



**MINUTES
of the
SSI WATERSHED PROTECTION AUTHORITY
TECHNICAL WORKING GROUP (TWG) MEETING**

Date of Meeting: Tuesday, June 13, 2017 10:00 – 12:00

Location: 112 Rainbow Rd. portable
Salt Spring Island

Members Present: Fred Beall, Member at large
Don Hodgins, Co-Chair
Dale Green, Capital Regional District, Integrated Watershed
(via web conferencing)
John Millson, new TWG member at large
Sylvia Barroso, Ministry of Forests, Lands and Natural Resources

Regrets: Kevin Chipperfield, Member at large
Ian deBie, Co-Chair
Julie-Ann Ishikawa, Ministry of Environment
Jos Lussenburg, Member at large
Katsky Venter, Member at large

Staff Present: Shannon Cowan, Coordinator

Observers/Public: George Grams, Chair, Islands Trust Local Trustee
Ian Peace, SSIWPA Conservation and Efficiency Working Group

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

1. The meeting was called to order at 10:08 am.
2. New proposed agenda item: 4.1.2 Cusheon literature review and update on Squires and Bodaly June 1, 2017 presentation to public (Fred Beall)

By general consent, the agenda was approved, as amended.

3. Draft Minutes of the April 25, 2017 Watershed Protection Authority's Technical Working Group were approved by general consent.

4.1 Research Updates

- 4.1.1 Safe Yield Analysis Model (revision after Weijs' review).



Member Hodgins indicated that a detailed discussion of this item was deferred. All TWG will have opportunity to comment on revised report and TWG response to Steering Committee. Consensus on any changes to the December 2016 report will be sought.

ACTION 4.1.1.1 D Hodgins will send revised report to TWG.

ACTION 4.1.1.2 Coordinator will schedule a date and time for deferred presentation of results and discussion of revised report.

4.1.2 Cusheon update on June 1 presentation of April, 2017 monitoring paper (flow and chemistry) by Squires and Bodaly – Fred Beall

Member Beall reported a synopsis of his understanding of the Squires and Bodaly presentation given about their Cusheon watershed monitoring program conducted 2014-16. In summary, member Beall finds that there is a need for continuous long term hydrological monitoring. There is a need for more comprehensive chemistry sampling: e.g. base cations, sulfate, chloride, pH, metals (Fe, Al, Zn), ammonia. Actions under 4.1.3 from TWG meeting minutes April 25, 2017 are ongoing by members Beall and Venter.

4.1.2b Stream monitoring by FLNRO – Fish and Wildlife - Coordinator and Member Barroso

Coordinator Cowan reported the status of the stream monitoring project on 6 streams on SSI: 4 small creeks (volunteer wetted width, temp, level), and monthly flow tracking plus instream transducers at Cusheon hatchery and Fulford Creek at a location in the valley. A discussion ensued. One member noted that conditional sampling of the flow tracking (average volume/second) is recommended at Cusheon Creek hatchery. It was noted that the hydrologist performing this work is aware of this fact. Members Beall and Hodgins and Millson expressed a desire to attend the next visit for stream monitoring by Fish and Wildlife staff Mr. Szczot.

Member Millson offered to do citizen science monitoring for ephemeral streams on the South side of Fulford Creek outflow (Isabella Pt.) and Weston Lake outflow to Fulford Harbour. Coordinator provided him with instructions on photos and a data collection sheet, and contact information for the Island Stream and Salmon Society to get information about those sites where he will collect data. Member Hodgins confirmed that the flow measurements in Cusheon Creek (and others) are very important for the safe yield analysis modelling as well.

ACTION 4.1.2b Coordinator will include members Beall, Hodgins and Millson in coordination of field day in late June with Mr. Szczot.



4.1.3 Wells inventory and REFBC Grant for Groundwater monitoring

Member Barroso provided a short update on the steering committee's approval in principle of the Task 5a Wells Inventory project. She also provided a reminder of the goal of Task 5b Groundwater monitoring, and update on the REFBC grant application development, to improve spatial resolution of both recharge and discharge zones for long term record of groundwater characteristics through installation of 4-6 monitoring by transducers (some coastal locations to include temperature, depth and specific conductivity). If pumps are installed, additional costs will be involved. Further explanation of the budget and matching funding rationale ensued. The goal is completion of the writing of the grant proposal this month, and if successful, the Groundwater Monitoring project will begin January 2018.

The Coordinator also provided a short synopsis of the status of the Task 5c groundwater community well inventory and data sharing action that she is conducting on behalf of TWG and CEWG data users, and noted the relevance of analysis of the community well data to the establishment of Task 5b monitoring locations for 2018.

A question was raised about the establishment of priority areas for groundwater monitoring (5b) and cost: benefit analysis about how ongoing well monitoring can impact safe yield answers for input of resources in the longer term. Member Barroso replied with some specific plans for determining the "location" priorities and the importance of long term monitoring for more accuracy and long term groundwater empirical information in more than the current three provincial locations for the whole of SSI. There is potential after the first phase (Task 5b ending march 31, 2019) to extend groundwater monitoring program for locations where data can aid regional provincial groundwater management and also meet the mandates of the other SSIWPA agencies.

Refinement through expanding the long term groundwater monitoring network addresses the data gap and inadequacy of the current three observation wells in the network for the whole island. The task 5b "well monitoring" has potential to determine seasonal effects of rainfall within the regional aquifer delineations will assist to determine predictors of groundwater availability late in the summer.

There were questions concerning current provincial observation wells. Member Barroso highlighted the data are used for 'aquifer dashboard' approach (reporting templates: 'state of the aquifer' and 'state of the environment' reports) done by the Province.



There was a question about whether Task area “5d” as defined in a draft work scope document prepared by John Millson was approved by the organization. It was clarified that the draft scope of work for 5d has not been confirmed complete by the TWG groundwater subcommittee, and it was determined that the groundwater subcommittee will need to finalize the 5d proposal before it is ready to forward to Steering Committee.

4.2 CEWG update

Coordinator provided a short update on the work of the Conservation and Efficiency Working Group.

5. OTHER BUSINESS

- 5.1 The one comment from the Chair of SSIWPA was that the Freshwater Specialist should be at work at Islands Trust by July 1, 2017.
 - 5.2 Well Owner Workshop on June 30th on SSI was announced.
 - 5.3 TWG members present agreed that the report to Steering Committee for June 2017 will be summarized from these draft minutes by the Co-Chair and presented verbally in the steering committee meeting.
 - 5.4 iMap demonstration. Member Barroso guided the group in a 30 minute presentation of the tools and access to information available in the GIS public platform called “iMap BC”. The audio file of this presentation is available through the coordinator for other TWG members who may wish to access it.
- 6. NEXT MEETING** September 12th, 2017 10:00 am – 12:00 pm.
- 7.** Meeting was adjourned at 12:14 pm.