

Council Meeting
September 8th 2021 • 9:00 - 11:45 AM

Virtual meeting via Zoom

Meeting Summary
Approved December 8th 2021

Meeting objectives

1. Receive update from program managers
2. Receive presentation and have roundtable discussion on Phosphorus Action Plan items completed to-date
3. Approve Water Quality Grant application
4. Receive presentation from staff at BC Ministry of Environment & Climate Change Strategy re: invasive clams and invasive mussels

Present

Paul Demenok, Chair – Columbia Shuswap Regional District, Area C
Jay Simpson, Vice Chair – Columbia Shuswap Regional District, Area F
Rene Talbot – Columbia Shuswap Regional District, Area D
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
Debbie Cannon - City of Salmon Arm (*from 9:15 AM*)
Howard Nordquist – Secwepemc Nation, Adams Lake Indian Band (*from 9:07 AM*)
Rick Fairbairn - Regional District of North Okanagan, Area D
Denis Delisle – Regional District of North Okanagan, Area F
Lindsay Benbow – BC Ministry of Agriculture, Food & Fisheries (*to 11:25 AM*)
Lorne Hunter – Community representative
Sharon Bennett – Community representative (*to 11:00 AM*)
Natalya Melnychuk – Community representative (*from 9:07 AM*)

Erin Vieira and Mike Simpson – Fraser Basin Council

Observers

John Irvine, Cory Sampson, Barbra Fairclough

Regrets

Colleen Anderson
Dave Nordquist
Kym Keogh

Call to Order

Chair Paul Demenok opened the meeting at 9:00 AM. He acknowledged the meeting taking place on the traditional lands of the Secwepemc people.

Chair Demenok announced that Randy Wood, SWC representative, has stepped down from his role as he moved out of province. Chair Demenok acknowledged Randy's contributions to the SWC since 2016.

Approval of agenda

Moved/seconded by Mayor Christian/Director Simpson that:

The agenda for the September 8th 2021 meeting of the Shuswap Watershed Council be approved.

Approved

Adoption of meeting summaries

Moved/seconded by Mayor Christian/Mayor Crowe that:

The draft summary of the Shuswap Watershed Council, held June 9th 2021, be approved.

Approved

Correspondence

None

Old business

Moved/seconded by Mayor Christian/Director Talbot that:

The draft summary of the Water Protection Advisory Committee meeting and site visit, held July 9th 2021, be received for information.

Approved

Councillor Howard Nordquist entered the meeting at 9:07 AM

Natalya Melnychuk entered the meeting at 9:07 AM

Report from Chair

Chair Demenok acknowledged Howard Nordquist as a new representative to the SWC from Adams Lake Indian Band, Secwepemc Nation.

Report from Program Managers

Erin Vieira and Mike Simpson provided an update on program operations since the last SWC meeting in June:

- The SWC facilitated the development of a Shuswap regional algal bloom response plan with input from many of the Water Monitoring Group members. The plan did not need to be enacted in 2021, as there were no significant algal blooms. The plan will be reviewed by the Water Monitoring Group on an annual basis.
- Staff and some Water Protection Advisory Committee members followed up on one of the applications to the 2021 Water Quality Grant Program, to obtain more information and clarity regarding the proposed project. A site visit was completed on July 9th. A second project with funding from the Water Quality Grant Program is underway.

- The SWC has continued its partnership with Columbia Shuswap Invasive Species Society to prevent the spread of invasive Zebra and Quagga Mussels into BC, and to prevent the spread of invasive freshwater clams around BC. This work involves both early detection monitoring, and education and outreach. For its part, the SWC has delivered campaigns via print media, editorials, and social media since May long weekend.
- The SWC has also continued its education and outreach regarding safe boating and water-based recreation. '7 tips for safety' are promoted through a variety of media. Additionally, the SWC works with partners to distribute marine safety whistles to those in need of one.
- The 2020 Shuswap Water Quality Summary Report was completed in July and distributed online, through emails, and print copies were sent to government offices and library branches for the public to pick up at no cost.
- Staff reported that the SWC's social media platforms have shown significant growth in following recently
- A financial update for the first quarter, April 1st - June 30th 2021 was provided:

Councillor Debbie Cannon entered the meeting at 9:15 AM

REVENUE - Source	\$
For the fiscal year April 1 st 2021 - March 30 th 2022	
Surplus (from March 31 st 2021)	69,072
Operating Reserve	198,995
<i>Per Contribution Agreement *</i>	
CSRD (Areas C, D, E, F and District of Sicamous)	97,200
TNRD	32,590
City of Salmon Arm	24,320
Adams Lake Indian Band	790
<i>Contribution from partner: Shuswap Lifeboat Society</i>	3200
Total revenue	426,167

** Funders' contributions are reduced by \$100,000, or 39% each, in 2021 to reduce the SWC's Operating Reserve*

EXPENSES	Budgeted (\$)	Expense (\$)
First quarter April 1 st - June 30 th 2021		
Water Quality Monitoring	32,950	15,008
Water Quality Protection	111,650	10,995
Zebra & Quagga Mussel Prevention	42,750	31,762
Safe Recreation	21,550	9585
Communications, engagement, advocacy	48,100	9961
Management & administration	41,500	7427
Sub-total Program Operations	298,500	84,737
Operating Reserve	127,667	0
Total expenses	426,167	84,737

Discussion

Director Martin and Sharon Bennett asked for clarification about education opportunities to schools and marina owner/operators.

Director Martin commented that there were three drowning deaths this summer. This underscores the importance of the Safe Recreation program and the Kids Don't Float lifejacket loaner kiosks provided by the Royal Canadian Marine Search & Rescue. Erin remarked that staff will consider amending some of the educational messaging to have a stronger emphasis on safe swimming. Mayor Ken commented that swimming while impaired is a major cause of drowning deaths.

Chair Demenok commented that the Water Quality report was very well done, with a good combination of reporting data combined with thoughtful explanation of water quality issues such as algal blooms, cyanobacteria, and invasive species. He remarked that the SWC should try to distribute it more widely.

Report from Program Managers: Phosphorus Action Plan

Cait Murphy introduced herself as a staff member of Fraser Basin Council working with Mike Simpson and Erin Vieira on the development of the SWC's Phosphorus Action Plan. Cait provided background information about the P Action Plan, and presented its purpose and structure:

- The effects of excessive phosphorus (P) on water quality are well documented in other regions of Canada and the world. Prevention of P-related water quality issues is much better than reacting to and correcting them.
- Research by UBC-Okanagan has shown that the largest loads of P to the lakes are coming from Shuswap and Salmon Rivers where there is agriculture, housing, and commercial development. Research has also shown the P inputs to Mara Lake via Shuswap River are trending upwards since the 1980s.
- Developing a P Action Plan is identified in the SWC's Strategic Plan for 2021-26 as one strategy to maintain and improve water quality in the Shuswap
- The P Action Plan will collate existing, disparate P regulations by and for various orders of government; it will also summarize new, innovative, non-regulatory opportunities to capture/mitigate P thereby protecting water quality
- The P Action Plan will be structured as follows:
 - Executive Summary
 - Background
 - Existing P regulations that apply in the Shuswap watershed
 - Action items and opportunities that major players can take to reduce phosphorus pollution in the Shuswap watershed
 - Resources
- The draft Phosphorus Action Plan will be completed by March 2022. To date, literature review is underway.

- Next steps will include seeking input from various orders of government, agriculture sector, other major players

Moved/seconded by Mayor Christian/Director Martin that:

The Phosphorus Action Plan structure be approved as presented.

Discussion

Chair Demenok commented that staff could consider trending P levels (e.g., Tappen monitoring site) and research by UBC-Okanagan (e.g., Mara Lake core sample) in the development of the P Action Plan.

Sharon Bennett commented that the SWC should be mindful of the effects of wildfires on water quality, and as a source of nutrients.

Mike Simpson further commented that wetland protection and restoration will be looked into as an effective method of capturing nutrients and protecting water quality.

Chair Demenok commented on the importance of communicating the plan and sharing it publicly and with target audience groups.

Approved

Further discussion

Lorne Hunter commented on the need for additional water quality monitoring post-wildfire; he is especially concerned about the impacts of the White Rock Lake fire on the Salmon River. Director Talbot said he shares the concern.

Mayor Christian remarked that Thompson Rivers University has a research chair for wildfires and ecosystem impacts. Natalya Melnychuk added that academic engagement would be a good starting point for the SWC.

Guest presentation: Aquatic Invasive Species

Martina Beck, Cassandra Silverio, and Dave Webster introduced themselves from the BC Ministry of Environment & Climate Change Strategy and BC Conservation Officer Service, respectively.

Ms. Silverio presented a brief overview of invasive freshwater clams. Next, she described the shoreline surveys and dive surveys that have been done by the BC MOECC, Columbia Shuswap Invasive Species Society, and First Nations this year. Surveys have indicated the clams' distribution is limited to the Salmon Arm reach of Shuswap Lake. Ms. Silverio presented some maps and charts to demonstrate the survey methodology and results. The next steps are to continue with surveys, and do education and outreach to prevent their spread. She commented that eradication of invasive freshwater clams is very difficult in large, complex systems like Shuswap Lake.

Director Delisle inquired if Shuswap Lake is suitable for clams to survive. Ms. Silverio replied yes, and that clams eat plankton through filter-feeding. She further commented that cold winter temperatures and freezing water may limit their growth.

Ms. Beck and Mr. Webster presented an overview of the Province's Invasive Mussel Defence Program, which includes three components: watercraft inspection, early detection monitoring for invasive mussels, and education and outreach. This year there are 9 watercraft inspections (two are roving stations) with 49 staff. The stations will remain open until October 25th 2021. 28,800 inspections have been completed (up to August 31st); out of these, 16 mussel-fouled watercraft were intercepted. Additionally, 519 water samples have been tested for Zebra & Quagga Mussel larvae, all of which have been negative.

Sharon Bennett left the meeting at 11:00 AM

Some SWC members asked questions about the provincial Invasive Mussel Defence Program, which Ms. Beck and Mr. Webster answered.

New business

Mike Simpson reported that the 2021 Water Quality Grant Program has approved \$26,753 in funding against a budget of \$85,000. He presented the following recommendation for the Grant Program:

- November 2021 - January 2022: Open the grant fund for a second round of applications. Advertise the grant program widely, with up to \$60,000 available and prioritize certain types of nutrient abatement projects.
- February 2022: Applications review completed by Shuswap Water Protection Advisory Committee, make recommendations to the SWC
- March 2022: SWC review and approve the Shuswap Water Protection Advisory Committee's recommendations; staff complete contribution agreements with successful proponents
- April 2022 - March 2023: project completion by proponents.

Moved/seconded by Councillor Cannon/Director Simpson that:

The Water Quality Grant Program be amended and continued in 2021-2022 as recommended.

Discussion:

Director Simpson asked for clarification regarding the grant program cycle going forward; Mike Simpson replied that the above-noted timing and cycle would be maintained in future years to better accommodate farmers.

Approved

Action item:

Staff will administer a second round of water quality grant applications and review as noted above.

Moved/seconded by Director Martin/Councillor Cannon that:

Water Quality Grant application, Project B, be approved for funding.

Discussion

Mayor Christian commented that, although he supports the project, it sounds more like a flood protection project than a nutrient abatement project and it could open the door to additional flood projects which is not the goal of the program.

Approved

Lindsay Benbow left the meeting at 11:25 AM

**Roundtable
discussion: forest
fires and water
quality monitoring**

Chair Demenok suggested that the SWC request the engagement of the Shuswap Water Monitoring Group on the subject of post-wildfire water quality monitoring.

Mike Simpson commented that in the past, the SWC supported additional monitoring on the Salmon River by the BC Ministry of Environment.

Moved/seconded by Director Talbot/Director Simpson that:

The SWC ask the Shuswap Water Monitoring Group to investigate the possibility of developing a special post-wildfire water quality monitoring program, and bring a recommendation forward to the SWC.

Approved

Action item:

Staff will bring this request to the next meeting of the Shuswap Water Monitoring Group.

Roundtable updates

Director Delisle suggested the SWC collect drone video footage of the Shuswap watershed for year-by-year monitoring and comparisons. It would show natural disturbances and shoreline developments. Chair Demenok commented that the SWC would not want to be perceived as spying on people.

Director Delisle further commented on water use by agriculture, especially at a time when conservation is important for salmon migration. Chair Demenok replied that water conservation is not part of the SWC's mandate. Natalya Melnychuk commented that she has been involved in work leading up to recent Fish Protection Orders that have required irrigators in some regions turn off their water for conservation reasons. Dr. Melnychuk offered to facilitate a further discussion on this at a later date with interested SWC members.

Dr. Melnychuk further commented that water quantity affects water quality, and the Provincial Watershed Security Strategy has identified roles and responsibilities for local governments and First Nations for water quality and water quantity. Chair Demenok remarked that SWC should be involved in the strategy. Dr. Melnychuk said it will be ready for public engagement in Spring 2022.

Adjourn

Moved/seconded by Director Simpson/Mayor Christian that:

The September 8th 2021 Shuswap Watershed Council meeting be adjourned.

Approved

Adjourned at 11:40 AM.

CERTIFIED CORRECT:

Chair