



Salt Spring Island Watershed Protection Authority

Minutes of a Regular Meeting

- Date of Meeting:** Friday, November 25, 2016
Location: 112 Rainbow Road, School District 64 Boardroom Portable
Salt Spring Island
- Members Present:** George Grams, Chair, Islands Trust Local Trustee
Dale Green, Capital Regional District, Integrated Watershed (via telephone conferencing)
Doreen Hewitt, Beddis Water Service Area Commissioner
Lorrie Hunt, Fernwood Water Service Area Commissioner
Pat Lapcevic, Ministry of Forests, Lands and Natural Resource Operations (FLNRO) (via telephone conferencing)
Wayne McIntyre, Deputy Chair, Capital Regional District (CRD) Director
Ron Stepaniuk, District Manager, North Salt Spring Waterworks District (NSSWD)
- Staff Present:** Shannon Cowan, Coordinator
Justine Starke, Island Planner (North Pender Island) (via telephone conferencing)
- Technical Working Group Liaison:** Don Hodgins, Co-chair, SSIWPA Technical Working Group
- Conservation Working Group:** Sandra Ungerson, Chair, SSIWPA Conservation and Efficiency Working Group
- Media and Others Present:** 5 members of the public, 2 other members of the Conservation and Efficiency Working Group, CRD Alternate Darryl Martin, and Islands Trustee Peter Grove

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 10:33 a.m.

2. APPROVAL OF AGENDA

Agenda amendments were put forward for additions to item 4.11.1: a) Salt Spring Island Water Preservation Society letter dated November 21, 2016, and b) Island Health reply letter dated November 22, 2016.

By general consent, the agenda was adopted as amended.

3. MINUTES

3.1 Draft Minutes of the October 28, 2016 Salt Spring Island Watershed Protection Authority Regular Meeting

By general consent, the Salt Spring Island Watershed Protection Authority Minutes of October 28, 2016 were adopted as presented.

4. BUSINESS ITEMS

4.1 Chair's report

Chair Grams reported he has been working on the Annual Report 2016. In addition, he reported the development of a draft proposal containing information about a "Request for Decision" for a Senior Freshwater Specialist for the Trust Area (Temporary, 1 year). The final request does have Staff support at Islands Trust, and after final touches by Director of Local Planning Services, it will be submitted to Trust Council in early December, 2016. The proposed position would provide expertise and capacity to meet the increasing need to address the decline and overstress evidence in existing groundwater and surface water supplies.

4.2 St. Mary Lake Water Quality Update

Committee Member Stepaniuk reported that lake levels have come up. There has been one instance of microcystin reported in treated water by NSSWD. There are twice weekly sampling protocols for both raw and treated water.

4.3 Cusheon Lake Water Quality Update

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

- The algal bloom in Cusheon Lake was still present with sample Nov. 2 showing *Microcystis* spp. By Nov. 14th, the qualitative result showed "low" algal activity, and cyanotoxin tests on raw water samples have shown results below detection limit.
- Threat to drinking water in Cusheon Lake lasted 12 weeks, and is of great concern to those obtaining water from Cusheon Lake.
- The Secchi Disk measurement was as follows: Nov. 4, 3.7m; Nov. 15, 4.0m (more clear) and Nov. 24, 3.16m (less clear than previous two weeks). The recent rains and inflow volume are likely cause of rise in turbidity over last two weeks.
- The corrected Lake gauge measurements are as follows: Nov. 4, 1.562m; Nov. 15 1.322m; and Nov. 24 1.336m.
- Rainfall quantities received at Gulf Island Secondary School: Nov 2016 – 106.2mm. Compare this with Nov. 2015 – 99mm and Nov. 2014 – 94.5mm.
- The lake continues to be mixed, and temperature of lake water on Nov. 24 was 9.2 degrees Celsius.
- Flow gauge measurement in Cusheon Creek on Nov. 23 was 0.436m. There was low flow from Tyler Brook and Stewart Road.
- On Nov.4 6:30 pm the flow in Cusheon Creek was 0.55m. The beaver dam was

on verge of letting go as a section of dam washing away on the North side. The next day Nov.5 12:05 pm the creek flow was 0.64m. Beaver dam washed out and nothing left but gravel. The dam washed down the creek sometime during the night. Logs, blocking the flow at the Far East end of the lake, were removed at approx.10:00 am. Algae in this area, was a sea of blue green and gray and needed to be flushed out and off the surface. There was a concern that the wind would blow it back to the west into main area of lake where the Beddis System Water intake is located. Permission was granted [from Islands Trustees] to do this work prior to removal of the logs. The Beddis water system did not need to have this further risk.

4.4 Coordinator's Report

The Coordinator's Report for the period reflects a series of activities. Coordinator Cowan reviewed the "in progress" actions and added detail about identifying (recently) the need for streamlining of the data-sharing among SSIWPA working groups, and water districts/small water system boards, as well as the provincial water budget study consultant (soon to become active on Phase 1 of that project). She reported assisting with deployment of rain gauges to Salt Spring Centre School, and other locations at private residences in an effort to spread out the precipitation monitoring and to assess variability across the island's micro-regions. All data collected by the five new rain gauges on Salt Spring Island will be available through Environment Canada weather monitoring database. These will not be formally connected to SSIWPA, but the results will positively impact SSIWPA investigations and priorities.

4.5 Technical Working Group report

Technical Working Group (TWG) Co-chair Hodgins presented TWG progress and the following items were highlighted:

- St. Mary Lake Water Quality:
 - Review of St. Mary Lake "additional" intensive sampling during overturn revealed that effort and expense was not justified. There may not be enough value in this management action.
 - The soil phosphorus pilot project sampling will begin December 3, 2016.
 - Technical working group member Beall is collaborating with Cusheon Lake Stewardship Committee and Beddis Water District Staff and Commissioners to develop a quality monitoring plan for Cusheon Lake, including possibility of funding applications to finance the work.
- Water Quantity:
 - The sustainable yield model for surface water St. Mary Lake is now complete
 - Impacts of climate change extremes on the model (above) has been pushed to early 2017.
 - Groundwater study workplan has been discussed within SSIWPA working groups, and the upcoming meeting with Golder Associates consultant for the Provincial water budget program (early December) will allow TWG to finalize this workplan, and determine resource sharing protocols.
 - Preliminary meeting of two TWG members with Trust Staff about

Geographical Information Systems work in the groundwater study proposal suggests that the resources are available to meet the projected needs. Specifics and timelines will be confirmed after the meeting with the provincial water budget consultant next week.

- Rain gauge expansion around the island is important and valuable to TWG. Outstanding variability for time scales and weekly data can be addressed by more rain monitoring points.

Chair Grams queried whether further intensive sampling of St. Mary Lake should be removed from the 2015 Integrated St. Mary Lake Management Plan. Discussion ensued about triggers that would suggest a need for elevated sampling (parameters, frequency, sample locations and depths, etc.).

By general consent, Salt Spring Island Watershed Protection Authority agreed that Coordinator Cowan will draft a revision to the 2015 St. Mary Lake Management Plan Action for more intensive sampling, to be submitted to the TWG and Steering Committee.

4.6 Conservation and Efficiency Working Group Report

The working group has developed a framework to address it's mandate. The CEWG established six assumptions, with full allocation of St. Mary Lake and stressed water supplies in general among the top assumptions. The following action areas:

- Comparative analysis of the Salt Spring Island water districts
- Investigate feasibility of re-using reclaimed water (Ganges Harbour – sewage treatment output)
- Use of Development Permit Areas as an effective deployment mechanism
- Compile list of techniques and technology for water conservation and efficiency (compare current zoning and bylaws to identify opportunities and barriers to implementation of technologies)
- Education system – involvement of youth in water conservation strategies and public education. Member Ken Lee is inspired to motivate this sector as a unit.
- Cost:benefit analysis of sticking with existing technology versus establishing more low-impact technologies

Member McIntyre mentioned that the reclaimed sewer water is currently being used to clean equipment at Burgoyne Bay. Member Hunt suggested that an example in Wellbury Bay of the use of condensation as an alternative water supply could be investigated.

Action 4.6: Member Hunt agreed to share information about the dew collecting example with the Conservation and Efficiency Working Group (CEWG).

Chair Grams suggested that CEWG could share list of incentives early with Steering Committee, as a potential for a funding application proposal.

4.7 Update on Local Trust Committee OPUS Project Extension

Planner Starke reported the revision of Terms of reference to meet substantial change

of direction that has been suggested by the TWG. The timeline for Local Trust Committee's revision to the OPUS project extension is January, 2017. Planner Starke agreed to circulate the revised Project Charter (Staff Report), which includes updates to SSIWPA's work program. The document that will be circulated outlines how Planner Starke will interact with the SSIWPA - CEWG work program.

4.8 Annual Report Draft

The annual report draft was presented in hard copy, and was sent electronically to committee members in advance of the meeting. Chair Grams reviewed the following features of the draft report: There was 100% completion for four of the six annual major goals. Progress has had to accommodate the new Integrated Water Management Program, which was added mid-way through the year. Coordinated approaches to the completion of this Integrated Water Management Program, will continue to rely on increased inter-agency cooperation, which was suggested to be one of the major accomplishments of the SSIWPA work during the current year.

There was discussion about the first listed action of the CEWG on page 7 of the draft report, to clarify the purpose. A suggestion was raised that the draft report should clarify the "year end date". The fiscal year-end timelines were discussed for each of the agencies.

By general consent, the Salt Spring Island Watershed Protection Authority agreed that the next annual report for SSIWPA will be completed in early April 2018 to meet the completion of the financial year of each SSIWPA agency.

4.9 Sustainable Yield Analysis for St. Mary Lake

TWG Member Dr. Don Hodgins presented a worked example for the surface water yield model for St. Mary Lake. The mathematical, longer description of this work will be presented on December 13, 2016 at the public meeting of the TWG. Some clarifying questions were asked from the meeting participants, with answers from Dr. Hodgins. A discussion ensued about risk management, and licensing practices at the provincial level, as well as the new "Water Sustainability Planning" process under the British Columbia Water Sustainability Act.

4.10 Announcements and Events

4.10.1 Meeting Schedule for SSIWPA Steering Committee 2017

By general consent, it was agreed that the Salt Spring Island Watershed Protection Authority Steering Committee members would each review the attached proposed meeting schedule for 2017, and inform the Coordinator of any conflicts or concerns.

4.10.2 The item was received for information.

4.11 Correspondence

4.11.1 Lake presence of cyanotoxin notification to the public. Three items of correspondence in the agenda package and two additional items of correspondence (Island Health letter to SSIWPA dated November 22, 2016 and the Salt Spring Island Water Preservation Society

letter dated Nov. 21, 2016) were received for information and discussion.

Member Stepaniuk agreed to report back to SSIWPA Steering Committee about the results of a meeting among Island Health staff with water purveyor staff regarding public notification about cyanotoxin presence.

4.11.2 A letter from Mr. W. Hewitt dated November 3, 2016 to SSIWPA re: Errors in Nov. 2 2016 Driftwood newspaper article about cyanotobacteria was received for information.

4.11.3 A letter from a member of the public regarding a possible Health Canada water quality guideline review that TWG may undertake was received for information.

By general consent, it was agreed that SSIWPA Coordinator will pass on this letter to Technical Working Group as an optional piece of information, which is not related to the TWG's local issues workplan.

4.11.4 A letter from a member of the public re: St. Mary Lake cleanup

By general consent, it was agreed that SSIWPA Coordinator would contact Dale Johnson (Ministry of Transportation and Infrastructure) to pass on the letter from the member of the public regarding garbage cleanup along the roadways adjacent to St. Mary Lake.

5. OTHER BUSINESS

5.1 Questions and Comments from Public

A member of the public commented that SSIWPA member agencies are doing a fabulous job of picking up the pieces in a process that is perhaps not functioning fully to inform all of the members of the community and visitors to the watersheds who may be impacted by health results of algal blooms. This member urged SSIWPA to consider playing a more coordinating role in public health issues related to water quality issues, and to consider revisiting this at the next meeting of Steering Committee.

Q: If a licensee does not use a water license for 3 years can it be removed? Member Lapcevic replied that the license can be cancelled if it is not used beneficially for three years.

Member Lapcevic agreed to get more clarification from the authorizations department at FLNRO about what that might look like.

Q: Is the FLNRO looking at individuals drawing from a surface resource without a license? A: There have been surveys about unlicensed use, and will follow up where feasible. The FLNRO will follow up if there has been a complaint.

Q (Directed at TWG member's presentation): Would you please characterize the level of precaution for the presented tool/model? A (Dr. Hodgins): The decision about risk involves setting the criteria in advance: Are you interested in ecological health, or merely a physical criterion (ie. How much water is available to physically remove?)?

Further discussion emphasised aspects of decision-making processes and water quantity planning. It was suggested by more than one steering committee

member that a “water quantity” watershed management plan, including consultation with island residents, is needed to consider all of the criteria that are involved in risk assessment.

One member of the public asked whether over-licensing indicates “stress” in a resource, such as a drinking water lake. A: No. The license amount is not necessarily the same as the level at which stress could be measured.

One member of the public asked whether hard copies could be provided for all addenda (items not in the agenda package) to the members of the public who attend the meeting.

Q: Might there be overlap between the proposed freshwater specialist position and the Kerr Wood Leidal hydrology reviews that Member Stepaniuk stated that NSSWD is planning to complete? A: Peer review is essential, and the freshwater specialist would provide this capacity, not only on this island, but the entire Trust area.

Q: How are cyanotoxins currently tested for by NSSWD? A: Member Stepaniuk described the physical removal of the current treatment plant, and the chemical addition that has been successful, to date (higher than usual dose of Chlorine).

It was suggested that the sustainable yield model (which was presented for St. Mary Lake) should consider the calculations from the last ten years, instead of the last 35 years, to reduce the skew and to better represent the effects of climate change that are currently being experienced in the system.

6. NEXT MEETING

The next regular meeting is scheduled for Friday, January 20, 2017, 10:30 a.m. to 12:30 p.m. at the School District 64 Boardroom Portable, 112 Rainbow Road.

7. ADJOURNMENT

By general consent the meeting adjourned at 12:38 p.m.

George Grams, Chair

CERTIFIED CORRECT:

Shannon Cowan, Recorder