

Okanagan Basin Water Board Meeting Agenda



DATE: Tuesday, May 4, 2021

TIME: 9 a.m. to 9:30 a.m.

PLACE: *Online (see notation below)

1. **CALL MEETING TO ORDER**

1.1 Acknowledgement of First Nations Traditional Territory

We acknowledge that we are holding this meeting on the unceded territory of the Syilx Okanagan Nation.

2. **INTRODUCTION OF LATE ITEMS**

3. **APPROVAL OF AGENDA**

4. **ADOPTION OF MINUTES**

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of April 6, 2021 held online. (page 1)

5. **STAFF REPORTS**

5.1 Executive Director Report (page 6)

5.2 Operations and Grants Manager Report (page 7)

5.3 Communications Director Report (page 8)

6. **NEW AND UNFINISHED BUSINESS**

6.1 Okanagan Hydrometric Information Program (page 9) (resolution requested)

6.1.1 Letter from Okanagan Nation Alliance re: hydrometric program

7. **CORRESPONDENCE**

7.1 B.C. Ministry of Environment letter to OBWB re: invasive mussels (page 12)

7.2 Shuswap Watershed Council letter to Province of B.C. and cc'ed to OBWB re: invasive mussels (page 14)

8. **NEXT MEETING**

8.1 The next meeting of the Okanagan Basin Water Board will be Tuesday, June 1, 2021 at 10 a.m. online.

9. **ADJOURNMENT**

*** NOTE:** Meetings of the Okanagan Basin Water Board are open to the public, and only closed for in-camera sessions as set out in the B.C. Community Charter. Given the current situation with COVID-19, the board will be holding its meeting online. If you are interested in attending this online meeting, please contact our Communications Director Corinne Jackson at corinne.jackson@obwb.ca for further details. Thank you for your patience and understanding.



Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 4.1

**MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD
HELD APRIL 6, 2021, ONLINE
OKANAGAN, B.C.**

PRESENT

Chair Sue McKortoff	Regional District Okanagan-Similkameen
Vice-Chair Cindy Fortin	Regional District Central Okanagan
Director Victor Cumming	Regional District North Okanagan
Director Rick Fairbairn	Regional District North Okanagan
Director Bob Fleming	Regional District North Okanagan
Director James Baker	Regional District Central Okanagan
Director Colin Basran	Regional District Central Okanagan
Director Doug Holmes	Regional District Okanagan-Similkameen
Director Rick Knodel	Regional District Okanagan-Similkameen
Director Bob Hrasko	Water Supply Association of BC
Director Denise Neilsen	Okanagan Water Stewardship Council

REGRETS

Director Christopher Derickson	Okanagan Nation Alliance
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STAFF

Anna Warwick Sears	Executive Director
Nelson Jatel	Water Stewardship Director
Corinne Jackson	Communications Director
James Littley	Operations and Grants Manager
Carolina Restrepo-Tamayo	Special Projects Coordinator
Kellie Garcia	Planning Specialist

TECHNICAL OBSERVER

Tessa Terbasket	Okanagan Nation Alliance
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GUESTS

Renee Clark	Okanagan Water Stewardship Council
Kevin Rothwell	107.5 Beach Radio

1. CALL MEETING TO ORDER

Chair McKortoff called the meeting to order at 10:01 a.m.

Chair McKortoff respectfully acknowledged that the meeting was being held on the traditional and unceded territory of the Syilx Okanagan Nation.

2. APPROVAL OF AGENDA

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of April 6, 2021 be approved."

CARRIED

3. ADOPTION OF MINUTES

3.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of March 2, 2021

held online.

"THAT the minutes of the regular meeting of the Okanagan Basin Water Board on March 2, 2021 held online be approved."

CARRIED

4. DELEGATION

- 4.1 Renee Clark, Okanagan Water Stewardship Council (OWSC)'s Source Protection Committee member, presenting on the state of source water protection in the Okanagan

Ms. Clark noted that the council committee began work on a source protection position paper in March 2020. In the background were a number of issues, including the Hullcar aquifer contamination issue and work by the POLIS Water Sustainability Project at the University of Victoria. Three themes emerged including the need for 1) government-to-government collaboration, work with First Nations, and improved communication; the need to 2) develop tools so that B.C.'s Water Sustainability Act and Drinking Protection Act were aligned with federal guidelines; and 3) the need for a lead agency with defined responsibilities. The report, presented to the board, recommends that OBWB advocate for four actions: clarify the state of source water protection in B.C.; acknowledge Indigenous values and commitments to the UN Declaration on the Rights of Indigenous People (UNDRIP); advocate for a lead water agency; and, request dedicated resources.

Ms. Clark noted that the recommendations are in line with the POLIS report which suggests a need to advance reconciliation and UNDRIP implementation, protect drinking water sources, implement a watershed security fund, appoint a Provincial Water Security Officer, and invest in climate adaptation and resilience.

In response to questions from the board, Ms. Clark said that there have been changes in the various B.C. ministries over time and today it is unclear who to take source protection concerns to. Dr. Sears added that conflicting mandates makes it difficult to protect water. It was suggested that the board review the council committee's report and be prepared for the May 4 joint board-council meeting. Ted Zimmerman, Executive Director of the Water Protection & Sustainability Branch of B.C.'s Ministry of Environment and Climate Change Strategy, will be presenting on the development of B.C.'s new Watershed Security Strategy. It's possible that this strategy will be linked to source protection, she said.

Dir. Fortin added that forestry in the watershed and severe weather are growing concerns. Ms. Clark responded that utilities are responsible for ensuring clean drinking water but other levels of government are responsible for allowing activities that can put water quality at risk, making it difficult sometimes.

5. STAFF REPORTS

- 5.1 Water Stewardship Director Report

Mr. Jatel suggests a motion to accept OWSC's Source Protection Committee report on the state of source water protection.

"THAT the Okanagan Basin Water Board accept the report from the OWSC's Source Protection Committee on the state of source water protection in the Okanagan as presented."

CARRIED

It was noted that the council starts a new term in April and Dir. Neilsen will be stepping down as

chair of the council. Dir Neilsen expressed her thanks to the board and added that she will continue participating on the council.

Ms. Clark exited the meeting.

Mr. Jatel gave an update on a flood mapping datum workshop noting the importance of the maps from a local government policy and planning perspective.

The next council meeting will include a presentation from Dr. Sheena Spencer, Research Hydrologist at B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development, discussing research priorities and highlights.

An update was provided on the OBWB's hydrometric program and installation of new stations throughout the Okanagan, working with ONA and Environment and Climate Change Canada. In response to questions it was noted that six new stations will bring the total to 28 online with information publically available. Dir. Cumming asked about the possibility of adding additional stations and was told that requests can be submitted for consideration.

"THAT the Water Stewardship Director's Report, dated March 31, 2021, be received."

CARRIED

1.1 Policy and Planning Specialist

Ms. Garcia reported on a \$50,000 grant provided by the Province of B.C. through the Healthy Watershed Initiative which will allow work to continue on the source protection toolkit project, including a website launch, webinars and outreach to utilities. Indigenous advisors will also be contracted to build Indigenous perspectives into the various project elements.

The Agricultural Water Supply Communications Project is entering its final year, providing alerts to ag customers with water supply information to best plan for their crops.

"THAT the Policy and Planning Specialist's Report, dated March 31, 2021, be received."

CARRIED

1.2 Communications Director Report

Ms. Jackson provided an update on the recent UN World Water Day-Canada Water Week event, with an online screening of *Lost Rivers* and panel discussion, adding that a recording is now available on the Okanagan WaterWise YouTube channel.

The board was told that work is proceeding on the "Make Water Work" (MWW) and "Don't Move A Mussel" (DMM) campaigns. Discovery meetings have been conducted for both campaigns and a research and audit report will be provided, reviewed by staff, and will help inform the strategies.

Ms. Jackson provided an update on the invasive mussel-infested moss balls noting the province contacted 1,100 retailers and sellers and seized 3,000 balls. Of special concern were balls that originated from mussel-infested waters in Ukraine. The item was reported in Kamloops, Invermere, Terrace, on Vancouver Island and throughout the Lower Mainland. The aquarium plant was found in Okanagan pet stores and, although they were believed to originate elsewhere, they were surrendered as a precaution. Testing of the product found none were viable although Eastern Canada reported live mussels on the plant. The province has been working with federal staff at Department of Fisheries and Oceans and Canada Food Inspection Agency to track and stop further imports of the product. Invasive species groups and the OBWB's Okanagan

WaterWise program have also been helping get the word out through various media channels. An update on mussel inspection stations for 2021 was also provided, noting that the province is said to be continuing with the same number of inspectors and stations as last year due to COVID-19-related travel restrictions.

The board was told about an art show by Lyse Deselliers at the Osoyoos Art Gallery, “Our Lakes: Connecting the Dots,” featuring the work of the OBWB and others in protecting valley water.

“THAT the Communications Director’s Report, dated March 31, 2021, be received.”

CARRIED

1.3 Special Projects Coordinator Report

Ms. Restrepo-Tamayo reported that work is continuing on the Osoyoos Lake Water Science Forum and organizers are still planning for an October event. Financial contributions have been provided by the International Joint Commission, OBWB, Province of B.C., Government of Canada. Others are still to be confirmed. The program committee is also working with the Osoyoos Indian Band and ONA to draft an agenda.

The Western Canada AquaHacking (AH) Challenge has 72 participants with a goal of 100. The majority of participants so far are from B.C. so recruiting efforts are underway in Alberta and Saskatchewan. The AH committee is finalizing judges for the semi-final on May 15. The finals will be held in September.

“THAT the Special Projects Coordinator Report, dated March 31, 2021, be received.”

CARRIED

1.4 Executive Director Report

Dr. Sears provided an overview of office operations under COVID-19 and the upcoming joint Board-Council meeting in May.

The board was updated on various flood-related projects. Dr. Sears noted that the Okanagan Lake Management Review report has been submitted to the province. As well, staff are waiting to hear about federal funding applications for an Okanagan Flood Risk Assessment and Nearshore Bathymetry Mapping of the valley’s mainstem lakes. Also, RDCO has received funds for its Flood Mitigation Plan – Phase 3 which OBWB will be supporting.

Dr. Sears reported on an upcoming roundtable session on water with Minister of State Nathan Cullen that she would be attending, along with other B.C. watershed organizations.

The snowpack is now at 100% for the Okanagan, she added. Another provincial update will be available April 9.

“THAT the Executive Director’s Report, dated March 31, 2021, be received.”

CARRIED

1.5 Operations and Grants Manager Report

Mr. Littley provided an overview of the milfoil program, noting that de-rooting on Okanagan and Wood Lake are completed. One rototiller is currently operating in Osoyoos and the second will soon move from Kalamalka Lake to Osoyoos. The province is reviewing OBWB’s request for expanded work areas, he added. And staff are working with a DFO species-at-risk person who is

studying the Rocky Mountain Ridged Mussel, reviewing OBWB's concerns regarding upgrading the listing to endangered under the Species At Risk Act.

The board was given an overview of applications to the Water Conservation and Quality Improvement Grant Program. It was noted that, as is policy, the board will review funding recommendations and approve funding in its in-camera session.

"THAT the Operations and Grants Manager Report, dated March 30, 2021, be received."
CARRIED

Mr. Rothwell was told that a news release would be issued following the in-camera meeting. The meeting was then closed to in-camera.

2. IN-CAMERA

2.1 In-camera session (under sec. 90(1)(m) of the Community Charter)

3. RISE & REPORT FROM IN-CAMERA

***"THAT the OBWB approve the 2021 grant funding as presented.
 AND THAT the OBWB Rise and Report the 2021 grant funding as approved."***
CARRIED

4. CORRESPONDENCE

4.1 B.C. Ministry of Forests, Lands, Natural Resource Operations response to OBWB letter re: Okanagan Lake Regulation System

"THAT the correspondence from B.C. Ministry of Forests, Lands, Natural Resource Operations response to OBWB letter re: Okanagan Lake Regulation System be accepted."

CARRIED

Dr. Sears noted that both MLAs Norm Letnick and Roly Russel have asked for briefing notes after the plan of study released by the province.

5. NEXT MEETING

5.1 The next meeting of the Okanagan Basin Water Board will be held Tues. May 4, 2021 at 9 a.m. at location TBD.

6. ADJOURNMENT

"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of April 6, 2021 be adjourned at 11:54 a.m."
CARRIED

Certified Correct:		
Chair		Executive Director

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 5.1

To: OBWB Directors
From: Anna Warwick Sears
Date: April 28, 2021
Subject: Executive Director Report

COVID-19 Considerations:

OBWB office-based staff continue to work mostly from home, coming into the office only as needed. Milfoil staff are observing COVID-19 safety protocols while moving equipment, and mostly work alone.

ONA Meeting

On April 20, Chair McKortoff and I met with Chief Derickson (WFN, and ONA representative to OBWB), Tessa Terbasket (ONA Natural Resources Cultural Research Lead), and Cailyn Glasser (ONA Natural Resources Manager) to strengthen the relationship between the OBWB and the syilx Nation. We discussed a range of different ideas, based on our mutual water goals. I will be working with ONA staff in the next few weeks to prepare a joint memo and presentation on next steps, for the OBWB's June or July meeting.

Flood Resilience Studies

We are still waiting to hear back about the success of our grant applications to the National Disaster Mitigation Program, for an Okanagan Flood Risk Assessment, and for Nearshore Bathymetry Mapping of the mainstem lakes. Both projects will help local communities improve their flood mitigation plans.

Roundtable Session on Water with B.C. Minister of State Nathan Cullen

On April 6, I attended a roundtable session on water with B.C. Minister of State Nathan Cullen. This relates to the province's goal (in mandate letters) to "bring forward a plan to create a new Ministry for Lands and Natural Resource Operations that will develop and implement land use policies that support B.C.'s goals for economic activity, environmental sustainability and reconciliation with Indigenous peoples" and also "to modernize land-use planning for B.C.'s ecosystems, rivers, lakes, forests and provincial public land and waters." Most of the other participants were from watershed organizations and NGOs. The Minister and his staff asked questions about what was working and what wasn't with the current organizational structures. Most participants commented on the need for more capacity in FLNRORD, and the need for a greater focus on water issues specifically. The formation of a new agency is not a 'done-deal', and Hon. Cullen is doing extensive consultation.

Weather Report

The OBWB's annual water supply webinar will be on May 12th, at 11 a.m., featuring experts from the BC River Forecast Centre. Nelson Jatel will send out a calendar invite.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 5.2

File No. 0550.04

To: OBWB Directors

From: James Littley

Date: April 27, 2021

Subject: Operations and Grants Manager Report

Legislative Changes to Prevent Invasive Mussels

On April 7th, following the April board meeting, OBWB received a response to our March 4th letter to the Province of B.C. regarding the board's call for legislative changes to prevent invasive mussels. The response from the province was more direct, with more detail than previous responses, providing some clarity for the board to consider prior to any future calls to action. I provided a supplemental memo to the board on April 19th with the following considerations for further board discussion.

- The calls to introduce pull-the-plug legislation, and to increase funding for local invasive species groups, may not require any further immediate action from OBWB.
- The calls for the province to provide toolkits for vulnerability assessments to local governments, and to introduce mandatory boat inspections could benefit from the support of local governments and UBCM, which OBWB could pursue.
- Finally, OBWB could work with the Shuswap Watershed Council and other relevant nearby organizations to develop a regional EDRR which accounts for longer-term containment and action planning. This plan could be sent to the province for review and to form part of their own containment strategy.

Milfoil Control Program

Milfoil operators continue their work in Osoyoos Lake, with two machines de-rooting. This is a change from our usual practice where one machine is used in the lake. This change has allowed us to do significantly more work in Osoyoos Lake, as we make the most out of a short timing window where conditions allow milfoil control. Operators are now working to reduce the significant milfoil bed at the north end of the lake after completing all of our higher-priority areas.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 5.3

File No. 0550.04

To: OBWB Directors
From: Corinne Jackson
Date: April 28, 2021
Subject: **Communications Director Report**

Due to the shortened board meeting, I am only providing an update on our “Make Water Work” campaign since it is planned to launch prior to our next board meeting.

“Make Water Work” 2021 – Campaign and Launch

This is the 10th year for “Make Water Work” (MWW), our outdoor residential water conservation campaign delivered by OBWB’s Okanagan WaterWise program and in partnership with local governments and utilities throughout the valley. Confirmed participation this year includes: City of Armstrong, Regional District of North Okanagan (Greater Vernon Water), District of Lake Country, City of Kelowna, Black Mountain Irrigation District, Rutland Waterworks, Glenmore Ellison Irrigation District, District of Peachland, District of Summerland, City of Penticton, the Town of Oliver and Osoyoos, and Regional District of Okanagan-Similkameen.

For the past several years we have held an in-person launch event for MWW. However, last year, due to COVID-19 and the inability to have large gatherings, we asked local government partners to work with their mayors and send us short videos with the mayor’s pledge and call to local residents to join them to conserve water. The video was then stitched together and shared online and in a media release.

This year, we are working with a new marketing company, Habit Creations, and are discussing a similar launch for 2021 due to the ongoing pandemic, with elected officials submitting a short video. I have a meeting with Habit later today to discuss this and other elements of the campaign and will provide more details to your utility and/or communications staff in the next couple of weeks.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 6.1

File No. 0550.04

To: Board of Directors
From: Nelson R. Jatel, Water Stewardship Director
Date: April 27, 2021
Subject: Okanagan Hydrometric Information Program

Background

In 2020, the OBWB approved the creation of a new hydrometric information network service with the stated goal of improving hydrometric data in the Okanagan. The goal of this program is to increase the number of stations and improve data access from existing stations, in partnership with Okanagan Nation Alliance (ONA), senior governments and Okanagan water suppliers.

Information about the new service is available online: <https://www.obwb.ca/hydrometrics/>

Operational Plan

As part of the operational plan for 2021, the Okanagan Alliance Fishery department staff will provide operational support including: installation of new stations, station maintenance, data collection, data reporting, data management, and QA/QC services. Staff have received a proposed activity budget for 2021 for \$76,500. This is an expected and budgeted expense in our current service plan and budget. The contract award is consistent with the OBWB's purchasing policy.

Throughout the course of the year it is anticipated that there will be partnership agreements created with the Okanagan Nation Alliance, National Hydrological Service, and the Province of British Columbia to support various aspects of the new program.

Recommended motion:

THAT the OBWB approve a sole source contract in the amount of \$76,500 with the Okanagan Nation Alliance for the operational support and management of the 2021 OBWB hydrometric information network service.

Appendix A. Hydrometric support cost estimates

Senior Biologist	48	\$21,200
Biologist	72	\$29,000
Technician (1)	14	\$7,000
Technician (2)	18	\$5,600
Mileage	4,000	\$2,200
Misc. materials (e.g. batteries, repairs)		\$2,000
Admin		\$10,000
Grand Total		\$76,500



OKANAGAN NATION ALLIANCE

#101 – 3535 Old Okanagan Hwy, Westbank, BC
Phone: (250) 707-0095 Fax (250) 707-0166 [www](http://www.okanaganalliance.ca)

Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 6.1.1

Mr. Nelson Jatel
Okanagan Basin Water Board
1450 KLO Road
Kelowna, B.C. V1W 3Z4

May 27, 2020

Dear Mr. Jatel,

Subject: Value of Streamflow and water level data in our water management operations

Syilx/Okanagan communities have always recognized and nurtured a strong connection towards siwłk^w (water). The Syilx Water Declaration describes the Syilx/Okanagan Nation's responsibility to care for and protect all of our relations within our homelands especially our most sacred relative, siwłk^w. Our governance systems have always sustainably and respectfully managed water and we continue to do so for everyone in the Okanagan for perpetuity.

The conservation and restoration of indigenous fish and aquatic resources within Okanagan Nation Territory depends on sufficient streamflows. In order to manage water, we must measure it to gain an understanding of the timing and duration of streamflows and how they are changing in a changing climate. This knowledge supports the maintenance of Environmental Flow Needs that are necessary for restoring and maintaining healthy aquatic ecosystems.

We rely on streamflow information from the existing hydrometric station network in the Okanagan to monitor flows for fish, particularly during critical times such as the salmon spawning season. Further, our communities rely on hydrometric information for flood management. Collaborating with OBWB on hydrometric data collection has provided us with a critical source of streamflow information and enabled the Okanagan Nation to take an active role in water monitoring and management, in keeping with our responsibility to care for and sustainably and respectfully manage water in our territory.

The current hydrometric network is a good start but additional information is needed. Long-term natural streamflow records in the Okanagan are lacking due to the discontinuation of hydrometric stations, which complicated development of Environmental Flow Needs for Okanagan streams. These types of records also provide important information on changes in runoff patterns in a changing climate. Further, hydrometric data from lower elevation fish-bearing reaches are needed to ensure Environmental Flow Needs are met. Expansion of the hydrometric network through OBWB will deliver critical information for sustainable water management in the future and we fully support this effort.

If you have any questions please do not hesitate to contact me at 250-707-0095 ext. 104 or hwright@syilx.org.
Sincerely,

Howie Wright
Fisheries Program Manager





Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 7.1

Reference: 373375

April 7, 2021

Sue McKortoff, Chair
Okanagan Basin Water Board
c/o Corinne Jackson, Communications Director
Sent via email: corinne.jackson@obwb.ca

Dear Sue McKortoff:

Thank you for your letter of March 4, 2021, regarding invasive mussel prevention. I appreciate the continued support provided by the Okanagan Basin Water Board for the work my ministry is undertaking to protect our water resources from invasive zebra and quagga mussels.

My apologies for the late response, the Invasive Mussel Defence Program (IMDP) team has been focused on the response to the aquarium moss ball incident since early March. The 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. In addition to this ongoing response, the team is busy preparing for the launch of the 2021 season with inspector training taking place in late March.

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. Of the total watercraft inspected, 158 were identified as high-risk, and as you note, 16 watercraft were identified as transporting invasive mussels. 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. Program operations will continue to adapt throughout the 2021 season in response to the current COVID-19 Provincial health orders.

The legislative improvements suggested in your letter are options we continue to explore and consider as refinements are made to the IMDP. We recognize that “pull the plug” legislation has been successfully implemented in several jurisdictions across the northwest and is something we are actively working on. The idea of requiring all watercraft to be inspected prior to launching in B.C. waters is not being actively pursued as the Province is focused on optimizing its perimeter defence and assessing pull the plug legislation, an approach that is consistent with other western provinces. With respect to boater sticker programs that have been implemented in some US states such as Idaho, in Canada, the federal government has authority over registration of all watercraft. To date, the Province has focused on the key entry points of watercraft coming into the province and optimizing the location and operations of inspection stations. This approach is based on the experience of other jurisdictions across Canada and US, as well as the best available science. The IMDP team continues to investigate the pathways of potential introduction of invasive mussels (and other high-risk aquatic invasive species) in collaboration with provincial and federal counterparts in Canada and the western US.

...2

Regarding the review and update of the provincial Early Detection, Rapid Response plan (EDRR) for Zebra and Quagga Mussels, it's important to understand that this plan is focused on the immediate response to an incursion of mussels in B.C. If mussels do become established in B.C., the long-term focus shifts to containment to prevent further spread. This includes prioritizing resources to both containment at the infested waterbody and maintaining the perimeter defence at the borders. All long-term containment measures will depend on variety of factors such as the size and location of the infested waterbody. It also includes long-term monitoring of priority surrounding waterbodies to assess risk/extent of spread. The EDRR plan is reviewed and updated on an ongoing basis and the recommendations that you have suggested will be taken into consideration as part of the review process.

As you note, the Province is currently updating the estimated economic impact if invasive mussels were introduced into B.C. The scope of this analysis includes an assessment of costs to municipal/public water supply. Experts from our Environmental Economics Unit have been in contact with your team to gather information on past work completed by OBWB that may help inform the analysis. The report is expected to be completed this spring and will be shared with partners. If the OWBC would like a briefing of this work, please contact Martina Beck at Martina.Beck@gov.bc.ca.

The idea of providing toolkits and resources to local governments to conduct vulnerability assessments and implement mitigation measures like retrofitting in-water infrastructure is an interesting one. This has not been something that local governments have been asking for, individually or through UBCM. With the focus of the IMDP being the watercraft inspection station and the new pathway for exposure revealed in our recent work on moss balls, this idea will be considered for the future, but not considered as an immediate priority.

The Province appreciates the ongoing support provided by invasive species groups to help educate British Columbians on the threat of invasive mussels and promoting the consistent messaging of Clean, Drain, Dry. The Province annually contributes funding to many invasive species organizations across B.C. to support the invasive mussel lake monitoring sampling. This funding has increased since the program started resulting in increased sampling efforts from 161 samples collected in 2015 to 954 samples collected in 2020. The IMDP continues to work with partners and benefit from the ongoing feedback and recommendations that are taken into consideration as part of the program's annual review process.

Thank you again for OBWB's continued work to mitigate the risks of invasive mussels of being introduced into B.C.

Sincerely,



George Heyman
Minister

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

Okanagan Basin Water Board
Regular meeting
May 4, 2021
Agenda No: 7.2

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).



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,

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

Attachments:

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



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



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.

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

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