

Okanagan Basin Water Board Meeting Agenda



DATE: Tuesday, April 6, 2021

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 March 2, 2021 held online. (page 1)

5. DELEGATION

5.1 Renee Clark, Source Protection Committee Member, Okanagan Water Stewardship Council, presenting on the State of Source Water Protection in the Okanagan.

6. STAFF REPORTS

6.1 Water Stewardship Director Report (page 6)

6.1.1 Source Water Protection Position Paper – (motion to receive)

6.2 Policy and Planning Specialist Report (page 16)

6.3 Communications Director Report (page 19)

6.4 Special Projects Coordinator Report (page 23)

6.5 Executive Director Report (page 24)

6.5.1 CIBC Resolution Request

6.6 Operations and Grants Manager Report (page 29)

7. IN-CAMERA

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

8. RISE & REPORT FROM IN-CAMERA

9. CORRESPONDENCE

9.1 B.C. Ministry of Forests, Lands, Natural Resource Operations response to OBWB letter re: Okanagan Lake Regulation System (page 30)

10. NEXT MEETING

10.1 The next meeting of the Okanagan Basin Water Board will be Tuesday, May 4, 2021 at 9 a.m. online.

11. 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 MARCH 2, 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

Lisa Scott	Okanagan and Similkameen Invasive Species Society
Kevin Rothwell	107.5 Beach Radio

1. CALL MEETING TO ORDER

Chair McKortoff called the meeting to order at 10:00 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 March 2, 2021 be approved as amended.”

CARRIED

3. ADOPTION OF MINUTES

3.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of Feb. 2, 2021 held

online.

“THAT the minutes of the regular meeting of the Okanagan Basin Water Board on Feb. 2, 2021 held online be approved.”

CARRIED

4. DELEGATION

- 4.1 Okanagan and Similkameen Invasive Species Society (OASISS)’s Lisa Scott with overview of their 2020 Aquatic Invasive Species Prevention Program

Ms. Jackson introduced Ms. Scott, noting that the OBWB’s Okanagan WaterWise program has provided funding to OASISS since 2012 to extend the reach of its “Don’t Move A Mussel” campaign with water recreationists.

Ms. Scott provided an overview of OASISS’s work, noting that in addition to invasive mussel prevention the society is also working to address invasive clams, insect pests and invasive plants. Invasive aquatic species account for about 15-20% of OASISS’s work, she added.

This past year, with COVID and concerns about the usual face-to-face outreach, the group focussed more of its mussel outreach effort to providing online support to businesses in an effort to get the word out. A variety of digital DMM materials were provided to OASISS, including posters, a boat checklist, rack card, web badge and more. This was supplemented by OASISS developed materials such as articles for newsletters and social media posts. Some 200 water-recreation related businesses were approached and asked if they were interested in the materials, and 109 requested the resource package.

Three summer students were hired and some face-to-face outreach was done mid-June to August, reaching 361 boats at 11 launches. Despite travel restrictions, the lakes were noticeably busy with locals and many Albertans, said Ms. Scott. Staff also conducted lake monitoring for the mussels with funding from DFO and the province, administered through the Habitat Conservation Trust Fund, and from OBWB-OkWaterWise. Some 156 water samples were taken on eight lakes. Substrate monitors were also deployed in partnership with marinas, yacht clubs and local governments at 13 locations in five lakes. As well, an RBC grant and funding from OBWB-OkWW helped expand a citizen science initiative, working with private dock owners to monitor for the mussels and residents to monitor beaches for invasive clams. An additional 19 volunteers were added.

Reviewing boater survey stats, Ms. Scott noted awareness for invasive mussels and Clean, Drain Dry has increased. Interestingly, an increasing number of boaters said they did not stop at inspection stations because they “didn’t see” the stations, or because they were “closed.”

There was some discussion about the province’s decision to close the Laidlaw inspection station. Ms. Jackson noted this was also noted by the public this summer. However, in asking the province about the decision, staff stated that - although it was a high visibility location - it did not have enough at-risk boats coming through to warrant staying open, especially with Canada Border Services was catching incoming watercraft at the Sumas crossing. Also, the border closure meant there were fewer incoming watercraft and any that did come in were commercially-transported, in which case the province was given prior notice to ensure inspection when necessary.

It was noted that once the border reopens, the provincial line of defence will be important. Mr. Littley noted that the province has said it is continuing to collaborate with its western provincial and U.S. counterparts, including through the Pacific NorthWest Economic Region.

5. STAFF REPORTS**5.1 Operations and Grants Manager Report**

Mr. Littley presented the board with a letter to the province, requesting stronger action on invasive mussels and the inclusion of six calls to action. The board agreed to send the letter and issue a news release.

An update was provided on milfoil control efforts. De-rooting is underway in Kalamalka and Okanagan Lake near Kelowna and operators are waiting for higher water levels to launch in Osoyoos Lake. It was noted that in past years, when rototilling was not done, there have been issues with algae blooms.

The board was presented with a Sewage Facilities Assistance Grant application from City of Vernon for a community sewer line.

“THAT the SFA notification for the City of Vernon Bella Vista Rd. Extension project be approved in principle as outlined above.”

CARRIED

Mr. Littley told the board that 24 applications were received to the Water Conservation and Quality Improvement Grant Program by the Feb. 26 deadline. The combined request is for \$575,000 with \$350,000 available. The applications will be reviewed and recommendations presented to the board at the next meeting.

“THAT the Operations and Grants Manager Report, dated Feb. 22, 2021, be received.”

CARRIED

5.2 Communications Director Report

Ms. Jackson presented an update on the *Our Relationship with Water in the Okanagan* – Education guides, noting an Okanagan valley-wide presentation to teachers at a Feb. 12 Zonal Professional Development Day Conference. Feedback was positive and there has been a number of requests for more information and resources. However, she added, not all requests are the result of the presentation, indicating the demand for such materials. A news release was also issued.

A discovery meeting was held March 1 between Habit Creative Marketing and local government and utility partners in the “Make Water Work” campaign. A similar roll-out will be held for the “Don’t Move A Mussel” campaign.

Other projects have included working with the RDCO’s Waste Reduction Office for the sale of rain barrels and composters with the sale starting March 1. Additional communications assistance was provided with the letter to the province on a review of the Okanagan Lake Regulation System, provincial mussel response, and the OBWB’s submission to the federal government on the proposed Canada Water Agency.

“THAT the Communications Director’s Report, dated Feb. 24, 2021, be received.”

CARRIED

5.3 Special Projects Coordinator Report

Ms. Restrepo-Tamayo told the board that planning for the Osoyoos Lake Water Science Forum is continuing and organizers are looking for additional funders to help with costs.

The Western Canada AquaHacking Challenge has 60 participants registered (65% male; 35 female) and organizers are looking at ways to encourage more female participation. They are also close to meeting their budget goal. There are now four water issues that participants will be invited to help solve. After considerable discussion with a potential water issue leader, it was decided that the fifth issue of improving water systems for Indigenous communities required a different approach than the current program offered. AquaForum, which leads the challenge, is looking at a separate challenge event for Indigenous water issues.

“THAT the Special Projects Coordinator Report, dated Feb. 21, 2021, be received.”
CARRIED

5.4 Policy and Planning Specialist

Ms. Garcia updated the board on the source water protection (SWP) project and a number of related meetings with groups which will help inform the work, including with RDNO’s Regional Growth Management Advisory Committee and a watershed stakeholder meeting hosted by City of West Kelowna.

In response to a question about SWP issues often involving multi-jurisdictional use, Ms. Garcia noted that the SWP toolkit includes information about collaborating between various governments and licensees.

Work is also underway on the final year of the Agricultural Water Supply Communications Project, supporting local utilities in sharing water supply information to their agricultural customers. An update on the project will be provided at the April board meeting.

“Slow It! Spread It! Sink It! An Okanagan Homeowner’s Guide to Using Rain as a Resource,” has been a popular guide and was originally published in 2011. An updated 2nd edition is now available and online on the Okanagan WaterWise website, resources page (<https://okwaterwise.ca/resources.html#sss>).

“THAT the Policy and Planning Specialist’s Report, dated Feb. 24, 2021, be received.”
CARRIED

5.5 Water Stewardship Director Report

Mr. Jatel provided an update on the Feb. 11 Okanagan Water Stewardship Council meeting and a presentation by Natalia Moudrak with University of Waterloo’s Intact Centre on Climate Adaptation, regarding flood risk guides. The March meeting will look at local efforts to address microplastics. Planning is also now underway for the annual joint board-council meeting in May.

Work is continuing on the Okanagan Basin Hydrometric Information Network program. A map is being developed of current stations to be used as a benchmark for future expansion and can be shared at the April meeting.

Mr. Jatel reported on a presentation on the OkanaganFloodStory.ca website to the Association of Interior Realtors. A follow-up presentation will be provided by ONA and include some discussion about the benefits of flooding.

Discussions are underway with UBC Okanagan to expand on the Okanagan Wetland Project in 2021-22, including using the OBWB’s LiDAR data. Students are updating wetland maps and looking at how wetlands can be carbon sinks and sources of greenhouse gases. Additional

projects being considered include cattle-exclusion fencing in the South Okanagan and Mill Creek restoration.

“THAT the Water Stewardship Director’s Report, dated Feb. 24, 2021, be received.”
CARRIED

5.6 Executive Director Report

Dr. Sears explained that the joint board-council meeting in May would be 9 a.m. to noon and include a presentation by Ted Zimmerman, Executive Director of the Water Protection & Sustainability Branch of B.C.’s Ministry of Environment and Climate Change Strategy. He has been tasked with developing a watershed security strategy, she added.

A letter from the OBWB, urging the province to undergo a review of the Okanagan Lake Regulation System, with letters of support from local governments has now been sent. A new release will also be going out soon. Dr. Sears added that she has been working with provincial staff and a consultant to review what studies have been done to-date and what studies are needed to help develop new regulations. This will be completed by April.

In response to a question from the board about water commodification, staff contacted UBCO’s Dr. John Janmaat who specializes in water resource economics for more information. His response indicates that this will not be an issue in the Okanagan.

“THAT the Executive Director’s Report, dated Feb. 24, 2021, be received.”
CARRIED

6. **NEXT MEETING**

6.1 The next meeting of the Okanagan Basin Water Board will be held Tues. April 6, 2021 at 10 a.m. at location TBD.

7. **ADJOURNMENT**

“THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of March 2, 2021 be adjourned at 12:04 p.m.”
CARRIED

Certified Correct:		
Chair		Executive Director

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.1

File No. 0550.04

To: Board of Directors
From: Nelson R. Jatel
Date: March 31, 2021
Subject: **Water Stewardship Director's Report**

Water Stewardship Council (Council)

The Council was established by the OBWB as an advisory body and communication channel to people and communities throughout the Okanagan – providing independent advice supporting sustainable water management in the Okanagan. The Council supports collaborative approaches, mindful of the basin's water budget, the importance of using good science, best management practices, the need for appropriate legislation, and clear communication.

Committee reports

The five Council committees (Policy, Agriculture Water, Flooding, Dams and Reservoirs, and Source Protection) are wrapping-up their initiatives and planning their presentation materials summarizing their term activities at our May joint Board-Council meeting.

This month, Source Protection Committee Chair Renee Clark will provide a short presentation to the Board in preparation for our May OBWB meeting with special guest Ted Zimmerman, Executive Director of the Water Protection and Sustainability Branch of B.C.'s Ministry of Environment and Climate Change Strategy. Ms. Clark will present to the Board her committee's findings and recommendations developed over the past two-terms (36 months). The Council had an opportunity to review and discuss the Source Protection Committee's findings at the February Council meeting. Feedback from the broader Council has been incorporated into the final summary document titled "*Position Paper on Source Water Protection in the Okanagan Basin*" and is attached to this memo. Four recommendations are included in the paper along with a short backgrounder including past source water protection report recommendations, status of Okanagan source water protection, and an updated reference list. A more extensive background document including a SWAT analysis of Okanagan source protection has been completed and will be posted on the OBWB source protection section of the OBWB's website. Renee Clark serves the Water Stewardship Council as an independent member. Recently retired, Ms. Clark was the Water Quality Manager for the Regional District of North Okanagan, with over 25 years in the Water Quality, Stewardship, and Watershed protection field. Her role has included the development and implementation of the Water Quality Program for Greater Vernon Water, Source Assessments and Response Plans, Emergency Response and Drought Management and Response plans.

Council meeting

Our last Council meeting was held on March 11th and we hosted a panel of guest speakers: Ryan Cope, Gregg Howard, and Jan Vozenilek. The panel focused on micro-plastics in the Okanagan.

Our upcoming Council meeting will be held this Thursday, April 8 from 1 p.m. to 4 p.m. on Zoom. This meeting marks the beginning of a new term (10th term) of the Council. We will be holding our election of Chair and Vice-Chair and discuss the structure of committees and work plan for the coming 24 month term. Notably, we will be recognizing the efforts and accomplishments of outgoing two-term Chair Dr. Denise Neilsen who has provided dedicated leadership over the past three years. Our guest speaker will be Dr. Sheena Spencer, Research Hydrologist, B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development. Dr. Spencer, situated in the Penticton FLNRORD office, will be discussing research priorities and highlights. Board members are encouraged to attend.

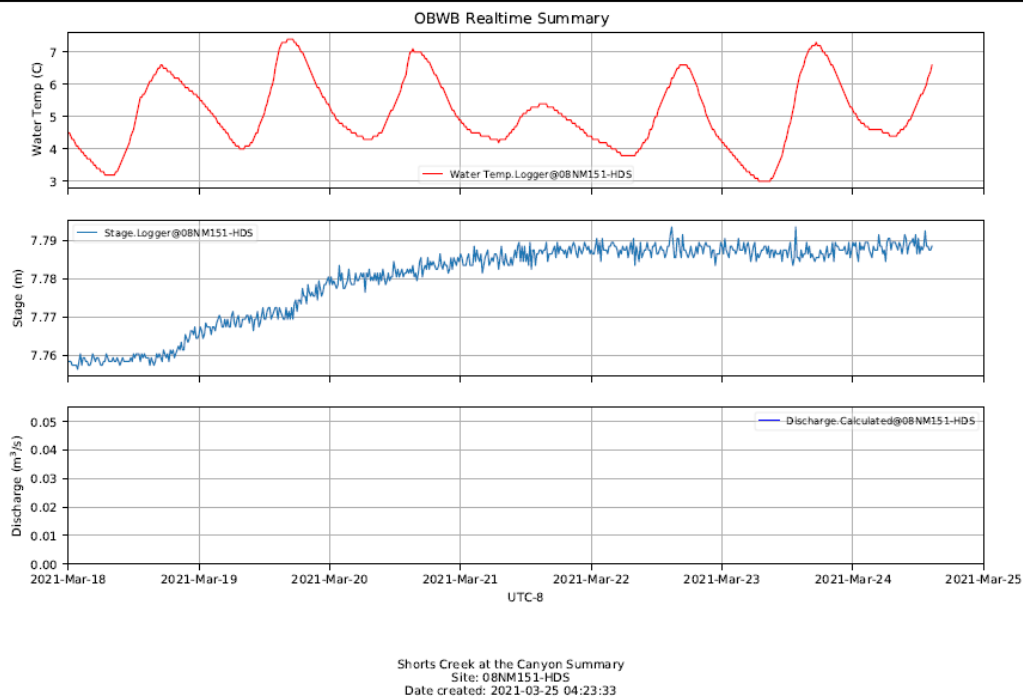
DATUM workshop

As part of our efforts to improve Okanagan flood mapping, I hosted a workshop on March 18th. The focus of the workshop was to present on recently converted Okanagan Flood Construction Levels (FCLs) reported from CGVD2013 to the older CGVD28 – commonly used by local and First Nation governments throughout the Okanagan. Floodplain maps completed for the Okanagan Floodplain Mapping Project are in the current Canadian Geodetic Vertical Datum of 2013 (CGVD2013). Modelling and mapping data completed in 2020 used the CGVD2013 vertical datum. This included the 2018 LiDAR data supplied by GeoBC, the LiDAR-based elevation model (DEM) used for hydraulic modelling and mapping, riverine and lake hydraulic models results, and elevations and FCLs. We heard presentations from local, provincial and federal staff involved in applying DATUMs to flood mapping projects. The workshop was well attended with over 40 participants.

OBWB Hydrometric Service

The OBWB's Okanagan Basin Hydrometric Information Network program is a component of the Water Management Program with the objective to develop and manage an adequate hydrometric information network for the Okanagan. This program will officially launch in April 2021. In preparation of the start of the new fiscal year, I have been working with the Okanagan Nation Alliance, Environment and Climate Change Canada and our project team members in preparation for the upcoming year that will see new hydrometric stations installed throughout the Okanagan. Progress continues on our data management software. Figure 1. Below provides an example of the new real-time summary reporting under development.

Figure 1. Example of real-time summary data from Shorts Creek (08NM151-HDS).



Disclaimer: The near real-time information presented in this report is preliminary and has been generated automatically with limited verification and review.

Project Management

With the closing of the fiscal year, I have been wrapping-up my project financial management and planning for the 2021-22 year. Active projects for the upcoming year include: enhancing and updating the OkanaganFloodStory.ca website, developing and implementing the Okanagan Wetland Action Plan, supporting the Okanagan Lake regulation initiative, ambient lake water quality data management and administration, and Environmental Flow Needs research – including large-bodied spawning salmon (i.e. Chinook and Sockeye) returning to the Okanagan up the Columbia from the Pacific Ocean.

Position Paper on Source Water Protection in the Okanagan Basin

Prepared for the Okanagan Basin Water Board by the Okanagan Water Stewardship Council March 2021

Mobilizing Action

The Okanagan Water Stewardship Council requests that the Okanagan Basin Water Board (OBWB) review this Position Paper and consider the following recommendations for action.

Clarify the State of Source Water Protection in BC

Request that the Province of BC provide a progress report on source water protection in BC. The progress report should include the status of governance, plans, actions, and timelines for full implementation of the *Water Sustainability Act* and the *Drinking Water Protection Act* and their regulations and tools.

Acknowledge Indigenous Values and Commitments to UNDRIP

Source water protection planning in the Okanagan Basin must recognize the unceded lands of the Syilx people and the Province of BC's commitments to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) legislation.

Advocate for a Lead Water Agency

Advocate, through whatever means available, for the assignment of a lead agency within the province to be responsible for, and coordinate, the integration of governance (including federal, provincial, regional and First Nations) and hold authority for all aspects of source water protection.

Request Dedicated Resources

Request that the Province of BC dedicate resources to support source water protection planning in the Okanagan Basin.

Background

Challenges with implementing effective source water protection measures have long been identified in BC. Since 2008, published reports and policy reviews have provided analysis and recommendations to improve source water protection in BC. These have included reports from the Auditor General, provincial ministries, professional associations, non government organizations, and research centres like the POLIS Project on Ecological Governance. The many recommendations for improved oversight and protection of our source waters have not gained traction at the provincial level. The objective of this Position Paper is to garner support from the OBWB to advocate to the Province on source water protection.

In BC, multiple acts and regulations govern water use, protection, conservation and sustainability. The Provincial acts and regulations to manage and protect water are enacted primarily by the Ministry of Environment and Climate Change Strategy, the Ministry of Forests, Lands, Natural Resource Operations

and Rural Development (FLNRORD), and the Ministry of Health. No one Ministry is responsible for water, unlike other resources in BC.

Figure 1 illustrates the complexity of water governance in BC. The *Water Sustainability Act* (WSA), which came into force on February 29, 2016, is the cornerstone of this governance. The blue circles depict legislation enacted by the provincial government, the yellow by federal and the orange by local governments.

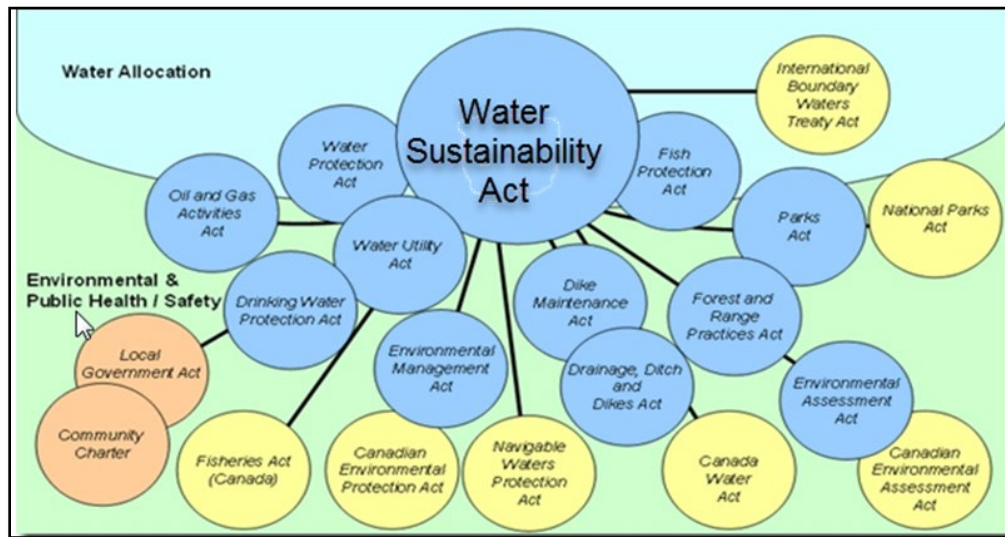


Figure 1: Legislation associated with water in BC

Source Water Protection Recommendations from Past Reports

The following reports and documents were reviewed by members of the Water Stewardship Council’s Source Water Protection Committee. Key recommendations from these reports are summarized in Appendix A (available [here](#)).

1. From Crisis to Solutions: Towards Better Source Water Protection and Nutrient Management in the Hullcar Valley, (Brandes et al. 2017).
2. Hullcar (Clcahl) Aquifer Response Plan Report, Ministry of Environment & Climate Change Strategy (MECCS 2018).
3. Verifying Best Management Practices (BMPs) for Livestock Grazing in Community Watersheds in the Okanagan Valley of BC: Final Report, (Roberts et al. 2016).
4. Advancing Freshwater Protection, (Brandes & Simms 2018).
5. Watershed Management Planning - Position Statement, (BCWWA 2013).
6. Watershed Governance Dispatch, Regional District of Nanaimo Drinking Water & Watershed Protection Program 10-Year Review & Action Plan Update, (RDN 2020).
7. Discussion on Water Issues, Water Supply Association of BC, (WSABC 2018).

8. Clean Safe, and Reliable Drinking Water: Provincial Health Officer’s Drinking Water Report 2012/13 – 2016/17, (Provincial Health Officer 2019).
9. The Protection of Drinking Water, (Office of the Auditor General 2019).
10. Towards Watershed Security: The Role of Water in Modernized Land Use Planning in British Columbia, (Brandes et al. 2020).

The reports document the complexity of source water protection in BC. Common themes identified in these reports, which were written between 2013 and 2020, include the need for inter-agency **collaboration** and **communication**. The reports highlight the **complex and overlapping legislative framework** in BC, identify the need for **a single oversight** agency for drinking water protection. Specific report actions are summarized below, and are grouped by theme to demonstrate the consistent findings of these reports:

Recommendation or Finding
Common Theme: <i>Inter-agency collaboration and improved communication</i>
<ul style="list-style-type: none"> • Improve communications with First Nations and stakeholders (Brandes et al. 2017). • Collaborative government-to-government approach between First Nations and the Provincial government (MECCS 2018). • Complete MOUs to build government-to-government relationships (Brandes et al. 2017). • Improve communications between Ministries, including an improved understanding of triggers (water quality changes in aquifers) (Brandes et al. 2017). • Implementing the WSA to its fullest potential will only happen with the leadership of Indigenous Nations, communities and watershed entities working together with the Province to deploy the Act’s key tools and levers for change – using a shared risk and responsibility approach to water management and governance (Brandes et al. 2018).
Common Theme: <i>Complex and overlapping legislative framework</i>
<ul style="list-style-type: none"> • Review the DWPA, especially with respect to time-delayed and cumulative contaminants (impact on water quality) (Brandes et al. 2017). • Clarity is required for how and where the WSA fits within the Provincial hierarchy of acts and regulations over Crown lands (WSABC 2018). • A Legislative Framework Review is needed to evaluate the available legislative tools to protect sources of drinking water under the DWPA and other acts to identify any gaps, areas of overlap or conflict, and triggers for enforcement action. Establish improved processes for coordinating actions taken to compel compliance to protect drinking water (PHO 2019). • Further develop tools to assure that the WSA and DWPA align with Canadian Drinking Water Guidelines (Brandes et al. 2017). • Develop better indicators of safe drinking water that align with the multiple barrier approach (MECCS 2018).

Common Theme: Need for single oversight/lead agency and defined responsibilities

- There should be a lead agency in the integration and authority for source water protection (WSABC 2018).
- Government needs to clearly articulate roles and responsibilities, and ensure that Ministries and agencies are held accountable (Office of Auditor General 2019).
- Compared with other provinces, BC seems to lag behind in comprehensive watershed management planning. Manitoba, Alberta, Ontario, and Quebec were all cited as examples of having provincially-led, effective management frameworks (BCWWA 2013).
- Higher priority and funding are needed at a Provincial level for source protection (WSABC 2018).
- Areas of challenge with the legislative framework include inter-agency coordination in areas of jurisdictional overlap (Brandes et al. 2019).
- As one of the three pillars of the multi-barrier approach, source water protection is crucial in ensuring that water is used sustainably, and that the water entering drinking water systems is as clean and safe as possible and protected from the effects of resource development, agriculture, and other land-based activities. Source protection is an area with multiple actors and pieces of legislation involved. As such, the Ministry of Health’s Action Plan for Safe Drinking Water called for clear lines of responsibility and effective inter-agency collaboration (PHO 2019).
- Inter-agency groups tasked with overseeing the implementation of the Action Plan have disbanded, leaving an accountability gap (PHO 2019). Note: *A Memorandum of Understanding (MOU) between Interior Health and multiple provincial agencies (SWIRT) discontinued in 2013. SWIRT was replaced with IAMC (Inter-Agency Ministry Committee). The IAMC was disbanded in 2016.*
- Given the complexity of drinking water protection and the challenges faced by the Ministry of Health, it is time for government to clearly articulate roles and ensures that Ministries and agencies are held accountable (Office of Auditor General 2019).
- Two fundamental shifts are needed to fully realize the potential of land use planning to address the multiple urgent risks facing communities and watersheds, fulfill reconciliation commitments, create greater local economic certainty, and drive resilience in the face of a destabilizing climate and changes in hydrology: Water must play a more central role in modernized land use planning. British Columbia needs a provincial land and water planning framework to support a modernized approach to land management (Brandes et al. 2020).

Many of the recommendations come back to a Legislative Framework review for source/ drinking water protection, coordination and accountability. The complexity in source water protection argues that a **lead agency is necessary**. The *SWPC* also notes that *clarity is required on the hierarchy of acts and regulations as they pertain to source water protection on crown lands*.

Status of Okanagan Source Water Protection

Source protection plans consist of a source water assessment, which identifies risks to drinking water safety and availability, and a response plan that contains actions to mitigate those risks. The SWP committee reviewed the status of current source water assessments and response plans within the Okanagan Basin and found that:

1. It has been a significant challenge to complete source protection plans within community watersheds in the Okanagan Basin.
 - Most community watersheds (85%) in the Basin have completed source water assessments but only 50% of these have completed their required response plans to address those risks (SWP committee report 2018).
 - It appears that local water purveyors do not have the expertise or resources to successfully complete source protection plans, a situation dating back more than 10 years.
2. There is little to no monitoring or assessment of the cumulative effects of recreational and industrial land use activities on source water resources within Okanagan Basin community watersheds. What assessments that have been made have lacked the mandate to look beyond a single industry focus (FPB 2019a, for example).
 - This is a gap recently identified by Brandes and Simms (2018) in current watershed governance that can potentially be filled by using the tools within the WSA. The provincial government has signed several recent agreements with Indigenous communities to pilot WSA tools (in the Nicola watershed, for example).
 - To date these tools have not been developed or implemented by the province in the Okanagan Basin.
3. Unmitigated risks primarily related to road development and stream crossings have degraded water quality and critical fish habitat in Pennask Creek immediately outside the basin (FPB 2020). Given the extent of similar findings in this study in other watersheds in the BC interior, similar conditions likely exist within the Okanagan Basin:
 - This situation is adding avoidable extra costs to purveyors for water treatment.
 - The cost of protecting drinking water is borne by the water purveyors and local government with no authority to regulate these activities.
 - Ever increasing land use pressures in most community watersheds within the Okanagan Basin suggest risks to water quality are increasing. In addition to roads, increasing forest stand removals, as expressed in equivalent clearcut area, enhance spring peak runoff which increases the risk of flooding and sedimentation in watersheds (Winkler and Boon 2017).
4. Communities with deep lake intakes for water supply have struggled to achieve intake protection zones, given the many levels of government involved. Federal, provincial and local government acts, regulations and bylaws govern activities, such as transportation, docks, marinas, storm water outfalls, permits to discharge, and mining. There has been little support to establish intake protection zones on lake intakes. In Ontario, the *Clean Water Act* requires communities to develop collaborative, locally driven, science based protection plans for their existing and future sources of drinking water.
5. The 2019 Okanagan Sustainable Water Strategy Actions 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, and 2-8 speak to source water protection. Recommendations for the OBWB include advocating, communicating and coordinating among levels of government.

References

- Brandes, O., J. Baltutis, J. O'Riordan and J. Wilson 2017. From Crisis to Solutions: Towards Better Source Water Protection and Nutrient Management in the Hullcar Valley - Independent Recommendations Report. Retrieved from Hullcar Aquifer Information: <https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-permitting-andcompliance/hullcar/review-docs/POLIS-hullcar.pdf>
- Brandes O. and R. Simms 2018. Advancing Freshwater Protection: Tools and Opportunities in British Columbia's Water Sustainability Act. POLIS Project on Ecological Governance, Centre for Global Studies, University of Victoria, Victoria, BC 16pp. Available from: <https://poliswaterproject.org/files/2018/09/POLIS-WSATools-webfinal.pdf>
- Brandes O., R. Simms, J. O'Riordan and G. Bridge 2020. Towards Watershed Security: the Role of Water in Modernized Land Use Planning in British Columbia. POLIS Project on Ecological Governance, Centre for Global Studies, University of Victoria, Victoria, BC. 51pp. Available from: <https://poliswaterproject.org/files/2020/07/DirectionPaperTWS.pdf>
- British Columbia Wastewater Association (BCWWA) 2013. Position Statement: Watershed Management Planning. Unpublished report. 11pp.
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MEMORANDUM

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.2

File No. 0550.04

To: OBWB Directors
From: Kellie Garcia
Date: March 31, 2021
Subject: Policy and Planning Specialist Report

Collaborative Source Water Protection in the Okanagan Project

The OBWB has received \$50,000 through the Healthy Watersheds Initiative (HWI) to continue our work on source water protection. The HWI, administered by the Real Estate Foundation of BC and Watersheds BC, is a provincially-funded program to stimulate British Columbia's economic recovery through investments in community-driven watershed conservation and restoration projects.

We will use the funding to facilitate a more coordinated and collaborative approach to source water protection by providing guidance to water suppliers, building support for source protection among decision-makers, facilitating knowledge-sharing between communities, and helping to build relationships between Indigenous and non-Indigenous peoples. Specifically, we will finish the Source Protection Toolkit, build its website, and pilot it in an Okanagan community. Learnings from the pilot will be shared with other communities in the Okanagan and beyond. We will develop and deliver an extensive outreach and education program using the toolkit as a framework, with webinars for local and provincial government staff and presentations to elected officials. Indigenous advisors will be contracted to help us bring Indigenous perspectives into the toolkit, webinars, and presentations and to develop guidance for water suppliers working on source protection plans.

Agriculture Water Supply Communications Project

The final year of this 3-year project is in full swing. Five water suppliers have confirmed their participation this year: Kaleden, RDOS, Penticton, Greater Vernon Water, and Lake Country. I'm waiting to hear back from Kelowna, West Kelowna and Osoyoos. Glenmore-Ellison Improvement District and Oliver have declined. The first e-alerts will go out in April and will include notifications of irrigation turn-on dates and information about snow pack conditions, spring precipitation forecasts, and water supply levels.

Approximately 1,469 agriculture customers are currently signed up to receive water supply alerts (Kelowna=839, RDOS=192, GVW=107, Penticton=94, Lake Country=86, Summerland=60, West Kelowna=34, Kaleden=26, GEID=16, Oliver=15). This is up by about 480 from last year, and represents approximately 35% of the connections in these water supply areas. The number will likely change because Kelowna is transitioning to a new communications platform and customers will need to re-register to receive water supply emails.

Water suppliers sent 24 alerts during the 2020 growing season. Message examples are included below.

- Greater Vernon Water sent 11 (six were regarding water main breaks),
- Summerland sent five (two were regarding COVID and temporary workers),
- RDOS sent three,
- Kelowna sent two,
- Lake Country sent two, and
- Penticton sent one.

Fri, Jun 26, 3:29 PM

As of May 1, snow pack levels at the Headwaters and Isintok snow survey sites were 67% and 112% of the historical average. For comparison, on May 1, 2018 snow pack levels were at 270% and 243% of the historical average. As of May 15, no snow remained at the survey sites. Some of the Districts reservoirs started spilling as early as the beginning of May and now all of the District's reservoirs are spilling.

Tue, Apr 28, 3:31 PM

Welcome to the first 2020 R D O S Water Supply and Agricultural Drought E-Alert. Water supply in the region's systems are currently at normal. The snow pack was over 120 percent of normal, and is now melting. March and April experienced lower than average precipitation, and long-range weather forecasts are for continuing below average precipitation and above average temperatures. For more info visit the R D O S website: www.RDOS.bc.ca, click on Water Systems Tab, then click on Provincial Water Bulletins Tab. Thank you for your continued efforts to use water wisely to reduce the risk of shortage later in the season.

Fri, Sep 11, 12:32 PM

Greater Vernon Water - Agricultural Turn Offs begin Sept. 15. Please leave the meter on until the service is turned off by Operations staff, which may take about two weeks to reach all customers. Apply for late turn off before Sept. 15 - call [250-550-3700](tel:250-550-3700) to get info. Customers must protect the meter and backflow preventer from freezing. Also take care to protect the wires attached to the meter and the remote reader. Winterization tips can be found here: http://www.rdno.ca/docs/protection/backflow_preventer.pdf

Tue, Aug 11, 6:15 PM

Reservoir levels are normal for this time of year however conserving water in the upland reservoirs for 2021 is important as it's uncertain how much snow the area will receive this coming winter. It is vital that all water users, including farmers, promptly fix leaks on their irrigation systems and only water as needed. Irrigation turnoffs are scheduled for early to the middle of October. Before the cold weather sets in, property owners have the responsibility to ensure that backflow preventers do not freeze or get damaged. Water Use Efficiency Tips visit www.obwb.ca/ag. Log in at www.obwb.ca/alerts if you would like to change how you receive these updates. Questions - call [250.766.6677](tel:250.766.6677)

Fri, Jun 12, 1:43 PM

RDOS Agricultural Drought Update: Groundwater well systems are seeing an average recharge of aquifers. Lake extraction water systems are operating as normal. All at STAGE Normal. Forecasts are for warmer weather next week-high 20's. Meteorologists expect a dry summer, so water efficiencies now, can help extend water supplies for producers, into the late summer/fall. Thank you.

OBWB Toolkit Updates and Websites

With the release of our updated homeowners guide to using rain as a resource (Slow It! Spread It! Sink It!) and the near-release of the Source Protection Toolkit, we thought it was a great time to also revisit and update our 2009 Groundwater Bylaws Toolkit and 2012 Topsoil Bylaws Toolkit. (Both toolkits are included as appendices to the Green Bylaws Toolkit, a project of the Stewardship Centre for British Columbia, which is also currently being updated by their project team.) We will also create websites for the toolkits that link with the Source Protection Toolkit website. The goal is to have an interconnected suite of toolkit websites that also coordinate with our OkWaterWise platforms. And then to promote the toolkits any and every opportunity we have!

The Groundwater Bylaws Toolkit provides local governments with practical land use management tools to protect groundwater. It presents the basic principles of hydrogeology and data management, outlines the jurisdiction for managing groundwater, and provides sample policy and bylaw language that can be tailored to specific areas. Much has changed on the regulatory front since its release in 2009, with the new *Water Sustainability Act*, the Auditor General Report on the Protection of Drinking Water, and the new regulation called the Code of Practice for Agricultural Environmental Management coming into effect. Climate change has also become a bigger deal since 2009 so we will need to reflect that in the toolkit. We would also like to see how Indigenous perspectives can be better showcased in the toolkit.

The Topsoil Bylaws Toolkit explains the importance of topsoil for rainwater management, outlines jurisdiction for managing topsoil, presents the basic principles of topsoil science and management, and provides sample policy and bylaw language that can be tailored to specific areas. This toolkit probably won't need as many updates as the groundwater toolkit but a quick scan to make sure the content is fresh and relevant will be useful.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.3

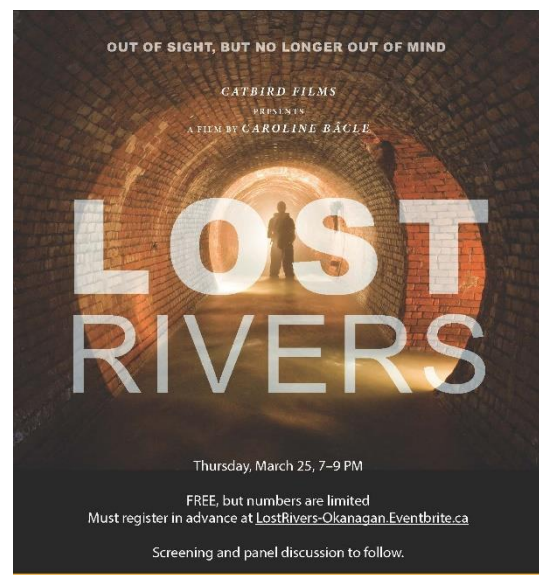
File No. 0550.04

To: OBWB Directors
From: Corinne Jackson
Date: March 31, 2021
Subject: **Communications Director Report**

UN World Water Day-Canada Water Week

This year, Canada Water Week was March 21-27 with UN World Water Day always marked on March 22. The OBWB and its Okanagan WaterWise program have traditionally held a public outreach event to celebrate water and in recent years held a number of popular film screenings. This year, we partnered with UBC Okanagan Institute for Biodiversity, Resilience and Ecosystem Services (BRAES) to present a special online screening of “Lost Rivers” on March 25, followed by a panel discussion.

The film features efforts to daylight and restore creeks in cities across the world in an effort to address various challenges, including climate change. Our panel included some of those involved in similar efforts in the Okanagan, including Kari Alex with Okanagan Nation Alliance and Darryl Arsenault of Arsenault Environmental. We also had UBC Okanagan’s Aleksandra Dulic presenting on the upcoming WaterWays multi-media project, and our own Anna Warwick Sears.



In celebration of UN World Water Day and Canada Water Week, event presented by:



We have now posted the discussion on our YouTube channel which can be found at <https://youtu.be/uwZ0qp-nEfw>. Within the video description we have included a link to the actual film for those who haven't seen it, or would like to see it again. The direct link is <https://www.youtube.com/watch?v=6-fQn5jwhXE&t=0s>.

“Make Water Work” & “Don’t Move A Mussel” campaigns

As noted at the last board meeting, we had a discovery meeting on March 1 between Habit Creative Marketing and our “Make Water Work” local government and utility partners. A similar meeting for the “Don’t Move A Mussel” campaign was held March 15. I have reviewed the MWW meeting summary report and should be receiving a similar report for DMM in the next few days. The next step is a research and audit phase with a report detailing strategy and timeline.

Moss balls update

As most are likely aware, we had a scare in early March, regarding invasive zebra mussels. A day after our Tues. March 2nd board meeting, and after the board asked staff to send a letter to the B.C. government regarding invasive mussel concerns and recommendations for action, we started to hear about mussel-infested moss balls being distributed through the aquarium industry in Washington state. The moss balls are a species of green algae, typically used to improve aquarium water quality. The infested product originated from Ukraine, which is known to be home to the zebra mussels. The OBWB's letter was sent and a news release issued. And then on Friday, March 5, I received an email from provincial staff, alerting us that they would be issuing a notice on social media, asking B.C. residents to inspect their aquariums for the moss balls, to report them and destroy them. Of course, I also sent out the alert on our social media channels. On Sat. March 6, I was contacted by a local news outlet for an interview about our letter and at that time I alerted them to the moss ball situation and encouraged them to contact the province, which they did. Later that day we had heard of B.C.'s first confirmed mussel-infested moss ball reported in Terrace.



Photos: (left) Zebra mussel on moss ball, courtesy BC Conservation Officer Service, (right) zebra mussels contained on moss balls first discovered at a Seattle pet store, courtesy US Geological Survey.

Okanagan stores that carry aquarium plants were inspected by the B.C. Conservation Officer Service that weekend and all moss balls, no matter where they were imported from, were removed. By the following week, the province had determined that infested moss balls were sold at various locations throughout the Lower Mainland and there had been a further report of the product in Invermere, bought online. You can find more on the local inspections [here](#). An update will be provided at the next board meeting.

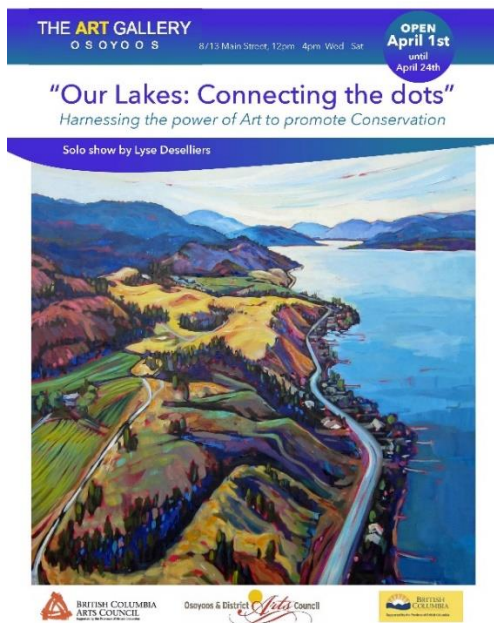
Our Relationship with Water in the Okanagan – Education guides

Work is continuing on the project “*Our Relationship with Water in the Okanagan – Explorations in Outdoor Education to Support the B.C. Curriculum.*” I have had several conversations with various educators in the valley and am developing a plan to facilitate awareness for, and distribution of, the materials.

We have also been invited to present at an upcoming district-wide Vernon Professional Development Day on the guides and other Okanagan WaterWise education materials.

Other communication initiatives

I was contacted by Penticton artist Lyse Deselliers a couple months ago about a proposed art show in Osoyoos, related to the waters of the Okanagan. We provided background information on the OBWB, water issues in the valley, and the names of others involved in water protection. Her exhibit is open April 1-24. More information is in the poster below.



Summary of OBWB-Related News Media

- Feb. 27 “Okanagan Basin Water Board seeks answers on commodification of resource,” *Castanet*
- Feb. 27 “Closure of Polson Spray Park sparks call for temporary option for kids,” *Castanet*
- Feb. 27 “Okanagan Basin Water Board pushes province for more measures to keep invasive mussels at bay,” *Castanet*
- Feb. 28 “Okanagan snow pillow readings could 'go either way' as La Nina trend softens,” *Castanet*
- Feb. 28 “Milfoil harvesting in Okanagan lakes has been a success - but more required,” *Castanet*
- March 1 “Central Okanagan residents to benefit from yard waste pickup; Boost soil, save water,” *Kelowna Capital News*
- March 3 “Okanagan facing extreme flooding risk - Water board calls for updated Okanagan Lake level management,” *Kelowna Capital News, Vernon Morning Star, Penticton Western News, Lake Country Calendar*
- March 3 “One-third of boats (surveyed) entering Okanagan Lakes not checked for mussels,” *VernonMatters.ca*
- March 4 “[Review of Okanagan water management needed to prevent flooding: water board](#),” *Global Okanagan*
- March 4 “Okanagan Basin Water Board calls for stronger invasive mussel protection,” *Kelowna Capital News, Penticton Western News, Salmon Arm Observer*
- March 4 “Outdoor water education guides available,” *Kelowna Capital News*
- March 5 “[OBWB wants new laws protecting Okanagan from invasive mussels](#),” *Castanet.net*
- March 5 “Okanagan is #1 destination for mussel-infested watercraft,” *AM1150*
- March 6 “[Invasive mussels found in B.C. woman's aquarium](#),” *Global Okanagan*
- March 8 “‘It's a big deal’ - B.C. conservation officers on alert after invasive mussels found in aquarium,” *InfoNews.ca*
- March 11 “West Kelowna council seek funding to create new flood risk plan,” *Kelowna Capital News*
- March 15 “[Battling floods and droughts in the Okanagan depends on more than a dam in Penticton](#),” *InfoNews*
- March 19 “Celebrate 'Water Week' with free screening of 'Lost Rivers',” *Castanet.net*
- March 19 “Pre-season maintenance at local sports fields – irrigation optimization pilot funded by Water Board conservation grant program,” *AM 1150*

- March 24 "Opinion: Barry Gerding - Climate change losing proposition for Conservatives," *Kelowna Capital News*
- March 27 "[‘Daylighting’ lost rivers helps combat climate change, say Okanagan experts.](#)" *Kelowna Capital News, Summerland Review, Salmon Arm Observer, Lake Country Calendar*

Recent Presentations

- Feb. 18 "AquaHacking – Ask me anything session" to University students – Carolina Restrepo Tamayo
- March 2, 3, 4 "Source Protection Toolkit" to B.C. Ministry of Forests, Lands and Natural Resource Ops staff, forest and range licencees, water suppliers – Kellie Garcia
- March 24 "Governance structure of OBWB, OWSC, and Osoyoos Lake Board of Control" to Columbia River Treaty Local Government Committee – Anna Warwick Sears and Sue McKortoff

Upcoming Presentations

- May 21 "Dip Your Toes into Okanagan Water Education – An Introduction to *Our Relationship with Water in the Okanagan* Education Guides" to District-Wide Vernon Teachers Professional Development Day Conference – Corinne Jackson

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.4

To: OBWB Directors
From: Carolina Restrepo Tamayo
Date: March 31, 2021
Subject: **Special Projects Coordinator report**

During March, I have been working on two initiatives: The AquaHacking Challenge 2021 and the Osoyoos Lake Water Science Forum 2021, Below is a short report on the status of each of them.

Osoyoos Lake Water Science Forum (OLWSF) 2021

- Steering Committee: Next meeting is scheduled for the week of April 5th
- Finance Committee: Next meeting is scheduled for the second week of April. As of March 29th the contributions confirmed for the conference are:
 - International Joint Commission: \$20,000 USD
 - OBWB: \$10,000
 - Town of Osoyoos: \$ 5,000 in-Kind
 - Province (FNLRO) \$ 5,000
 - Environment Canada Confirmed – Pending amount
 - US Geological Survey Confirmed – Pending amount
 - Real Estate Foundation of BC Grant application pending confirmation
- Program Committee: Next meeting is scheduled for the second week of April. During the month of March, the subcommittee in charge of the facilitation by ONA and OIB has met almost on a weekly basis, and a draft agenda is ready. An update on this progress will be presented at the steering committee meeting in April.

AquaHacking

Current areas we are working on:

- Recruiting: Recruiting at Western Canadian universities began in early January. We are reconnecting with the network we built last year for the B.C. challenge, as well as working with partners to establish additional university contacts in Alberta, Saskatchewan and Manitoba. As of March 29th we have 67 participants. Last effort on recruiting activities are planned for the first two weeks of April. Upcoming info-sessions and more information about the challenge can be found [here](#).
- Sponsors: During March an application to the Real Estate Foundation of BC was submitted for the remaining funding for the challenge.
- Advisory Committee meeting will take place on Thursday April 1st.
The virtual Semi-final will take place on May 15th and the official announcement of the 4 finalist teams will take place via Facebook live on Tuesday, May 18th at 4 p.m. Planning for the event is in progress including the recruiting for the judges.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.5

To: OBWB Directors
From: Anna Warwick Sears
Date: March 31, 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. We are really looking forward to when we can all share the office space again, but we are fortunate to be able to work remotely for most of our activities. Milfoil staff are observing COVID-19 safety protocols while moving equipment, and otherwise work alone.

CIBC Banking Resolution

We have recently moved our banking to the CIBC. Our account managers have requested that the OBWB approve the attached resolution regarding electronic signatures (see 6.5.1 attached to this memo).

Schedule for May OBWB/OWSC Joint Meeting

Reminder that on our May 4th meeting, (**Scheduled for 9 a.m. to 12 p.m.**) we will have a presentation by Ted Zimmerman, Executive Director of the Water Protection & Sustainability Branch of B.C.'s Ministry of Environment and Climate Change Strategy, presenting on the development of B.C.'s new Watershed Security Strategy. We will also have presentations from the Okanagan Water Stewardship Council committees, which have been researching various water issues. The board will have a shorter "regular" meeting to address any urgent business, and all of these activities will result in a longer than normal session.

Flood Resilience Studies

The report for the lake level management review, titled: *Gap Analysis and Recommendations of studies needed to update the Okanagan Lake Regulation System and its Operating Plan* has been completed and submitted to the province. As we did the report under contract to the B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development, we cannot share or distribute the report until they review it and make it public.

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.

The RDCO, with funding from the UBCM’s Community Emergency Preparedness Fund, is kicking off their Flood Mitigation Planning project; Phase 3 of the RDCO Flood Management Plan. The OBWB will be closely involved with the project. I see this as an excellent model for all Okanagan local governments, with impacts reaching beyond the Central Okanagan. The first steering committee meeting for this project is scheduled for April 14th.

Roundtable Session on Water with Minister of State Nathan Cullen

On April 6, following the OBWB meeting, I will be attending a roundtable session on water with Minister of State Nathan Cullen. This relates to the province’s stated 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.”

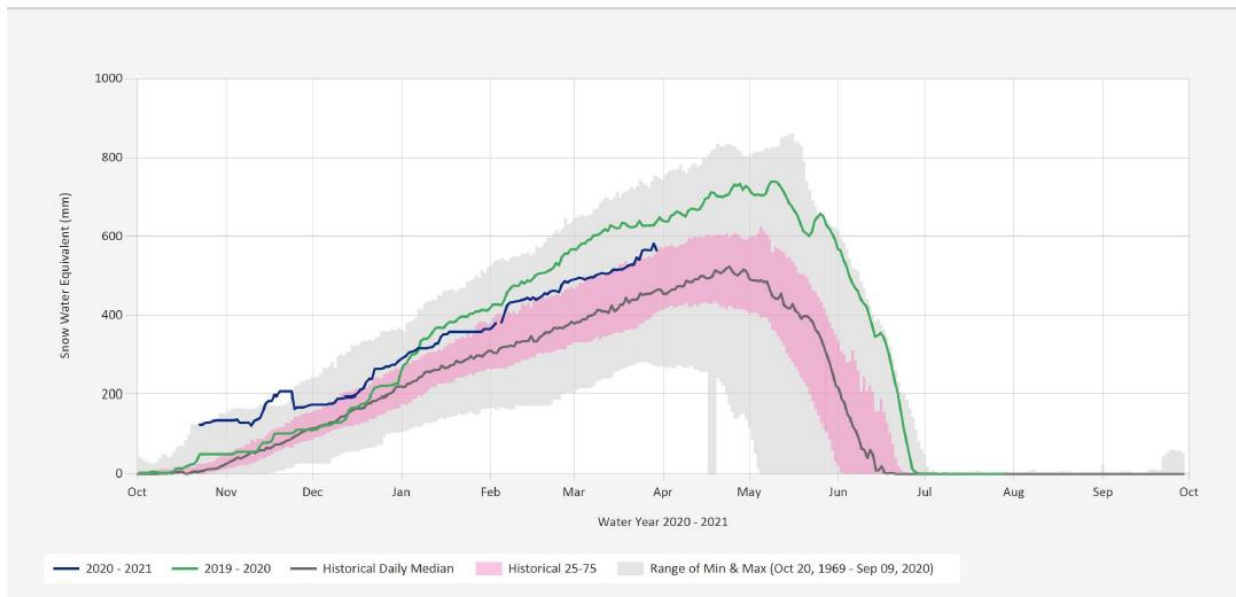
Weather Report

According to the B.C. River Forecast Centre, by March 15, on average, nearly 90% of the total seasonal snowpack has accumulated. The April 1st 2021 Snow & Water Supply Bulletin will be issued on April 9th. The April snow bulletin is considered the benchmark to compare with other years. As you can see in the charts below, the snow-water has been consistently above average this year.

While we are still officially in La Nina conditions, we haven’t experienced the extreme precipitation that usually accompanies this trend in the Pacific Ocean. Climate agencies are still reporting that there is a 60% chance of a transition from La Nina to a neutral condition this spring.

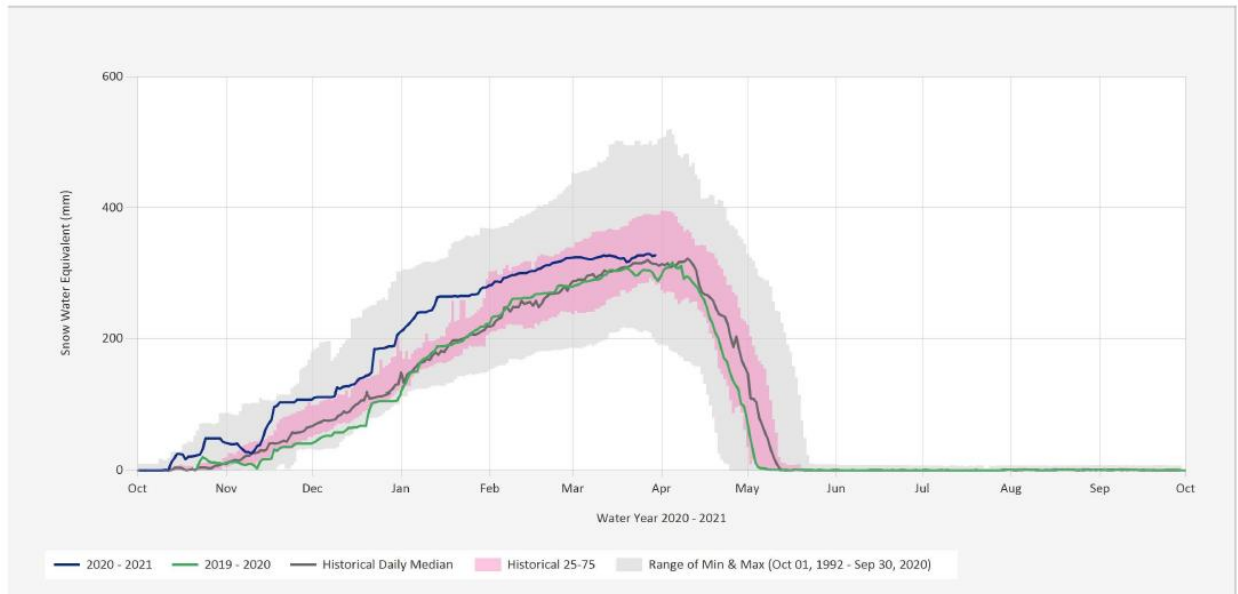
Mission Creek Snow Pillow – March 30, 2021

Source Data: SW.Daily@2F05P
Location: Mission Creek, Latitude: 49.94889, Longitude: -118.94889, Elevation: : 1780 m



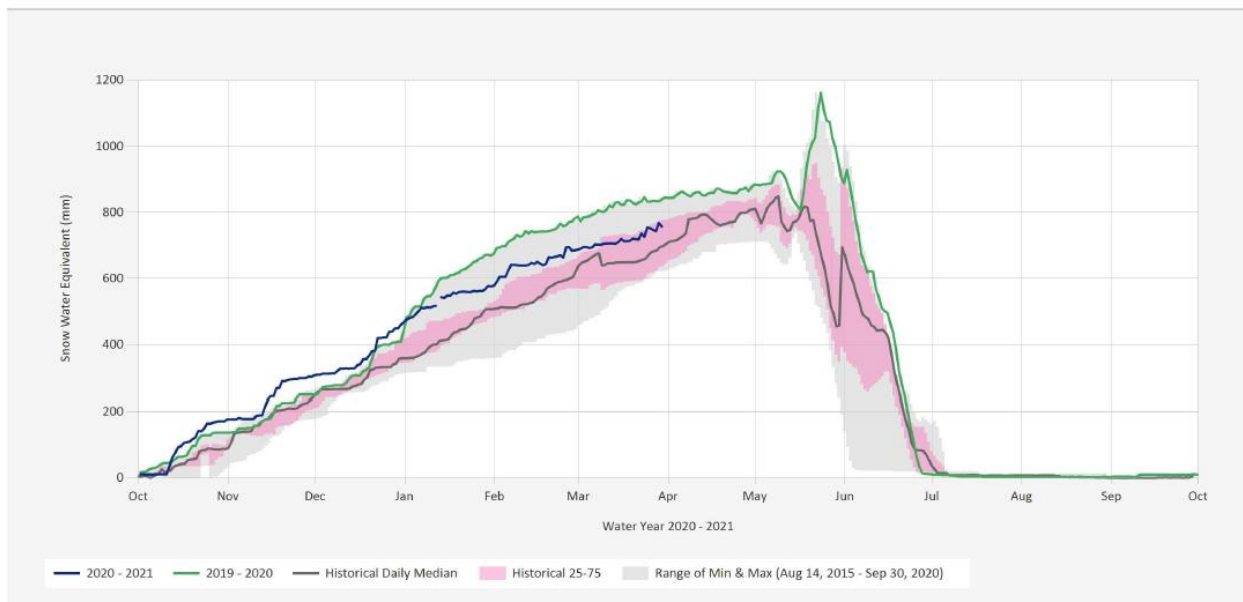
Brenda Mines Snow Pillow – March 30, 2021

Source Data: SW.Daily@2F18P
Location: Brenda Mine, Latitude: 49.862361, Longitude: -119.982111, Elevation: : 1460 m



Silver Star Snow Pillow – March 30, 2021 (Note there are very few years of data at this site, so the historical ranges are more erratic and less comparable.)

Source Data: SW.Daily@2F10P
Location: Silver Star Mountain, Latitude: 50.37136, Longitude: -119.06211, Elevation: : 1840 m





Agreement re: Facsimile Signatures on Cheques etc.

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.5.1

In consideration of Canadian Imperial Bank of Commerce (the "Bank") dealing with or continuing to deal with the undersigned in the way of its business as a bank, the undersigned hereby authorizes and directs the Bank to pay all instruments purporting to be cheques, drafts or orders for the payment of money issued by the undersigned and purporting to bear facsimile signatures of any of the persons who from time to time are authorized to sign such instruments for and on behalf of the undersigned.

And the undersigned further agrees that:

1. all such instruments may be dealt with by the Bank to all intents and purposes and shall bind the undersigned as fully and effectually as if signed in the handwriting of and duly issued by such persons for and on behalf of the undersigned; and
2. the undersigned will provide the Bank with specimens of such facsimile signatures which may be acted upon by each branch of the Bank with which any dealings are had by the undersigned until notice to the contrary or of any change therein has been given to the Manager or Acting Manager of such branch.

The undersigned acknowledges receipt of a copy of this Agreement.

Dated at _____ this _____ day of _____ , _____



OKANAGAN BASIN WATER BOARD
Firm or Corporation Name in Full

Per _____

Per _____

Note: The corporate seal, if one exists, should be affixed (BMO II-3-12.03).
For a corporation, the resolution printed on the reverse must be completed.



Resolution re: Facsimile Signatures on Cheques etc. by a Corporation

Resolution of the Board of Directors of

_____ (the "Corporation")

Resolved that:

1. the Corporation create and issue to Canadian Imperial Bank of Commerce (the "Bank") an agreement respecting facsimile signatures on the Bank's Form 330 (the "Agreement") relating to the issuance of instruments under facsimile signatures of authorized officers of the Corporation;
2. the President or a Vice-President together with the Treasurer or Secretary or any one of such officers together with a Director are hereby authorized for and on behalf of the Corporation to execute under its corporate seal, if one exists, and deliver the Agreement to the Bank with such alterations, additions, amendments and deletions as may be approved by such persons executing the same, whose signatures shall be conclusive evidence of such approval; and
3. any one of the persons designated in paragraph 2 is hereby authorized for and in the name of the Corporation to execute and deliver under the corporate seal or otherwise all such other documents and to do all such other acts and things as may be necessary or desirable to give effect to this Resolution or as may be reasonably required by the Bank.

We hereby certify that the foregoing is a true copy of a Resolution passed by the Board of Directors of the Corporation on the

_____ day of _____, _____ and recorded in the Minute Book of the proceedings of the said Board of Directors, and that the said Resolution is now in force and effect.

Dated the _____ day of _____, _____



President

Secretary

Note: The corporate seal, if one exists, should be affixed (BMO II-3-12.03).

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 6.6

File No. 0550.04

To: OBWB Directors
From: James Littley
Date: March 30, 2021
Subject: **Operations and Grants Manager Memo**

Milfoil Program Update

Our winter de-rooting work is now complete in Okanagan Lake and Wood Lake. We are continuing work in Kalamalka Lake and recently started in Osoyoos Lake. We are also working with Ecoscape Environmental Consultants Ltd. to study turbidity caused by our rototillers as part of our notification requirements from Department of Fisheries and Oceans. We also continue to make progress in our discussions with the province regarding our application for permit expansions in Okanagan, Wood and Osoyoos Lake. Provincial staff have requested some additional information to support the new permit requests and we are working to provide that information.

WCQI Applications

This year we received 24 applications for WCQI funding, asking for over \$575,000 with \$350,000 available. After conducting a comprehensive review and scoring according to the board-approved scoring criteria, staff have prepared funding recommendations for the board which will be presented in a closed meeting with the board's decision made public through a rise and report.



Okanagan Basin Water Board
Regular meeting
April 6, 2021
Agenda No: 9.1

Reference: 261672

March 15, 2021

Anna Warwick Sears
1450 KLO Road
Kelowna, BC V1W 3Z4

Dear Ana Warwick Sears,

Thank you for your emailed letter to Minister Conroy and Minister of State Cullen dated February 25, 2021. I have been asked to respond on behalf of the Ministers.

Okanagan and Kalamalka Lakes have experienced significant high water events in three out of the past four years. Climate change projections including those described in the Okanagan Mainstem Floodplain Mapping report you mention in your letter indicate that these events will become more common in the coming decades. Responding to flood risks and ensuring the province is better prepared is a key priority for this Ministry.

As you are aware, the process of reviewing and updating the Okanagan Lake Regulation System (OLRS) is currently underway. FLNRORD has partnered with the Okanagan Basin Water Board to undertake a gap analysis study of information and data required to address all aspects of this issue including flood control, availability of water for domestic and agricultural uses, fish habitat requirements and other environmental needs. We expect the gap analysis to be completed in the near future and will use resulting data to inform us in developing potential options and solutions for improvement of OLRs management. First Nations engagement is also a government priority, Okanagan Nation Alliance staff have contributed to the gap analysis and will continue to be involved in this ongoing process.

Thank you for your ongoing collaboration with Ministry staff and for expressing your concerns regarding a review of Okanagan Lake Regulation Systems operations.

For further information, please contact Tony Zanotto at 778 943 6867 or by email tony.zanotto@gov.bc.ca.

Sincerely,

Gerry MacDougall
Regional Executive Director
Thompson Okanagan Region

Pc: Honourable Katrine Conroy, Minister of Forests, Lands, Natural Resource Operations and Rural Development

Honourable Nathan Cullen, Minister of State for Lands and Natural Resource Operations