

AGENDA PACKAGE FOR:

Council Meeting
Wednesday June 9th 2021 | 9:00 - 11:00 AM

Virtual meeting via Zoom

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1.	March 10 th 2021 meeting summary for approval	9:05 AM

Council Meeting
March 10th 2021 | 10:15 AM – 2:30 PM
Virtual meeting Via Zoom

Draft meeting summary

This summary is subject to correction at the next Council meeting

Meeting objectives

1. Elect Chair and Vice Chair for 2021
2. Receive update from program managers
3. Approve 2021-22 workplan and budget
4. Discuss updates to SWC Terms of Reference
5. Receive guest presentation on Upper Adams River salmon restoration project

Present

Paul Demenok, Chair – Columbia Shuswap Regional District, Area C
Rene Talbot – Columbia Shuswap Regional District, Area D
Rhona Martin – Columbia Shuswap Regional District, Area E (*from 9:20 am*)
Jay Simpson – Columbia Shuswap Regional District, Area F
Ken Christian – Thompson-Nicola Regional District, City of Kamloops
Rod Crowe – Thompson-Nicola Regional District, Village of Chase
Colleen Anderson – District of Sicamous
Steven Teed – Secwepemc Nation, Adams Lake Indian Band
Dave Nordquist – Secwepemc Nation, Adams Lake Indian Band
Rick Fairbairn – Regional District of North Okanagan, Area D (*from 9:10 am*)
Denis Delisle – Regional District of North Okanagan, Area F
Dennis Einarson – BC Ministry of Environment and Climate Change
Lindsay Benbow – BC Ministry of Agriculture
Lorne Hunter – Community representative (*to 11:20 am*)
Sharon Bennett – Community representative
Randy Wood – Community representative
Natalya Melnychuk – Community representative (*from 9:00 to 10:30 am; from 11:35 am to 12:15 pm*)

Erin Vieira and Mike Simpson – Fraser Basin Council

Observers

Don Holmes
John Irvine, Clyde Mitchell, Barbra Fairclough, Kimm Magill-Hoffmann

Regrets

None

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Call to Order Mike Simpson opened the meeting at 9:00 AM

Elections Mike Simpson presided over the election

Mayor Christian nominated Director Demenok for Chair; accepted

ELECTION of Chair for 2021 is Paul Demenok, by acclamation.

Director Demenok nominated Director Simpson for Vice Chair; accepted

ELECTION of Vice Chair for 2021 is Jay Simpson, by acclamation.

Adoption of meeting summaries

Moved/seconded by Mayor Christian/Director Talbot that:

The agenda for the March 10th 2021 meetings of the Shuswap Watershed Council be approved.

APPROVED

Moved/seconded by Councillor Anderson/Vice Chair Simpson that:

The draft summary of the Shuswap Watershed Council meeting, held December 9th 2020, be approved.

APPROVED

Correspondence

Councillor Anderson introduced four new items from the District of Sicamous, regarding District resolutions and memos to the Southern Interior Local Government Association, for the SWC's information and consideration.

Moved/seconded by Mayor Christian/Director Talbot that:

The correspondence be received for information.

Discussion

Chair Demenok thanked Director Delisle for the financial contribution from RDNO Area 'F' discretionary funds to the SWC for 2020/21.

APPROVED

Moved/seconded by Chair Demenok/Vice Chair Simpson that:

The SWC send a response letter to RDNO thanking them for their participation.

APPROVED

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Action item: Staff will send a response letter to RDNO as described in the motion above.

Director Fairbairn entered the meeting at 9:10 am

Moved/seconded by Councillor Anderson/Councillor Cannon that:

The SWC send a letter to Minister for Environment George Heyman regarding aquatic invasive species, specifically requesting stronger measures to protect British Columbia from Zebra and Quagga Mussels and also specifically requesting new legislation to list invasive freshwater clams (*Corbicula fluminea*) as prohibited under the Controlled Alien Species Regulation.

Discussion

Colleen Anderson asked for support from the SWC regarding a stronger federal mandate on Zebra and Quagga Mussel prevention, specifically on Clean-Drain-Dry practices and watercraft inspection/decontamination. She expressed that the current prevention system isn't strong enough and there are gaps. The recent entry of zebra mussels into BC via the aquaria industry (i.e., [news bulletin here](#)) is yet another example of an insufficient prevention system. Councillor Anderson suggests greater enforcement and greater fines for non-compliance are needed. Natalya Melnychuk also suggested that homeowners be more engaged as an infestation would directly impact them (i.e., water intake, etc.)

APPROVED

Action item: Staff will send a letter to Minister Heyman as described in the motion above.

Director Martin entered the meeting at 9:15 am

Old business

Moved/seconded by Director Martin/Mayor Christian that:

The draft summary of the Shuswap Water Monitoring Group meeting, held March 2nd 2021, be received for information.

Discussion

Chair Demenok re-iterated from the meeting summary that no single agency has the capacity and mandate to frequently monitor the Shuswap watershed during an algal bloom. He proposed that a role for the SWC is to coordinate monitoring and communications with as many partners as possible. Director Simpson commented that it is the responsibility of the Province, in one department or another, to respond to an algal bloom but he also agreed that if that isn't possible, it is a good role for the SWC to help lead a response. Chair Demenok added that collecting algal samples could also be supported by residents around the lake, should the need arise. Sharon Bennett remarked that it's important the content of communications come from the subject matter experts, i.e., biologists

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or scientists at IHA. Councillor Cannon commented that communications must be led by IHA and she agreed that the SWC can help coordinate algal sampling.

APPROVED

Action item: Staff will develop a 'local algal response plan' that describes various organizations role in responding to future algal blooms with monitoring and communications; on the latter, acknowledging that Public Service Announcements will come from Interior Health Authority

Report from Chair

Chair Demenok thanked the SWC members for their ongoing support for him in the role as Chair.

Report from Program Managers

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

- An update on the status of each of the five 2020 water quality grant recipients' projects was reviewed. Three are complete, one is underway, and one is not yet started.
- The 2021 Water Quality Grant Program was launched on February 23rd. The grant program is being advertised across the region. The application period closes on April 30th; proponents can find information about eligibility and an application package online at www.shuswapwater.ca.
- The highlights of the March 2nd Shuswap Water Monitoring Group meeting were reviewed; notably, that several organizations have volunteered to collaborate in response to future algal blooms
- Staff are preparing media campaigns for Zebra and Quagga Mussel prevention for 2021; campaign messaging focuses on 'Clean-Drain-Dry' and watercraft inspection
- Staff are continuing to stay engaged regarding the discovery of invasive freshwater clams in Shuswap Lake and are developing education/outreach measures in partnership with the Columbia Shuswap Invasive Species Society
- Staff reviewed the results of a series of presentations that were given to community groups through late Fall and Winter 2020. There were constructive conversations and lots of good questions put to the SWC in these presentations.
- Staff reported that social media platforms continue to show growth; the SWC has a new [YouTube channel](#)
- Staff have submitted two grant applications for funding to support the SWC's work: one application to Eco-Action (federal program) in the amount of \$95K, another application to Habitat Stewardship Program (federal program) in the amount of \$25K. If successful, these funds will go toward the Water Quality Grant Program and developing a wetland strategy, respectively.
- A financial report to the end of the third quarter (April 1st 2020 - December 30th 2020) was provided:

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Revenue for 2020-21	(\$)
Surplus (from March 31 st , 2020)	241,995
CSRD (C, D, E, F and District of Sicamous)	160,000
TNRD	53,600
City of Salmon Arm	40,000
Adams Lake Indian Band	1300
NEW: Regional District of North Okanagan (Area F)	5000
Grant funding: Transport Canada <i>Boating Safety Contribution Program</i>	20,550
Total revenue	522,445

Expenses for 2020-21 (April 1 st - December 31 st 2020)	Budget (\$)	Expenses (\$)
Water Quality Monitoring	35,200	19,715
Water Quality Protection	113,600	63,738
Zebra & Quagga Mussel Prevention	35,400	28,414
Safe Recreation	27,400	20,552
Communications & Advocacy	68,700	54,139
Management & Administration	43,150	29,245
Sub-total Operational Program Expenses	323,450	215,802
Operating Reserve	198,995	0
Total expenses	522,445	215,802

**New business:
Workplan and
budget for
2021-22**

Erin Vieira presented the proposed budget for 2021-22 and key workplan items. She clarified that two of the items in the budget may change, depending on the success or not of two grant applications to federal funding programs.

Moved/seconded by Mayor Christian/Director Martin that:

The budget and workplan for 2021-22 be approved.

Discussion:

Director Simpson remarked on the disparity between the budgets for the Water Quality Grant Program, and Zebra and Quagga Mussel prevention. He suggested the SWC take on more work related to ZQM prevention. Councillor Anderson expressed her agreement with Director Simpson. Erin Vieira clarified that this could be done, and that the SWC should continue to focus on education, outreach, and advocacy - not items related to enforcement or watercraft inspection which is the role of the Province.

Chair Demenok suggested that a public opinion survey be added to the 2021-22 communications plan. He remarked that it would be helpful to understand public support for the SWC, in advance of a voter assent process. He clarified that a survey should be limited to the assent process service area (i.e., CSRD Areas C, D, E, F and Sicamous). Mayor Christian remarked that it could be perceived to be interfering with the assent process. He expressed his preference to focus on the

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current workplan thereby proving the worth of the SWC. Director Martin expressed her agreement with Mayor Christian.

Natalya Melnychuk left the meeting at 10:30 am

Chair Demenok inquired if the SWC should produce a 2020 Water Quality Summary Report, as mentioned in the proposed workplan. Erin Vieira suggested that although the data will be fewer (due to Covid preventing some aspects of the monitoring program in 2020), she said there is still plenty of information to share with residents and visitors via the Summary Report. Dennis Einarson remarked that the BC Ministry of Environment is in the process of completing some reports, and would like to share some of that information via the SWC's Summary Report.

APPROVED

The budget and workplan for 2021-22 is summarized:

Revenue for 2021-22	(\$)
Projected year-end surplus (March 31 st 2021)	45,000
Operating reserve	198,995
<i>Per Contribution Agreement (2021-23)*</i>	
CSRD (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>Grant applications:</i>	
Eco-Action (Environment and Climate Change Canada - not confirmed yet)	95,000
Habitat Stewardship Program (Department of Fisheries and Oceans Canada - not confirmed yet)	0
Total revenue	493,895

* Contributions in 2021-22 are reduced, relative to previous years, to draw down the Operating Reserve by approximately \$100K. This is described in the Contribution Agreement.

Workplan and expenses for 2021-22	(\$)
Water Quality Program:	
Water Monitoring Initiative	27,950
Water Protection Initiative	206,650*
Zebra and Quagga Mussel Prevention Program	34,500
Safe Recreation Program	21,550
Communications Program	48,100
Administration	41,500
Sub-total operational expenses	380,250
Operating Reserve (includes \$20K contingency fund)	113,645
Total revenue	493,895

* Assumed \$95K contribution (grant funds) from Eco-Action

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Action item: Staff will boost the Zebra and Quagga Mussel Program, and bring a revised budget to the June SWC meeting. It's anticipated staff will also be able to report on the outcomes of two grant applications submitted to federal funding programs.

**New business:
SWC Terms of
Reference**

Erin Vieira presented some recommended updates to the Terms of Reference, and walked through several discussion questions for the SWC to consider related to membership and decision-making. Mike Simpson pointed out that staff have been corresponding with representatives of Okanagan Indian Band and Syilx Nation, and are expecting a letter of recommendation for a new member of the SWC, representing Syilx Nation.

Director Martin commented that indigenous representation on the SWC needs careful consideration.

Director Fairbairn suggested inviting additional representation from the North Okanagan; in particular, RDNO Area C which is partly in the Shuswap watershed.

Councillor Teed noted that Adams Lake Band wants to continue to be part of the SWC.

Sharon Bennett remarked that it is good to be inclusive. She suggested that potential new communities or governments be asked how they would like to participate: as a member of the SWC, as part of a technical committee, or to simply be kept 'in the loop' about SWC business.

Lorne Hunter left the meeting at 11:20 am

Chair Demenok suggested that creating a spot for a representative of the Shuswap Waterfront Owners Association could create a mutually beneficial linkage.

Moved/seconded by Director Martin/Councillor Cannon that:

The SWC approve staff's minor updates to the Terms of Reference.

APPROVED

Moved/seconded by Director Martin/Director Talbot that:

A committee be established to develop recommendations for amending the Terms of Reference further regarding membership and decision-making, using staff's discussion questions as a basis for consideration. The committee will bring forth the recommended amendments to the Terms of Reference at a future SWC meeting.

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Director Martin, Director Talbot, Councillor Teed, and Chair Demenok volunteered to form the committee noted above, with staff support from Erin Vieira and Mike Simpson.

Guest presentation: Upper Adams River salmon restoration and Adams Lake fertilization project

Don Holmes, R.P. Bio, introduced himself as the program coordinator working on behalf of Adams Lake Indian Band for the Upper Adams River salmon restoration project. He explained that the historic Upper Adams River sockeye salmon run was nearly decimated in the early 1900s by a splash dam constructed at the outlet of Adams Lake (i.e., thereby creating a barrier to upstream salmon passage) and the Hell's Gate slide which impacted many salmon runs.

Natalya Melnychuk returned to the meeting at 11:35 am

The restoration program will fertilize a portion of Adams Lake for three years to increase the plankton communities which will in turn improve the growth and survival of juvenile salmon. The long-term goal of the program is to re-establish a natural cycle of salmon returning to the Upper Adams River and supplying important marine-derived nutrients that improve habitat for juvenile salmon.

Mr. Holmes explained several factors of the program, including detailed monitoring of water quality, phyto- and zooplankton, invasive species, and juvenile salmon. Monitoring will ensure the right results are being produced, and will allow for course corrections if needed. He also explained that lake fertilization has been done in 24 other lakes in BC for approximately 30 years, and the success of this type of restoration has been demonstrated through that work.

There was a Question & Answer Period, with some SWC members asking for more specific information related to type of fertilizer, and the potential deleterious effects of the lake fertilization program, and the source for Upper Adams River sockeye broodstock.

Roundtable updates

Sharon Bennett reported that the Salmon Arm Food Hub initiative may be an opportunity to link up with regarding local agriculture and water quality. She also commented on an organization called Waterlution as a group to look into regarding telling indigenous water stories with a focus on youth engagement.

Councillor Anderson encouraged SWC members to send letters from their organizations to senior government regarding invasive freshwater clams and zebra and quagga mussels.

Adjourn

Moved/seconded by Mayor Christian/Director Martin that:

The March 10th 2021 meeting of the Shuswap Watershed Council be adjourned.

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APPROVED

Meeting adjourned at 12:15 pm.

CERTIFIED CORRECT:

Chair

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2-a	Correspondence	9:10 AM



c/o Fraser Basin Council
200A – 1383 McGill Road
Kamloops, BC V2C 6K7
250.314.9660
www.shuswapwater.ca
f i t y

Director Rick Fairbairn
Chair, Electoral Area Advisory Committee
Regional District of North Okanagan
9848 Aberdeen Road
Coldstream, BC. V1B 2K9

Sent by e-mail to rick.fairbairn@rdno.ca

23 March 2021

Re: RDNO participation in Shuswap Watershed Council

Dear Rick,

Thank you for your letter, dated February 23rd 2021, confirming the RDNO Electoral Area (EA) Advisory Committee's decision not to support the Shuswap Watershed Council (SWC) with a long-term funding commitment. While we are disappointed, we appreciate your consideration of this, and look forward to the day when we can take a fully collaborative approach to the stewardship of the Shuswap watershed.

We understand that Director Denis Delisle is contributing a one-time contribution to the SWC from the Area 'F' discretionary funds. On behalf of the SWC I would like to thank him for his kind support.

Your letter also stated a willingness on the part of RDNO EA Directors to continue collaborating with the SWC on Shuswap watershed issues, on an in-kind basis. Thank you for your ongoing participation in this way; the discussions and decisions around the SWC table are richer because of your involvement and perspective representing the Shuswap River and upper Shuswap regions.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Demenok".

Paul Demenok
Chair, Shuswap Watershed Council
Director, Columbia Shuswap Regional District, Area 'C' South Shuswap
250 517-0810 | pdemenok@csrd.bc.ca

cc: Director Denis Delisle, RDNO Area 'F'
Leah Mellott, General Manager, RDNO Electoral Area Administration

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2-b	Correspondence	9:10 AM



c/o Fraser Basin Council
200A – 1383 McGill Road
Kamloops, BC V2C 6K7
250.314.9660
www.shuswapwater.ca
f i t y

Hon. George Heyman
BC Minister of Environment and Climate Change Strategy
Room 112 Parliament Buildings
Victoria, BC. V8V 1X4
Sent by e-mail to ENV.Minister@gov.bc.ca

16 April 2021

Re: New measures needed for invasive mussels and invasive clams in British Columbia

Dear Minister Heyman,

I am writing on behalf of the Shuswap Watershed Council to express concern about the threat of aquatic invasive species to the Shuswap watershed, and all of British Columbia. Our province needs stronger measures to prevent an invasion of zebra and quagga mussels and to manage existing infestations of invasive freshwater clams.

The Shuswap watershed, in particular, is at high risk of a new invasion of invasive mussels (*Dreissenidae* sp.) due to tourism and boat traffic (these increase the likelihood that infested watercraft will arrive in our waters) and due to our water quality conditions (ideal calcium and temperature increase the likelihood that mussels will thrive).

We have shared our feedback with your office, and with your federal counterparts, through previous correspondence dated February 1st 2018, April 11th 2017, January 5th 2017, and April 21st 2016. Many of our concerns remain the same. We also share priorities for action as other organizations in BC, including the Okanagan Basin Water Board (OBWB) in the watershed south of us, who wrote to your office on March 4th 2021 with six recommendations¹ and the Shuswap Waterfront Owners Association who wrote to your office on March 30th 2021. In particular, we are very much in support of measures to enhance enforcement via the provincial watercraft inspection program. We are asking that it be expanded such that no entry-point to BC is vulnerable to unchecked watercraft, and that there be greater fines for non-compliant travellers. Additionally, the recent entry of zebra mussels into BC via the aquaria industry demonstrates other gaps in the prevention system that need to be addressed.

¹ OBWB identified six gaps that can be addressed by the Provincial government: 1) Restore core inspection program funding to at least 2017 levels of \$3.8 million and adjust for inflation going forward; 2) Introduce "pull-the-plug" legislation and supporting regulations for enforcement this summer; 3) Review and update the provincial Early Detection, Rapid Response plan (EDRR), to include specific long-term planning for waterbody or regional quarantines once an infestation is found in BC; 4) Provide toolkits and resources for local governments to conduct vulnerability assessments, and to implement mitigation measures like retro-fitting in-water infrastructure; 5) Introduce legislation to require all out-of-province watercraft to be inspected prior to being launched in BC waters; 6) Provide additional funding to invasive species groups in high-risk regions for monitoring, outreach, and education. (OBWB letter to Minister Heyman, March 4th 2021).

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We still have the opportunity to keep invasive mussels out of BC waterways, and the threat of an invasion will never subside. We believe that should make it more of a priority for stronger prevention measures from the Provincial government. The cost of better prevention would be a small fraction of the projected cost of managing a zebra and quagga mussel infestation.

The Shuswap Watershed Council is invested in keeping invasive mussels out through funding public awareness campaigns in our region to 'Clean-Drain-Dry' and 'Don't Move a Mussel' since 2018. To date, we have spent nearly \$92,000 in local taxpayers' dollars on these campaigns; we've spent an additional \$45,000 supporting early detection monitoring in the Shuswap watershed.

Regarding invasive freshwater clams, *Corbicula fluminea*, unfortunately we no longer have the option of prevention as live populations of the clams were discovered in Shuswap Lake last fall. This discovery adds to the list of locations where the clams occur in BC. Surveys done last fall by one of our partners, the Columbia Shuswap Invasive Species Society, confirmed invasive clams at two locations, at relatively low population densities. We also have been made aware that the Province has done some further studies using a dive team. We are appreciative of these efforts to understand the extent of the clam infestation in Shuswap Lake, and we respectfully request that the results of the diver survey be shared with us. We also urge the Provincial government to consider all possible methods of eradicating the clams from Shuswap Lake, as soon as possible. We would like to be kept informed about the Province's plans for managing or eradicating the clam infestation, and we are willing to work with the BC MOE to support their efforts. For our part, we are now embarking on a public awareness campaign to Shuswap residents and visitors about preventing the spread of invasive clams around the Shuswap watershed and to other parts of BC.

In addition, we are in full support of the District of Sicamous' Resolutions 21-047 and 21-068 which were sent to your office on March 18th 2021, and we echo their request that the Province of BC use its authority to designate *Corbicula fluminea* as a Prohibited Aquatic Invasive Species under the *Controlled Alien Species Regulation* of the Wildlife Act. Doing so would enable stronger prevention measures, including enforcement.

Thank you for your thoughtful consideration of these requests.

Sincerely,

Paul Demenok
Chair, Shuswap Watershed Council
Director, Columbia Shuswap Regional District, Area 'C' South Shuswap
250 517-0810 | pdemenok@csrd.bc.ca

Attachments:
District of Sicamous Certified Resolution 21-047
District of Sicamous Certified Resolution 21-068

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CC:

- Shuswap area MLAs: Greg Kylo (Shuswap), Harwinder Sandhu (Vernon - Monashee), Todd Stone (Kamloops - South Thompson), Peter Milobar (Kamloops - North Thompson)
- Secwepemc Chiefs: Cliff Arnouse (Adams Lake Indian Band), Oliver Arnouse (Little Shuswap Lake Band), Judy Wilson (Neskonlith), Wayne Christian (Splatsin)
- Shuswap Local Government Chairs and Mayors: Kevin Flynn (CSRD), Ken Gillis (TNRD), Kevin Acton (RDNO, Lumby), Alan Harrison (Salmon Arm), Terry Rysz (Sicamous), Rod Crowe (Chase), Greg McCune (Enderby)
- North Okanagan - Shuswap MP, Mel Arnold
- Provincial Critic for Environment and Climate Change, Ross Ellis
- Okanagan Basin Water Board, Chair Sue McKortoff
- Invasive Species Council of British Columbia, Executive Director Gail Wallin
- Columbia Shuswap Invasive Species Society, Executive Director Robyn Hooper
- Shuswap Waterfront Owners Association, President Clyde Mitchell

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About the Shuswap Watershed Council

The Shuswap Watershed Council (SWC) was established in 2014 as a watershed-based partnership that enhances water quality and safe recreation in the Shuswap. There are 18 SWC members that represent three regional districts, two municipalities, the Secwepemc Nation, two provincial government agencies, and Shuswap communities. The SWC is a collaborative, non-regulatory group. It works alongside organizations that have regulatory roles in managing the Shuswap watershed, complementing their work and carefully avoiding duplication. Its primary mandate is to enhance, protect, and advocate for water quality in the Shuswap watershed.

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District of Sicamous
 446 Main Street
 PO Box 219
 Sicamous, BC
 V0E 2V0

T: 250 836 2477
F: 250 836 4314
E: info@sicamous.ca
sicamous.ca



Certified Resolution # 21-047

It was moved and seconded:

WHEREAS invasive Asian clams (*Corbicula fluminea*) are known to threaten the natural biodiversity of lakes by competing with native species for sustenance and space, cause biofouling to water treatments systems, alter water chemistry, and potentially reduce the quality of drinking water;

AND WHEREAS the spread of Asian clams will have significant environmental, social, and economic consequences for our waterways, wildlife and communities;

AND WHEREAS the Controlled Alien Species Regulation exists under the Wildlife Act to enforce controls for species that pose a risk to people, property, wildlife, and wildlife habitat:

THEREFORE BE IT RESOLVED that UBCM ask the Province of British Columbia to designate invasive Asian clams (*Corbicula fluminea*) as a Prohibited Aquatic Invasive Species under the Controlled Alien Species Regulation under the Wildlife Act.

Carried

Certified a true and correct copy of a resolution endorsed by the Council at its Regular Council Meeting held on January 27, 2021.

Dated this 11th day of February, 2021.



 Jennifer Bruns
 Corporate Officer

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District of Sicamous
 446 Main Street
 PO Box 219
 Sicamous, BC
 V0E 2V0

T: 250 836 2477
F: 250 836 4314
E: info@sicamous.ca
sicamous.ca



Certified Resolution # 21-068

It was moved and seconded:

THAT Council submit the following resolution to the Southern Interior Local Government Association:

WHEREAS Canada is home to 20 percent of the world's fresh water, and the spread of aquatic invasive species (AIS) poses irreparable environmental, social and economic threats that will cost Canadian taxpayers billions of dollars in lost tourism and economic opportunities, and other unknown costs;

AND WHEREAS the spread of AIS is largely connected to human activity, including the unsafe transport of watercraft and floatplanes between bodies of water;

AND WHEREAS current government efforts through fines for failing to stop at a B.C. Watercraft Inspection Station, there is a lack of specific provincial or federal regulation and enforcement that is directed at watercraft owners who fail to prevent the spread of AIS by cleaning, draining, and drying their watercraft before transport;

THEREFORE, BE IT RESOLVED that the provincial and federal governments adopt increased and stricter enforcement measures for watercraft and floatplane owners including the introduction of a significant fine for watercraft and floatplane owners that fail to Clean, Drain and Dry their watercraft or floatplane before transporting it to another body of water and an increase in the fine issued to motorists who fail to stop at a Watercraft Inspection Station.

Carried

Certified a true and correct copy of a resolution endorsed by the Council at its Regular Council Meeting held on February 10, 2021.

Dated this 18th day of February, 2021.


 Jennifer Bruns
 Corporate Officer

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2-c	Correspondence	9:10

Reference: 375672

May 13, 2021

Paul Demenok, Chair
Shuswap Watershed Council
Email: pdemenok@csrd.bc.ca

Dear Chair Demenok:

Thank you for your letter of April 16, 2021, regarding invasive aquatic species in the Shuswap watershed. I appreciate the continued support provided by the Shuswap Watershed Council for the work my ministry is undertaking to protect our water resources from aquatic invasive species such as invasive zebra and quagga mussels.

The global pandemic significantly impacted the delivery of the Invasive Mussel Defence Program (IMDP). Despite these challenges, the program had a successful 2020 season with a total of 29,900 inspections performed. This year's watercraft inspection season is now underway with several southern inspection stations open since April 1, 2021, including the Golden station on Highway 1. Additional stations and expanded hours of operation will start in mid-May. Program operations will continue to adapt throughout the season in response to the current COVID-19 Provincial health orders. The Province continues to collaborate with jurisdictions across western Canada and northwest US to implement a perimeter defence approach. This approach continues to mitigate the risks of zebra and quagga mussel introduction into B.C. waterways and leverage our collective investments to date.

As you noted, in early March a new high-risk pathway for zebra mussels was identified in aquarium plants known as moss balls. The Invasive Mussel Defence Program (IMDP) team has been working closely with counterparts in western Canada, the Government of Canada and the US to understand and respond to the threat of zebra mussels coming into Canada through the pet industry supply-chain. Although this work is still in progress, the B.C. IMDP took a leadership position in identifying and mitigating this risk, both provincially and nationally.

The provincial legislative improvements suggested in your letter are options we continue to explore and consider as refinements are made to the Invasive Mussel Defence Program. With respect to making it mandatory for boaters to clean, drain, dry their watercraft, we recognize that "pull the plug" legislation has been successfully implemented in several jurisdictions across the northwest and this is something we are actively working on. The fine for motorists who fail to stop at a watercraft inspection station in B.C. is \$345 and we are not currently looking to increase this fine amount. For context, fines under the *Motor Vehicle Act* for failing to obey a traffic sign (Section 125) are \$121. Additionally, most violations for not stopping at an inspection station are due to ignorance or mistake, as opposed to willful contravention of the regulation. We also do not see repeat offenders, so higher fines are unlikely to result in increased compliance.

Item No.	Agenda item	Time
2-c	Correspondence	9:10

With respect to the invasive freshwater clam (*Corbicula fluminea*), established populations have been identified in B.C. since 2008. They are present in the Lower Fraser, Pitt, and Coquitlam Rivers, one waterbody on Vancouver Island and, as you noted, *Corbicula* were confirmed in Shuswap Lake in 2020. The ministry has partnered with Indigenous Nations and regional partners including the Columbia Shuswap Invasive Species Society (CSISS) to assess distribution through shoreline surveys. The ministry has also completed dive surveys in Shuswap Lake. Results to date indicate *Corbicula* have only been detected in the Salmon Arm of Shuswap Lake. Additional shoreline surveys and outreach work in the Shuswap watershed is planned for this spring and fall. Ministry staff would be happy to schedule a webinar in the coming months to share results from the surveys once they are complete. Once distribution and risks are better understood, staff will assess potential management options. It's important to understand that *Corbicula* are difficult to control and almost impossible to eradicate once established, particularly in large complex systems such as Shuswap Lake. Impacts of *Corbiculato* water systems and infrastructure are not directly comparable to invasive zebra and quagga mussels, because they cannot attach to surfaces the same way that zebra and quagga mussels do.

Government of B.C. decisions regarding the prevention and management of *Corbicula* are done using science-based risk assessment tools integrated into the [Provincial Early Detection and Rapid Response program](#). Actions are further informed based on provincial and regional scale priorities, risk and feasibility. Taking a pathway approach to prevention rather than a species-specific approach is a more effective way to target multiple aquatic invasive species. Identified pathways can be targeted by promoting existing outreach and education programs—such as Clean, Drain, Dry and Don't Let It Loose—to help prevent the spread of *Corbicula*.

With respect to the resolution put forward by the District of Sicamous to list *Corbicula* under the Controlled Alien Species Regulation (CAS) of the provincial *Wildlife Act* (Section 6), species have been designated as controlled alien species because they have been identified to pose the highest potential threats to public safety, property, wildlife and wildlife habitat. An updated risk assessment is currently in draft and will help inform if *Corbicula* may be considered for listing under the CAS in the future. Although *Corbicula* are not currently listed under the CAS, the Aquatic Invasive Species Regulation (Section 10) under the federal *Fisheries Act* prohibits the introduction of aquatic species into a region or body of water frequented by fish where it is not indigenous unless authorized to do so under federal or provincial law.

Thank you again for the Shuswap Watershed Council's continued work to mitigate the risks of aquatic invasive species in B.C.

Sincerely,

George Heyman
Minister

cc: James Mack, Assistant Deputy Minister, Environmental Sustainability Division, Ministry of Environment and Climate Change Strategy

Item No.	Agenda item	Time
3-a	Old business: draft summary of the May 27 th 2021 Water Protection Advisory Committee meeting	9:15

**Water Protection Advisory Committee Meeting
Thursday May 27th, 2021 | 9:00 AM – 12:00 PM
Online Meeting**

Draft meeting summary as at June 2nd, 2021

Meeting objectives

1. Review the grant applications and make recommendations to SWC

Attendance (committee members)

Lindsay Benbow, Ministry of Agriculture, Food and Fisheries

Jeff Curtis, UBC Okanagan (from 9:10)

Dennis Einarson, Ministry of Environment and Climate Change Strategy

Lorne Hunter, Agriculture – dairy/retired and SWC community representative

Dennis Lapierre, Agriculture – other (to 10:30)

Ralph Vandalsen (from 9:10, except for discussion of application B)

Ben Van Nostrand, Columbia Shuswap Regional District

Staff

Mike Simpson, Shuswap Watershed Council c/o Fraser Basin Council

Erin Vieira, Shuswap Watershed Council c/o Fraser Basin Council

Meeting Outcomes

1. Meeting summary from November 26th, 2020 was approved
2. Recommendations on which projects to recommend for funding to the SWC

Summary of discussions, decisions and action items

1. Welcome, Introductions, Agenda and Objectives

Mike Simpson welcomed everyone and thanked them for their time. Secwepemc territory (or the territory where participants are located) was acknowledged. The agenda was reviewed and accepted as presented, with the exception of providing an overview of current projects first, and a review of which projects last year were not recommended.

2. Meeting Summary from November 26th, 2020

The WPAC meeting summary from November 26th, 2020, was approved. All action items are complete, in progress or on today's agenda.

3. SWC Granting Program Evaluation Procedures, 2020 Projects, and 2020 Applications not Funded

The following was provided as an update on the 2020 projects that were funded:

Item No.	Agenda item	Time
3-a	Old business: draft summary of the May 27 th 2021 Water Protection Advisory Committee meeting	9:15

Application	Project type	SWC \$ funding	Other \$	In kind \$	Status
Hillside Dreams Goat Dairy (A)	Flood mitigation; divert spring; manure storage; fencing	\$20 500	\$31 020	\$1000	Complete, paid out
Swaan Farms (C)	Liquid manure effluent storage	\$15 500	\$16 000	\$0	Complete, paid out
Lakeland Farms (E)	Cover crop demo	\$7350	\$0	\$6720	Field complete, waiting on report, 50% paid
Grass Roots Dairies (F)	Manure storage	\$3920	\$4115	\$4240	Completed April 2021, paid out \$2650.20
FRISP/Splatsin Development Corporation (G)	Fencing	\$18 200	\$0	\$8070	\$8200 advanced; contact made with possible project partners
Total		\$65 470	\$51 135	\$20 030	

The two applications received in 2020 that were not recommended were both riparian stabilization/planting projects, one on the Salmon River and one on a tributary to the Salmon River. They were deemed limited in their scope and scale for nutrient management effectiveness as they were relatively small, and one property was not active farmland.

Before commencing the review of the applications, a few comments were made:

- Mike reminded committee members that the applications are anonymous. The names and addresses of the applicants, maps, and other identifying information in the applications were removed. Instead of names, the applications are labelled A - D.
- Mike explained that staff did a preliminary screen of the applications to ensure that they met the criteria outlined in the program guide
- Mike reminded committee members that if they have a conflict of interest with an application, to “leave the room” when it is being discussed
- The committee needs to decide if it is recommending the full amount of funding applied for is to be spent, or if only the applications that are fully supported should be funded.

It was agreed to qualitatively discuss the applications, share perspectives and experiences based on whether the applications meet the stated criteria, and reach consensus on whether to recommend them for funding. Scores were filled in by consensus to have a quantitative ranking.

Item No.	Agenda item	Time
3-a	Old business: draft summary of the May 27 th 2021 Water Protection Advisory Committee meeting	9:15

4. Application Evaluations

The following table summarizes the applications, whether they are recommended for SWC funding, any qualifying conditions or comments, and any rejection comments:

Applic ation	Project	SWC \$ ask	WPAC recommendation to SWC	Score (max 100) Comments
A	Riparian planting	\$6320	Not recommended for funding; follow up with applicant.	36.21. Impact of project is estimated to be minimal due to small area, and project area occurs on a ditch, not a natural stream course. Concern over choice of species for planting.
B	Field drainage	\$18 840	Recommended for funding with changes; follow up with applicant, seek changes to project, may require more funding than asked for	79.37. Strong preference to see drainage water diverted to a natural or built wetland in lieu of what's proposed. Follow up with applicant on a modified approach, rework costs, see if applicant is agreeable.
C	Livestock grazing amendme nts	\$7913	Recommend for funding (noting one dissenting opinion within WPAC)	73.28. Dissenting opinion noted that change from pasture vs. forage is similar, there is no net change in nutrient reduction. Require that former exercise pens are restored to vegetative cover.
D	Bridge, riparian planting, fencing	\$20 000	Not recommended for funding; follow up with applicant and invite an application next year	57.00. Bridge construction outside the scope of the program. Fencing and riparian work is good concept in principle but more detail is needed to support the application. Suggest applicant prepare more info and submit again next year.
Total		\$53 072		

A few comments were made by WPAC members about the grant guidelines and application process:

- Any unawarded funds should be carried forward to a future water quality grant program, beyond the annual budget of \$50 000
- Limited number of applications received was likely due to the fact that staff couldn't get in front of people in person due to COVID, as was done in 2020.
- A barrier to the success of the SWC Water Quality Grant Program has been people who can write a good proposal. It was suggested that program staff not rely on lay people to prepare and submit applications; but program staff must also acknowledge that potential applicants are reluctant to seek professional help to write a proposal on spec without guarantee of funding.
- It was suggested that rather than being flexible on types of projects that can be applied for, be more specific and "limit their imagination" – list a specific range of project concepts for nutrient reduction (e.g., riparian restoration with nutrient goals, wetland creation, changing flowpaths, manure management). Jeff commented further that grant funding should focus on cropland rather than forage or pasture, as the export coefficients for cropland are higher than forage and pasture. The "best bang for buck" could be achieved by Intercepting nutrients as they're being

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exported from croplands. Further, an annually cultivated crop has a higher export coefficient than a permanently established crop. Erosion mobilizes soil, that's of lesser concern than nutrients in dissolved form that run off and in organic form. Erosion contributes to nutrient export, especially from cultivated agricultural land, but more threatening to water quality is dissolved organic export.

- List examples of projects that would be funded; have select options, not open to anything an applicant proposes; use a "boilerplate" proposal template to make applications easier
- Have someone with more technical knowledge than SWC staff who can discuss options for projects during the intake period
- Adjust timing of intakes – tweak timing of this cycle, enable SWC decisions in March not June to give more time for implementation during non-winter conditions, and avoid busy spring period for application evaluation. Alternatively, the SWC could establish two intake periods per year.
- Partner with another funding organization to leverage more funds (e.g., Ducks Unlimited, ALUS, federal Eco-Action, Weston Group) and have a more substantial program. (Mike noted that a federal Eco-Action funding application was made in March 2021 to double the water quality grant program amount of funding, but it was rejected.)
- Explore synergies with Investment Agriculture Foundation of BC (IAFBC) Farmland Plus program.

5. Other Items

Mike noted that the SWC's Water Monitoring Group has prepared a local algae response plan, which supplements the [BC Ministry of Health decision protocol for cyanobacteria bloom response](#) and builds on the experience of monitoring and communication from last year's Salmon Arm Bay bloom.

Dennis Einarson noted that the Ministry of Environment has a new [website](#) to educate the public about algae blooms and to enable reporting.

ACTION ITEMS:

Item	Responsibility	Date
Send any comments on the grant program guidelines and application form	Committee members	Ongoing
Include recommendations in agenda package for SWC meeting on June 9	Erin	By June 2
Follow up with each applicant, including those that were not recommended for funding	Mike	After June 9

Next Meeting

TBD – likely November 2021.

Item No.	Agenda item	Time
4-a	Report from Program Managers	9:45

Annual Highlights Report for 2020-21

The Shuswap Watershed Council Annual Highlights Report for 2020-21 was completed in late April, and sent by e-mail to all SWC members on May 4th. The report was also distributed via e-mail to SWC partners and other community members. Print copies have been sent to municipal, First Nations, and regional district offices in the Shuswap.

The report covers key accomplishments and activities for the period April 1st 2020 - March 31st 2021.

The report can be viewed online at www.shuswapwater.ca.

Financial summary for the year (April 1st 2020 - March 31st 2021)¹

REVENUE

Source	Amount received (\$)
Surplus SWC funds (from March 31 st 2020)	241,995
CSRD (C, D, E, F and District of Sicamous)	160,000
TNRD	53,600
City of Salmon Arm	40,000
Adams Lake Indian Band	1300
RDNO (Area F)	5000
Grant Funding: Transport Canada, Boating Safety Contribution Program	20,550
Total	522,445

EXPENSES

Program	Budget (\$)	Expenses (\$)	Variance (\$)
Water Quality Program: Monitoring Initiative	35,200	21,849	13,351
Water Quality Program: Protection Initiative	113,600	70,501	43,099
Zebra & Quagga Mussel Prevention	35,400	32,929	2471
Safe Recreation	27,400	24,335	3065
Communications & Community Engagement	68,700	62,453	6247
Administration and Governance	43,150	42,311	839
Sub-total Operational Program Expenses	323,450	254,378	69,072
Operating reserve ²	198,995	0	198,995
Total for 2020-21	522,445	254,378	268,067

¹ There is no financial update available for the current fiscal year. The first quarterly financial update, for the period April 1st - June 30th, will be provided at the next SWC meeting.

² The Operating Reserve has been growing each year since 2016, as a result of annual surpluses. Within the reserve the SWC holds a \$20,000 water quality contingency fund that can be drawn from in case of arising water quality issues that require additional, unplanned monitoring or response. The fund has not been drawn from to-date.

Item No.	Agenda item	Time
4-c	Report from Program Managers	10:00

Revised budget for 2021-22

Projected revenue	Budget presented on March 10 th 2021 (\$)	Revised (\$)
2020-21 Surplus	45,000	69,072
Operating reserve	198,995	198,995
<i>Per Contribution Agreement:³</i>		
CSRD (Areas C, D, E, F, and District of Sicamous)	97,200	97,200
TNRD	32,590	32,590
City of Salmon Arm	24,320	24,320
Adams Lake Indian Band	790	790
<i>Grant funding applied for (not confirmed):</i>		
Environment Canada Eco-Action Program	95,000	0
Department of Fisheries and Oceans Habitat Stewardship Program	0	0
<i>Contribution from partner:</i>		
Shuswap Lifeboat Society		3200
Total revenue	493,895	426,167

Revised work plan and budget are on the next page...

³ In 2021-22, the SWC is requisitioning less funds from each of its funders, proportionately, to draw down the reserve by approximately \$100,000.

Item No.	Agenda item	Time
4-c	Report from Program Managers	10:00

Work plan and expenses		Workplan presented on March 10 th 2021 (\$)	Revised workplan (\$)
Water Quality Program			
	Water Monitoring Initiative		
	Facilitate the Shuswap Water Monitoring Group	7750	7750
	Implement the watershed water quality monitoring plan	20,200	25,200
	<i>Sub-total Water Monitoring Initiative</i>	23,550	32,950
	Water Protection Initiative		
	Facilitate the Water Protection Advisory Committee	7600	7600
	Develop phosphorus action plan	8850	8850
	Water Quality Grant Program	190,200	95,200
	<i>Sub-total Water Protection Initiative</i>	206,650	111,650
Zebra and Quagga Mussel Prevention Program			
	Education, outreach and advocacy	34,500	37,750
Recreation Safety Program			
	Implement safety campaigns	17,650	17650
	Provide safety equipment	3900	3900
	<i>Sub-total Recreation Safety Program</i>	21,550	21,550
Communications			
	Collateral	11,700	11,700
	Public engagement	19,500	19,500
	Annual water quality summary	16,900	16,900
	<i>Sub-total Communications</i>	48,100	48,100
Administration			
	Council administration	25,500	25,500
	Financial management and fund development	16,000	16,000
	<i>Sub-total Administration</i>	41,500	41,500
Sub-total operational expenses		375,850	293,500
Operating Reserve (includes \$20K Contingency Fund)		118,045	132,667
Total Expenses		493,895	426,167

Item No.	Agenda item	Time
5	New business: Water Quality Grant recommendations	10:15

Background

2021 is the second year that the SWC is offering water quality grants to assist farms or other large land holdings improve nutrient management. The purpose of the program is to protect water quality in the Shuswap by minimizing nutrient-loading from land to surface waters. The Water Quality Grant Program for 2021 was launched on February 23rd (Canada Agriculture Day). Staff promoted the \$85,000 grant fund throughout the region and invited applications by the deadline of April 30th 2021. A grant program guide, detailing eligibility criteria, an application template, and evaluation procedures was provided to potential applicants.

Staff received applications from four proponents, with a total ask of \$53,072. Staff performed an initial screen of the applications to ensure they met the eligibility criteria, and removed all identifying information from the applications so that they could be assessed anonymously. The applications were reviewed by members of the SWC Water Protection Advisory Committee.

Recommendations

The Water Protection Advisory Committee recommends the following projects, with commentary, for funding:

Applic ation	Project	SWC \$ ask	WPAC recommendation to SWC	Score (max 100) Comments
A	Riparian planting	\$6320	Not recommended for funding; follow up with applicant.	36.21. Impact of project is estimated to be minimal due to small area, and project area occurs on a ditch, not a natural stream course. Concern over choice of species for planting.
B	Field drainage	\$18 840	Recommended for funding with changes; follow up with applicant, seek changes to project, may require more funding than asked for	79.37. Strong preference to see drainage water diverted to a natural or built wetland in lieu of what's proposed. Follow up with applicant on a modified approach, rework costs, see if applicant is agreeable.
C	Livestock grazing amendme nts	\$7913	Recommend for funding (noting one dissenting opinion within WPAC)	73.28. Support for all aspects of this project. Dissenting opinion noted that switching pasture to forage paddocks will not achieve a significant nutrient export reduction. Suggestion that former exercise pens are restored to vegetative cover.
D	Bridge, riparian planting, fencing	\$20 000	Not recommended for funding; follow up with applicant and invite an application next year	57.00. Bridge construction outside the scope of the program. Fencing and riparian work is good concept in principle but more detail is needed to support the application. Suggest applicant prepare more info and submit again next year.
Total		\$53 072		