



**Salt Spring Island
Watershed Protection Authority
Regular Meeting Draft Agenda**

Date of Meeting: Friday June 17, 2016 10:30 am – 12:30 pm

Location: 145 Vesuvius Bay Rd., Salt Spring I., CRD PARC portable

1. CALL TO ORDER

2. APPROVAL OF AGENDA

3. MINUTES

- 3.1 Draft minutes of the May 20, 2016 Regular SSI Watershed Protection Authority Meeting – for approval

4. CLOSED MEETING RESOLUTION

The Salt Spring Island Watershed Protection Authority closes this meeting to the public subject to Community Charter Section 90(1)a *personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality*; and also, 90(2)b *the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party.*

5. OPEN MEETING RESOLUTION

The Salt Spring Island Watershed Protection Authority re-opens this meeting to the public subject to Section 89 of the Community Charter.

6. RISE and REPORT

7. BUSINESS ITEMS

- 7.1 **Chair's report** - *attached*

- 7.2 **St. Mary Lake water quality update** – NSSWD Board Representative

- 7.3 **Cusheon Lake water quality update** – Doreen Hewitt

- 7.4 **Coordinator's report** – *attached*

7.5 Technical Working Group report – TWG Co-Chair (Don Hodgins)

7.5.1 Soil Phosphorus Proof of Concept Proposal - *attached for approval*

7.6 St. Mary Lake Integrated Watershed Management Plan 2015 - Review of Progress

7.6.1 St. Mary Lake Sign – see Chair’s Report this package

7.6.2 Review Management Actions and Workplan (Coord)

St. Mary Lake Progress Report Card - *DRAFT attached*

7.6.3 Outreach & Events - Discussion

- i) Cancellation of June 19 Lake Celebration
- ii) Event insurance
- iii) Tuesday markets June 28, July 5, July 26, Aug 2, 9, 16, 23 (materials only, or materials and coordinator outreach)
- iv) Watersheds 2016 Sept 30- Oct 1, 2016 Simon Fraser U. - SSIWPA attendance or presentation?
- v) Living Waters Rally - Sept 27 - 30, 2016.

7.7 Upcoming Events

SSIWPA and Community Workshop with Diana Allen

“Estimating Groundwater Recharge to the Gulf Islands: Challenges and Progress”

Date: Friday August 19, 2016

9:30 am – 11:00 am Regular monthly SSIWPA meeting

11:00 am - Public arrives for presentation

12:30 pm - Presentation ends

12:45pm - 2:00pm - Steering Committee and TWG meet with Diana Allen

ACTION: Please RSVP by June 29 to Coordinator indicating:

- i) Your attendance at a Salt Spring venue. Y/N
- ii) Would you consider attending if the event were held off island, in Sidney, at a conference centre in order to accommodate more attendees from other Southern Gulf Islands Local Trust Committees? Y/N

7.8 SSIWPA Website and Library of Documents - a Tutorial (Chair/Coordinator)

7.9 Correspondence

7.9.1 SSI Water Preservation Society Invitation to SSIWPA for Drought Management Panel Discussion in August 2016 - attached

7.9.2 SSIWPA Letter to CRD Building Inspection re: Pollution Barrier - attached

7.9.3 Memo Coordinator to Steering Committee re: Pollution Barrier - attached

7.9.4 Announcement of news release: Auditor General for Local Government to audit "Local Government's Role in Ensuring Clean Drinking Water" in the communities of City of Kelowna and Regional District of Okanagan-Similkameen.
http://www.aglg.ca/includes/docs/drinking_water_audit_final2.pdf

8. OTHER BUSINESS

8.1 Questions and Comments from Public

9. NEXT MEETING of the Steering Committee

Friday July 15, 2016 10:30 am - 12:30 pm – @ CRD portable 145 Vesuvius Bay Rd., Salt Spring Island, BC

***Note:**

Please send agenda items to Coordinator before July 6th, 2016.

10. ADJOURNMENT



Salt Spring Island Watershed Protection Authority Minutes of a Regular Meeting

Date of Meeting: Friday, May 20, 2016

Location: 145 Vesuvius Bay Road, CRD PARC portable
Salt Spring Island

Members Present: George Grams, Chair, Islands Trust Local Trustee
Shannon Cowan, Coordinator
Dale Green, Capital Regional District, Integrated Watershed (via web conferencing)
Doreen Hewitt, Beddis Water Service Area Commissioner
Lorrie Hunt, Fernwood Water Service Area Commissioner
Pat Lapcevic, Ministry of Forests, Lands and Natural Resources
Wayne McIntyre, Capital Regional District (CRD) Director
Jeff Thompson, North Salt Spring Waterworks District (NSSWD) Trustee

Staff Present: Stefan Cermak, Regional Planning Manager (RPM)
Sarah Shugar, Recorder

Regrets: Don Hodgins, Chair, SSIWPA Technical Working Group

Technical Working Group Liaison: Ian DeBie, SSIWPA Technical Working Group member

Media and Others Present: 4 members of the public

These minutes follow the order of the agenda although the sequence may have varied.

1. CALL TO ORDER

Chair Grams called the meeting to order at 10:30 a.m.

2. APPROVAL OF AGENDA

The following additional items were presented for consideration:

- 6. Rise and Report
- 7.13.1.1 Memo regarding Habitat Conservation Grant Application
- 7.13.2.1 Memo regarding Blackburn Road Capped Landfill Site Monitoring
- 7.13.4 Correspondence from a member of the public
- 7.13.5 Correspondence from a member of the public

By general consent, the agenda was adopted as amended.

3. MINUTES

3.1 Draft Minutes of the April 22, 2016 Salt Spring Island Watershed Protection Authority Regular Meeting

By general consent, the Salt Spring Island Watershed Protection Authority Minutes of April 22, 2016 were adopted.

4. CLOSED MEETING RESOLUTION

At 10:32 a.m., it was **MOVED** and **SECONDED** that the Salt Spring Island Watershed Protection Authority closes this meeting to the public subject to Community Charter Section 90(1)(m) a matter that, under enactment, is such that the public may be excluded from the meeting; 90(2)(b) information received and held in confidence relating to negotiations between Islands Trust and a provincial government and that staff be invited to remain.

CARRIED

5. OPEN MEETING RESOLUTION

At 10:53 a.m., it was **MOVED** and **SECONDED** the Salt Spring Island Watershed Protection Authority re-opens this meeting to the public subject to Section 89 of the Community Charter.

CARRIED

6. RISE AND REPORT - none

7. BUSINESS ITEMS

7.1 Chair's Report

Chair Grams reported he has been working with Islands Trust staff, the North Salt Spring Waterworks District, and Coordinator Cowan on the Integrated Water Management Plan.

7.2 St. Mary Lake Water Quality Update – North Salt Spring Waterworks District

Committee Member Thompson reported the level of St. Mary Lake is below the weir height of 40.7 metres and this is slightly earlier than last year. The lake is currently experiencing an algal bloom. The next North Salt Spring Waterworks District meeting is scheduled on May 25, 2016.

7.3 Cusheon Lake Water Quality update

Committee Member Hewitt presented an update regarding the Cusheon Lake Watershed and the following highlights were presented:

- Secchi Disk measurement was 4.9 metres on May 2, 4.5 metres on May 14, and 4.5 metres on May 19. The lake is still very clear at this time;
- The corrected Lake gauge measurement was 1.206 metres on Apr 29, 1.226 metres on May 2; 1.206 metres on May 14, 1.194 metres

on May 19. The lake gained some water during the month likely due to the beaver dam not letting as much water out of the lake. The lake is now dropping;

- Rain received at Salt Spring Elementary to May 19 2016 - 5.6 mm, May 30 2015 - 5.3 mm, May 30 2014 - 43.2 mm;
- April rainfall was only 29.7 mm and this was much lower than previous years. It looks like this reduction in rainfall is continuing;
- Blackburn Creek is flowing into and out of Blackburn Lake;
- Blackburn Creek is still slowly flowing a very small amount into Cusheon Lake;
- Cusheon Creek has only a very small flow out of the lake likely due to a beaver dam;
- The lake temperature is rising and the oxygen at the bottom is absent;
- Cusheon Lake has stratified and the oxygen near the lake bottom is giving a negative number. This may indicate that hydrogen sulfide is being released from the lake bottom.
- Travis Tormala the Roads Area Manager- Saanich Office 240-4460 Chatterton Way, Victoria BC V8X 5J2, Telephone: 250-952-4481 has not responded regarding ditching;
- Committee member Hewitt called BC Hydro Stakeholder Relations and spoke with Ted Olynyk 250- 755 -7180 about the tree-cutting BC Hydro is conducting in Cusheon watershed. It was explained that Capital Tree - 250-415-7244 has a contract for 6 months and they will be severely pruning the trees on Salt Spring Island, in site specific locations, around the wires. It is hoped that and they will not need to be back for 4 years. A notice was placed in the Driftwood about this action. Some of the practices are questionable. Oil or other fluid was found on the road left by the equipment. Debris was left in the ditches and could be fuel for a wildfire when it is dry.

7.4 Coordinator's Report

Coordinator Cowan presented the Coordinator's Report for April 15, 2016 to May 13, 2016 and clarified that the Habitat Conservation Grant Application was not a SSIWPA grant application, contrary to what was written about it in the Driftwood May 18, 2016 edition.

7.5 Technical Working Group Report

Ian DeBie presented Technical Working Group (TWG) progress and the following highlights were presented:

- The Technical Working Group held its regular quarterly May (2016) meeting, which included a public presentation regarding climate change and drought analysis and implications for Salt Spring Island. In that presentation, the following items were presented:
 - 2015 spring drought was by far the most severe in the 100-year record.
 - Droughty springs occur throughout the record and show no indication of becoming more frequent or severe on average;
 - The likelihood that a droughty spring will be followed by a droughty fall and winter, leading to a shortfall of the lake from refilling, is low, in the order of 1 in 1000 years;

- SML climate is becoming wetter, the data suggests an increase of about 200 mm in the past 100 years or about 20% of the current annual total of 965 metres;
- the data indicate that the year-to-year variation of total fall/winter rainfall totals are increasing compared to 100 years ago.
- TWG is starting to integrate work on atmospheric pressure and look at SSI and St. Mary watershed rainfall data over time, in July and August;
- TWG is developing a soil study proposal, in order to map potential P soil content and movement near septic fields in St. Mary watershed, in order to verify groundwater septic P results (Hodgins, 2015), and as a potential template for other watersheds. If approved, and if successful, the method may be significantly less costly than the drilling method used at St. Mary in 2014-15;
- TWG is developing a proposal for groundwater study that needs to be integrated with the FLNRO grant application to MOE "Groundwater Science Program" for a surface-water and groundwater "budget" for Salt Spring Island.

It was noted the proposed soil sampling study and the groundwater study would be brought forward to the Steering Committee for approval at a future meeting.

7.6 SSILTC Resolution No. 2

Chair Grams introduced the following motion from the Salt Spring Island Local Trust Committee April 22, 2016 meeting:

"The Salt Spring Island Local Trust Committee supports SSIWPA's draft proposal to undertake a multi-agency, integrated planning exercise to reconcile sustainable source of potable surface and ground water with the aspirations expressed in the OCP for modest improvements to the built environment, and to examine how maximum benefit can be realized from sustainable water resources through conservation and recycling."

Chair Grams called for each Committee Member to confirm the nature of participation by his/her agency in this proposed program for SSIWPA.

By general consent, all Committee Members expressed support for SSILTC Resolution No. 2, in principle.

Chair Grams presented preliminary objectives. It was noted the next stage is to determine next steps and resources.

7.6.2 Proposal 2-1

By general consent, the Salt Spring Island Watershed Protection Authority agreed to develop an Integrated Water Management Program to reconcile the sustainable source quantity of potable surface and ground water available on Salt Spring Island, with the aspirations expressed in the Official Community Plan for modest improvements to the built environment, and to examine how maximum benefit can be

realized from sustainable water resources through conservation and recycling.”

7.6.3 Proposal 2-2

By general consent, the Salt Spring Island Watershed Protection Authority agreed to refer to the Technical Working Group (TWG) for information and comment regarding the intention to develop an Integrated Water Management Program for Salt Spring Island and requests the TWG to draft the technical scope of the program and how it might impact its work plan, and then report back to the Steering Committee.

7.6.4 Proposal 2-3:

By general consent, the Salt Spring Island Watershed Protection Authority agreed to prepare a draft scope of work for the Integrated Water Management Program as a whole, and to refer this scope of work to the various agencies and the Technical Working Group for comment and input.

7.7 SSILTC Resolution No. 1

7.7.1 Salt Spring Island Local Trust Committee motion, May 5, 2016

The Salt Spring Island Local Trust Committee and North Salt Spring Waterworks District agreed to enhance the depth of collaboration through Salt Spring Island Watershed Protection Authority and have proposed that the Salt Spring Island Watershed Protection Authority prioritize a review and completion of the Water Conservation Supply and Demand Management Plan for Salt Spring Island, written by Opus DaytonKnight Consulting.

The item was received for information.

7.7.2 Proposal 1-1:

By general consent, the Salt Spring Island Watershed Protection Authority agreed to request that the Technical Working Group review the following three reports in order to provide a critical, technical assessment of the methods, results and conclusions reached by the reports' authors, in terms of their stated objectives:

- i) Kerr Wood Leidal report on water availability for St. Mary Lake;
- ii) Kerr Wood Leidal report on water availability for Lake Maxwell; and
- iii) Opus DaytonKnight report on water conservation and demand management for Salt Spring Island, and to prepare a technical memorandum stating it's findings and conclusions.

7.8 Budget and Work plan Updates

Coordinator Cowan presented the Salt Spring Island Watershed Protection

Authority Final Income Statement 2015-16, for Revenue / Expenditures recognized to March 31, 2016.

7.8.1 2015-16 SSIWPA Income Statement

The income statement was received for information.

7.8.2 Current Work plan

Chair Grams presented the Salt Spring Island Watershed Protection Authority Workplan.

By general consent, the Salt Spring Island Watershed Protection Authority agreed to appoint a Conservation and Efficiency Committee (or working group).

7.8.3 Adopted 2016-17 Budget and Corrected Budget

Coordinator Cowan presented the Salt Spring Island Watershed Protection Authority Adopted Budget for April 1, 2016 to March 31, 2017, and Corrected Budget for the same period. It was noted the Events and Communications line item should be \$8,000, the Meetings line item should be \$5,300, the Grants line item should be \$30,800 and the amended total is \$166,700.

By general consent, the Salt Spring Island Watershed Protection Authority agreed to approve the Corrected Budget.

7.9 SSIWPA Capacity-Building

7.9.1 FLNRO Water Budget Funding Application - memo from Member Lapcevic

The memo was received for information.

7.10 2016 Water Fair Report

The report was received for information.

By general consent, the Salt Spring Island Watershed Protection Authority agreed to approve the 2016 Water Fair Report as presented.

7.11 St. Mary Lake Sign

Coordinator Cowan presented the final version of the St. Mary Lake Sign.

It was noted Coordinator Cowan would coordinate a site visit with the Capital Regional District, prior to commissioning the printing and mounting of the final sign.

7.12 Upcoming Events

7.12.1 SSIWPA and Community Workshop with Diana Allen - “Estimating Groundwater Recharge to the Gulf Islands: Challenges and Progress”

The “Estimating Groundwater Recharge to the Gulf Islands: Challenges and Progress” Workshop is scheduled on Friday, August 19, 2016. There was discussion regarding changing the venue to the Mary Winspear Theatre in Sidney.

By general consent, the Salt Spring Island Watershed Protection Authority agreed Coordinator Cowan would discuss the venue for the event with the TWG, Diana Allen and representatives from other Gulf Island Local Trust Committees (and communities that may be interested in attending) and present an update at the next meeting.

7.12.2 St. Mary Lake Celebration Event

The St. Mary Lake Celebration Event is scheduled for June 19, 2016. It was noted Committee Members are requested to send RSVP to Coordinator Cowan and include the time they are available to volunteer at the event.

By general consent, the Salt Spring Island Watershed Protection Authority agreed Coordinator Cowan would confirm the correct Hul'qumi'num' language interpretation for St. Mary Lake for both the sign and the June 19th event.

7.13 Correspondence

7.13.1 SSIWPA-supported Habitat Conservation Trust Foundation Grant Application

SSIWPA supported a Habitat Conservation Trust Foundation Grant Application from two local stewardship groups that was made to the “Public Conservation Assistance Fund” on May 13, 2016 for a shoreline restoration project.

7.13.1.1 Memo from Coordinator Cowan regarding the Habitat Conservation Grant Application

7.13.2 Memo regarding capped Blackburn Road Capped Landfill Site Monitoring

7.13.2.1 Memo regarding Blackburn Road Capped Landfill Site Monitoring

7.13.3 Letter sent from SSIWPA Coordinator to Ministry of Transportation and Infrastructure (action item 7.3 April 22, 2016)

7.13.4 Correspondence from a member of the public

7.13.5 Correspondence from a member of the public

All above correspondence items were received for information.

P. Lapcevic left the meeting at 12:12 p.m.

8. OTHER BUSINESS

8.1 Questions and Comments from Public

A member of the public asked for clarification regarding whether the planning exercise to reconcile sustainable source of potable surface and ground water would include amendment to the Land Use Bylaw, the Official Community Plan or both. She suggested SSIWPA consider the 'Soft Path' Water Conservation report that was prepared for the Salt Spring Island Water Council by POLIS Centre for Ecological Governance at University of Victoria.

A member of the public expressed concern regarding the impact of tourism on water demand and suggested SSIWPA invite the tourism sector to be involved as a stakeholder. He cautioned against relying on conservation measures to address the water issues and spoke to climate change and the need to adjust the year-to-year trends. He suggested to focus on freshwater and that "desalinization options" be considered a secondary priority. He also expressed concern regarding the time limit for public questions and comments.

A member of the public asked for clarification regarding "population stabilization" and asked if SSIWPA would consider increasing carrying capacity through means such as desalinization.

J. Thompson left the meeting at 12:32 p.m.

A member of the public requested SSIWPA send a letter to BC Hydro regarding the tree cutting equipment leaking oil on the roads within the Cusheon Lake Watershed. He acknowledged SSIWPA for considering all natural sources of water in their planning process.

9. NEXT MEETING

The next meeting is scheduled Friday, June 17, 2016, 10:30 a.m. - 12:30 p.m. at the CRD portable 145 Vesuvius Bay Road.

10. ADJOURNMENT

By general consent the meeting adjourned at 12:35 p.m.

George Grams, Chair

CERTIFIED CORRECT:

Sarah Shugar, Recorder

DRAFT

SSIWPA CHAIR'S REPORT 17 JUNE 2016

Apologies

for my absence but I have to chair a local trust committee meeting on Saturna today. Many thanks to Wayne for chairing today's meeting and to Peter Grove for representing the Trust.

Since last meeting

I've been working on:

1. The SML sign. A further revision was made to the design following the on-site meeting with CRD and Shannon and the sign will now be fixed a tree bole. Accordingly, the sign has to be single sided and the size has been amended to 2 x 4' portrait layout. A graphic of the revised sign is below. The sign is now in production and delivery is awaited. The means of fixing and erection have been designed and the sign can be fixed within a few days of delivery.
2. With our coordinator, the terms of reference for the CEWG.
3. The Integrated Water Management Program.
4. Our coordinator and I met with a candidate for membership of the CEWG.
5. Website update:
 - Main site has had the front page updated to include the integrated water management program.
 - A 'call for action' has been posted through which islanders can register their interest in joining this committee.
 - On the library site, some glitches in the site that prevented viewing and downloading of documents have been resolved. There may still be some broken links that need repaired. If steering committee and TWG members identify a broken link, please bring it to my attention.

Miscellaneous

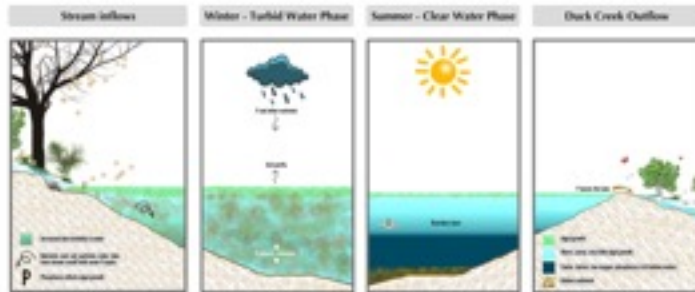
I would like to defer discussion on the integrated watershed management plan until the next meeting and would ask the committee's agreement to that proposal.

St. Mary Lake "Tl'elhum Xatsu"

The largest freshwater lake in the Gulf Islands

The lake and its surrounding watershed landscape are connected. They act as a living sponge to filter, collect, store and recycle water and nutrients. It is home to a diverse abundance of plants, animals and microscopic life.

Historically, this watershed is a special place, revered by Indigenous and colonial cultures alike. Today, it is the source of drinking water for many Islanders and visitors, and a delicate ecosystem that deserves our respect and protection.



Seasonal Nutrient Cycles Explained

Good Practice Guide Salt Spring Island Watershed Protection Authority



Responsible Authorities:

SSIWPA: The Salt Spring Island Watershed Protection Authority is a non-profit organization that was established in 2004 to protect and enhance the watershed of St. Mary Lake. The Authority is responsible for the development and implementation of the Watershed Protection Plan and the Good Practice Guide. The Authority also provides education and outreach to the community about watershed protection.

CRP: The Canadian Rangers Program (CRP) is a federal program that provides a variety of services to the community, including wildlife management, land management, and environmental protection. The CRP is a key partner in the watershed protection efforts of the SSIWPA.

Local Government: The local government is responsible for the development and implementation of the Watershed Protection Plan and the Good Practice Guide. The local government also provides funding and support for the watershed protection efforts of the SSIWPA.



Item 7.4 - 3 pages

Coordinator's Report
May 14-June 13, 2016

Meeting Admin:

Created adopted minutes file for April 22, 2016 regular SSIWPA meeting
Created adopted Closed minutes file for April 22, 2016
reviewed DRAFT SSIWPA May 20 meeting minutes
forwarded regular May 20 meeting minutes to Chair and Planner
adopted minutes January – April, 2016 sent to Trust Staff for signature and SSIWPA binder records
adopted minutes April, 2016 uploaded on website
TWG internal communications to prepare for meetings – two proposals, one project
facilitation of TWG session in June

Project Management/Facilitation:

SSIWPA new Integrated Water Management Program

ACTION 7.6.3 and 7.6.4 May 20 2016 – In PROCESS

- DRAFT process / scope proposal – In progress (Chair, Coordinator) (JULY)
- Referral of scope of work to TWG for comment – not begun

ACTION 7.8.2 May 20, 2016 **Conservation and Efficiency Committee** (or working group) agreement to establish/appoint members – IN PROCESS

- Terms of Reference – draft for discussion completed with input from Chair
- Membership application – draft for discussion completed

ACTION 7.7.2 May 20 2016 “Request for Consultants’ Report Review from Steering to TWG” – COMPLETED - was discussed by TWG in early June, 2016, reply to Steering pending

St Mary Lake Integrated Management Action Plan Action Implementation:

SML Sign – Almost Completed – Met with CRD Parks June 3, now in manufacture and mounting phase
Progress Report DRAFT – COMPLETED

SSIWPA Budget and Workplan:

Income Statement 2015-16 that was adopted by SSIWPA in May 20 2016 meeting was loaded to the website

ACTION 7.8.3 May 20 2016 – COMPLETED Amended Budget (May 13, 2016) that was presented in May 20 meeting has been loaded to website (working copy)

Adding to Workplan (Reports, links, new actions and updates) - In PROCESS

Cusheon Watershed Management Plan Review Project:

Closed minutes items (2) – ACTIONS May 20, 2016 – BOTH COMPLETED

Cusheon Water Use and Watershed Information Survey – analysis by Coordinator IN PROCESS

Technical Working Group

- internal liaisons and assistance with proposal-writing and organization of group
- facilitation services

ACTION

Outreach:

Diana Allen event August 19th:

- letters of invitation and RSVP request sent to 5 Local Trust Committees on other islands;
- RSVP request to SSIWPA committees and groups sent
- Venue rental inquiries made

Letters written and sent on behalf of SSIWPA:

CRD – Bergner re: Waste Transfer Station practices and licensing

MOE – Downie re: Landfill Monitoring by MOE since 2000

ACTION 7.10 May 20 2016 – COMPLETED SSIWPA/Water Council **Water Fair Report** 2016 – added on website

June 19 St Mary Event – 30 actions undertaken under planning, advertising, bookings, communications, event insurance negotiations with Islands Trust and query with CRD – COMPLETED

Event Cancellation under advisement of Chair, Vice-Chair and Trust Planning Mgr on June 7, 2016 – COMPLETED and communicated to Steering

Public Correspondence:

Media – Gulf Islands Driftwood inquiries re: new Integrated Water Program –referral to Chair Grams

Created Watermark newsletter for May, and June

Website fixes: broken links and making files visible to non-admin users

News posts on website: 4

Website uploads: several new documents, including budget under Governance & Social folder in Steering Committee sub folder

2 sets adopted minutes

Internal memos with CRD and IT – re website errors, St. Mary Lk sign, and event insurance

Proof of Concept of Soil P Movement from Septic Field Effluent through a Soil Sampling Approach

Investigators: Kevin Chipperfield and John Harris

Rationale: In the 2014-2016 St. Mary Lake monitoring program, septic tank effluent flow P was monitored by testing the water in shallow wells located near and down-slope of septic fields at three sites. The testing was able to capture effluent-P moving with shallow groundwater in the saturated zones. An unresolved question concerns possible P movement in the vadose zone (from the surface to 2m deep) during episodic periods of surface saturation (heavy winter rains). Another limitation of this study was the low number of sampling depths and wells to fully describe P movement both horizontally and vertically.

It is believed that a soil sampling approach may answer these questions and enhance understanding of P movement in near-lake septic fields. P movement is limited in non-calcareous (neutral to acidic) soils due to binding with Iron (Fe) and Aluminum (Al) which are in vast abundance. It is only when Fe and Al are unavailable (bound to P) can P move with soil pore water. Possibly, a few soil tests could determine if the effluent-P from a septic field is migrating beyond the drain field either horizontally in the vadose zone and/or vertically in the saturated zone and whether either pathway has the potential to reach the lake. An added benefit would be to give an estimate of the usable life of the field (based on Fe and Al concentration and availability).

Objectives:

1. To determine the Phosphorous Saturation Ratio (PSR: the ratio of Available P to Available Fe+Al) at a small number of locations and to determine if the PSR is a reliable predictor for significant P loss from the septic field into the lake.
2. If the PSR detects the P-plume, to assess the implications for St. Mary Lake and its applicability to Cusheon Lake as an investigative technique for septic P loading. (The motive is that soil sampling is a great deal less expensive than installing monitoring wells and the associated analytical chemistry costs.)

Study Design:

To soil sample one of the previously monitored sites around St. Mary Lake at 4 depths (0-30cm, 30-60cm, 60-90cm, and 90+ cm) in 6 spots and test for Available P, Fe and Al using the Mehlich3 extract, pH, nitrate, chloride and bromide. The Mehlich3 extract is an agricultural soil extract used to determine "Plant Available" nutrients - what the plant roots are able to utilize for metabolic processes. Nitrate, chloride and bromide are used as tracers for septic effluent. The results are to be compared to the previous study as a proof of concept.

For this study, there does not need to be water present in the soil. Sampling can be done anytime of the year and would be by hand auger (although would be easier in spring to fall). Any of the previously monitored sites would be good. A spot above the field and 5 spots between the field and the lake would be chosen using the previous data to most likely sample within and out of the effluent plume.

Costs and Labour

soil auger	supplied free by Kevin
labour (approximately 20 person hours)	supplied free by John and Kevin
supplies (bags, scoops, cold packs, styro shipper etc)	\$57
soil analysis for P, Fe, Al, pH, nitrate, chloride and bromide	\$87/sample x 24 samples = \$2088
shipping 24 soil samples to laboratory	\$145
contingency	\$250
<hr/>	
TOTAL	\$2,540

Budget request from SSIWPA
For Discussion and Approval

Item 7.6.2 2 pages - DRAFT

Progress Report Card for St. Mary Lake IWMP Implementation

Dated June 2016

		In Process	Complete
MA 1	Stormwater runoff phosphorus monitoring	✓	
MA 2	Verification of Septic Nutrient Input Study		✓
MA 3	Lake water quality monitoring - phase 2	✓	
MA 4	Best Management Practices for water quality	✓	✓
MA 5	Survey - improvement actions by landowners Habitat Conservation Trust Foundation Grant	✓	
MA 6	Watershed stewardship workshops		✓
MA 7	EFP Group workshop, SSIAA, David Tattam		removed
MA 8	Water Quality Signage		✓
MA 9	Island-Wide Fair		✓
MA 10	Youth Stewardship Activities		✓
MA11	Residential Septic Maintenance Education	✓	✓
MA 12	Biodiversity Inventory	✓	
MA 13	Grant writing assistance	✓	
MA 14	Sediment pore-water profiling	✓	
MA 15	Stormwater management phase 2		
MA 16	Permaculture Water Management Program	✓	

Detail

- MA 1 Preliminary report - D.O. Hodgins
- MA 2 Final report - D.O. Hodgins, TWG
- MA 3 St. Mary Lake water quality monitoring for fall turnover 2016 under consideration by TWG.
- MA 4 SSIWPA Brochure 2015 complete and distributed; BMP Draft in process
Cusheon Watershed results are in; Analysis in process. Island-wide survey as part of SML IWMP and also new Water Management Program to be developed by TWG and CEWG.
- MA 5 Application submitted by two local stewardship groups, May 26, 2016 (covers actions 5,6,8,9,10,12)
March 13 Water Fair Workshops. 2015 Cowichan Riparian Restoration Field Trip.
- MA 6 October correspondence with group Environmental Farm Plan officer and Farmer's Institute revealed that point-source driven approach would be necessary to warrant application to this program.
- MA 7 pending sign mounted at lake
- MA 8 Final Report on website
- MA 9 Ongoing. Kids for Creeks at Water Fair.
existing educational materials distributed in SSIWPA mailouts, survey
- MA 10 includes septic data request; realtor packages
- MA 11 Application submitted by two local stewardship groups, May 26, 2016
Assisted Cusheon Lake Stewardship Committee and Island Stream and
- MA 12 Salmon Enhancement Society April-May, 2016
- MA 13 St. Mary Lake sediment monitoring under consideration by TWG;
- MA 14 as yet, TBD
- MA 15 CRD involved through Growing Forward grant with one island farmer.
Potential to expand after March Water Fair workshop by permaculture expert. Not a specific action for this watershed, but whole island. ONGOING

Event Insurance

Communication received via email, June 7, 2016

From: [redacted], insurer for Islands Trust

Hi Shannon

No problem I am happy to help. Too funny I had just followed up with Cindy a few minutes ago about next steps on this event.

The last update that I had from Cindy indicated that SSIWPA was the responsibility of Islands Trust. For events in future I will be looking to Cindy to confirm if

a) they want an event under the Islands Trust policy, and there are reasons for risk control purposes that IT needs to consider that

or

b) under a separate one of event policy.

I think the only time you are likely to run into an issue with an event is if Islands Trust is somehow not involved. I don't think I see a need for SSIWPA to be setting anything additional up at this time.

There might be a discussion to be had about operational liability overall. The jist I am seeing though is that it lies with Islands Trust and I will have to get some instructions from Cindy on that going forward.

Best regards,

[redacted signature box]



*Salt Spring Island
Water Preservation Society*

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Salt Spring Island, BC
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www.ssiwaterpreservationsociety.ca

June 15, 2016

Salt Spring Island Watershed Protection Authority
c/o Shannon Cowan, Coordinator

Dear Authority Members:

The Salt Spring Island Water Preservation Society is dedicated to protecting drinking water resources on Salt Spring Island. Since the recent drought seems to be continuing, we feel a responsibility to help keep the community informed about what is happening now and what might lie in the future with regard to our island's water supplies.

We are sponsoring a community education event in mid-August about water supply planning in a drought prone era. We are inviting your organization to send a spokesperson to participate first in informal discussions with attendees and then to be on a panel to speak and answer questions.

The attached questions were created to get the discussion started and provide background for the audience. It would be up to your spokesperson to decide which questions to address. There will also be questions from the audience. After we know who will be on the panel, we will discuss with your speaker how much time they will need to speak. We will be inviting the following organizations and speakers:

North Salt Spring Waterworks District
SSI Watershed Protection Authority
SSI Local Trust Committee Trustees

A speaker to discuss re-using wastewater from the Ganges sewage treatment plant.
A rainwater collection system installer

We understand that you cannot commit until we have a date. But we are hoping that this letter will allow the request to be put to your governing board so we will know if you are interested. As soon as we have a date and location, we will let you know. Thank you very much for considering this request. Please respond to me at 250-537-1577 or ssiwps@gmail.com.

Sincerely yours,

A handwritten signature in black ink that reads "Maxine Leichter". The signature is written in a cursive, flowing style.

Maxine Leichter
President, Salt Spring Island Water Preservation Society

Capital Regional District Building Inspection

May 27, 2016

206-118 Fulford-Ganges Road, Salt Spring Island, BC V8K 2S4

or main office:

PO Box 1000, 625 Fisgard Street, Victoria, BC V8W 2S6

To Whom It May Concern,

The Salt Spring Island Watershed Protection Authority (SSIWPA) is currently undertaking an audit of the health of the Cusheon Lake watershed for the purposes of preparing an integrated watershed management plan.

As part of that process, SSIWPA has received information from the Cusheon Lake Stewardship Committee pertaining to development practices on properties within the watershed that may be impacting surface waterways which fall under Islands Trust Bylaw 480, and Development Permit Area 7 (Riparian).

Salt Spring Island Watershed Protection Authority would like to recommend that the Capital Regional District Building Permitting and Inspection Units consider adopting the practice of mandated pollution barriers for certain types of building and development activities, especially those involving the movement and/or application of soil or fill materials within 30m of a surface water body such as a ditch, stream, pond or lake.

There are examples from other jurisdictions where the use of pollution barriers is mandated, which have successfully protected riparian areas and water quality. For example....

SSIWPA recommends that pollution barriers be a requirement in the building permit process throughout the Capital Regional District.

Thank you for your consideration. SSIWPA steering committee meets monthly, and would appreciate a response to this letter at its upcoming June 17, 2016 meeting.

Sincerely,



George Grams, SSIWPA Chair, Local Trustee, Vice-Chair Islands Trust

Memo to SSIWPA
From Coordinator Cowan

re: Development-caused erosion in sensitive/riparian, drainage zones.

This pertains to SSIWPA outstanding Action item 7.6.3 from 23-10-2015 to remedy mitigation of sediment washing away in stormwater runoff.

Action was for CRD Director to inquire about pollution barriers with Building Inspection Office (CRD).

What is a Pollution Barrier? By Chair Grams:

The pollution barrier usually consists of some sort of temporary, reusable fencing such as chestnut pale that provides a barrier during construction that defines sensitive areas of the site and into which the contractor is not allowed to trespass. In our instance, the delineation of the RAR setback area would be appropriate, but it could also apply to other sensitive areas such as those where species at risk exist.

Context:

The action arose when Steering Committee set priorities for Cusheon Watershed program in fall of 2015, after the September 2015 community meeting about Cusheon Watershed priority issues.

Results:

Inquiry by the CRD Director at the level of Building Inspection did not yield any results.

Chair Grams inquired with Islands Trust Planning Staff regarding the potential for Local Trust Committee to take any appropriate action.

On the advice of Regional Planning Manager, Stefan Cermak:

The issue is not with erosion-prevention policy, but with enforcement.

New Proposals:

1) Islands Trust and MOTI could coordinate on an improved prevention-based permitting approach relating to subdivision and new land clearing activities.

2) Proactive policy from LTC to Islands Trust Bylaw Enforcement may complement any Watershed Management Program on island, especially to improve development-based erosion prevention through both education and/or fines.

Chair Grams has set the proposals on the LTC agenda.