



Shawnigan
Basin Society

January 20, 2021

Kate Miller, MSc. MCIP, RPP
Environmental Services Manager
Engineering Department
Cowichan Valley Regional District
175 Ingram Street, DUNCAN BC V9L 1N8

Dear Kate,

Re: Strategic Partnership with CVRD

Shawnigan Basin Society (SBS) is interested in a strategic partnership with the CVRD to achieve the objectives of the Drinking Water and Watershed Protection (DWWP) function in the CVRD. Specifically, we can assist the CVRD with the development of a preliminary Watershed Management Plan (WMP) for the Shawnigan Creek Watershed. This plan would adhere to the goals and objectives of the ten-year 2020/2030 DWWP Program currently under development in the CVRD. The strategies and the actions for this Program are based on a model that incorporates the efforts of community-based groups such as the Shawnigan Basin Society to achieve science-oriented planning and objectives. Shawnigan Basin Society has professional staff with the skill sets to achieve the work program detailed below.

1. Proposed Work Program

A Watershed Management Plan (WMP) is required for the Shawnigan Creek watershed. This watershed provides numerous benefits to the CVRD residents in the South Sector including drinking water, water for recreational purposes, and water quality and quantity to support dependent ecosystems within the watershed. Land use planning, planning for climate change, and planning for population growth are all processes that are dependent on a healthy watershed. A WMP for the Shawnigan Watershed will need to address the current state of knowledge for the various physical and biological processes underway in the watershed. There will be information requirements that can be addressed through various studies and monitoring efforts, subject to resources being made available to address information deficiencies as identified. The WMP will need to prioritize the various studies required to address information deficiencies using a risk-based approach. A WMP is the key document used to operationalize environmental performance. This document will allow CVRD or their strategic partners to intervene where necessary to prevent environmental damages from occurring. The document should provide the direction required for these interventions. Through a series of memos for CVRD review and discussion, the overall process will result in a final report being prepared and co-published under the DWWP function.

Task 1. Compile a bibliography and Identify the State of Information

Monitoring plans in general are often preceded by extensive environmental assessments to gather discipline-based information such as hydrogeology, hydrology, biology (plant and animal), archaeology and cultural, and socio-economic. This information exists in various documents from studies conducted to date. It will be required as part of the WMP preparation to compile the existing information with an emphasis on identifying what we do and don't know with respect to processes occurring in the watershed. The deliverable for this task will be a summary of background data with a gap analysis and resultant recommendations for prioritizing studies to fill critical information gaps.

Task 2. Characterize Watershed in Terms of Biogeoclimatic Zones, Hydrological Characteristics, and Current Land Use

Changes in the watershed will arise from both natural and anthropogenic sources. To assist with this characterization, SBS has already completed a basin-wide characterization of land use as part of an ecological forestry study. Biogeoclimatic zones will be useful both as predictors of climate change, and ecosystem characterization within the watershed. The hydrological characteristics of the watershed will be the subject of both past and future monitoring in order to characterize changes as they are occurring. Water in its various forms is essential for the ongoing function of the ecosystems found in the watershed. This task will result in a watershed assessment document providing an analysis of the current state of the watershed based on the existing information base identified in Task 1.

Task 3. Identify Sources of Potential Negative Change in the Watershed

Resources will be limited when it comes to intervention to reverse or prevent negative changes to the watershed functions. The sources of negative change need to be identified and assessed with a view towards prioritizing actions given these resource limitations. Potential negative changes will be identified, characterized with respect to severity and prioritized for future action. The deliverable for this Task will be a memo summarizing the current and potential pressures being exerted in the watershed and an analysis of the potential response from these pressures with clarification of overall risk combined with temporal assessment, which will then provide guidance for future recommended priorities.

Task 4. Identify Monitoring Requirements to Determine if Changes are Occurring

With an agreement on sources of potential negative change, monitoring plans can be identified with associated costs and time frames. These costs will be developed in cooperation with the CVRD Environmental Manager to optimize the use of in-house resources. A memorandum will be produced that outlines a long-term monitoring program. With CVRD review and concurrence, this memorandum will allow for projected costs estimates for prioritized monitoring programs.

Task 5. Create a Template or Templates for Monitoring Reports

SBS professionals are familiar with the CVRD water monitoring programs conducted in cooperation with Provincial Ministry of Environment and Climate Change (MOE) personnel. We are also familiar with the surface water monitoring strategy for CVRD developed in cooperation with Palmer consultants. As part of the WMP, SBS will develop surface water monitoring report templates. There will be separate templates for stream/river monitoring and lake monitoring. These templates, once finalized by the CVRD, should be appropriate for use in all of the CVRD watersheds and will provide direction for volunteers that may not have the depth of experience with this type of sampling. CVRD will interface with the community via consultation processes. In consultation with CVRD, SBS will assist in the development of communication templates to create community awareness and participation.

Task 6. Summarize Existing Regulations and Jurisdictions That Apply to Control Negative Changes

This section of the WMP will be directly transferable to other WMPs planned for the Region. There is a broad array of regulations that come into play depending on the planned and ongoing activity in the watershed. When those activities are resulting in negative impacts, the WMP will be used to inform opportunities for corrective action through an understanding of regulatory jurisdictions and specific information on what rules apply to activities in the watershed. This is a key information requirement in order to 'operationalize' the environmental management process.

Task 7. Compile Working Draft of Watershed Monitoring Plan

A draft working WMP document will be compiled following the various deliverables for Task 1 to 6. The information derived from completing Tasks 1 to 6 will be organized according to an agreed upon format following discussions with the CVRD Environmental Manager and designated staff. CVRD will review the draft summary report, and a final WMP document will be produced following that review.

2. Cost Estimate for WMP Program

Task Number	Task Description	Effort Allocated (person/days)	Estimated Cost* (\$400 \$CAD/day)
1	Compile Bibliography and Review Information	5	\$2,000
2	Characterize Watershed - Climatic Zones, Hydrology, Land Use	5	\$2,000
3	Identify Sources of Negative Change	1	\$400
4	Identify Monitoring Requirements	3	\$1,200
5	Create Monitoring Report Templates	3	\$1,200
6	Establish Regulations and Jurisdictions	3	\$1,200
7	Compile First Draft of Watershed Monitoring Plan	5	\$2,000
Estimated Program Cost			\$10,000

* = Based on \$50/hr for a Qualified Environmental Professional, which represents a significant discount

Summary

SBS Directors are for the most part science-based and can support analytical programs focused on DWWP issues. We have environmental specialist, water quality and quantity specialists, and ecological and sustainable forestry specialists. This expertise will assist with DWWP program development. We can support environmental sampling, sediment quality sampling, water quality sampling, and other forms of environmental sampling and monitoring. Our community contacts and facilities in Shawnigan Lake (see Appendix 1) are ideal to support communication, education, and reporting. We are experienced in technical writing. Our Administrative Assistant is a part-time employee with clerical & creative skills to support the production and dissemination of technical information. Our staff & volunteers are "boots on the ground", active in South Cowichan communities and connecting with people who have concerns and direct information about water quality stressors on a daily basis.

In conclusion, SBS is ideally suited to work with the CVRD as a Strategic Partner. We look forward your advice on how to proceed to fulfill that role. Thank you for considering our request to join the CVRD as a Strategic Partner.

Yours truly,



David Munday, B.Sc., MBA, R.P. Bio.

President

Shawnigan Basin Society

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Shawnigan Lake, BC

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The Shawnigan Basin Society,

Working towards the ecological preservation of the Shawnigan Basin and the Drinking water it provides.

#102-1760 Shawnigan Lake-Mill Bay Rd. PO Box 189 Shawnigan Lake BC V0R 2W0 Telephone: 250 929 4076

Email: info@shawniganbasinsociety.org Facebook: [@shawniganbasinsociety](https://www.facebook.com/shawniganbasinsociety)

Appendix 1 – Shawnigan Basin Society Community Contacts and Facilities

i. Community Contacts

SBS has an extensive network of community organizations that can help with CVRD objectives under a Strategic Partnership relationship. Our contacts include but are not limited to:

Cowichan Community Land Trust – joint venturing on strategic land acquisitions

Invasive Species Council of BC – Participating in the BC Clean, Dry, Drain program with signage and education for Shawnigan Lake environs

Koksilah Watershed Working Group – SBS provided funding for a program to establish ecologically sustainable practices in their watershed

Mill Bay and District Conservation Society – Working together on salmon enhancement in the Shawnigan Lake watershed

Shawnigan Lake Business Community Association – Joint awareness programs for SL residents

Shawnigan Residents Association – Joint program to look at milfoil control in Shawnigan Lake

UBC – Restoration programs with graduate students

UVIC – Restoration and water quality programs in cooperation with graduates and professors

Mosaic – Long term Memorandum of Understanding to work together to deliver public awareness programs for forestry practices in local watersheds

Malahat Nation – Letter of understanding to work towards common goals related to watershed function preservation

Shawnigan Improvement District – Community recognition of SL fire department

Sonia Furstenau – Leader of the Green Party Provincially - Communicating on environmental issues in the Shawnigan Lake watershed

Blaise Salmon – Director of CVRD – communicating on environmental issues in Area A – Mill Bay

Sierra Acton – Director of CVRD – communicating on environmental issues in Area B – Shawnigan Lake

Community Contacts (cont'd)

Mike Wilson – Director of CVRD – communicating on environmental issues in Area C – Cobble Hill

SBS also has approximately 100 members, and 700 followers on Face book and Instagram.

OUR Ecovillage – This relationship connects us to locally curated, internationally recognized educational programs which offer innovation in water conservation, natural wastewater treatment, permaculture, food security and natural building.

II. Facilities and Personnel

SBS maintains an office space in downtown Shawnigan Lake (#102 – 1760 Shawnigan Lake – Mill Bay Road, Shawnigan Lake, BC, V0R 2W0, phone 250 929 4076). We have an Administrative Assistant (Brettany Flowers) who is available to the public three days a week - Tuesdays, Thursdays and Saturdays. The office is equipped with WIFI and telephone, as well as a computer and audio-visual equipment for presentations. We have a three- dimensional terrain model for the Shawnigan Lake watershed, as well as large scale mapping on the entire watershed that can be used for planning and educational purposes.

This facility is ideal for volunteer training, and program mobilization as required to achieve CVRD DWWP program objectives.