



File No.: 6500-20 – Water Sustainability

DATE OF MEETING: March 23, 2021

TO: Salt Spring Island Local Trust Committee

FROM: Jason Youmans, Island Planner  
Salt Spring Island Team

COPY: Gary Holman, CRD Electoral Area Director  
Dale Green, CRD, Supervisor, Regional Source Control Program  
Salt Spring Island Watershed Protection Alliance (SSIWPA)

SUBJECT: Weston Lake Water Availability and Climate Change Assessment

## RECOMMENDATION

1. That the Salt Spring Island Local Trust Committee endorse Weston Lake Water Availability and Climate Change Assessment project charter v.1.1 attached as Appendix 1 to the staff report of March 23, 2021.

## REPORT SUMMARY

The purpose of this report is to provide the Salt Spring Island Local Trust Committee (LTC) with a project charter to guide its involvement in the development of a water availability and climate change assessment study for Weston Lake.

The LTC will be the primary funder of this work using a portion of its unspent special property tax requisition funds from previous fiscal years. Capital Regional District staff will manage the project.

## BACKGROUND

At its meeting of January 19, 2021 the Salt Spring Island Local Trust Committee passed the following resolution concerning the development of a Weston Lake Water Availability and Climate Change Assessment:

### SS-2021-004

**It was MOVED and SECONDED,**

*That the Salt Spring Island Local Trust Committee request that Islands Trust Council amend the 2021/22 draft budget to include a draw of \$30,000 from Salt Spring Island Local Trust Committee surplus funds – which includes the remainder of the constituency grant received by SSIWPA in 2017 – for the development of a Weston Lake Water Availability and Climate Change Assessment Study to be carried out by a contractor in cooperation with the Capital Regional District.*

**CARRIED**

This resolution followed on a resolution from the Salt Spring Island Watershed Protection Alliance (SSIWPA) from its December 17, 2021 meeting recommending that the LTC support such an initiative:

**By general consent, the Salt Spring Island Watershed Protection Alliance recommends the Salt Spring Island Local Trust Committee allocate \$14,097 from the SSIWPA surplus (Constituency fund) to the Weston Lake Water Availability and Climate Change Assessment Study by the CRD.**

At its December 15, 2021 meeting, the LTC received [correspondence](#) from CRD electoral area director Gary Holman seeking the LTC’s financial support for this initiative.

Development of such a study was identified in SSIWPA’s 2020/21 work plan, and again in its [2021/22 work plan](#).

**ANALYSIS**

**Policy/Regulatory**

**Islands Trust Policy Statement:**

Providing financial and staff support to undertake technical work to better understand the Island’s freshwater resources and the limitations of their human use is consistent with the Islands Trust Policy Statement. See relevant policies below.

3.3.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.
4.4.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
4.4.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses

**Official Community Plan:**

Providing financial and staff support to undertake technical work to better understand the Island’s freshwater resources and the limitations of their human use is consistent with the Salt Spring Island Official Community Plan. Weston Lake is a water body identified in the OCP as warranting particular attention. See relevant policies below.

- B.5.3.2.17 The Local Trust Committee should support a Weston Lake watershed management plan, a study of the improvement (or replacement) of the water distribution system and the installation of water meters for all users.
- C.3.2.2.5 The Local Trust Committee will continue to cooperate with community water system operators to ensure water supply issues are considered before zoning changes are made. The Committee should also continue to assist in the development of better estimates of projected water demands and supply potential. The Committee could consider zoning changes that would limit land uses with a high water demand. The Committee particularly recognizes that this Plan could critically affect the North Salt Spring Waterworks District’s ability to meet future needs and will cooperate with the District to address this issue.
- C.3.2.2.8 The Local Trust Committee will consult, assist and cooperate with water districts in supply and demand management by providing data and supporting efforts to coordinate activities.

**Land Use Bylaw:**

N/A

**Islands Trust Conservancy :**

N/A

**Issues and Opportunities**

*Proposed Study*

See excerpt from the draft Request for Proposal attached as Appendix 3 for a description of the project.

In sum, this study will seek to determine whether there is available water in Weston Lake to increase service connections to the Fulford Water System, taking into account:

- Current licensed allocations;
- Environmental flow needs; and
- Anticipated impacts of climate change.

This study will not:

- Assess water quality and factors contributing thereto; or
- Make detailed recommendations about changes to upland land uses to increase water quantity or quality.

*Future Work*

The consultant may conclude the assessment report with recommendations for either the LTC or the CRD. The LTC will have to determine whether to carry out any recommendations arising from the assessment study.

*Project Resourcing*

Islands Trust is in the midst of reorganizing its delivery of planning services. This has implications for the availability of Local Planning Services staff to manage LTC projects. Nonetheless, staff do not anticipate significant staff time in the undertaking of this project as the CRD will be managing the consultant. Staff time has been, and will be, used in the development of guiding documents. Once the work is underway staff anticipate little-to-no direct involvement, but will review the draft product and coordinate release of the final.

**Consultation**

The consultant undertaking the work will engage agencies and local organizations as necessary to gather relevant data to inform the study.

**Timeline**

Staff anticipate the study should only take a few months to complete. However, the consultant’s ability to undertake the study will depend on the completeness of the data available. If the consultant indicates that the

current available data is insufficient, then a period of data gathering may be required, which will extend the project timeline. This delay could be considerable depending on the duration of data required.

The Memorandum of Understanding (MOU) with the CRD is currently proposed for a duration of six months.

### **Protocols**

Islands Trust role in this study is defined by an MOU with the Capital Regional District. The LTC is the primary funder of the work, while CRD staff will manage the consultant.

A draft MOU is attached as Appendix 2.

### **Agencies**

The consultant will liaise with agencies as needed.

### **First Nations**

Staff do not anticipate involvement of First Nations in this technical study, although the finished product will be made available to them for their information. Future land use changes in the Fulford Area would require First Nations consultation.

### **Rationale for Recommendation**

- 1. That the Salt Spring Island Local Trust Committee endorse Weston Lake Water Availability and Climate Change Assessment project charter v1.1 attached as Appendix 1 to the staff report of March 23, 2021.**

The LTC has already resolved to provide financial support to undertake the proposed study. This staff report and attached project charter is intended to provide clarity to the LTC about the work that will be done and the role of Islands Trust in the commission of that work.

### **ALTERNATIVES**

- 1. Amend project charter**

The LTC may wish to amend the project charter. Recommended wording for the resolution is as follows:

*That the Salt Spring Island Local Trust Committee amend Weston Lake Water Availability and Climate Change Assessment project charter v1.1 as follows . . .*

The implication of amendments to the project charter are that changes to the role of Islands Trust staff in the project may have implications for other projects to which staff are currently assigned. Additionally, changes to Islands Trust staff role would require revising the MOU with the CRD.

### **NEXT STEPS**

If the LTC endorses the attached project charter, staff will finalize the project management MOU with CRD and provide assistance on developing a terms of reference for the CRD to begin the procurement process.

Submitted By:	Jason Youmans, Islands Planner	March 11, 2021
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Concurrence:	Stefan Cermak, Regional Planning Manager	March 11, 2021
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**ATTACHMENTS**

1. Project Charter v1.1 – Weston Lake Water Availability and Climate Change Assessment
2. Memorandum of Understanding – Islands Trust/CRD
3. Project Deliverables – RFP Excerpt - Weston Lake Water Availability and Climate Change Assessment

## Water Sustainability Project: Land Use Management for Watershed Protection Weston Lake Water Availability and Climate Change Impact Assessment - Charter v.1.1

Salt Spring Island Local Trust Committee

Date: March 23, 2021

**Purpose:** *The purpose of this project and associated charter is to define the Salt Spring Island Local Trust Committee's role in the commission of a study to quantify the volume of water in Weston Lake available for human use and the impacts that climate change is anticipated to have on that volume.*

**Background:** *Weston Lake on Salt Spring Island provides potable water to the Fulford Water System in Fulford Village. The Salt Spring Island Official Community Plan identifies the Island's villages as areas of potential residential and commercial growth. Islands Trust and the Capital Regional District, which manages the Fulford Water System, want to better understand the volume of water available for human use from Weston Lake and the impacts that climate change may have on that water availability.*

*This project was identified in the 2020/21 work plan of the Salt Spring Island Watershed Protection Alliance (SSIWPA) and the Capital Regional District electoral area director has requested up to \$30,000 from the Salt Spring Island Local Trust Committee to fund such a study. At its January 19, 2021 meeting the LTC endorsed this funding request using accumulated funds from its annual special property tax requisition to fund the coordination of freshwater policy on Salt Spring Island.*

### Objectives

- A sustainable potential yield and storage analysis for Weston Lake that accounts for:
  - License allocations;
  - environmental flow needs; and
  - Climate change impacts

### In Scope

- Provide up to \$30,000 in funding;
- Assist CRD staff to:
  - Draft a cost-sharing agreement with CRD
  - Draft a Request for Proposals for qualified consultant to undertake the study;
  - Draft a Terms of Reference for the study;
- Provide relevant data to qualified consultant;
- Provide completed study to the LTC with implications for land use planning and options for next steps; and
- Manage communications related to release of project deliverables

### Out of Scope

- Procurement process management;
- Contract management;

### Workplan Overview

Deliverable/Milestone	Date
Project charter endorsement	March 23, 2021
RFP distributed	Spring 2021
Qualified consultant selected	Spring 2021
Draft study provided for staff review	August 1, 2021
Final study released to LTC and general public	September 1, 2021

<b>Project Team</b>	
Dale Green, CRD	Project Manager
Jason Youmans, IT	Project Liaison
William Shulba, IT	Technical Advisor
Barb Dashwood, IT	GIS Tech
Shannon Cowan, SSIWPA	Project Assistant

<b>Budget</b>		
<b>Budget Sources:</b>		
<ul style="list-style-type: none"> <li>• Unspent special property tax requisition funds</li> <li>• 2017 SSIWPA Constituency Grant</li> </ul>		
<b>Fiscal</b>	<b>Item</b>	<b>Cost</b>
2021/22	Weston Lake Water Availability and Climate Change Impact Study	\$30,000
2021/22	Total	\$30,000

**MEMORANDUM OF UNDERSTANDING**

This memorandum of understanding is made and effective \_\_\_\_\_.

**BETWEEN:**

**CAPITAL REGIONAL DISTRICT**

625 Fisgard Street,

PO Box 1000

Victoria, BC V8W 2S6

(Hereafter, **CRD** or the **Managing Partner**)

**AND:**

**ISLANDS TRUST**

200 – 1627 Fort Street,

Victoria, BC V8R 1H8

(Hereafter, **Islands Trust** or the **Funding Partner**)

Referred to hereafter as the “Parties”. The Parties desire to create an understanding for the purposes and on the terms stated in this agreement. Therefore, the Parties agree to the following:

**NAME:** The name of the project shall be the “**Weston Lake Water Availability and Climate Change Assessment**” (the “**Project**”).

**PROJECT SUMMARY:** The purpose of this project is to assess the volume of water available in Weston Lake which serves the Fulford Water System (CRD-operated), and the potential for future water availability in this lake system based on climate change predictions.

The study will be undertaken by a consultant.

Findings of this study will be used to inform operations and service area expansion options for the Fulford Water System as well as future land use considerations by the Salt Spring Island Local Trust Committee.

**DURATION OF THE AGREEMENT:** The duration of this memorandum of understanding shall be for 6 months, commencing on March 1, 2021 and terminating on September 1, 2021.

**PURPOSE:** The purpose of this memorandum of understanding is to ensure that participants and parties clearly understand their obligations under this agreement as they relate to the proposed project.



## MEMORANDUM OF UNDERSTANDING

### OBLIGATIONS:

The **Managing Partner (CRD)** commits to:

1. Work in cooperation with the **Funding Partner** to develop a Request for Proposals (RFP) to hire a qualified consultant with expertise in watershed hydrology and hydrological modelling;
2. Manage all aspects of the procurement process to obtain consulting services from a qualified consultant;
3. Work in cooperation with the **Funding Partner** to develop a Terms of Reference (ToR) to guide the consultant's work on the **Project**;
4. Manage the consultant in fulfilling the **Project** Terms of Reference;
5. Notify the **Funding Partner** in a timely fashion of any challenges that arise in the carrying out of the **Project** and work cooperatively to resolve them;
6. Provide the **Funding Partner** with draft **Project** deliverables for review and comment prior to public release; and
7. Work in cooperation with the **Funding Partner** to develop a communications plan associated with the public release of **Project** deliverables; and
8. Consider funding project costs above the contribution from the **Funding Partner**.

The **CRD** project manager may seek coordination assistance for this project as a representative of the Salt Spring Island Watershed Protection Alliance (SSIWPA) from SSIWPA Coordinator to:

- a. Coordinate on-island activities to support the consultant's work such as arranging meetings between the consultant and the SSIWPA Technical Working Group or other relevant stakeholders; and
- b. Compile/procure data and reports that the consultant may need and that are held by various agencies and volunteers on Salt Spring Island.

The **Funding Partner (Islands Trust)** commits to:

1. Contribute funds as follows:
  - i. **\$14,097**, constituting the remainder of the provincial government constituency grant received by the Salt Spring Island Watershed Protection Alliance (SSIWPA) in 2017;
  - ii. Up to **\$15,903**, from the Salt Spring Island Local Trust Committee's unspent special property tax requisition funds.

## MEMORANDUM OF UNDERSTANDING

2. Work in cooperation with the **Managing Partner** to develop a Request for Proposals (RFP) to hire a qualified consultant with expertise in watershed hydrology and hydrological modelling;
3. Work in cooperation with the **Managing Partner** to develop a Terms of Reference (ToR) to guide the consultant's work on the **Project**;
4. Provide the consultant with available data to inform the **Project**;
5. Work cooperatively with the **Managing Partner** to resolve any challenges that arise in the carrying out of the **Project**;
6. Provide the **Managing Partner** with timely review and comment on draft **Project** deliverables prior to public release; and
7. Work in cooperation with the **Managing Partner** to develop a communications plan associated with the public release of **Project** deliverables.
8. Work with SSIWPA coordinator to execute a communications plan associated with the public release of **Project** deliverables.

### COMMUNICATIONS:

In all communications about the project (i.e. media, website, social media, etc.) the Parties shall refer to the **Project** in a manner that is consistent with the guidance and regulations of the **Managing Partner** (CRD). No Party shall hold itself out as or otherwise represent itself as an agent of the other Party, nor that it has authority to enter into or to cancel contracts on behalf of the other Party. Neither party shall claim to be the other's agent for any purpose unless there is consent in writing to act as an agent for a specific purpose that is reasonably necessary to carry out the venture detailed in this agreement. Nothing in this agreement shall be interpreted to render the Parties as employer or employee of either Party. Anyone working or volunteering for either Party to this Memorandum of Understanding must not do anything that misrepresents the **Project** or the commitment of either Party.

**MEMORANDUM OF UNDERSTANDING**

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED AND ACCEPTED THE TERMS OF THIS MEMORANDUM OF UNDERSTANDING.

**SIGNED BY: The Capital Regional District (CRD)**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

WITNESSED BY:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**SIGNED BY THE Islands Trust**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

WITNESSED BY:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



## Weston Lake Water Availability and Climate Change Assessment Study – Scope of Work (Draft RFP Excerpt)

### 2.1 Scope of Services – Phase 1 – Data Assessment

The scope of services in Phase 1 will include, but is not limited to:

- Proposing a methodology for the sustainable potential yield and storage analysis;
- Review of the watershed:
  - Land cover and land uses
  - Geology and soils
- Assessing the available data (a preliminary list is in Table 1) against the requirements of the methodology.

### 2.2 Scope of Services – Phase 2 – Water Availability Study

The scope of services in Phase 2 will include, but is not limited to:

- Using the data assessed in Phase 1, undertake the water availability study for three time frames:
  - Current
  - Future 2050s
  - Future 2080s
- Study must consider future climate impacts. Refer to Capital Regional District, 2017, “Climate Projections for the Capital Region” and provide values for current, 2050s and 2080s scenarios;
- The study must incorporate all inputs and outputs of Weston Lake including water licenses;
- The analysis must assume maintenance of environmental flow needs (i.e., minimum base flow) in Weston Creek to protect aquatic life;
- Estimate inputs such as groundwater interflow using available data and best practices for estimation;
- Consider Provincial water licenses

**Table 1.** Data sources

Source	Description	Holder
FLNRO	Water license data	Province of BC
Fresh Water Catalogue stream data	Flow and water quality data in Weston Creek	CRD
Islands Trust	Planning data	Islands Trust
Islands Trust	Lake Level logger data	Islands Trust
Environment Canada	Weather data	Canada
Schoolnet weather	Continuous weather data	UVic
Bathymetry	Weston Lake water quality monitoring	Province of BC
Water service data	Water production/use data	Fulford Water District
CRD	Fulford Water System usage data	CRD