



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

**Date of Meeting:** Tuesday, April 25, 2017 10:00 – 12:00  
**Location:** 112 Rainbow Rd. portable  
Salt Spring Island

**Members Present:** Fred Beall, Member at large  
Kevin Chipperfield, Member at large  
Ian deBie, Co-Chair  
Don Hodgins, Co-Chair  
Jos Lussenburg, Member at large  
Katsky Venter, Member at large (via web conferencing)  
Dale Green, Capital Regional District, Integrated Watershed  
(via web conferencing)  
Sylvia Barroso, Ministry of Forests, Lands and Natural Resources

**Regrets:** Julie-Ann Ishikawa, Ministry of Environment  
John Millson, new TWG member at large  
George Grams, Chair, Islands Trust Local Trustee

**Staff Present:** Shannon Cowan, Coordinator

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

1. The meeting was called to order at 10:00 am.
2. A suggestion was made to add the following to the agenda:
  - 4.1.0 – Dale Green – CRD Contour Data
  - 4.1.6 – Sylvia Barroso - Golder Phase 1 Draft Summary Report Review Request
  - 4.2.3 – Sylvia Barroso – also to comment on Draft Workslope memo for 5d

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



3. Draft Minutes of the February 28, 2017 Watershed Protection Authority's Technical Working Group were not included in the agenda package.

**By general consent**, the TWG requested the Coordinator to circulate the minutes for approval or editing, to be reconsidered in the next meeting of the TWG.

#### 4.1 Research Updates

**4.1.0 Contour mapping data.** D. Green reported that 1m contour data for SSI (and other S. Gulf I.) will be generated by CRD (from LIDAR data) in the next few months. He also reported that the scope of the CRD service (currently stormwater and harbours) is currently in the final stages of being approved for expansion to include groundwater within its scope, as well.

**ACTION 4.1.0a: D. Green agreed** to inform TWG/SSIWPA, when it is available.

**ACTION 4.1.0b: Coordinator agreed** to send LIDAR data to S. Barroso that was previously shared between J. Lussenburg, Coordinator and Islands Trust.

**4.1.1 Soil Phosphorus Pilot Data Analysis.** K. Chipperfield discussed sampling methods used for pilot study and some preliminary findings (e.g. SSIWPA septic research programme soil samples from drilling in late 2014 at same site were analyzed as the deeper samples that were not accessible by hand auger). Data analysis is ongoing, report out expected later in the year.

#### **4.1.2 External Review by Professor Weijs of Report "Safe yield for St. Mary Lake" by D. Hodgins**

The Technical Working Group received the report from Steering Committee. TWG members suggested that the first step is for report author D. Hodgins to prepare a technical response to the points in Dr. Weijs' review (including incorporation of changes to the original research that he supports as author of the work).

**ACTION 4.1.2: D. Hodgins agreed** to circulate his response to TWG.



**Next steps on 4.1.2 Weijs Review that were agreed by general consent of TWG:**

- 1) TWG agreed to review D. Hodgins' response and Dr. Weijs' report and revised Safe Yield for SML paper.
- 2) TWG to discuss and agree related recommendations to Steering Committee on the report, review and author's response. (TWG Member DH to recuse himself from TWG recommendations)
- 3) TWG to submit response to Weijs report formally to Steering Committee (If possible, by May 16 for inclusion in next Steering agenda, but not required.)

**4.1.3 Cusheon Lake Watershed Historical Data and Monitoring Scope of Work (Cusheon committee members K. Venter and F. Beall)**

Spreadsheets of historical quality data to date have been consolidated into one Excel data file by K. Venter.

**ACTIONS 4.1.3:**

- 1) Compile 3 additional Water Quality datasets with Venter's compilation: 1) J Sprague's data, 2) Maggie Squires and Drew Bodaly data (2017 release), 3) Provincial Water Quality data (EMS data).
- 2) Compile quantity data for Cusheon 1976-1998 years of flow and level data (Water Survey of Canada data).
- 3) **Members Beall and Venter to develop surface flow monitoring pilot project outline and rationale** for Cusheon watershed to be either 1) standalone grant proposal to REFBC via Steering Committee (June 15 internal deadline) or 2) addition to the WorkTask 5b pilot GW monitoring grant proposal to REFBC (June 15 deadline).

**4.1.4 Safe Yield Maxwell Lake**

Member D. Hodgins presented preliminary results from conducting the Safe Yield Model. Next report will include consideration of Weijs' review suggestions for this watershed, and be sent to TWG for internal review when ready.



#### **4.1.5 Safe Yield Cusheon Lake**

Member D. Hodgins presented preliminary results from conducting the Safe Yield model using existing Water Survey of Canada data for Cusheon lake.

Next Steps: Hodgins to liaise with FLNRO and MOE on queries for any limits on licenses (drawdown, refill, environmental flow). Follow up on first FLNRO reply. Gather more information on Cusheon Creek discharge measurements and instream flow requirements (e.g. Salmonid Enhancement Program SEP by Dept. Fisheries and Oceans).

**ACTION 4.1.5: Coordinator** to assist D. Hodgins with contacting Kathy Reimer about Cusheon Creek flow requirement details with Salmonid Enhancement Program.

#### **4.1.6 Draft Summary Report by Golder (Phase 1)**

**ACTION 4.1.6: S. Barroso** agreed to send the summary report to the GW committee plus F. Beall for any questions or comments prior to internal finalizing of the report by FLNRO and MOE.

The possibility of a next phase meeting in late spring/summer (informal technical discussion in person, pending funding in the Phase 2 budget) was suggested; that TWG-SSIWPA meet with FLNRO-MOE-Golder for the start of prospective Phase 2 of the SSI Water Budget project.

S. Barroso explained that the LeapFrog Model will be a tool that is available for technical folks who have the background (and will be a public resource).

## **4.2 Groundwater IWM Task Scope of work memos**

### **4.2.1 Scope of Work Task 5a “Well Inventory” draft memo**

Member S. Barroso (and lead on this Task 5a) summarized the scope of work memo that was received by TWG as a late agenda addendum on April 25, 2017. (see revised meeting agenda package available on SSIWPA website)



**It was agreed by general consent** that the TWG would send forward this version of Scope of Work Memo for task 5a to Steering Committee for consideration.

#### **4.2.2 Scope of Work Task 5b “Groundwater Monitoring” draft memo**

Member S. Barroso (and lead on this Task 5b) summarized the scope of work memo that was received by TWG as a late agenda addendum on April 25, 2017. (see revised meeting agenda package available on SSIWPA website)

A discussion ensued about the possibility of recommending that the 5b GW monitoring pilot grant funding application may also include aspects of a related pilot for Cusheon water quality and/or hydrological/flow monitoring. It was suggested that that Steering Committee would have to be convinced of the ability for both projects to fit into a single application for funding (or not).

4.2.2 continued. Further discussion of the timing of overlapping projects (Golder Phase 2, drivers from surface streams and specific areas, etc.) ensued. A May 2017 citizen science project coordinated by SSIWPA for “date of flow cease” was suggested.

Member Barroso brought up the example of GW and surface monitoring in stressed or targeted areas in Nanoose, and pointed out that determining which areas for both 5b SSI groundwater and a pilot scope of work for task area

Compilation of existing data for unused wells across island areas for pilot 5b grant proposal for development was raised by member J. Lussenburg.

**ACTION 4.2.2a:** Member Barroso, Coordinator and member Hodgins to discuss (this week) a citizen science outreach approach to data collection on stream flow for May 2017 and report back.

**ACTION 4.2.2b:** Member J. Lussenburg to share information about unused well locations with Coordinator for master file to track information.



**It was agreed by general consent** that TWG would need to provide both 5b and any TWG-agreed drafts of 3bii (Cusheon flow monitoring) or 9b (Cusheon quality monitoring) scopes of work to Steering Committee in the timeframe (before June 15<sup>th</sup>, internal deadline for draft REFBC grant application preparation).

**4.2.3 Scope of Work NEW Task 5d “Common Risk Segment Mapping: SSI Aquifers”** draft memo by member J. Millson

Member D. Hodgins reported on behalf of J. Millson (in his absence) that since April 21, 2017 Golder Phase 1 presentation, he intends to revise the draft for Scope of Work for Task 5d and circulate to GW committee, then TWG.



#### **4.3 Update from CEWG**

Coordinator expressed that Work Task areas 4c and 5c (Community Wells Consumption Data) is moving forward and data will be shared with CEWG member Ungerson, as well as two named TWG members for data analysis in their respective IWM workplan lead task areas. On behalf of CEWG, Coordinator reminded TWG of the high level scope of approved CEWG workplan task areas that are in the final IWM workplan. In answer to TWG member query, Coordinator confirmed that CEWG is not involved with downhole monitoring (ie. no overlap with TWG task 5b). Member K. Venter offered to share a book resource with CEWG through Coordinator.

#### **4.4 Report out to Steering Committee May 19, 2017, And to CEWG on May 2, 2017.**

Co-Chair D. Hodgins will summarize the research updates from minutes of this meeting for Steering Committee agenda and provide a verbal update.

#### **5. OTHER BUSINESS**

5.1 There were no observers, questions or comments.

#### **6. NEXT MEETING**

May 30th, 2017 10:00am – 12:00pm at SD 64 Boardroom.