



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

Date of Meeting: Friday March 17th, 2017 10:30 am - 12:30 pm

Location: School District Boardroom, 112 Rainbow Rd., Salt Spring Island, B.C.

1. CALL TO ORDER

2. APPROVAL OF AGENDA

3. MINUTES

- 3.1 Draft minutes of the February 17, 2017 steering committee regular meeting - *for approval*

4. BUSINESS ITEMS

- 4.1 **Chair's report** - G. Grams

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

- 4.3 **Cusheon Lake water quality update** – Beddis Water Commissioner

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

- 4.5 **Technical Working Group update** – TWG Co-Chair

- 4.6 **Conservation and Efficiency Working Group update** - CEWG Chair

- 4.7 **Scope of Work - Workplan Task 2 "Climate Extremes"** - *attached*, TWG Co-Chair

- 4.8 **Scope of Work - Workplan Tasks 4a & 4b "Consumption Statistics for Surface Supplies"** - *attached*, TWG Co-Chair

4.9 Scope of Work - Workplan Tasks 4c & 5c “Community Well Supply Survey and Consumption Study”- *attached*, Coordinator

4.10 Amendment to St. Mary Lake IWMP 2015
- attached draft for approval, Coordinator

4.11 SSIWPA 2017-18 Final Workplan ([Link here](#))

4.11.1 **Graphical workplan for public release** - *attachment pending*, Coordinator

4.11.2 **Project Management Workplan Chart** - *hard copy to be provided*, Chair and Coordinator

4.12 Review of action items 6-17-16 4.3.1 and 4.3.2

re: Waste Management Plan for SSI and “looking into” well testing at 360 Blackburn Rd. Closed Landfill

4.12.1 See screenshot of relevant item from minutes of a closed meeting - *attached*

4.13 Other SSIWPA Action List Review

021717 4.9 b: **Vice-Chair McIntyre and Member Green** to contact Brent Reems regarding the CRD proposed budget bylaw impacts on the SSIWPA 2017-18 IWM Work plan

021717 4.9.1a: **Planner Starke** to follow up with the TWG regarding the island-wide water information database and mapping tools.

021717 4.7.2: **Member Green** to provide summary of CRD outreach programs that relate to SSIWPA.

5. OTHER BUSINESS

5.1 Questions and Comments from Public

8. UPCOMING MEETING Friday, April 21, 2017 at 10:30 am
@ School District 112 Rainbow Rd.

9. ADJOURNMENT



Salt Spring Island Watershed Protection Authority

Minutes of a Regular Meeting

Date of Meeting: Friday, February 17, 2017
Location: School District Boardroom, 112 Rainbow Road
Salt Spring Island

Members Present: Wayne McIntyre, Deputy Chair, Capital Regional District (CRD) Director
Dale Green, Capital Regional District, Integrated Watershed (via telephone conferencing)
Doreen Hewitt, Beddis Water Service Area Commissioner
Pat Lapcevic, Ministry of Forests, Lands and Natural Resource Operations (FLNRO) (via telephone conferencing)
Derek Masselink, Ministry of Agriculture

Regrets: George Grams, Chair, Islands Trust Local Trustee
Lorrie Hunt, Fernwood Water Service Area Commissioner
Ron Stepaniuk, District Manager, North Salt Spring Waterworks District (NSSWD)

Staff Present: Shannon Cowan, Coordinator
Justine Starke, Island Planner (North Pender Island)
Sarah Shugar, Recorder

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: Marshall Heinekey, North Salt Spring Waterworks District Board Chairperson
4 members of the public

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

1. CALL TO ORDER

Deputy Chair McIntyre called the meeting to order at 10:31 a.m.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

- 4.9.1 Request for Agency Agreement to begin work on island-wide water information database and mapping tools with assistance of Islands Trust GIS staff
- 4.11.5 Constituency Funding for a Community Project letter from G. Grams to D. McRae dated January 25, 2017

By general consent, the agenda was adopted as amended.

3. MINUTES

3.1 Draft Minutes of the January 20, 2017 Salt Spring Island Watershed Protection Authority Regular Meeting

By general consent, the Salt Spring Island Watershed Protection Authority Minutes of January 20, 2017 were adopted.

3.2 Draft Minutes of the February 6, 2017 Salt Spring Island Watershed Protection Authority Regular Meeting

By general consent, the Salt Spring Island Watershed Protection Authority Minutes of February 6, 2017 were adopted.

4. BUSINESS ITEMS

4.1 Chair's Report - none

4.2 St. Mary Lake water quality update – NSSWD Board Representative

M. Heinekey reported St. Mary Lake and Maxwell Lake are overflowing.

4.3 Cusheon Lake Water Quality Update – Beddis Water Commissioner

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

- The lake is still frozen in the east end and at the lake level gauge and no lake water monitoring has been done since January 14, 2017.
- A dead deer was observed on the ice on the lake on February 8, 2017. Eagles and turkey vultures cleaned up everything except for the bones and the hide and the ice was too thin to remove the remains.
- The corrected Lake gauge measurements for January 31, 2017 was 1.246 m although the lake was frozen so the measurement was not accurate.
- Rainfall/Snowfall quantities received at Gulf Island Secondary School: Feb. 2017, 99.0 mm; Jan 2017, 42.5mm; Feb. 2016, 106.2 mm; Jan 2016, 146.3 mm; Feb. 2015, 88.1 mm; Jan 2015, 95.2 mm
- Flow gauge measurement in Cusheon Creek was 0.38 on January 31, 2017; 0.4 on February 9, 2017; and 0.73 on Feb. 16 2017. The lake steadily rose with the melting snow. There is increased flow into the lake from the upper watershed and ditches.
- It was reported to the Beddis Water Service that a large fir tree had fallen near the lake at #336 Cusheon Lake Road. The neighbours could smell diesel fuel so investigated. A sample of the exposed soil was collected from the area of the tree roots. Exposed pipes were also observed in this area. Dan Robson of the CRD was contacted. Dan Robson planned to contact the Ministry of Environment, as he has no jurisdiction to investigate the property. The property has a domestic water licence C064040 (92.B.083.2.1 JJ (PD 33753) was issued

in 1986 but has no septic system. The house on the property has been vacant and for sale for nearly a year. It was built in 1930.

By general consent, the Salt Spring Island Watershed Protection Authority agreed W. McIntyre will follow up with Dan Robson and the CRD Building Inspection Office in Victoria and D. Hewitt will contact the Report All Poachers and Polluters (RAPP) line regarding potential contamination of Cusheon Lake.

4.4 Coordinator's Report

Coordinator Cowan reported there is a previous version of the Coordinator's Report in the agenda package and she will circulate the Coordinator's report for January 14 to February 13, 2017 by email. She noted Islands Trust is planning to host a well owners workshop and that the workshop may be an opportunity for outreach.

4.5 Technical Working Group Report

Technical Working Group Co-chair Hodgins reported the target date for the External Review of the "TWG Sustainable Yield Model for Surface Water Resources" is mid March 2017. He also reported the TWG and CEWG have met to discuss their work plans.

4.6 Conservation and Efficiency Working Group Report

Conservation and Efficiency Working Group Chair Ungerson reported the TWG and CEWG have met to discuss their work plans and the CEWG is in the process of developing the Criteria for Assessing Alternative Options for Conservation.

There was question regarding whether the CRD rainwater collection rebate deadline could be extended.

By general consent, the Salt Spring Island Watershed Protection Authority agreed Coordinator Cowan would forward enquiries regarding extension of the CRD rainwater collection rebate to W. McIntyre.

4.7 SSIWPA Outreach Plan Draft 2017 – Version 2

Coordinator Cowan presented the Draft Outreach Plan Draft 2017.

By general consent, the Salt Spring Island Watershed Protection Authority agreed Coordinator Cowan would follow up regarding the previously proposed "street party event" as an outreach opportunity.

By general consent, the Salt Spring Island Watershed Protection Authority agreed D. Green would provide a summary of CRD outreach programs for 2017 that would relate to SSIWPA.

By general consent, the Salt Spring Island Watershed Protection Authority

approved the Draft Salt Spring Island Watershed Protection Authority Outreach Plan for 2017.

4.8 Budget

4.8.1 Updated Annual SSIWPA Budget 2017-18

Coordinator Cowan presented the Updated Annual SSIWPA Budget 2017-18 and reported that the \$12,000 administrative services fee has been removed and the total tax requisition has therefore been reduced by \$12,000.

There was question regarding the Septic Wells item. The item is estimated at \$3,000 although the budget is \$2,000. D. Green advised the septic wells item should be \$3,000.

4.8.2 Year to date expenditures report as at December 31, 2016

Coordinator Cowan presented the Year to date expenditures report as at December 31, 2016.

4.9 Draft 2017-18 IWM Program Work plan and Deliverables Table

TWG Co-Chair Don Hodgins presented the Roadmap to SSIWPA Draft Integrated Watershed Management Program Work plan and Deliverables. There was discussion and the following comments were noted:

- There was question regarding whether this model would have the potential to isolate agricultural water consumption and it was noted task 6 will address agricultural use and task 4 will address residential consumption.
- There was comment regarding the upgrades to Ganges Wastewater Treatment operations and it was noted grey water reclamation/recycling is on the CEWG work plan.
- There was question regarding whether there any privacy concerns with private well use and it was noted there are privacy issues and SSIWPA working groups will aim to protect raw data. Data that is an outcome of the tasks will be aggregate (individual user water use data will not be public; any public presentation of data will be on a statistical basis only).
- There was question regarding whether the proposed work plan addresses allowable 'water licence' use, and it was noted the work plan addresses consumption data for 'actual' water use.
- There was comment regarding whether there will be assumptions in place of empirical data collection, when looking at unmetered wells and it was noted that, unless the property owner agrees to add a well meter, assumptions for consumption from unmetered wells will be based on a statistical data currently available which best represent the consumer type. Some well metering will be part of this program, as developed by eventual scopes of work proposals which meet approval (possibly funding) by steering committee.
- CEWG has identified key users by user type.
- Public outreach will be key for success of this program.
- There was a suggestion regarding whether funding could be accessed for

coop students.

- There was question regarding whether task 10 could be used as an analytic tool and it was noted task 10 could be used in many different models.

Coordinator Cowan presented the SSIWPA Summary Work plan 2017-18 and noted many items were moved into the “parking lot” for future consideration. There was discussion and the following comments were highlighted:

- There was question regarding whether item 1a will incorporate 3a and it was noted that SSIWPA has considered the potential for duplication in this task area. The NSSWD Board would discuss the item at their next meeting.
- Need to be aware of cost benefit analysis and whether an agricultural use study would be more important than residential consumption.
- There are a number of OCP policies that are directly related to the work plan.
- D. Masselink reported the agricultural use survey would be a rough survey from data observed at the entrance of the property unless property owners allow access onto the property. The level of use is a projection and will not be a measurement. The Ministry of Agriculture has an interest in water quantity, both surface and ground, and is looking at whether property activity can be connected with licensing. It will be based on current approximate use.
- Support was expressed for assumptions and generalities at this high level; the work plan should not get bogged down with details. There will be a non-uniformity of data across the island and representative samples will supply info that is aggregate and useful.
- It was noted that the subdivision table in the Land Use Bylaw No. 355, Section 5.5.5 is in need of an update.

By general consent, the Salt Spring Island Watershed Protection Authority agreed Coordinator Cowan would add “Islands Trust revision of subdivision table in the Land Use Bylaw No. 355, Section 5.5.5 “ to the work plan.

By general consent, the Salt Spring Island Watershed Protection Authority agreed W. McIntyre and D. Green would contact Brent Reems regarding the CRD proposed budget bylaw impacts on the SSIWPA 2017-18 IWM Work plan.

4.9.1 Request for Agency Agreement to begin work on island-wide water information database and mapping tools with assistance of Islands Trust GIS staff

TWG Co-Chair Don Hodgins presented slides regarding the links between the tasks in the work plan with the deliverables and objectives, and included a specific request from TWG to Islands Trust on this item.

Planner Starke reported Islands Trust GIS staff would assist the Technical Working Group with the island-wide information database and mapping tools.

By general consent, the Salt Spring Island Watershed Protection

Authority agreed Planner Starke would follow up with the TWG regarding the island-wide water information database and mapping tools.

By general consent, the Salt Spring Island Watershed Protection Authority approved the draft 2017-18 Integrated Watershed Management Program Work plan and Deliverables Table.

4.10 Real Estate Foundation Grant Program - Discussion of priorities application deadline February 21, 2017

Coordinator Cowan reported the Real Estate Foundation Grant Program deadline is February 21, 2017. According to consultation with representatives of TWG and CEWG, the Coordinator reported that there are no grant ready projects prior to the upcoming deadline. The REF BC Grant is available in September 2017 and the Eco Action Grant is available in November 2017. The Work plan task 3b)ii and task 9 (Cusheon Lake Watershed monitoring program), and possibly other task areas in the 2017-18 IWM Work plan may be eligible for those grants once the proposed tasks have been further scoped and developed.

4.11 Correspondence

- 4.11.1 Local Trust Committee correspondence re: 'Sustainable Yield Analysis for St. Mary Lake' approved external review and RRU project**
- 4.11.2 RRU project - signed Letter of Agreement on behalf of SSIWPA**
- 4.11.3 RRU project budget proposed increase for resolution without meeting**
- 4.11.4 Ken Lee's notice of resignation from SSIWPA's Conservation and Efficiency Working Group**

The correspondence items were received.

5. OTHER BUSINESS

5.1 Questions and Comments from Public

A member of the public spoke to the increased interest in farmers markets and impacts on water demand and added that tourism constitutes a significant amount of the attraction and whether Salt Spring Island is raising food and consuming water for commercial export or for domestic self sufficiency and whether SSIWPA would prioritize the impact of tourism on water demand.

A member of the public asked why Blackburn Lake and Roberts Lake are not included in work plan item 6. agricultural water use (new dataset - sfw, gw). Coordinator Cowan will add Cusheon Watershed or it will be generalized as "water sources".

A member of the public asked if is there a policy for setting priorities for allocation of water and added that it is a critical and difficult part of what needs to happen.

6. **CLOSED MEETING RESOLUTION - none**

7. **OPEN MEETING RESOLUTION - none**

8. **RISE AND REPORT - none**

9. **NEXT MEETING**

The next regular meeting is scheduled for Friday, March 17, 2017, 10:30 a.m. to 12:30 p.m. at the School District 64 Boardroom Portable, 112 Rainbow Road.

10. **ADJOURNMENT**

By general consent the meeting adjourned at 12:30 p.m.

Wayne McIntyre, Vice Chair

CERTIFIED CORRECT:

Sarah Shugar, Recorder

DRAFT



Coordinator's Report

Feb 14 – March 9, 2017

Meeting Admin:

- Created agenda for steering committee meeting March 17, 2017 and attachments
- Edited February 17th Steering Committee draft minutes, and distributed to Chair and Planner
- Sent request for agenda to steering committee on March 9, 2017
- Posted to SS Exchange for TWG and CEWG meetings
- Created March 7, 2017 CEWG meeting agenda cover and attachments
- Recorded and facilitated March 7, 2017 CEWG meeting
- Created draft minutes March 7, 2017 CEWG meeting, and circulated draft minutes to CEWG chair and members
- Created Feb 28, 2017 TWG meeting agenda cover and attachments
- Invited CEWG to TWG Feb 28 meeting for working group function
- Recorded and facilitated Feb 28, 2017 TWG meeting
- Created draft minutes Feb 28 2017 TWG meeting and circulated draft minutes to TWG co-chairs and members
- Created adopted minutes Jan 20, 2017 Steering Committee (and loaded on website, request for printing)
- Obtained adopted minutes signatures
- Participated in meeting and follow up communications with Islands Trust First Nations Coordinator F MacRaid
- Facilitated agenda and March 7, 2017 meeting with Royal Roads students (w/ CEWG Chair Ungerson)
- Posted all agendas listed here on SSIWPA website

Project Management/Facilitation:

General

- correspondence with Islands Trust staff (C Frater, S Miller) regarding outreach and education about groundwater “Well Owner Workshops” for all Gulf Islands areas for 2017
- correspondence with committee members between meetings –developing Scope of Work task documents for steering committee approval
- Completed readings about First Nations in SSIWPA area, de-colonization and reconciliation as well as Islands Trust First Nations participation and outreach programming as it applies to SSIWPA.

Integrated Water Management Program

- Liaison for map request to Islands Trust staff
- Learned iMap provincial mapping software manipulation from TWG member and will disseminate /facilitate learning of this public tool to working group members for use in IWM workplan tasks
- Published approved IWM workplan on website = action 02-17-17 4.9.1b - complete
- Follow up with NSSWD about action item to reconcile potential overlap between workplan task area and KWL contracts or pending contracts
- Completed action from 11-25-16 to amend SML IWMP to remove SML intensive sampling task.
- 021717 4.9 a: Coordinator to add “Islands Trust revision of subdivision table in LUB 355, S 5.5.5” to approved SSIWPA workplan - completed (This was placed into FastTrack workplan for project management, because it did not seem to fit into 10 task areas in IWM workplan, as approved).

Budget

- Obtained resolution without meeting by steering committee to meet deadline for budget increase approval by Royal Roads student project group (Feb. 14)

Conservation and Efficiency Working Group Projects Coordination

- received expression of interest from member of the public for potential application to serve on CEWG
- communications with CEWG members to continue to clarify workplan and assist with next steps (weekly informal coffee meetings and several phone meetings)
- weekly communications and document review for Royal Roads project
- provided group members with specific reports (access to online sources) and relevant background information for group tasks (ongoing)

- outreach and communications to invite new member to apply
- document creation and edits for “data terms of use” and “data sharing” agreement templates (conversations and research into templates, and processes that are appropriate for CEWG workplan tasks)
- Royal Roads project work group – weekly communications and revision of documents on behalf of SSIWPA

Technical Working Group Projects Coordination

- phone meetings with members Hodgins and Barroso to develop scopes of work for Supply and Consumption Studies and workplan data collection and management
- document creation and edits for “data terms of use” and “data sharing” agreement templates (conversations and research into templates, and processes that are appropriate for TWG workplan tasks)
- distribution of draft report for member Hodgins to working group members for review internally
- management of action tasks and reminders

Outreach and Educational Event Planning and Coordination

- Created a revised comparison chart for water organizations on SSI (previously called “Who Does What with Water” – received approval and edits from the Conservancy and Cusheon Lake Stewardship Cttee (others, in process)
- Finalized Outreach plan for 2017
- Communications with 3 new members of the public and CRD staff about rainwater harvesting rebate by Water Council
- Communications with members of the public about possible algal blooms under the ice at St. Mary lake
- Events:
 - Communications with members of the public re : Cusheon Lake Neighbourhood event and role of watershed science/SSIWPA outreach - ongoing

Watermark newsletter

- Assembled and sent February edition
- March edition – in process

Website:

- News posts for Rainwater Rebate Program Extension
- Rebate application re-loading, and on new site, and new link on Exchange
- Second **new** mirror SSIWPA library website - populated with documents – mainly batch uploads of past agendas and minutes – ongoing investigation for missing docs
- Fixed links on Main SSIWPA site to redirect to mirror site – ongoing
- posted to SSIWPA calendar
- notice of rainwater harvesting workshop
(<http://ssiwatersheds.ca/2017/03/02/rainwater-harvesting-2day-workshop-april-6-7-victoria/>)

Coordinator Action Items – IN PROCESS:

Final workplan 2017-18 graphical representation for public release – in process

New item - Development of First Nations education and outreach plan to inform and include/invite First Nations communities through their technical staff, about the work of SSIWPA – in process

021717 4.7.1 Possible role of SSIWPA or working groups in Cusheon neighbourhood event
April 30 2017

092616 Item 7.4- Community Well supply and consumption - development of data terms of use agreements and parameters of task with working groups and Planner Starke
Comparison chart - approval of revisions

Website homepage links to : SSIWPA reports , agendas, minutes (ongoing updating)

Parking Lot Actions:

Grant proposal application for REFBC Freshwater Sustainability General Grant – postponed to fall entry

Terms of reference revisions for working groups – on hold until Steering Committee direction

M E M O R A N D U M

To: SSIWPA, Steering Committee
 Date: February 22, 2017
 Subject: Work scope – Objective 1: safe supply – surface reservoirs
 Project: SSIWPA TWG, Task 2 Work Plan – climate extremes
 Submitted by: SSIWPA Technical Working Group – Contact: Don Hodgins

Purpose: assess state of science for estimating drought extremes for climate change, and see if there are reasonable methods applicable to SSI. Assess adequacy of existing data for such method(s) and determine what is required if there are shortcomings. Identify outside expertise able to assist TWG.

Reason: quantify safe yield estimates under different climate change scenarios (purpose of Task 2).

Scope of Work: This task builds on work started in 2016 through contact with PCIC at Uvic and its director Francis Zwiers. The proposed tasks are:

1. Pursue contact with PCIC through meetings and review of specialty conference papers recommended by Zwiers. Focus is on estimating extrema at regional scales from GCM output, not changes in the climate trend.
2. Establish dialog with other research specialists in this field (e.g. Eric Gilleland, NCAR and so on).
3. Review of relevant publications in this area of research. Possibly attend a conference or meeting dedicated to this subject (such a meeting was held in Banff last June that brought together more than 20 of the world’s leading researchers in this particular field).
4. Extend analysis of climate variables (ENSO, PDO, AO, ALPI, jet stream) and teleconnections (low frequency contribution to climate variability) – software required for this task.
5. Prepare a progress report on findings and recommendations on how to proceed. Identify outside expertise.

Deliverables: Progress report with recommendations.

Resources required: The work will be carried out by Don Hodgins.

Task 2 Cost estimate				
		hours	\$/hour	Cost
Labour (in-kind)	D. Hodgins	50	\$ 225	\$ 11,250
Labour (third party)				\$ -
Equipment				\$ -
Computer (softwear)				\$ 350
Data requirements				\$ -
Expenses	travel			\$ 350
	conference*			\$ 1,500
Total cost				\$ 13,450
In-kind support				\$ 11,250
Cash required with conference				\$ 2,200
Cash required w/o conference				\$ 700

*conference travel is optional.			
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Computer software: Golden Software Surfer 13 (license upgrade) – 3D data visualization & analysis software.

The conference travel expense is considered optional, subject to finding a germane event that is worth the time and money. The proposal is that should such a conference be identified during the work, a request to attend will be made to the Steering Committee at that point.

TWG Task Manager: Don Hodgins (don_hodgins@shaw.ca).

Time frame: end of 2017.

MEMORANDUM

To: SSIWPA, Steering Committee
Date: February 24, 2017
Subject: Work scope – Objective 3: consumption statistics
Project: SSIWPA TWG, Task 4a,b Work Plan – consumption statistics for surface supply
Submitted by: SSIWPA Technical Working Group – Contact: Don Hodgins

Purpose: derive representative water consumption statistics for properties supplied from surface water reservoirs. Stratify and analyze data by consumption use category and/or land use/zoning as defined by BC Assessment and Islands Trust.

Reason: determines consumption and water demand for surface sources. Directly aides revision of prescribed allowances for Islands Trust OCP. Provides the basis for future consumption and demand¹ projections, as well as benefits from conservation and efficiency tasks.

Scope of Work: Through the cooperation of local Islands Trust staff, Hodgins has been able to examine some work products from the Opus Phase 1 study. These suggest that much valuable groundwork has been accomplished, and that there is considerable merit in seeing what can be mined out of that information, with, perhaps, some readily available augmenting data. The objective is to provide a more complete statistical specification of water consumption, linked to actual land use, within the NSSWD service area, and then extend that analysis to other service districts.

1. Review data resources and analysis results from Opus phase 1 using the Excel spreadsheets provided to Opus, and resulting from their analyses. This task is to understand what data they have, how it has been arranged, and thus what is possible to derive by further analysis. The outcome is an assessment of what is realistically possible with the data in hand, or readily accessible from SSIWPA member agencies.
2. Meet with the Opus engineers responsible for the Phase 1 work to answer questions arising from task 1 and discuss the best way to proceed with further analysis. Acquire the data.
3. Request consumption data for CRD service areas (lakes and two groundwater districts). Discuss with CRD staff what is feasible and practical in terms of time span for data, and level of detail. Make as compatible with the Opus data as possible. Acquire data. Coordinate with Task 4c, 5c (Coordinator as lead) acquisition of consumption data from non-CRD groundwater sources (community wells).
4. Conduct data analysis sufficient to design statistical protocols for complete analysis.
5. Coordinate development of the GIS support and database design with Islands Trust (GIS staff, see note below on overlapping tasks).
6. Deliver consumption statistics to Island Trust for incorporation into the database. Scope out work to complete the analysis for all island properties.
7. Prepare technical report on methods, results and scope of remaining work. Transfer data to Islands Trust.

Deliverables: Technical report with recommendations. Data files.

¹ Consumption refers to the potable water used after the service connection. Demand means the amount of water required from the reservoir to meet the consumption (allowing for operational requirements, leakage, etc.).

Overlapping tasks: Subtask 5 above will involve close coordination with Task 5a/5c for the design of the GIS and databases at Islands Trust. Subtasks 4 to 7 above will incorporate data from the community wells service areas as it becomes available (Task 4c/4d of the work plan).

Resources required: The work will be carried out by principally by Don Hodgins. The proposal is that Opus will be reimbursed for their professional time for subtasks 1 and 2, and preparing/delivering Excel files. An estimate is included below for that work. There is the option to contract further work from Opus if it is concluded that that would be the most cost-effective way to proceed. An allowance has NOT been included here for that component of work. It will be assessed and a recommendation on the best way to proceed will be made when subtask 2 is complete.

Data: a large part of creating the GIS and supporting databases concerns identifying land parcels, and related information, and structuring the outputs to be returned to the TWG as work progresses. Additional data from BC Assessment on land use, assessment and other variables will be required. Much of this information may already be held by Islands Trust and/or SSIWPA member agencies. Coordination of who-has-what and how-do-we-get-what-we-need will take place early in this task. Data sharing agreements may be required; Justine Stark will coordinate such agreements.

Task 4a/4b Cost estimate				
		hours	\$/hour	Cost
Labour (in-kind)	D. Hodgins	120	\$ 225	\$ 27,000
Labour (third party)	Opus	30	\$ 135	\$ 4,050
Labour (Islands Trust)	GIS staff	40	\$ 115	\$ 4,600
Equipment				\$ -
Computer (softwear)				\$ -
Data requirements	see note			\$ 200
Expenses	travel			\$ 350
r				
Total cost				\$ 36,200
In-kind support				\$ 27,000
Cash required				\$ 4,600

Labour costs for Opus and Islands Trust are estimates only. GIS staff time estimates do NOT include work related to Task 5a/5c of the work plan, but there is clearly overlap and this can be coordinated by TWG.

TWG Task Manager: Don Hodgins (don_hodgins@shaw.ca).

Time frame: early 2018.

MEMORANDUM

To: SSIWPA, Steering Committee
Date: February 27, 2017
Subject: Work scope – IWM program obj. 1 – supply, and obj. 3 - consumption
Project: “SSI Community Well Supply Survey & Consumption Study” Tasks 4c & 5c
Submitted by: SSIWPA Coordinator – Contact: Shannon Cowan (With TWG)

Purpose: Determine and analyze water supply characteristics, as well as consumption¹ information for nine (9) improvement districts² that rely on groundwater resources.

Notes: The same data request and analysis will be conducted under Task 4a/b for the two (2) CRD Service Areas that rely on groundwater resources [Cedars of Tuam Water District and Cedar Lane Water District]. Only aggregated data will be published in any reports emanating from these tasks.

Reason: To access data about public and private groundwater resource productivity and consumption rates, for use by SSIWPA and its working groups in IWM program, and for use in “Aquifer Mapping and Monthly Water Budget Analysis for Aquifers on Salt Spring Island” (Ministry of Forest Lands and Natural Resource Operations and Ministry of Environment).

Ultimate goals of the programme: To directly aide revision of prescribed allowances for Islands Trust OCP. To provide the basis for concurrent provincial ‘Salt Spring Aquifer Water Budget’ project and future consumption and demand¹ projections, as well as to make measurable those potential benefits from conservation and efficiency tasks/recommendations.

Scope of Work: Coordinator Cowan will conduct steps 1-4 and assist with data-transfers. TWG groundwater subcommittee members will carry out steps 5-9.

1. Reach out by telephone, on behalf of SSIWPA Steering Committee, to the appropriate contact representative of 9 water districts who rely on groundwater sources, and private community wells.
2. Make contact within SSIWPA member agency CRD to put forward a request for data about consumption and supply characteristics for Cedar Lane and Cedars of Tuam Water Service Areas, on behalf of SSIWPA.
3. Propose and agree on terms for use of data between SSIWPA and each Water District Board/Commission. Negotiate with representatives and receive final approval from SSIWPA Steering Committee and Water District Boards.

Agreements for compilation and use of primary data will be signed between SSIWPA agency (Islands Trust) and each entity (Water District) for ethical use of data, and non-disclosure.

¹ Consumption refers to the potable water used after the service connection. Demand means the amount of water required from the reservoir to meet the consumption (allowing for operational requirements, leakage, etc.).

² Erskine Water Board, Harbour View Improvement District, High Hill (private), Maracaibo Estates (private), Merchant Mews (private), Mt. Belcher Improvement District, Reginald Hill Waterworks District (private), Scott Point Waterworks District, Swan Point Waterworks District

4. Acquire data from 9 water districts and private community wells. (See attached for description of data requested.)
5. Analyze supply data by land use/zoning as defined by BC Assessment and Islands Trust.
6. Stratify and analyze consumption data by consumption use category and/or land use/zoning as defined by BC Assessment and Islands Trust.
7. Coordinate data compilation with IWM workplan task 4b which aims to acquire similar data from surface sources and CRD surface and groundwater Water Service Areas.
8. Database development. Data will be uploaded and maintained into the Islands Trust SSI Water Information Database, and will be shared by agreement between Islands Trust and the Provincial Ministry staff responsible for the project entitled “Aquifer Mapping and Monthly Water Budget Analysis for Aquifers on Salt Spring Island”.
9. Prepare technical report on methods, results and scope of remaining work. Transfer data to Islands Trust.

Deliverables: Primary and derived data files into database at Islands Trust.

Technical report on aggregated statistics about consumption data (all districts).

Overlapping tasks: This scope of work will involve close coordination with Task 4b for the design of the database(s) at Islands Trust.

Resources required: See next page for table.

Notes about resources in table: Estimated in-kind hourly labour, only. The hourly labour by either coordinator or district commissioner may be considerably greater than estimated if electronic data entry and/or sorting is required. GIS staff time estimates do not include work related to Task 4a/4b of the work plan, but there is clearly overlap and, this can be coordinated by Task Manager in consultation with TWG task 4a/b and 5a/b managers in single point of communication with Islands Trust GIS staff.

Task Manager: Shannon Cowan

Time frame:

Steps 1– 4 completed by April 30, 2017.

Steps 5 – 9 beginning May 2017 – December 2017, or beyond, depending on analysis needed.

Task 4c/5c cost estimate				
		hours	\$/hour	cost
Labour (in kind)	Coordinator	54	47	2538
Labour (Districts)	District Commissioners	54	30	1620
Labour (Islands Trust)	GIS Staff	27	47	1269
Equipment				-
Computer				-
Data requirements				-
Travel (other)				-
Total cost				5427
In kind support				5427
Cash required				0



St. Mary Lake Integrated Watershed Management Plan 2015 - Amendment -

Summary:

The Plan and its implementation is subject to periodic review by the Salt Spring Island Watershed Protection Authority Working Groups and its' Steering Committee.

On November 25, 2016, the SSIWPA Steering Committee agreed to amend the Plan's Management Action number 3 (Page 35, the Plan) to remove "more intensive sampling", based on assessment of feasibility to meet objectives that was reviewed by Technical Working Group (see Technical Working Group Chair's Report, meeting minutes 11-25-16). The result is this amendment to the IWMP to effect removal of the subtasks related to non-NSSWD water quality monitoring in the Plan's management action three.

As published (2015):

Action 3 Study methods: (Page 35, the Plan)

- a) Continue monthly water quality monitoring (NSSWD), and, SSIWPA action to:
- b) add monthly measures of Fe (iron), chlorophyll and nitrate;
- c) measure weekly amounts of Fe, chlorophyll and nitrate, as well as phosphorus (total phosphorus and SRP during the turnover period.

Duration:

Weekly starting October 15, 2015 until end December, 2015.

As amended (March, 2017):

Action 3 Study methods: (Page 35, the Plan)

a) Continue monthly water quality monitoring (NSSWD).

[Deleted tasks b) and c) to be performed by SSIWPA.]

Duration:

Ongoing monthly.

[replaces “Weekly starting October 15, 2015 until end December, 2015.”]

Notes for Steering Committee:

The SML-IWMP 2015 action “more intensive sampling and water quality monitoring parameters than what NSSWD does monthly” under Action 3 tasks b) and c) (Page 35, the Plan) was discussed multiple times by both SSIWPA Technical Working Group and by SSIWPA Steering Committee.

- The first action item, as per minutes 28 September 2015, was developed, as follows:

“There was discussion regarding the cost of sampling and alternatives within SSIWPA for the sampling labour of an ongoing in-lake monitoring program. It was agreed [by general consent] that Don Hodgins, Dale Green and Lorrie Hunt would investigate alternatives [for St. Mary Lake weekly or bi-weekly water quality monitoring with additional parameters at turnover] to contracting a QP, including labour, equipment and upgrades that are necessary.”

- After that time during 2016, alternatives were presented at a subsequent meeting of the SSIWPA Steering Committee in TWG Chair’s Report, and the result of that was the following:

Action 3 Tasks b) and c) in St. Mary Lake IWMP were deferred by one year to 2016.

- In November 25, 2016, SSIWPA Steering Committee meeting, SSIWPA Steering Committee members agreed by general consent to request that the Coordinator create an amendment to the St. Mary Lake IWMP 2015 document, here above.

Workplan Final SSIWPA 2017-2018

attachment pending to follow this cover sheet

Member D. Hewitt located an item that may warrant discussion as it has not yet seen resolution.

Screenshot of Section 4.3.1 (See SSIWPA Closed meeting minutes of June 17, 2016) :

The letter from the Ministry of Environment dated June 15, 2016 was presented.

By general consent, the Salt Spring Island Watershed Protection Authority agreed to request the Chair of the Environmental Services Committee to present an update regarding the Solid Waste Management Plan as it pertains to the Cusheon Lake Watershed.

By general consent, the Salt Spring Island Watershed Protection Authority agreed that pending review of the draft Solid Waste Management Plan, the Steering Committee will look into well testing on the Blackburn Road closed landfill site.

4.4 Conservation and Efficiency Working Group

SSIWPA Agency representative please consider:

Was the presentation by CRD on November 24th, 2016 Solid Waste Management to the Salt Spring Island community a presentation of a Solid Waste Management Plan? If so, how did it address the Blackburn Road Waste Transfer Station, and the management of water and soil quality at the closed landfill site, adjacent?

Has SSIWPA had opportunity to review such a Plan?