

**AGENDA PACKAGE FOR:**

**Council Meeting**  
**Wednesday September 11<sup>th</sup> 2019 | 10:00 – 2:00**  
**Columbia Shuswap Regional District Boardroom**  
**555 Harbourfront Drive NE, Salmon Arm**

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**Council Meeting**  
**June 12<sup>th</sup> 2019 | 9:00 AM – 1:30 PM**  
**Columbia Shuswap Regional District Boardroom**  
**555 Harbourfront Drive NE, Salmon Arm**

Draft Record of Decisions and Action Items

This record is subject to correction when adopted at the next SWC meeting

**Meeting objectives**

1. Receive Annual Report for 2018-19 from Program Managers
2. Discuss and decide next steps for the SWC's Water Protection Initiative
3. Have a roundtable discussion on biosolids

**Present**

Paul Demenok, Chair – Columbia Shuswap Regional District, Area C  
Jay Simpson, Vice Chair – Columbia Shuswap Regional District, Area F  
Rhona Martin – Columbia Shuswap Regional District, Area E  
Ken Christian – Thompson-Nicola Regional District, City of Kamloops  
Rod Crowe – Thompson-Nicola Regional District, Village of Chase (*to 10:55 AM*)  
Tim Lavery – City of Salmon Arm (*from 9:15 AM*)  
Laura Code – BC Ministry of Agriculture  
Dennis Einarson – BC Ministry of Environment and Climate Change (*from 9:40 AM*)  
Lorne Hunter – Community Representative  
Randy Wood – Community Representative  
Natalya Melnychuk – Community Representative

Erin Vieira and Mike Simpson – Fraser Basin Council

**Observers**

Ray Nadeau, Paul Bennett

**Regrets**

Rene Talbot  
Steven Teed  
Colleen Anderson  
Denis Delisle  
Rick Fairbairn  
Sharon Bennett  
Dave Nordquist

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**Call to Order**

Chair Paul Demenok called the meeting to order at 9:07 AM

**Adoption of meeting summary**

**Moved/seconded** by Mayor Christian/Director Simpson that:  
The summary of the March 13<sup>th</sup> 2019 meeting of the SWC be adopted.

**CARRIED**

*Councillor Tim Lavery entered the meeting at 9:15 AM*

**Correspondence**

**Moved/seconded** by Councillor Lavery/Director Simpson that:  
The correspondence be received for information.

Discussion:

Chair Demenok commented that several presenters at the delegation to the Parliamentary Committee on Fisheries and Oceans were advocating for more federal resources to be dedicated to preventing further spread of ZQM to Western Canada.

Lorne Hunter commented on Mr. Bremer’s June 6<sup>th</sup> correspondence to the SWC, stating that it would align with the Council’s desire to move forward on working with agriculturalists to manage nutrients. Laura Code commented that the Kamloops Okanagan Dairy Association (KODA) may also consider research partnerships with BC Forage Council, and must also consider the requirements under the new provincial Agricultural Environmental Management Code of Practice. Director Simpson also commented on the opportunity to work with KODA.

**CARRIED**

**Old business**

**Moved/seconded** by Mayor Christian/Mayor Crowe that:  
The draft summary of the Shuswap Water Protection Advisory Committee meeting on May 15<sup>th</sup> 2019 be received for information

Discussion:

Laura Code remarked that determining next steps is challenging and complex, as there are many initiatives underway that play a role in managing nutrients and reducing risks to water quality.

**CARRIED**

**Report from Chair**

Chair Demenok briefly described his presentation with Erin Vieira to the House of Commons Standing Committee on Fisheries and Oceans, which

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took place via teleconference on May 6<sup>th</sup>. Their presentation explained the risks of a Zebra/Quagga Mussel infestation to the Shuswap watershed, including as a drinking water source, the tourism economy, and Pacific salmon habitat. In their presentation they called for more federal resources to support prevention activities in Western Canada, and containment in Eastern Canada, noting that federal resources are currently unfairly and disproportionately allocated to aquatic invasive species in Ontario.

**Report from Program Managers**

Erin Vieira gave an overview of the SWC Annual Highlights Report for 2018-19, including the activities and achievements for water quality monitoring, water quality protection, prevention of a Zebra/Quagga Mussel infestation, and awareness campaigns for safe boating and water-based recreation. An overview of the annual expenditures and variances was provided:

Program	Budget (\$)	Expenses (\$)	Variance (\$)
Water Quality Program: Water Monitoring Initiative	66,400	36,831	29,569
Water Quality Program: Water Protection Initiative	76,300	58,528	17,772
ZQM Prevention	26,850	27,750	-900
Safe Recreation	12,200	11,849	351
Communications & Advocacy	37,850	33,754	4096
Administration & Governance	40,750	36,271	4479
Operating Reserve	131,528	0	131,528
Summary of operational expenses	391,878	204,982	186,896

*\*a more detailed financial summary is available in Appendix 1*

Erin also gave an overview of program activities since the last Council meeting in March:

- The Water Protection Advisory Committee met on May 15<sup>th</sup>, the meeting included a discussion about next steps for the SWC in nutrient management and mitigation, but no recommendations were made. The committee toured the new built wetland at Gardom Lake.
- Education and awareness campaigns for preventing the spread of invasive Zebra & Quagga Mussels are underway in the region. Staff have placed advertisements and editorials in three annual magazine publications, community newspapers, and social media. Additionally, there are two billboards about ZQM on Highway #1, and staff are working with the Columbia Shuswap Invasive Species Society to install new signage at boat launches

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and marinas.

- Campaigns for safe boating and water-based recreation are also underway. Staff reported that they will be delivering a more robust education program this year thanks to a successful grant application to Transport Canada. The campaigns focus on “7 tips” including lifejacket use, sober boating, and drowning prevention.
- Staff have made presentations to the Okanagan Basin Water Board and the Salmon Arm Environmental Advisory Committee about the SWC, and will attend an upcoming community event at Blind Bay later this summer.
- Staff are currently finalizing the 2018 Shuswap Water Quality Summary Report.

Discussion:

Councillor Lavery recommended that staff promote the Mara Lake core sample project more through media and social media. Natalya Melnychuk suggested that a video with story commentary be produced from the project.

Director Martin inquired about the possibility of SWC supporting the Province in procuring and training an additional mussel-sniffing canine. She also requested that some safety whistles and “7 top tips” be sent to her to share at community events in her area.

Mayor Christian suggested that the SWC work with the Conservation Officer Service at the watercraft inspection stations to distribute educational material about safe boating, via signs or rack cards.

**Action items:**

Staff will follow up with the provincial Invasive Mussel Defence Program staff about mussel-sniffing canines and educational signage about safe boating at the watercraft inspection stations.

Staff will provide rack cards and whistles to SWC members as requested.

Staff will follow up with UBC-O researchers about acquiring photos and commentary on the core sample.

**Late agenda item:  
Abandoned sunken  
vessel at Sandy Point**

Hamish Kassa, Environmental Coordinator for the CSRD, reported that there is a sunken vessel near Sandy Point. He has been in contact with several organizations to have the vessel removed, including Transport

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Canada, the BC Conservation Officer Service, and the Coast Guard all of whom have indicated that it's not their responsibility.

Discussion:

Chair Demenok suggested that the CSRD contact the BC Ministry of Forests, Lands and Natural Resource Operations. Failing that, the SWC can fund the removal and disposal.

Director Simpson inquired of the precedent-setting nature. Mayor Christian inquired about the possible liability to the SWC for removing and disposing a derelict vessel.

**Action item:** staff will wait to hear from Hamish and will facilitate a financial vote by SWC members regarding paying for disposal of the vessel if the BC MFLNRORD doesn't support it.

**Roundtable  
discussion: Biosolids**

Chair Demenok introduced the proposed land application of biosolids in the Turtle Valley near Chum Creek. There are concerns regarding the contents of the biosolids, including deleterious substances such as heavy metals and bacteria.

Mayor Christian commented that the source of the biosolids, the City of Kamloops' Wastewater Treatment Centre, needs to find a longer-term alternative solution to stockpiling biosolids. He further explained that the City has an agreement with Arrow Transport to haul the biosolids, and that Arrow hired an agrologist to develop a plan for mixing and applying biosolids to a newly logged parcel of land in the Turtle Valley to remediate the soil and prepare it for agriculture. Mayor Christian stated the biosolids have been tested for a number of compounds.

Chair Demenok inquired about the requirements for monitoring. Mayor Christian replied that the professional agrologist hired by Arrow has developed a monitoring plan to comply with the monitoring requirements under the Organic Matter Recycling Regulation (OMRR).

Dennis Einarson confirmed that the land application plan and all its components are compliant with OMRR's requirements, and some aspects of the plan go beyond what's required. He commented that MOE staff are ensuring the required monitoring is being done, and that baseline data has been acquired by the permittee.

Natalya Melnychuk inquired about potential impacts and monitoring of the aquifer at Chum Lake, and about monitoring for pharmaceuticals.

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She also inquired if there's a role for the SWC to play in terms of providing commentary on the OMRR. Mayor Christian replied that many pharmaceuticals are water-soluble and flow out of the treatment centre via effluent, rather than being maintained as residuals in the solids. Randy Wood commented on his observation that concerns about the Turtle Valley application are primarily around the risk of pathogens in the biosolids. He also commented on the vast amount of misinformation circulating about biosolids.

Director Martin commented on the need for a solution to dealing with biosolids, and the importance of individuals' responsibility for source control.

Dennis Einarson further remarked on the need for ongoing research on the subject of biosolids. He re-iterated that the monitoring requirements for the Turtle Valley application would reveal any concerns.

*Mayor Rod Crowe left the meeting at 10:55 AM*

**Roundtable  
discussion: Next  
steps for SWC's  
Water Protection  
Initiative**

Mike Simpson reviewed the context for the challenge ahead of the SWC, including some aspects of the SWC's five year plan and goals for nutrient remediation, Megan Ludwig's research results including nutrient-loading in different reaches of the watershed, and the conclusion that the Shuswap watershed is sensitive to nutrient inputs due to very low natural nutrient-loading from the forested land-base. He explained various components that should be considered for the SWC's next steps in nutrient management or remediation, including the new provincial Agricultural Environmental Management Code of Practice (AEMCoP), draft Water Quality Objectives for Shuswap Lake, attainment monitoring on Salmon River, Ruth McDougall's report to the SWC on nutrient management strategies (2014), and the sediment core from Mara Lake that's currently being analysed for historic nutrient-loading. Mike reviewed the discussion that took place at the Water Protection Advisory Committee in mid-May, concluding that the committee did not make any conclusive recommendations for the SWC to consider.

Chair Demenok commented that this is a very complicated situation with a lot of puzzle pieces, and he suggested that the Council seek input and guidance from an expert on the next steps.

Laura Code commented that a limitation of the nutrient research is that it didn't differentiate between types of agricultural land uses. Chair Demenok remarked that focusing on the 'incremental flow sub-watersheds' (IFSW, i.e., valley bottoms) which contribute the highest

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concentrations of nutrient-loading to the rivers. Laura Code further commented that any action to mitigate nutrient-loading may not produce visible results for several years.

Lorne Hunter inquired about the availability of fine-scale data on the IFSW areas, and if that could indicate where the SWC could look to implement nutrient mitigation. He indicated his support for modeling, as a way of guiding very precise next steps for nutrient mitigation. He also remarked that he would be in support of nutrient management policy in the uplands.

Mayor Christian remarked that the BC Ministries of Environment and Agriculture ought to be dealing with issues of environmental stewardship and best farming practices, and that the SWC should not be involved in those matters. He supports the concept of pilot projects closer to home-owners, such as the use of horticultural fertilizers. He also stated his support for the SWC working with nature and environmental education centres.

Dennis Einarson proposed that the SWC help agriculturalists respond and react to the new AEMCoP. He supports the development of small wetlands as ‘on-farm water treatment systems’. Chair Demenok agreed, and further remarked about the ancillary benefits of building wetlands.

Laura Code remarked that there are other on-farm beneficial management practices, in addition to protecting and building wetlands, to mitigate nutrient effluents. She commented that local agriculturalists will need to be part of the discussion in determining what and where these types of practices should be implemented.

Director Simpson inquired about the possibility of using excess nutrients from agriculture to produce a new product. Laura Code responded that there are technologies out there that do that; some of them are cost-prohibitive, and limited to certain agriculture sectors.

Mike Simpson summarized that perhaps three options for moving forward include 1) KODA’s letter for support in forage trials; 2) pursuing modeling to further guide the SWC’s efforts; and 3) following up with Valid Manufacturing regarding the manure centrifuge.

Councillor Lavery remarked that this is a very important discussion and perhaps the SWC shouldn’t make any decisions until the conversation can take place with more participants.

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Laura Code commented on the possibility of engaging the resource management units within the BC Ministry of Agriculture.

Ray Nadeau, as an observer in the gallery, was invited to speak by Chair Demenok. He commented that the SWC can help agriculturalists improve their nutrient management and come into compliance with the new AEMCoP; he further stated that the BC Ministry of Environment has indicated that they are willing to host a workshop and further delve into this with the SWC and landowners in the Shuswap.

Mike Simpson pointed out that the SWC meeting attendance didn't meet financial quorum.

**Action items:**

Staff will follow up with the BC Ministry of Environment to be part of a workshop regarding nutrient management requirements under the new AEMCoP.

Laura Code will determine appropriate involvement from the BC Ministry of Agriculture's Resource Management Unit.

Staff will follow up with Valid Manufacturing to learn more about the manure centrifuge.

**Adjourn**

**Moved/seconded** by Councillor Lavery/Director Simpson that: The June 12<sup>th</sup> 2019 meeting of the Shuswap Watershed Council be adjourned.

**CARRIED**

Meeting adjourned at 12:10 PM.

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2(a-i)	Report from Program Managers	10:30

## Program Managers' Report

### Corrected budget for 2019-20

Note that the Communications budget for 2019-20 has been adjusted to \$42,200, from \$40,200 as presented at the March 13<sup>th</sup> 2019 SWC meeting. This revision is to correct an addition error.

### Financial summary for the first quarter (April 1<sup>st</sup> – June 30<sup>th</sup> 2019)

#### INCOME

Source	Amount received (\$)
Surplus SWC funds (from March 31 <sup>st</sup> 2019)	186,896
TNRD	53,600
CSRD (C, D, E, F and District of Sicamous)	160,000
City of Salmon Arm	40,000
Adams Lake Indian Band	1,300
Grant funding: <i>Transport Canada Boating Safety Contribution Program</i>	19,538
<b>Total</b>	<b>461,334</b>

#### EXPENSES

Activity (per 2019-20 work plan)	Budget (\$)	Expenses (\$) Apr 1 <sup>st</sup> – Jun 30 <sup>th</sup>
Water Quality Program: Water Monitoring Initiative	51,150	11,570
Water Quality Program: Water Protection Initiative	79,500	19,171
Zebra and Quagga Mussel Prevention Program	30,825	20,981
Safe Recreation Program	26,050	9462
Communications	42,200	8349
Administration	43,150	7394
<b>Sub-total (Operating Expenses)</b>	<b>272,875</b>	<b>76,927</b>
Operating Reserve	188,459	0
<b>Total for 2019-20</b>	<b>461,334</b>	<b>76,927</b>

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2(a-ii)	Report from Program Managers	10:30

2018 Shuswap Water Quality Summary Report

The 2018 Shuswap Water Quality Summary Report was completed in July. The 16-page report is available on the SWC website, [www.shuswapwater.ca](http://www.shuswapwater.ca). The report was emailed to SWC members on July 25<sup>th</sup>. Print copies have been mailed to local/regional government and band offices, Shuswap branches of the Okanagan Regional Library, the health clinic in Salmon Arm, and Ministry of Environment offices in Vernon and Kamloops. The report has been publicized through newspaper editorial, advertising, and social media.

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2(b-i)	Program Managers' Report: Other updates for information	10:30

## Provincial Invasive Mussel Defence Program

### Background

At the June SWC meeting, there was brief discussion and an inquiry about the SWC potentially supporting the expansion of the Province's K9 unit of the provincial Invasive Mussel Defence Program. In response to this inquiry, staff have corresponded with provincial staff about the costs and capacity that would be required for such an expansion.

### Information for consideration and discussion

The following information is provided by Ms. Martina Beck, Head of the Invasive Fauna Unit of the BC Ministry of Environment and Climate Change:

K9's provide a considerable benefit to both the Invasive Mussel Defence Program (IMDP) and the Conservation Officer Service as they are trained as multi-purpose detection dogs for detecting invasive mussels (as well as firearms and bear parts), and are also used in evidence recovery cases. The K9's provide invaluable benefits for both detection of invasive mussels as well as outreach and education to the public.

When looking at expanding the IMDP's K9 unit there are a number of factors that need to be carefully considered, in addition to the above-mentioned benefits that they provide to the Program. These factors include:

The long-term commitment: K9's typically work until they are around 7 – 9 years old and they require a full-time handler for their entire service career. If the handler retires before the K9 does, it requires recruiting a new suitable handler and habituating them with the K9. Finding a suitable K9 handler who is also suitable for the position of Sergeant (supervisor) for the IMDP may be a challenge in the future, and needs to be considered prior to this commitment.

Full-time commitment: the duties of a K9 handler can be 24/7 and require an exceptionally dedicated person to take this on. It also takes time out of the Sergeant's daily routine for exercising and training the K9, and these daily commitments need to be taken into consideration when also balancing the operational requirements to maintain oversight of staff across all inspection stations. The IMDP needs to ensure that the Ministry still has the capacity to address ongoing operational issues effectively such as staffing, occupational health and safety, training and logistical concerns.

Cost: the initial cost to purchase and train the K9 and handler is relatively insignificant relative to the commitment of training, exercising, and caring for the K9 for their full working career, as this cost needs to include one full time salary for the handler.

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2(b-ii)	Program Managers' Report: Other updates for information	10:30

## Canada Border Services Agency Aquatic Invasive Species Prevention

### Background

Since the Shuswap Watershed Council officially joined the fight against aquatic invasive mussels in 2017 by allocating a portion of its budget toward monitoring, education and advocacy activities, staff have been working with other like-minded organizations to consider vectors and pathways for an invasion so that education and advocacy can be carried out where it's most needed. As part of this work, the SWC has corresponded with the federal Department of Fisheries and Oceans and the provincial Ministry of Environment of Climate Change for various purposes including fact-finding, operational updates, inquiries, and requests for new funding and action to prevent the spread of invasive Zebra and Quagga Mussels.

In December 2018, SWC Chair Demenok received a letter from Hon. Jonathan Wilkinson, Minister of Fisheries, Oceans and the Canadian Coast Guard<sup>1</sup> that was in response to the SWC's correspondence in September 2018 about invasive Zebra and Quagga Mussels. The Minister's letter pointed out, among other items, that the Canada Border Services Agency (CBSA) is responsible for aircraft and floatplane monitoring for aquatic invasive species.

Staff have since followed up directly with staff from CBSA to understand what measures are in place to prevent the spread of aquatic invasive species via floatplanes.

### Information for consideration and discussion

The following information is provided by Ms. Helen Gerson, Senior Program Advisor, Canada Border Services Agency (CBSA):

The CBSA's Memorandum D19-8-5, [Import Prohibitions and Requirements for Commercial Importers of Aquatic Species and for Travellers Under the Aquatic Invasive Species Regulations](#), advises importers and travellers on import prohibitions and requirements under the Aquatic Invasive Species Regulations. Conveyances and equipment, including floatplanes, must be free of invasive mussels. Floatplane pilots are required to ensure their planes and floats are cleaned, drained and dried.

The CBSA's Memorandum D2-5-12, [Telephone Reporting for General Aviation and Private Boats](#), requires floatplane pilots to report to the Telephone Reporting Centre (TRC). Pilots calling in to the TRC must inform the CBSA that floatplanes moving between fresh water bodies are compliant. Pilots may also be questioned by CBSA officers as to where the aircraft was in the water in the past 30 days, whether their aircraft is clean, drained and dry, and whether any boat or other food, plant or animal product is being imported. Floatplanes suspected of being infested with aquatic invasive species will be referred to enforcement authorities for inspection.

The two above-mentioned D memoranda apply only to floatplanes entering Canada from outside Canada.

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<sup>1</sup> The correspondence was included in the March 13<sup>th</sup> 2019 SWC meeting agenda.