protection Authority meeting which are held on the third Friday of every month.

## **PART III Draft Plan and Bylaw**

18. Draft Water Conservation And Water Demand Management Plan
  - a. Include in draft plan a bylaw that could be implemented by the Salt Spring Island Local Trust Committee which includes feasible mandatory provisions of water conservation measures for all future developments with potable water needs
19. Draft Final Report including plan and bylaw for review and comment by the Islands Trust Planning staff, SSIWPA and SSI LTC. The contractor will make any necessary edits/changes to the plan and bylaw.
20. Draft communication materials for stakeholders, water managers, consumers and the public. Materials for review and comment by the Islands Trust Planning staff and required edits done. Materials should be suitable for the internet, general handouts, and for a Community Information Meeting.
21. In person, on Salt Spring Island, present materials at a Community Information Meeting (a special business meeting of the SSI LTC). Engage in discussion with interested parties in attendance.

22. In person, on Salt Spring Island, Present Final Report including bylaw to SSI LTC

## **5. Qualifications and Experience**

- Proponents need have at least 10 years of experience in each of the following areas:
  - drafting and implementing water conservation and water demand management plans
  - drafting and implementing water conservation and water demand management bylaws
  - communication/coordination of multiple agencies or departments