

Okanagan Basin Water Board Meeting Agenda



Okanagan Basin
WATER BOARD

DATE: Tuesday, July 5, 2022

TIME: 10 a.m. to 12 p.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 June 7, 2022 held online (page 1)

5. **DELEGATION**

5.1 Martina Beck and Dave Webster, B.C. Ministry of Land, Water and Resource Stewardship, presenting on the B.C. Invasive Mussel Defense Program for 2022

6. **STAFF REPORTS**

6.1 Executive Director Report (page 5) (resolution required)

6.1.1 OBWB submission to B.C. Select Standing Committee on Finance and Government Services

6.2 Special Projects Coordinator Report (page 10)

6.3 Water Stewardship Director Report (page 12)

6.4 Operations and Grants Manager Report (page 14)

6.5 Policy and Planning Specialist Report (page 16)

6.6 Communications Director Report (page 18)

7. **NEW AND UNFINISHED BUSINESS**

8. **CORRESPONDENCE**

8.1 Minister of Fisheries, Oceans and the Canadian Coast Guard June 17, 2022 letter to OBWB regarding federal invasive mussel response (page 22)

9. **NEXT MEETING**

9.1 The next meeting of the Okanagan Basin Water Board will be Friday, September 9, 2022 at 10 a.m. at location to be announced on July 5, 2022.

10. **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.

**MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD
HELD JUNE 7, 2022, 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 B.C.
Director Scott Boswell	Okanagan Water Stewardship Council (OWSC)

REGRETS

Director Christopher Derickson	Okanagan Nation Alliance (ONA)
Caitlyn Glasser	ONA Technical Staff
Nelson Jatel	Water Stewardship Director
Kellie Garcia	Policy and Planning Specialist

STAFF

Anna Warwick Sears	Executive Director
Corinne Jackson	Communications Director
James Littley	Operations and Grants Manager
Carolina Restrepo-Tamayo	Special Projects Coordinator

GUESTS

Tiana Verigin	BDO
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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 June 7, 2022 be approved."

CARRIED

3. ADOPTION OF MINUTES

3.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of May 3, 2022 held online.

"THAT the minutes of the regular meeting of the Okanagan Basin Water Board on May 3, 2022 held online be approved."

CARRIED

4. DELEGATION

- 4.1 Tiana Verigin, Assurance & Accounting Service Line Leader, BDO; presenting on the OBWB's 2022 Audited Financial Statements

Ms. Verigin presented the Water Board's 2022 audited financial statements adding that no issues have been noted. Dr. Sears added that the difference between surplus and deficits fluctuate based on project expenditures.

Dir. Basran entered the meeting at 10:10 a.m.

"THAT the audited financial statements be received."

CARRIED

5. STAFF REPORTS

- 5.1 Executive Director Report

Dr. Sears noted that once the financial statements are adopted, work will begin on the OBWB's annual report and strategic plan tracking measures.

"THAT the Okanagan Basin Water Board approve the 2022 Audited Financial Statements as presented."

CARRIED

The board discussed upcoming meetings and decided to hold the July meeting online and the September Annual Meeting in person.

"THAT the Executive Director's Report, dated June 1, 2022, be received."

CARRIED

- 5.2 Policy and Planning Specialist Report

Dr. Sears presented the Policy and Planning Specialist memo, noting upcoming work on the Okanagan Lake Management Review.

"THAT the Policy and Planning Specialist Report, dated May 31, 2022, be received."

CARRIED

- 5.3 Water Stewardship Director Report

Dr. Sears presented the Water Stewardship Director memo and noted work to expand hydrometric stations.

Dir. Boswell added that Deborah Curran, with University of Victoria's Faculty of Law and School of Environmental Studies, would be presenting at the next council meeting on Indigenous processes of consent law with a water governance lens.

"THAT the Water Stewardship Director Report, dated June 1, 2022, be received."

CARRIED

5.3.1 Okanagan Hydrometric Information Service Memo

Dr. Sears presented a memo to extend OBWB's partnership with Okanagan Nation Alliance (ONA) to provide operational support and data management to the Water Board's hydrometric information network service for 2022.

"THAT the OBWB approve a sole source contract in the amount of \$137,400 with the Okanagan Nation Alliance for operational support and data management of the 2022 OBWB hydrometric information network service."

CARRIED

5.4 Operations and Grants Manager Report

Mr. Littley reported to the board on the Environmental Funders Canada (EFC) Conference hosted in the Okanagan in May, adding the OBWB is a member of EFC. Dr. Sears added that the conference offered the opportunity to showcase the Okanagan and the collaborative work being done to address water and other environmental issues, potentially drawing additional funding for such work.

Directors were told that milfoil de-rooting season is complete. Staff have received approval from Osoyoos Indian Band and a permit application from Canadian Wildlife Service to conduct milfoil harvesting in Vaseux Lake. An additional permit application has been submitted to the province and is awaiting approval.

The board was updated on initial discussions to develop an invasive mussel vulnerability assessment toolkit for local governments. Directors were also provided an update regarding B.C. mussel inspection stations for 2022. The board requested more information at the next board meeting. Dirs. Holmes and Cummings suggested a meeting with B.C.'s Minister of Environment and Climate Change Strategy at the next Union of B.C. Municipalities conference may also be worth pursuing. Dir. Basran added that the BC Urban Mayors' Caucus was able to bring attention to a mutual issue and maybe a similar tactic could be used for mussels.

"THAT the Operations and Grants Manager Report, dated May 31, 2022, be received."

CARRIED

5.5 Special Projects Coordinator Report

Ms. Restrepo Tamayo explained that the Osoyoos Lake Water Science Forum is planned for Oct. 27-29. The planning committee will be meeting before the end of summer and posters are now being accepted until end of September.

The OBWB is hosting a boating impacts workshop on June 22. Invitations have been sent to representatives from local, provincial, federal, and First Nations government, academia, the boating industry (e.g. marinas and dock builders), and conservation groups. The workshop will look at the impacts to water quality, aquatic habitat, and more, and begin a discussion to find solutions.

"THAT the Special Projects Coordinator Report, dated May 31, 2022, be received."

CARRIED

5.6 Communications Director Report

Ms. Jackson updated the board on the re-launch of the annual Make Water Work (MWW) campaign with videos submitted by Okanagan mayors and Westbank First Nation Coun. Jordan Coble. Residents will see MWW water conservation messages on billboards, buses, bus shelters,

social media, Global Okanagan and Castanet. This year's campaign will include promotion of the native plants in the 'Make Water Work Plant Collection.'

Work is also well underway to re-launch the Don't Move A Mussel campaign. This year's campaign will include billboards, radio ads, ads on social media, and digital media. This year will include geotargeting some of the ads to those planning to visit the Okanagan with watercraft from mussel-infested regions. Ms. Jackson added that there has been additional attention given to expanding the partnership with those involved in water recreation and tourism.

Staff are also working with the province's Thompson Okanagan Drought Response Team to address communication challenges with drought messaging to the media and public. Last year there was confusion between federal, provincial and local utility drought messages.

"THAT the Communications Director Report, dated June 1, 2022, be received."
CARRIED

6. NEW AND UNFINISHED BUSINESS

Move to in-camera at 11:23 a.m.

7. IN-CAMERA

7.1 In-camera session (under sec. 90(1)(k) of the Community Charter)

"THAT the OBWB move to come out of camera."
CARRIED

Come out of in-camera at 11:28 a.m.

8. RISE & REPORT FROM IN-CAMERA

"THAT the OBWB approves the 2022 OBWB Governance Manual revisions as provided, removing the requirement for future renewal of the Water Management Program, and directs staff to request the three Okanagan regional districts to approve these changes to the OBWB Governance Manual."

CARRIED

9. NEXT MEETING

9.1 The next meeting of the Okanagan Basin Water Board will be held Tuesday, July 5, 2022 at 10 a.m. The meeting location is to be determined.

10. ADJOURNMENT

"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of June 7, 2022 be adjourned at 11:29 a.m."

CARRIED

Certified Correct:		
Chair		Executive Director

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.1

To: OBWB Directors
From: Anna Warwick Sears
Date: June 28, 2022
Subject: Executive Director Report

Upcoming OBWB meetings

The August OBWB meeting is cancelled this year, because of a conflict with the B.C. Day long-weekend. The OBWB's next meeting will be our 2022 Annual Meeting, a public event, on September 9th. We will announce the location at the July 5th OBWB meeting.

Water Management Program presentations

I presented the Water Management Program review to the RDOS Environment Committee on June 16th, and it was met with broad approval, passing our recommended resolution for changes to the program. The RDOS board also passed our Asset Management Equipment Replacement Plan, presented by James Littlely. Our presentation to RDCO was delayed until July 14th, and we are scheduled to present to RDNO on July 20th. Please let us know if board directors need any additional information prior to the meeting. We are hoping to have all these resolutions in place as soon as possible, to allow us to develop the 2024 budget in August.

2024 Budget Preparation

I am hoping to provide the OBWB's Draft 2024 Budget at our regular board meeting following the Annual Public Meeting on September 9, 2022. This is earlier than normal, because we need to pass the budget before the October 15th municipal election. If the board wishes any revisions, this will give time to bring it back at the October 4th OBWB meeting.

Submission to B.C. Budget 2023 Consultation

Because of a prior commitment, I was not able to present in-person this year to the Select Standing Committee on Finance and Government Services, but I submitted three recommendations (attached) through their web portal. These recommendations are an update to the recommendations the board made to the committee in 2021, focusing on funding for the Plan of Study for Modernizing the Okanagan Lake Regulation System, funding for inspections stations to prevent invasive zebra and quagga mussels, and funding to establish a permanent Watershed Security Fund for all of B.C.

Gas Tax Grant Submission

OBWB staff have prepared an application for the Gas Tax Strategic Priorities Fund – Capacity Building Stream. This is to undertake Studies 9 & 13 of the Plan of Study for Modernizing the Okanagan Lake Regulation System (see link [here](#)), for lake level management. The application requires a resolution of support from the OBWB. The grant program covers up to 100% of project costs. We are applying for \$600,000 for the project below:

Project title: How climate change is affecting the Okanagan Lake Regulation System and what infrastructure and operating plan changes could be made to enhance community benefits and reduce impacts

Project summary: This project will document the specific benefits and impacts of the existing Okanagan Lake Regulation System (OLRS) infrastructure and operations and describe how those will be affected by climate change and changes to the operating plan.

The project will:

- Describe the purpose and history of the OLRS construction, and its benefits and negative impacts.
- Describe the existing limitations of the OLRS to manage flood and drought,
- Describe the current physical and biological state of the mainstem lake and river system.
- Evaluate the impacts on receptors influenced by the OLRS that will result from increasing operational challenges due to climate change. These receptors include aquatic and riparian ecosystems, socio-economic conditions, the structural integrity of the OLRS infrastructure assets, and international agreements related to cross-border flow.
- Identify opportunities to mitigate those impacts and determine the associated implications for future lake water levels and river flows.

Impacts to Indigenous Syilx culture, values, and ways of life (described in the Plan of Study for Studies 9 and 13) will be evaluated in a separately funded, Syilx-led project.

Recommended resolution: *“That the OBWB supports the Gas Tax Strategic Priorities Fund application for the project: How climate change is affecting community benefits and impacts from the Okanagan Lake Regulation System and management of Okanagan Lake.”*

Weather Report

After a very wet month of June, with higher-than-normal streamflows and higher-than-expected lake levels, conditions are finally moderating. National Oceanic and Atmospheric Administration (NOAA)’s seasonal forecast for July to September is leaning weakly toward higher-than-normal temperatures and lower-than-normal precipitation. Environment Canada projects that B.C. will have more moderate temperatures than the rest of Canada (which expect a hot summer), and that B.C. will have “Goldilocks” weather: not too hot, not too cold.

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.1.1

Budget 2023 Consultation: Written submission to B.C. Select Standing Committee on Finance and Government Services, formatted for web submission form

I am providing these recommendations on behalf of the Okanagan Basin Water Board (OBWB). Established in 1970, the OBWB is a watershed agency that is a partnership of the three Okanagan regional districts, with additional board directors from the Okanagan Nation Alliance, the Water Supply Association of B.C., and the Okanagan Water Stewardship Council, a technical advisory body to the board.

1. Funding for the review of the Okanagan Lake Regulation System and Operating Plan – a joint initiative of B.C. Ministry of Forests and the Okanagan Basin Water Board, working with the Okanagan Nation Alliance – following our 2021 *Plan of Study for Modernizing the Okanagan Lake Regulation System*.

Okanagan Lake is the largest lake in the Okanagan valley – controlled by Okanagan Dam in Penticton, and other structures that make up the Okanagan Lake Regulation System. The infrastructure is owned and operated by B.C. Ministry of Forests. The dam's operating plan was developed in 1974, primarily for flood control.

With climate change, Okanagan Lake's level fluctuates much more than in the past, and the infrastructure and operating plan are no longer adequate. In 2017, we had the worst flood in memory, and in 2021 the lake was near the lowest level of its range. Flooding is projected to become much more common by 2050, damaging public and private infrastructure – at great cost. Drought is also projected to become more common, harming agriculture and creating conflict between water users. Both drought and flood harm ongoing work by the Okanagan Nation Alliance (ONA) to restore salmon populations. Also, the typical lifespan of this infrastructure is 70 – 80 years. Okanagan Dam is now more than 60 years old, and the province needs to begin planning for its replacement.

In 2021, we partnered with the Ministry of Forests to develop a plan of 18 studies for modernizing the Okanagan Lake Regulation System, including a review of the operating plan, existing infrastructure, and needed improvements. The work is under Provincial jurisdiction and requires funding allocated to carry this out. We have been seeking grant funding to do component studies, but piece-meal approaches are less effective than a government-supported effort. There is a huge return on investment for this work, as the costs of future damages – if the work is not completed – will be astronomical.

Required Funding: \$1,000,000/year for the next four years, through external grants to local governments, the OBWB, and the ONA; as well as internal funding to B.C. Ministry of Forests.

2. Funding for B.C. Ministry of Environment and Climate Change Strategy and B.C. Conservation Officer Service, for inspection stations to prevent the invasion of non-native zebra and quagga mussels to B.C.

Okanagan lakes are at high risk for invasion by zebra and quagga mussels, non-native species introduced to the Great Lakes in the 1980s, that have spread throughout North America. B.C., Alberta, Yukon, and Saskatchewan are the only Canadian western regions not yet affected, along with the U.S. Pacific Northwest. Mussels spread by hitchhiking on watercraft from infested waterbodies – like Lake Winnipeg, or Lake Mead. Invasive mussels cause significant harm to native fish, degrade water quality, and damage water intakes, boats, and other infrastructure and equipment in the water.

The Okanagan is at risk for invasive mussels because our relatively warm, calcium-rich waters provide ideal habitat for the mussels to rapidly multiply. We are also at risk because, based on the Province's mussel-inspection station statistics, we are the top destination for mussel-infested watercraft entering B.C. The only way to prevent invasive mussels (beyond banning the launch of out-of-province boats) is through inspection and decontamination of affected watercraft.

The Province of B.C. has maintained inspection stations at major highways since 2015, and the Canada Border Services Agency works with B.C. Conservation Officers to flag boats for inspection. However, the funding and scope of the program is inadequate to protect B.C. lakes. A 2021 boater survey by our partner, the Okanagan and Similkameen Invasive Species Society, found only 83% of out-of-province boaters stopped at an inspection station. With so much at risk, the Province of B.C. must increase inspections to ensure no contaminated boats enter B.C. The OBWB has sent many letters to the B.C. Ministry of Environment and Climate Change Strategy (ENV), detailing recommended actions, including the following funding needs.

Required Funding: Restore core inspection program funding to ENV and B.C. Conservation Officer Service to at least 2017 levels of \$3.8 million/year, and adjust for inflation going forward.



3. Establish a permanent Watershed Security Fund to support protection of water sources, available to water suppliers, watershed organizations, water stewardship groups, Indigenous organizations, etc., through an open and transparent application process.

In 2020, as part of its COVID-19 response, the Province of B.C. made \$27 million available through its Healthy Watershed Initiative (HWI) to support water and watershed protection in B.C. These funds were used by communities and not-for-profit groups to restore watersheds and undertake protection of water sources. The province renewed the HWI in 2022, but divided it between a small number of hand-picked organizations and a fund directed to Indigenous organizations, which reduced its distribution and broad application for watershed protection. We are asking for a permanent Watershed Security Fund that can be accessed by water suppliers, watershed and Indigenous organizations, and groups with related mandates throughout B.C., through an open application process.

The province has a long-standing policy to allow resource development and recreation in drinking water source areas (with fees and other income from these activities going to the province). At the same time, water suppliers, who draw on streams and reservoirs from these areas are required by the B.C. Ministry of Health to deliver safe drinking water to their communities, but are given little assistance or funding to respond to damage by resource development and recreation. Approximately half of the Okanagan's drinking water comes directly from these watershed source areas.

The Watershed Security Fund could provide funding to Okanagan water suppliers and other organizations to restore damage to source areas from resource development and recreation, improving wildlife habitat, as well as reversing water quality degradation. We recognize that other groups are making similar calls to government, reinforcing the importance of these issues across the province.

Required Funding: Create a dedicated and ongoing investment to B.C.'s watershed security, with sustained funding of \$75 million/year, to protect water sources in the Okanagan and across the province.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.2

To: OBWB Directors
From: Carolina Restrepo-Tamayo
Date: June 28, 2022
Subject: **Special Projects Coordinator Report**

Osoyoos Lake Water Science Forum (OLWSF) 2022

The 2022 Osoyoos Lake Water Science Forum “Nk'Mip (Osoyoos Lake) - The Heart of the Watershed - Bridging Indigenous and Western approaches to Knowledge, Science and Management” will be held Oct. 27-29, 2022 at the Sonora Centre, Osoyoos, and the conference program is now finalized.

The forum will be hosted in partnership with the Osoyoos Indian Band and the Okanagan Nation Alliance (ONA), with particular emphasis on bridging Western and Indigenous approaches to water and watershed management.

This is the fourth edition of the conference (previous conferences were held in 2007, 2011 and 2015), and the intention for this one is to build on Indigenous and Western approaches to knowledge, science and management. The event will be facilitated by members of the ONA. The program has been designed for participants to have time to reflect both on the scientific information, as well as the Indigenous approaches that are introduced.

For information about the this event please go to: <https://www.obwb.ca/olwsf/> .

Registration is now open at: <https://www.obwb.ca/olwsf/#registration>. We have extended the deadline for poster submissions to Sept. 30, 2022.

For your reference, here is a summary of the conference program:

Day 1

The forum will begin on Thursday, Oct. 27 with two main activities:

In the afternoon participants will have the opportunity to select one of the following locations for a field trip:

- Nk'Mip Desert Centre tour
- Spotted Lake
- Haynes Point

Field trips will be guided by experts from the Okanagan Indian Band and the Osoyoos Lake Water Quality Society.

After the field trip, participants are invited to a welcoming reception at the NK'Mip Desert Centre, the award-winning architecture of the interpretive centre offers the perfect venue for the opening of our conference.

Days 2 and 3:

Hosted at the Sonora Centre. Day 2 will open with a conference overview, goals and theme that will set the stage for participants. Each day will begin with a keynote presentation, followed by sessions in topics such as:

- Introduction to Indigenous Approaches
- Osoyoos Lake Management
- Climate Change
- Fisheries Restoration
- Watershed Influences
- Water Quality
- OLRs Modernization among others...

Days 2 will close with an expert-panel that will share their reflections on the first day of sessions. Day 3 will close with a youth panel that will share their reflections on the conference content, followed by a conference summary presented by Bob Sandford.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.3

To: OBWB Directors
From: Nelson R. Jatel
Date: June 28, 2022
Subject: **Water Stewardship Director's Report**

Okanagan Water Stewardship Council

The council is the Water Board's standing technical advisory body and meets monthly to discuss relevant and timely watershed issues, supporting information sharing and knowledge building. Current leadership is provided by two volunteers: Council Chair Mr. **Scott Boswell** (Okanagan Collaborative Conservation Program), and Vice-chair Dr. **Jeremy Fyke** (Environment and Climate Change Canada).

The council has five active committees: *Policy, Water and Climate, Alluvial Fans, Wetlands, Agriculture Water, Water Quality*, and one standing committee: *Source Protection*. Recently, the province posted an updated Environmental Flow Needs Policy which is under review by the policy committee.

Our guest speaker at last month's meeting was Dr. **Deborah Curran**, Faculty of Law and School of Environmental Studies, University of Victoria. Deborah presented on her 2019 published paper titled "Indigenous processes of consent: Repoliticizing water governance through legal pluralism." The council meeting was well attended with lots of great discussion and networking.

Our next council meeting is scheduled for Thursday, Sept. 8 from 1 – 4:30 p.m. and will be held at the Kelowna Capri Hotel. Lunch will be served at noon. Our guest speaker is **Scott Boswell** who will be providing an update on the ONA-led *Okanagan Lake Responsibility Planning* process. Board members are encouraged to attend and participate.

Okanagan Flood Risk Mapping project

This project builds on a previously completed flood and debris-flow risk mapping project by the Okanagan Nation Alliance (ONA) and will increase the resolution and granularity of flood risk maps. The project will produce digital maps to support flood planning and adaptation, customized to support all levels of government.

A 3rd workshop/discussion in early July will provide an opportunity to solicit input on the newly developed flood risk maps. At this meeting, the technical working groups will have



Okanagan Lake flooding in 2017.

a further look at the flood risk model results and will have an opportunity to comment.

OBWB Hydrometric Service

The objective of this OBWB service is to develop and manage an adequate hydrometric information network for the valley. Information about the OBWB's hydrometric service is available online at <https://www.obwb.ca/hydrometrics/>.

Both Environment and Climate Change Canada (ECCC) and ONA staff were busy throughout June collecting and managing hydrometric data, with a continued focus on collecting high-flow data measurements across the Okanagan.

Data collected by OBWB/ONA hydrometric stations is posted on the B.C. government water data websites, providing public access to the data.



Pearson Creek (08NM172). Activated on May 21, 2021.
Photo courtesy ECCC.

The province's real-time water data tool can be found online here:

<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-science-data/water-data-tools/real-time-water-data-reporting>

Canadian Water Resource Association National Conference

I attended this year's Canadian Water Resource Association (CWRA) national conference hosted in Canmore, Alberta, June 5 to 9. The theme of this year's conference was "*Valuing shared water*" with a focus on: cultural significance, agricultural and ecological needs; respecting and upholding Indigenous rights; and the roles of municipalities, governments, and industry. As part of the conference, I presented three papers:

- A new watershed hydrometric monitoring program enabling Environmental Flow Needs monitoring: Advancing water governance in Canada
- Diagnosing watershed governance: A 50-year longitudinal social network analysis of the Okanagan Basin Water Board
- Developing a cloud-based and open-source hydrology model (RAVEN) and data framework for the Okanagan Basin, B.C.

The CWRA is a national organization committed to promoting responsible, innovative and effective water resources management.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.4

To: OBWB Directors
From: James Littley
Date: June 28, 2022
Subject: Operations and Grants Manager Report

Milfoil Control Program

Swan Lake

Due to high water levels causing murky conditions, we have postponed our survey of Swan Lake to assess milfoil growth. We surveyed near the end of the summer last year and observed mostly native northern milfoil – although it is difficult to differentiate without genetic testing. Northern milfoil does not cause the same harms as Eurasian milfoil and does not form dense mats on the surface of the water. Another survey on Swan Lake is planned for mid-July.

Vaseux Lake

We have received confirmation that the province is reviewing our permit application for Vaseux Lake harvesting this summer. We expect to receive the “Habitat Officer’s Terms and Conditions” (permit) by July 15, consistent with the 45-day review period given by the province. We are also submitting for a review by Fisheries and Oceans Canada later this week, with an anticipated two-week response period. Pending these reviews, we should be able to start harvesting in Vaseux Lake the week of July 18.

Sewerage Facilities Grants Review

This month we formally initiated the Sewerage Facilities Assistance Grant program review. We have formed an advisory committee including local government engineering staff, and staff from B.C. Ministry of Municipal Affairs, Interior Health, and B.C. Ministry of Environment and Climate Change Strategy. I am still looking for local government planning staff to join the advisory committee as the current grant program has such a large effect on land use planning, especially in rural areas. Our initial meeting is scheduled for July 18, with the final report to the board with recommendations in March 2023.

Invasive Mussel Prevention

Following the board’s discussion on invasive mussel prevention at the June board meeting, Ms. Jackson and I met with Martina Beck, Unit Head, Freshwater Applied Science and Programs, Ministry of Land, Water and Resource Stewardship, and Inspector Dave Webster, Officer in Command, Aquatic Invasive Species – Invasive Mussel Defence Program, BC Conservation Officer Service. Ms. Beck and Inspector Webster will join us as a delegation at the July meeting, providing the latest information on the Invasive Mussel Defence Program, and taking questions. Following that discussion I will ask for direction from the board on next steps.

On June 17 we also received a letter from Minister Joyce Murray, Fisheries, Oceans and the Canadian Coast Guard, responding to the board's April 7 letter. (See 8.1 Correspondence.) Minister Murrey provides answers to specific funding questions that were posed by the board and provides more detail on the efforts being taken by the Canadian Border Services Agency to enhance biosecurity at the international border, to prevent infested boats from entering Canada. Over the summer, I will be conducting a thorough review of the information provided, including the various reports and programs that are mentioned in the DFO letter.

On July 25-27, I will be attending the Pacific NorthWest Economic Region (PNWER) Summit in Calgary and representing OBWB on the PNWER Invasive Species Working Group. This will be an opportunity to gather information from multiple neighbouring jurisdictions, and federal and provincial staff on the current "big picture" in the Pacific Northwest, and upcoming plans for improvements. I will provide the board with a comprehensive update at the September meeting.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.5

To: OBWB Directors
From: Kellie Garcia
Date: June 28, 2022
Subject: Policy and Planning Specialist Report

Boating Benefits, Impacts, and Solutions Workshop

On June 22, OBWB staff hosted a workshop at the Eldorado Hotel in Kelowna, to discuss the benefits and impacts of boating and associated infrastructure in the Okanagan and come up with collaborative solutions. Staff from Okanagan local governments and regional districts, the Government of B.C., Fisheries and Oceans Canada (DFO), local consulting companies, Living Lakes Canada, local dock and marina construction companies, and the Kelowna Yacht Club attended.

The workshop began with a video welcome from Grouse and Pamela Barnes, syilx knowledge keepers and members of Westbank First Nation. Then, participants were asked to introduce themselves and talk about why boating is important to them. This was followed by a video presentation from the Thompson Okanagan Tourism Association that highlighted the benefits of boating to residents and tourists and its positive impact on our economy. Next, we heard presentations about how boating is impacting water quality and shoreline ecosystems, how collaboration and partnerships can lead to better project outcomes, what provincial legislation governs the construction of boating infrastructure, and how recent changes to the *Fisheries Act* have improved DFO's ability to collaborate and do proactive integrated planning. In the afternoon, we went down to the Cook Street boat launch to look at examples of things we had heard about in the presentations. Then, we met in small groups to identify the top actions to help reduce impacts and enhance the benefits of boating and its infrastructure. We have distributed a workshop summary and copies of the presentations to participants and other interested people. OBWB staff will meet over the summer to develop an action plan that I will bring to the board in the fall.



Drought Planning and Response

On June 1, I facilitated a meeting between Agriculture and Agri-Food Canada's Canadian Drought Monitor (CDM) coordinators and B.C. Ministry of Forests staff to discuss opportunities to collaborate on communicating about our different drought classification schemes. As a reminder, the province uses a rating system of drought **levels** 0 to 5, while local water suppliers use **stages** based on their drought response plans (stage numbers vary between suppliers). The CDM reports on drought conditions using drought **ratings** D0 to D4. Several times in 2020 and 2021, an AAFC media release using the CDM ratings would come out just days before the province was set to release information on their drought levels (and the OBWB was ready to send out a drought bulletin), potentially confusing the public and diluting the message. The meeting went very well, and everyone agreed that future collaboration is essential. We will meet monthly throughout the summer to discuss drought conditions and coordinate our communications.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
July 5, 2022
Agenda No: 6.6

To: OBWB Directors
From: Corinne Jackson
Date: June 28, 2022
Subject: Communications Director Report

“Don’t Move A Mussel” 2022

The last few weeks have been busy working on the roll-out of the Don’t Move A Mussel (DMM) campaign, raising awareness regarding the threat of invasive zebra and quagga mussels. **Billboards** are now posted in the Okanagan with an additional board going up this week. We have been running **radio ads** in the valley with a couple of new ones being produced to match some of the new campaign wording. **Social media posts** are now running, as well as **digital ads**, in time for the July long-weekend. Additional work includes updates to the www.DontMoveAMussel website with the updated provincial inspection station map and latest map from US Geological Survey showing the spread of the mussels. We are also designing new **posters** and **rack cards** with boat inspection check list information and mussel facts, to be distributed by water recreation-related agencies, including retailers, marinas, yacht clubs and tourist centres. We will also be running a **contest** on social media to encourage Okanagan residents to help get the message out and protect Okanagan waters.

Finally, we have a new contract in place with the Okanagan and Similkameen invasive Species Society to extend the reach of the DMM campaign and met this week to discuss this summer’s outreach efforts.

Below are a few images from this year’s campaign.



2022-07-05_CD Report_Memo



Photos above: Don't Move A Mussel billboards along highway route in Oliver and Vernon. Additional boards have been placed in Penticton, overlooking Skaha Lake, and in Lake Country near Wood Lake. Images below: samples of social media content.

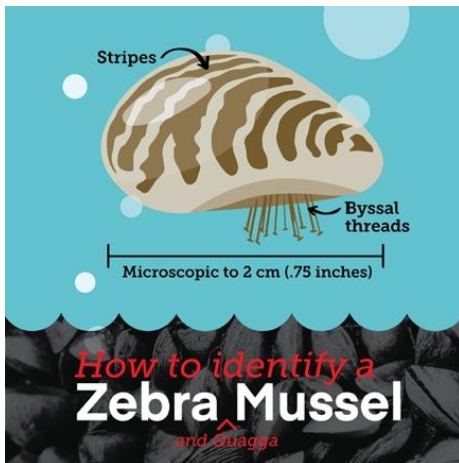
Our biggest threat is actually tiny.



Don't let invasive mussels sink Okanagan lakes. Our water, beaches and local ecosystem are at risk. Property values could drop. Taxes could go up. And beautiful Okanagan lakes could be ruined. Remember to Clean, Drain, Dry. Spread the message, not the mussel.

Learn more at DontMoveAMussel.ca

#DontMoveAMussel #OkWaterWise
#CleanDrainDry



Take a look at this beach and economy destroyer. At their youngest, zebra and quagga mussels are microscopic and feel like grains of sand. These invasive mussels aren't from here, but they'd like to move in and take over. Zebra and quagga mussels encrust and corrode hard surfaces. They will ruin Okanagan waters if they set up camp.

Learn more at DontMoveAMussel.ca

#DontMoveAMussel #OkWaterWise

More dangerous than they look.



If we don't do anything, we risk losing everything. Help make sure all watercraft and fishing gear gets the Clean, Drain, Dry treatment before entering Okanagan water. Spread the message, not the mussel.

Learn more at DontMoveAMussel.ca

#DontMoveAMussel #OkWaterWise
#CleanDrainDry



If you answer yes to this question, it is mandatory to stop and report to all provincial invasive mussel watercraft inspection stations along your travel route. If you have family or friends visiting with watercraft, same thing goes!

Love our lakes? Help us keep Okanagan waters zebra and quagga mussel-free!

Learn more at DontMoveAMussel.ca

#DontMoveAMussel #OkWaterWise



(THREE - FRAME VIDEO AD)

July long weekend boat inspection checklist.

Invasive mussels are more dangerous than they look. And just as sneaky. They hitch rides on any hard surface they touch, including water recreation equipment such as kayaks, paddleboards and fishing gear. These mussels would ruin Okanagan waters. Check it before you wreck it!

Learn more at DontMoveAMussel.ca

#DontMoveAMussel #OkWaterWise

“Make Water Work” 2022

We are still waiting on a few items to come in and be distributed to Make Water Work garden centre partners, but most materials have been delivered to these and local government partners now. I have heard from a couple of partners who are holding additional community events and I have been happy to assist where possible.

We also have a contract in place with the Okanagan Xeriscape Association to help extend the reach of the Make Water Work campaign, and promote low-water/xeriscape landscaping in the valley.



Photos (left and above): A couple of our water utility partners – Rutland Waterworks and Black Mountain Irrigation District – with MWW materials, including Make Water Work gardening gloves.

2022-07-05_CD Report_Memo

Other Communication Initiatives

Last week, I provided communication's support and participated in the Boating Impacts and Solutions Workshop. Given the strong message for the need for more communication and education, I look forward to assisting on this project as needed.

Summary of OBWB-Related News Media

May 17	"Kelowna, West Kelowna Flower Power tours back bigger and better," <i>Kelowna Capital News</i>
June 2	"First time weed war planned for South Okanagan lake," <i>Kelowna Daily Courier, Penticton Herald</i>
June 6	" Harvester anticipated to finally fight milfoil problem in South Okanagan lake, " <i>iNFOnews.ca</i>
June 15	"Epic gardens on display at Flower Power Garden Tour in Kelowna, West Kelowna," <i>Castanet.net</i>
June 23	" Summerland adopts new Water Master Plan to guide water decisions in future, " <i>Castanet.net</i>
June 23	"Summerland Finalizes Water Master Plan," <i>AM1150</i>

Recent Presentations

June 8	"Collaborative Source Water Protection in the Okanagan Basin," to Canadian Water Resources Conference – Kellie Garcia
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June 17, 2022

Ms. Sue McKortoff
Chair
Okanagan Basin Water Board
c/o Ms. Corinne Jackson
< corinne.jackson@obwb.ca >

Okanagan Basin Water Board Regular meeting July 5, 2022 Agenda No: 8.1

Dear Ms. McKortoff:

Thank you for your correspondence of April 7, 2022, regarding invasive mussel prevention in British Columbia (BC). Your kind words on my appointment as Minister of Fisheries, Oceans and the Canadian Coast Guard are greatly appreciated. I regret the delay in responding.

Fisheries and Oceans Canada (DFO) recognizes the serious threat that aquatic invasive species (AIS), such as zebra and quagga mussels, pose to Canada's aquatic and marine ecosystems, economy, and society.

The [Government of Canada announced in 2018](#) that it would be providing \$100,000 to Simon Fraser University over four years to conduct research to help assess the risk of spread and predict the ecological impacts of invasive mussels in the Okanagan region, and \$400,000 to the Canadian Council of Invasive Species (CCIS) over three years for education and outreach purposes to complement the current efforts deployed by the Province of British Columbia and other partners within the Okanagan Basin. These projects and their associated funding ended in March 2022 and 2021, respectively.

Multi-year funding for a total of \$600,000 was also provided to British Columbia's Ministry of Environment and Climate Change Strategy to benefit aquatic species at risk through the suppression of invasive species under the Canada Nature Fund for Aquatic Species at Risk (CNFASAR). This project and the associated CNFASAR funding is set to end in March 2023.

In your letter, you asked for more information on a "\$700,000 commitment since 2019 in British Columbia to focus on increasing awareness and identifying best practices to reduce AIS-related threats to species at risk." Under the CNFASAR, DFO has committed more than \$700,000 to the Invasive Species Council of BC for its project, "Protecting Species at Risk from Threats of Invasive Species." This project aims to protect aquatic species at risk and their key habitats by helping to prevent the introduction and spread of invasive species to new waters and helping to increase understanding of their impacts to critical populations and habitats. Project completion is set for March 2023. For more information on this, please visit [New Report On Species at Risk](#) from the Invasive Species Council of BC.

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Although the funding for CNFASAR has been fully allocated, I encourage you, as well as your local or regional invasive species groups, to seek other funding opportunities under the [Habitat Stewardship Program](#) and the [Aboriginal Fund for Species at Risk](#). Calls for proposals occur annually. In the 2022–23 call, priorities in the Pacific region for both funding programs included the threat of invasive species.

Addressing the threat of AIS is a shared priority and responsibility across federal, provincial, and territorial governments. The Government of British Columbia has delegated authority under the *Fisheries Act* for non-salmon freshwater fisheries. The Province is also the lead on freshwater fish governance, conservation, habitat management, and recreation, as well as the management of AIS within BC, with support from DFO. I encourage you to coordinate with the Government of British Columbia to identify opportunities to protect our waters from invasive mussels and other threats, including potential future funding.

Departmental staff meet regularly with representatives from BC to discuss emerging AIS threats and potential collaboration and support for freshwater AIS initiatives, including early detection monitoring programs. In addition, the Department collaborates with provincial and territorial partners through the National AIS Committee (NAISC), established under the Canadian Council of Fisheries and Aquaculture Ministers, to foster nationally consistent implementation of the *Aquatic Invasive Species Regulations* within its respective jurisdictions.

DFO supports the development of research and outreach materials, such as those developed for the “Clean, Drain, Dry” campaign, that increase public awareness of AIS and are nationally beneficial. As previously mentioned, the Department allocated \$400,000 to CCIS to develop nationally consistent “Clean, Drain, Dry” outreach materials in collaboration with NAISC. I am happy to share that CCIS and partners, including DFO, are deploying these materials throughout Canada and raising awareness on the issue of contaminated watercrafts.

The Department continues to allocate resources nationally to AIS research and monitoring, and supports BC’s invasive mussel management by providing scientific advice and conducting risk assessments. In December 2021, DFO completed a Science Advisory Report ([2021/043](#)) to review the effectiveness of “Clean, Drain, Dry” and decontaminate treatments and protocols that can be used to prevent the introduction and spread of AIS, including zebra and quagga mussels. This will help BC and other partners promote national consistency in the treatments and protocols used to decontaminate watercrafts in Canada.

As indicated in previous letters, DFO and the Canada Border Services Agency (CBSA) have developed new protocols, tools, and procedures to improve enforcement of the *Aquatic Invasive Species Regulations* at international borders with respect to recreational watercrafts entering Canada at land crossings (that is, trailered boats). DFO will be leading a pilot at the Emerson, Manitoba, port of entry this boating season until early September 2022, that will coordinate with, and build upon, existing efforts by CBSA, in collaboration with Manitoba. This pilot project will test the procedures and tools necessary for border service officers and fisheries officers to use the *Aquatic Invasive Species Regulations*—and other legislative tools—to take measures to improve biosecurity at international borders (for example, inspection and decontamination of recreational watercrafts).

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The Department appreciates your efforts to support the control of AIS, including the delivery of your “Don’t Move A Mussel” campaign and the promotion of the “Clean, Drain, Dry” messaging.

Thank you again for writing.

Yours sincerely,



The Honourable Joyce Murray, P.C., M.P.

c.c.: Mr. Dan Albas, M.P.
Central Okanagan–Similkameen–Nicola
Mr. Mel Arnold, M.P.
North Okanagan–Shuswap
Mr. Richard Cannings, M.P.
South Okanagan–West Kootenay
Ms. Tracy Gray, M.P.
Kelowna–Lake Country
The Honourable George Heyman, M.L.A.
British Columbia’s Minister of Environment and Climate Change Strategy
The Honourable Josie Osborne, M.L.A.
British Columbia’s Minister of Land, Water and Resource Stewardship and
Minister Responsible for Fisheries
Ms. Harwinder Sandhu, M.L.A.
Vernon–Monashee
Mr. Norm Letnick, M.L.A.
Kelowna–Lake Country
Ms. Renee Merrifield, M.L.A.
Kelowna–Mission
Mr. Ben Stewart, M.L.A.
Kelowna West
Mr. Dan Ashton, M.L.A.
Penticton
Mr. Roly Russell, M.L.A.
Boundary–Similkameen