

**Council Meeting**  
**September 19<sup>th</sup> 2018 | 10:15 AM – 3:00 PM**  
**Columbia Shuswap Regional District Boardroom**  
**555 Harbourfront Drive NE, Salmon Arm**

Record of Decisions and Action Items

**Meeting objectives**

1. Receive report from Program Managers
2. Receive interim report on nutrient research from Megan Ludwig, UBC – Okanagan
3. Receive guest presentation from James Littlely, Okanagan Basin Water Board
4. Receive recommendation from Interim Review Committee

**Present**

Paul Demenok, Chair – Columbia Shuswap Regional District, Area C  
Rick Berrigan, Vice Chair – Thompson-Nicola Regional District, Village of Chase  
Rene Talbot – Columbia Shuswap Regional District, Area D  
Rhona Martin – Columbia Shuswap Regional District, Area E  
Bob Misseghers – Columbia Shuswap Regional District, Area F (Alternate director)  
Steven Teed – Secwepemc Nation, Adams Lake Indian Band  
Ken Christian – Thompson-Nicola Regional District, City of Kamloops  
Nancy Cooper – City of Salmon Arm  
Dennis Einarson – BC Ministry of Environment and Climate Change  
Lorne Hunter – Community representative  
Ray Nadeau – Community representative  
Randy Wood – Community representative

Erin Vieira and Mike Simpson – Fraser Basin Council

**Observers**

John Irvine, Ralph Vandalfsen, Henry Bremer, Hamish Kassa

**Regrets**

Todd Kylo  
Herman Halvorson  
Tundra Baird  
Dave Nordquist  
Laura Code

- Call to Order** Chair Paul Demenok called the meeting to order at 10:15 AM.
- Councillor Steven Teed from Adams Lake Indian Band introduced himself as the new appointed representative to the SWC from the Secwepemc Nation; a full round of introductions took place.
- Adoption of meeting summary** **Moved/seconded** by Director Talbot/Director Martin that:  
The summary of the June 13<sup>th</sup> 2018 meeting of the SWC be adopted.
- CARRIED**
- Correspondence** Erin Vieira reviewed three pieces of correspondence since the last Council meeting in June.
- Old business** Erin Vieira reported the results of the financial vote via electronic poll on July 12<sup>th</sup> regarding a grant for the Royal Canadian Marine Search & Rescue for a feasibility study. The motion for a \$2,000 grant was carried. Staff have since provided a payment to the RCM-SAR in the amount specified.
- Report from Chair** Chair Demenok reported that he and Director Martin met with Minister George Heyman and Assistant Deputy Minister David Morel (both from BC Ministry of Environment and Climate Change Strategy) on September 10<sup>th</sup> at the Union of BC Municipalities Convention. It was a productive meeting. In the meeting, Chair Demenok expressed that the BC Ministry of Environment is a very important partner in the SWC and that their in-kind contribution is highly valued, but the concern is that the partnership is not formalized; Chair Demenok also relayed that the SWC may seek financial support for its Water Protection Initiative, upon conclusion of a nutrient research project. Chair Demenok also pointed out that the SWC provided input to the *Agricultural Waste Control Regulation* review, and has not heard an update on the review process by the Province since that time.
- Report from Program Managers** Erin Vieira and Mike Simpson presented an update on program operations since the last SWC meeting:
- The 2017 Shuswap Water Quality Summary is complete; it has been distributed throughout the region and promoted throughout July and August. It's also available online at [www.shuswapwater.ca](http://www.shuswapwater.ca).
  - Campaigns promoting safe water-based recreation ran throughout summer. The campaigns focussed on "7 tips for having fun and staying safe."
  - Campaigns raising awareness of zebra and quagga mussels ran throughout summer. The campaigns emphasize the importance of watercraft owners to "Clean Drain Dry" and stop at watercraft inspection stations.

- A wetland restoration project on Gardom Creek is proceeding; this work is led by Gardom Lake Stewardship Society with financial support from SWC and others, and will be wrapped up later this Fall.

Expenses to the end of the first quarter (April 1<sup>st</sup> – June 30<sup>th</sup> 2018) were reported:

	<b>Annual Budget (\$)</b>	<b>Expenses (\$)</b>
Water Monitoring Initiative	66,400	11,517
Water Protection Initiative	76,300	4715
Zebra & Quagga Mussel Prevention Program	26,850	19,018
Safe Recreation Program	12,200	3929
Communications	37,850	10,468
Management and Administration	40,750	9293
Operating Reserve	126,528	0
<b>Total expenses to June 30<sup>th</sup> 2018</b>	<b>386,878</b>	<b>58,940</b>

Erin Vieira also presented a brief overview of the 2017 Water Quality Summary (available at [www.shuswapwater.ca](http://www.shuswapwater.ca)).

Discussion:

Council members provided comments and ideas on how the SWC could expand criteria for water quality improvement grants in the future, and make it available to more groups.

**Action item:** staff will consider ways to increase community partnerships and projects via water quality improvement grants, while keeping it relevant to the SWC’s objectives.

Discussion:

Council members discussed the recent algae bloom in Salmon Arm Bay at the marina. Dennis Einarson clarified that cyanobacteria has occurred in Shuswap Lake before, in small occurrences, and confirmed that the recent bloom was localized and did not spread in the lake, and that toxicity results on the algae are negative (i.e., not toxic). Council members discussed the role for the SWC to communicate these events and advisory notices. It was agreed that health-related notices and advisories are solely the responsibility of Interior Health Authority and drinking water providers, but that the SWC can re-post them to help improve reach; where matters of health aren’t in play, the SWC will continue to coordinate and communicate water quality information.

**Lunch break** SWC members took a lunch break from 12:00 – 12:40 PM

*Rhona Martin left the meeting at 12:15 PM*

**Guest presentation:  
Megan Ludwig  
and Dr. Jeff Curtis**

Megan Ludwig, an M.Sc. candidate from UBC – Okanagan, presented an update on the nutrient research project being carried out in the Shuswap River and Salmon River:

- The research objective is to gain an understanding of the sources of nutrients (especially phosphorus) in the two rivers, and how it is being transported into those rivers
- Ms. Ludwig briefly explained the research methodology, including how phosphorus is being quantified from three sources to the rivers: tributaries, the upper reaches of the watershed, and incremental flows (groundwater, seasonal streams, and ditches account for incremental flows). There are 20 surface-water monitoring sites on the rivers, and dozens of additional sites for monitoring incremental flows.
- Results to-date, for data collected between July 2016 – February 2018, indicate the following
  - In the Shuswap River watershed, incremental flows contribute the highest proportion of phosphorus per hectare to the river.
  - In the Salmon River watershed, incremental flows contribute the highest proportion of phosphorus per hectare to the river, however there's a complex of interplay of groundwater infiltration happening simultaneously that results in a net decrease in nutrient concentration as the river flows downstream.
- Main conclusions, to-date:
  - Incremental flows (i.e., seasonal streams, groundwater, and ditches) contribute the most phosphorus per hectare to the two rivers. This is not unexpected, as the majority of anthropogenic activities take place in areas of incremental flows.
  - The phosphorus exports and loadings from the different land uses – forest, agriculture, and urban – are within the 'normal' or otherwise observed ranges for those land uses.
  - The Shuswap watershed is a sensitive system, due to the fact that the natural forested land base and soil types do not contribute very much phosphorus to surface water (the study determined it to be 0.011 kg/ha/year). Therefore, a small input of phosphorus has the potential to cause a significant impact to surface water quality.

Dr. Jeff Curtis, a professor and researcher from UBC – Okanagan, was asked to describe additional research methodology that could be added to the scope of the research project. Dr. Curtis explained that a core sample could

be collected from the bottom of Mara Lake, and analysed for various contents, including nutrients, to create a chronology of environmental change in Mara Lake over a span of a few hundred years. He explained that this could be done within the current work contract and budget if the third year of water quality monitoring and analysis were discontinued. He further explained that the project to-date has yielded very robust data, and the collection and analysis of a core sample would provide a complementary set of data to the project.

Discussion:

Council members discussed the idea of including core sampling in the research project, as an addition to three years of monitoring or as an alternative to the third year of monitoring. Dennis Einarson commented that MOE is monitoring the Salmon River, also, and he agreed that core samples would provide valuable complementary data. Lorne Hunter commented that core sampling would be worthwhile but would also like the three-year monitoring research project to be carried through to completion, as planned; others agreed with his sentiment. Dr. Curtis said that core sampling could be added to the research project for an additional approximate \$20,000 and could be completed within a year; he commented that SWC would likely only need to bear a portion of this expense because he may be able to find another funding partner to share the cost. Mayor Christian commented that he would prefer to see a project proposal, with cost and timeline for the core sample analysis, before making a decision.

*Rhona Martin re-entered the meeting at 1:30 PM*

**Moved/seconded** by Vice Chair Berrigan/Mayor Christian that:

The Shuswap Watershed Council receives a research proposal from Dr. Jeff Curtis for the core sample analysis, to be considered and decided upon at the December SWC meeting.

**CARRIED**

**Action item:** staff will work with the research team at UBC-O to receive a project proposal by the next SWC meeting.

**Guest  
presentation:  
James Littley**

The Okanagan Basin Water Board was formed in 1970 with a mission to provide leadership to protect and enhance quality of life in the Okanagan Basin through sustainable water management. To that end, the OBWB administers three core programs for improving water quality and supply:

- Sewage Facilities Assistance Grants – provides up to 16% of project costs for building tertiary wastewater treatment plants, or installing new sewerage pipes to older neighbourhoods (to replace septic)

- Eurasian Watermilfoil Control Program – treats milfoil in five Okanagan lakes through rototilling and harvesting
- Water Management Program – several initiatives in science, monitoring, flood mapping and response, wetlands, water conservation, water quality improvement, and zebra/quagga mussel prevention.

**New business:  
Interim Review  
Committee  
Recommendation**

Chair Demenok explained the interim review process and thanked the six committee members for their time and input. He went through the performance indicators, and summarized the qualitative assessments and comments that were provided through the review process.

The interim review committee's recommendation to the SWC is that:  
The Shuswap Watershed Council continue with its programs.

**Moved/seconded** by Vice Chair Berrigan/Director Talbot that:  
The Shuswap Watershed Council approve the recommendation from the interim review committee that the SWC continue with its programs,

AND that:

Staff be directed to renew the contribution agreement with funding partners.

Discussion:

Chair Demenok commented that the review committee generally agreed that the SWC strive to continue improving its communiqués for water quality monitoring and results, and seeking opportunities to work with the agriculture industry, the Okanagan Basin Water Board, stewardship groups, school/education groups and waterfront property owners.

**CARRIED**

**Action item:** Staff will work with the four funding partners to renew a contribution agreement for 2019-2020 (per the SWC's five-year plan).

**Roundtable  
updates**

Item cancelled

**Adjourn**

**Moved/seconded** by Alternate Director Misseghers/Lorne Hunter that:  
The September 19<sup>th</sup> 2018 meeting of the Shuswap Watershed Council be adjourned.

**CARRIED**

Meeting adjourned at 2:40 PM