Okanagan Basin Water Board Meeting Agenda

DATE: Tuesday, March 7, 2023

TIME: 10 a.m. to 12 p.m.

PLACE: Online

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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 February 7, 2023 held online. *(page 1)*

5. DELEGATION
   5.1 Lisa Scott, Okanagan and Similkameen Invasive Species Society (OASISS), presenting an overview of 2022 outreach efforts to prevent introduction of invasive mussels.

6. STAFF REPORTS
   6.1 Executive Director Report *(page 6)*
   6.2 Policy and Planning Director's Report *(page10)*
   6.3 Water Stewardship Director Report *(page 12)*
   6.4 Office and Grants Manager Report *(page 16)*
   6.5 Communications Director Report *(page 17)*

7. NEXT MEETING
   7.1 The next meeting of the Okanagan Basin Water Board will be **Tuesday, April 4, 2023, at 10 a.m. at the Regional District of North Okanagan, Coldstream B.C.**

8. 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. From time-to-time, the board will be holding its meeting online. If you are interested in attending this online meeting, please contact our Communications Director Corinne Jackson at corinne.jackson@obwb.ca for further details. Thank you for your patience and understanding.*

Okanagan Basin Water Board
Regular meeting
March 7, 2023
Agenda No: 4.1

MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD HELD JANUARY 10, 2023, ONLINE

OKANAGAN, B.C.

PRESENT

Chair Sue McKortoff	Regional District Okanagan-Similkameen
Vice-Chair Blair Ireland	Regional District Central Okanagan
Alt. Director Gord Lovegrove	Regional District Central Okanagan
Director Charlie Hodge	Regional District Central Okanagan
Director Victor Cumming	Regional District North Okanagan
Director Rick Fairbairn	Regional District North Okanagan
Director Christine Fraser	Regional District North Okanagan
Director Doug Holmes	Regional District Okanagan-Similkameen
Director Rick Knodel	Regional District Okanagan-Similkameen
Director Tim Lezard	Okanagan Nation Alliance (ONA)
Director Bob Hrasko	Water Supply Association of B.C.
Director Scott Boswell	Okanagan Water Stewardship Council (OWSC)

GUESTS

Simone Runyan	Regional District Okanagan-Similkameen

STAFF

Anna Warwick Sears	Executive Director
Nelson Jatel	Water Stewardship Director
James Littley	Deputy Administrator
Carolina Restrepo-Tamayo	Office and Grants Manager
Corinne Jackson	Communications Director
Kellie Garcia	

1. CALL MEETING TO ORDER

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

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

Staff, directors and guests were invited to introduce themselves.

2. INTRODUCTION OF LATE ITEMS

No late items were brought forward.

3. APPROVAL OF AGENDA

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of Jan. 10, 2023 be approved."

CARRIED

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of Jan. 10, 2023,

held online.

"THAT the minutes of the regular meeting of the Okanagan Basin Water Board on Jan. 10, 2023, held online, be approved."

CARRIED

5. FILM PRESENTATION

The board was shown a pre-release screening of the short film "Nk'mip (Osoyoos Lake) – The Heart of the Watershed," providing an overview of the October 2022 Osoyoos Lake water science forum.

6. STAFF PRESENTATIONS

6.1 Water Stewardship Director presentation: Overview of Water Management Projects

Dr. Jatel provided background on the OBWB's Water Management Program, including the Okanagan Water Stewardship Council. The council is the technical advisory body to the board and was included in the original 1970 mandate of the OBWB, to be a connection back to the community. The council is a multidisciplinary body that can make recommendations to the board, and the board can also ask the council to look at issues. The council begins a new term in April 2023 and has a number of committees, looking at various local water issues, including agriculture and irrigation, wetlands, climate change, and more.

Additional water management projects include the OBWB's Okanagan Hydrometric Service, re-introducing and installing new hydrometric stations in the valley with Okanagan Nation Alliance (ONA) and Environment and Climate Change Canada; and the Environmental Flow Needs (EFN) work with ONA, looking at the water needs of fish and helping ensure these needs are met. The EFN project has been ongoing for a few years and is now helping the Province of B.C. and local water managers make better decisions to ensure proper flows. The OBWB also worked with the province and local governments a few years back to bring a number of groundwater monitoring wells back online. The purpose was to better understand what water was available and help local government staff make better planning and development decisions. Two additional monitoring wells, one near Vernon and one west of Osoyoos, are set to come online in the spring, Dr. Jatel added. As well, staff are looking to revisit the Mission Creek groundwater study.

Other projects include a two-year study with UBC Okanagan and other partners to look at the value of irrigation for agriculture, continued wetlands mapping and planning initiatives, and an Okanagan Lake water quality monitoring initiative.

In response to questions, the board was reminded that, as of March 1, 2022, the B.C. Government requires farms and water utilities using groundwater to license their well-water extractions. If land is sold without a well being licensed the new owner may lose their water rights. The importance of wetlands in helping address groundwater and stream temperatures was also discussed.

6.2 Communications Director presentation: Overview of Communications Program

Ms. Jackson provided an overview of the OBWB's communications program, including an update on the board's external communications protocol. Additional communications, she added, can be divided into internal and external efforts.

Internal communications currently conducted include: monthly board agendas, minutes, and board reports with highlights from the board meetings. Here is where internal and external communications crossover in an effort to promote transparency, Ms. Jackson added. The minutes

and board agendas are posted on the OBWB website. Agendas are also sent to local and senior government elected officials and staff, and media. The Board Reports (with highlights from the board meetings) are provided as an external communications piece to local and senior government electeds and staff, media, and OBWB-Okanagan WaterWise social media channels. Staff put out an annual report, hold an annual meeting, and during drought will put out Okanagan Drought Bulletins which are provided to all those noted above.

External communications include: the OBWB website with information on the history of the organization, its programs and projects, and more. Okanagan WaterWise is the OBWB's outreach and education program which has a website that includes information on where our water comes from, how it's used, the importance of being WaterWise and how to protect water in and outside the home, in business, in schools and in nature. There are several online and printed resources available for free to the public, business community, educators and students. OkWaterWise also has two spring-summer outreach campaigns: "Make Water Work" to address outdoor residential water conservation and "Don't Move A Mussel" to help protect Okanagan waters from an invasive mussel infestation.

Additional communication efforts include news conferences and news releases, presentations to various government agencies and the public. The Communications Director also responds to media requests, public information requests, and manages the board's social media channels (Facebook, Twitter, Instagram and LinkedIn).

In response to questions, it was noted that the OBWB has also contributed Op-ed articles, and writes and sends letters to government regarding pressing water concerns, as well as letters of support for organizations that are working on OBWB-related issues.

6.3 Office and Grants Manager Presentation: Overview of Water Quality & Conservation Improvement (WCQI) Grants Program

Ms. Restrepo-Tamayo provided an overview on the WCQI program noting its purpose it to encourage collaborative approaches to water management, promote uniform standards and best practices, knowledge-sharing, innovative solutions, and help local organizations address water issues and enhance valley-wide sustainable water use.

The program began in 2006 and today provides grants between $3,000 and $30,000 with a total of $350,000 available. Proposals can be multi-year projects, Ms. Restrepo-Tamayo added.

Since its beginning, the program has awarded $5.5 million to 315 projects, including drought and flood preparation efforts, groundwater studies, water metering, education, irrigation, xeriscaping, mapping, water treatment studies, and more.

Groups and projects that are not eligible for funding include private utilities, for-profits, those located outside the basin and retroactive funding for past projects.

Each application is rated looking at whether project methods are appropriate for objectives, the potential outcome for water protection, valley-wide benefit, use of best practices, collaboration, budget and timeline and quality of proposal. The board also approves an annual theme that is eligible for bonus points.

7. STAFF REPORTS

7.1 Executive Director Report

Dr. Sears noted a couple staff updates, with Ms. Garcia rejoining the OBWB as part-time Policy

and Planning Director, and the hiring of Sandra Shira as an intern for OBWB's new climate indicators project.

The board was told that the BC Ministry of Environment and Climate Change Strategy was able to bring the Mission Creek snow pillow data back online in mid-January which will help water managers plan for water use throughout the irrigation season and for returning salmon.

"THAT the Executive Director's Report, dated Feb. 1, 2023, be received."
CARRIED

7.2 Deputy Administrator Report

Mr. Littley told the board that winter milfoil rototilling in Okanagan and Wood Lake is now complete, and the crew is monitoring water levels on Osoyoos Lake to launch the machine and conduct weed control there as soon as its possible.

Directors were also updated on the Water Board's topobathymetric LiDAR being used by a range of diverse partners for projects beyond its original intent – demonstrating the extensive value of gathering these kind of data and making them open and available to the community.

"THAT the Deputy Administrator Report, dated Jan. 31, 2023, be received."
CARRIED

7.3 Water Stewardship Director Report

Dr. Jatel explained that the current term for the Okanagan Water Stewardship Council ends in March and provided the board with a list of potential organizations to be invited to send a representative for the new 18-month term. Directors had some questions about the organizations and the ability to include others in future years. Both Drs. Jatel and Sears noted that a review is possible with each term.

"THAT the Board approves the slate of organization members for the Okanagan Water Stewardship Council's 11th term (April 2023 – March 2025), as provided by staff."
CARRIED

The board was told about a presentation by Dir. Hrasko at the previous meeting on polyfluoroalkyl substances (PFAS), an emerging class of contaminants for drinking water. The next meeting will include a presentation from Patrick Riley, Research and Environmental Projects Manager with Okanagan Indian Band.

"THAT the Water Stewardship Director's Report, dated Feb. 1, 2023, be received."
CARRIED

7.4 Communications Director Report

Ms. Jackson updated the board on plans for a screening and panel discussion to celebrate UN World Water Day (WWD). The event will take place online in the evening of March 21 (a day ahead of WWD) and more details will be provided in the coming days.

Directors were also told about Make Water Work campaign planning and interest from several Okanagan local government and utility partners, as well as garden centres, that are interested in continuing to partner on the initiative.

The board was also briefed on additional communication efforts, supporting the WCQI program and more.

"THAT the Communications Director's Report, dated Jan. 31, 2023, be received."
CARRIED

8. NEXT MEETING

8.1 The next meeting of the Okanagan Basin Water Board will be held Tuesday, March 7, 2023 at 10 a.m., online.

9. ADJOURNMENT

"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of February 7, 2023 be adjourned at 12:14 p.m."
CARRIED

Certified Correct:		
Chair		**Executive Director**

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www.obwb.ca

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
March 7, 2023
Agenda No: 6.1

To: OBWB Directors

From: Anna Warwick Sears

Date: March 1, 2023

Subject: Executive Director Report

Board Training - continued

For the final section of formal board training, Kellie Garcia, the OBWB's Policy and Planning Director, will be giving an overview of the Source Protection Toolkit, developed by the OBWB for local water suppliers. This presentation will be in the staff reports part of the meeting.

Staff transitions

Our new climate indicators intern, Sandra Schira, will be starting with the OBWB in early May. Funding for this position will come from the Climate Indicators project budget. We are also planning to post a half-time, year-round position for a Communications Assistant to support board outreach. Funding for this position was included in the budget for the coming fiscal year that begins April 1, 2023.

Okanagan Flood Story Website Updates

The OBWB published the Okanagan Mainstem Floodplain Maps in 2020, on the OkanaganFloodStory.ca website. These detailed digital maps show the extent of flooding we need to use when planning for development around the valley's lakeshores and river channels. Development of the maps was made possible through funding from the National Disaster Mitigation Program, and the Community Emergency Preparedness Fund, as well as a contribution from Emergency Management BC, and others. They have recently been featured on the provincial website for Climate Ready BC (see link here)

However, although the maps are designed to provide information to the public, they have so many options, and there are so many technical terms in the legends, it has been very difficult for the public to navigate them. In addition, the maps show flooding under two different management scenarios: management under 'current operations,' and management under recommended changes to dam operating rules. As a result, the OBWB is working to update the Okanagan Flood Story website with a simplified set of maps under a Public User tab, showing the primary 'design' scenario (the flood that communities should be designing around), under current operating conditions. Users will still be able to type in their addresses to determine if their houses are exposed to flood hazards.

The OBWB is also close to completing a Flood Risk mapping project, covering the same mainstem lakeshore and river floodplains shown in the original maps. Flood Risk combines the flood hazards and exposure with information on vulnerability, to create an estimate of total risk for particular areas in the floodplain. These maps will be provided on a third tab on the Flood Story website.

Healthy Watersheds Initiative

On Feb. 23, I attended the Healthy Watersheds Initiative (HWI) symposium in Vancouver. The HWI was the program by which the provincial government's $27 million in COVID-19 jobs-funding was distributed to watershed protection projects in B.C. The OBWB received $50,000 from this program to support the development of the Source Protection Toolkit, and an additional $50,000 to support Penticton Indian Band and En'owkin Centre's k'əmcnitkw Floodplain Re-engagement Project. The symposium was intended to highlight work that came out of the initiative, and to look ahead at a potential new funding program under the B.C. Watershed Security Strategy and Fund.

The day included presentations by Fin Donnelly, B.C. Parliamentary Secretary for Watershed Restoration, Lori Halls, Deputy Minister for the Ministry of Water, Land and Resource Stewardship (WLRS), George Heyman, Minister of Environment and Climate Change Strategy, and Nathan Cullen, Minister of WLRS. Each of these speakers reflected on the importance of watershed protection and security. Much of the emphasis throughout the symposium was on the importance of including Indigenous knowledge and voices in the decision-making process for watershed activities.

Watershed Security Fund in the B.C. Budget

B.C. budget news via an email from the BC Watershed Security Coalition, on Feb. 28:

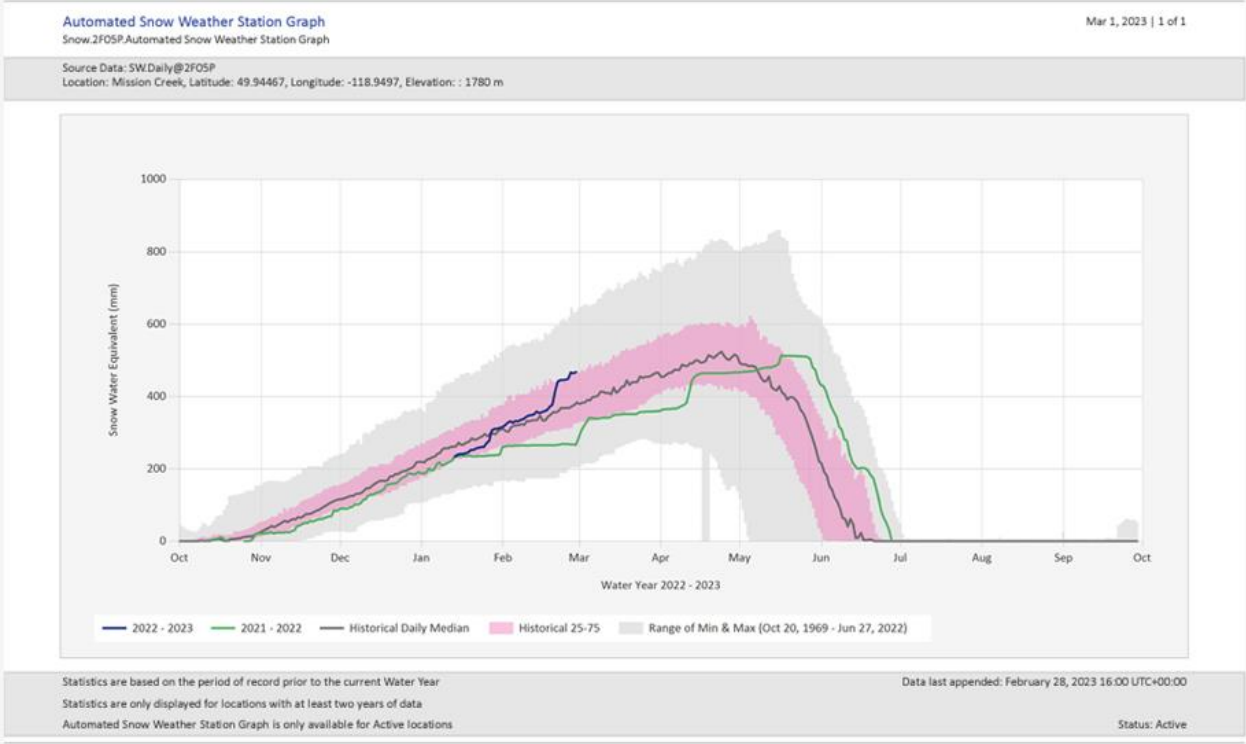
> *Budget 2023 has a commitment of $100 million for the Watershed Security Fund. The Budget states "Healthy watersheds are vital to ensuring British Columbia has good quality water for healthy ecosystems and communities. This funding will enable projects that benefit a range of provincial priorities, including wild salmon health, clean drinking water, biodiversity, flood resilience, economic opportunities, and reconciliation with First Nations".*
>
> *This commitment is an important step towards creating the long-term sustainable funding we have been pushing for. This commitment signals that the province is serious about advancing watershed security. Like most Budgets, there is very little detail on how the $100 million will be spent. Some of these details will be learned through supplementary estimates, but we will be sure to learn more in the upcoming weeks and months.*

Weather Report

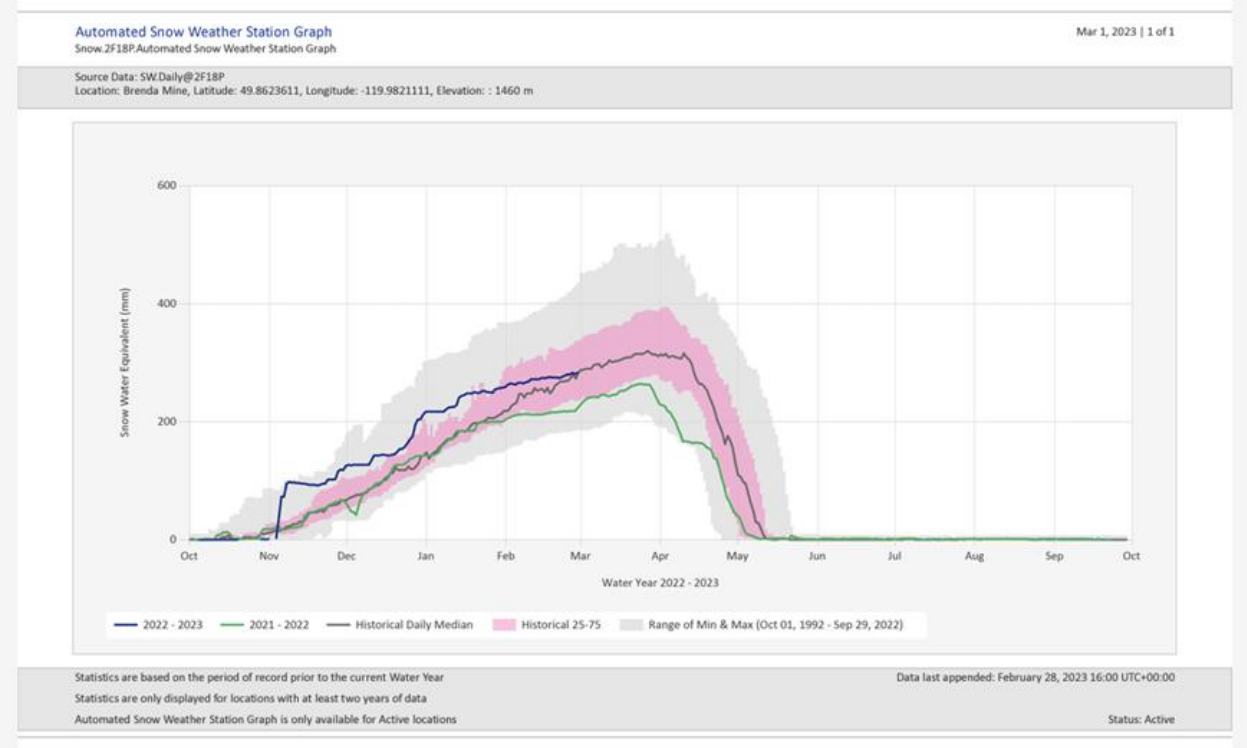
The BC River Forecast Centre's most recent biweekly snow conditions commentary (Feb. 15) finds the Okanagan's snowpack to be slightly above normal (104%) compared to the long-term median. The next official snow report, which takes into consideration the snow pillow data as well as the manual snow surveys, will be published on March 8th.

Releases from Okanagan Lake have kept the lake level near the target range, but the province is poised to increase release rates to accommodate a forecasted larger-than-normal freshet. There is a good media article on the province's new inflow models (see link here).

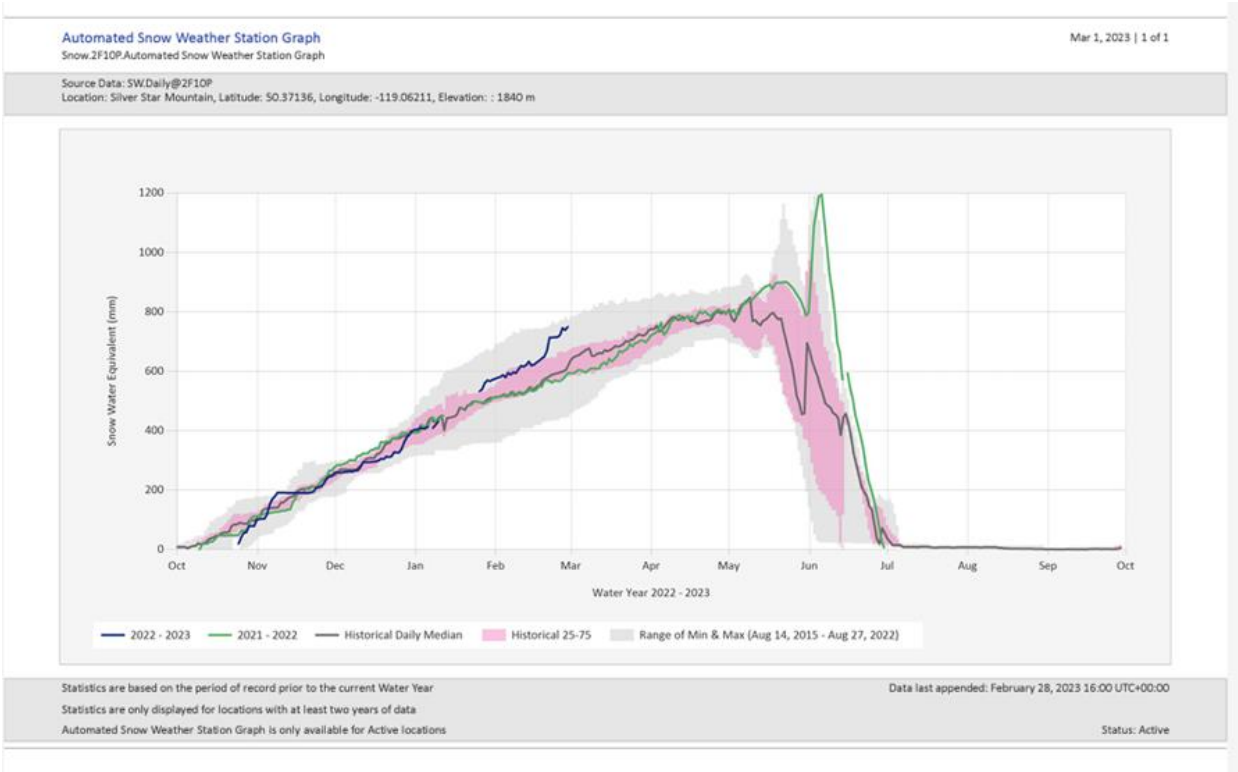
Mission Creek snow pillow – elevation 1780m. Current year given in dark blue. Water year data prior to January 13, 2023 is erroneous.



Brenda Mine snow pillow – elevation 1460 m. Current year given in dark blue.



Silver Star snow pillow – elevation 1840 m. Current year given in dark blue.



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MEMORANDUM

Okanagan Basin Water Board
Regular meeting
March 7, 2023
Agenda No: 6.2

To: OBWB Directors

From: Kellie Garcia

Date: February 28, 2023

Subject: Policy and Planning Director Report

This month, my memo focuses on the source water protection work I have been leading in the Okanagan over the last few years and is meant to complement the presentation I will be giving at the board meeting. In future months, I will inform the board about other initiatives I manage as the Policy and Planning Director, including drought planning and response, flood planning, and modernization of the Okanagan Lake Regulation System.

The aim of my source protection work is to facilitate a more coordinated and consistent approach to watershed protection by providing information and guidance to water suppliers, building awareness of and support for source water protection initiatives, and facilitating knowledge-sharing between communities.

In 2021, we launched the OBWB's source water protection toolkit website and webinar series, a culmination of two years of collaborative work guided by water suppliers, provincial regulators, health agencies, planners, and local consultants. We crafted the toolkit (www.sourcewaterprotectiontoolkit.ca) to take the mystery out of the source protection planning process, and to empower local governments to take the lead on protecting water sources. It recognizes the challenges local governments face, including a complicated legislative framework governing water and a lack of authority, capacity, and funding, and provides practical solutions. About 35 case studies from a variety of B.C. watersheds are included in the toolkit – enabling communities to learn from others.

The webinar series featured 33 speakers over nine, one-hour sessions. Topics included: working together across jurisdictions to increase awareness and stewardship; advancing local government policies and regulations to protect source waters; securing long-term funding and resources; role of nature-based planning and natural asset management; using mapping to understand, manage, and communicate about risks to source waters; and how to be an effective science communicator. Some 182 individuals attended one or more of the webinars, representing a variety of B.C., Ontario, Quebec, Alberta, and U.S. organizations. Webinar recordings are available on our YouTube channel (https://youtu.be/oUlycPatxtU).

Outreach efforts for the toolkit continued throughout 2022. I presented to most of the city councils and regional boards in the Okanagan, at a national water conference, and to the Drinking Water Leadership Council (comprised of representatives from the province's Ministries of Health; Water, Land, and Resource Stewardship; Environment and Climate Change Strategy; Forests; and Municipal Affairs; and staff from the Health Authorities). I also prepared an article for the BC Water and Waste Association's Watermark magazine,

which reaches more than 4,000 water professionals, including facility operators, utility managers, engineers, consultants, researchers, and government policy and regulatory staff across B.C. and the Yukon. Ms. Jackson and I also worked together to create an educational source water protection poster (https://okwaterwise.ca/resources/Choose-Your-Watershed-Poster.pdf).

Our source water protection outreach efforts will continue this year. On March 30, Dr. Sears and I are leading a workshop at the Water Supply Association of B.C.'s spring conference focused on source protection and watershed governance, to representatives from local government, non-profits, the province, and industry. It should be a lively discussion and will hopefully result in meaningful recommendations that we can bring forward to the province. I also just recorded a podcast about source water protection with Director Holmes for episode 2 of his "The Mayor's Podcast" series. You can find it at https://www.summerland.ca/your-city-hall/mayor-council/mayor's-podcast?pname=The%20Mayor%27s%20Podcast.

I am also updating the OBWB's 2009 Groundwater Bylaws Toolkit. Much has changed on the regulatory front since its release in 2009, with the 2016 *Water Sustainability Act,* the Auditor General Report on the Protection of Drinking Water, and the new "Code of Practice for Agricultural Environmental Management" regulation coming into effect. Rather than create another standalone resource, I am simplifying, shortening, and repackaging the document as a companion guide to the Source Water Protection Toolkit. The guide will mainly provide a groundwater lens to Tool 3: Policies, plans and bylaws. It will include sample groundwater policy and bylaw language that can be tailored by local governments to each unique area and provide case studies that highlight leadership and best practices in groundwater protection.

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MEMORANDUM

Okanagan Basin Water Board
Regular meeting
March 7, 2023
Agenda No: 6.3

To: OBWB Directors

From: Nelson R. Jatel

Date: February 15, 2023

Subject: Water Stewardship Director's Report

Okanagan Water Stewardship Council (OWSC)

The guest speaker at our Feb. 9 council meeting was Mr. **Patrick Riley**, Research and Environmental Projects Manager with Okanagan Indian Band (OKIB), presenting on the significant new and ongoing water projects that the OKIB is leading and working on with several partners to improve water knowledge and management. This well-attended meeting showcased several of the water projects underway at the OKIB. See map provided (right), regarding one such project. A report with highlights from the meeting is attached at the end of this memo.

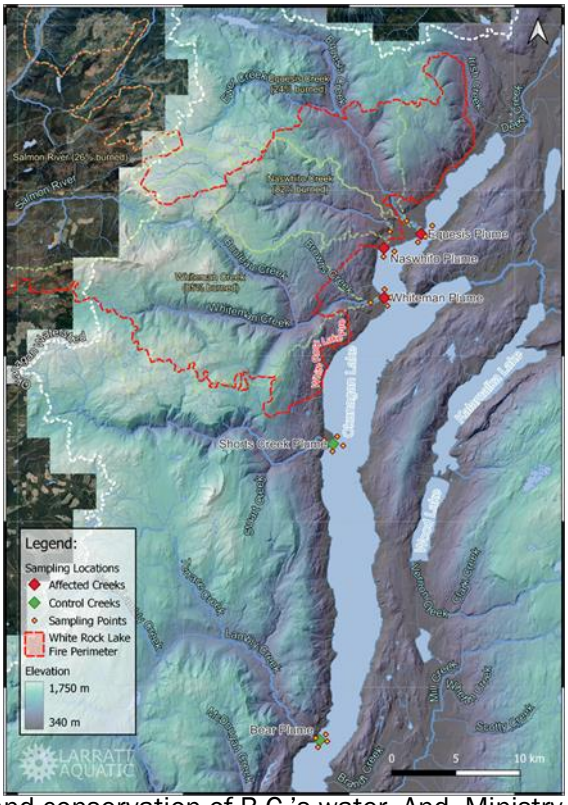

Figure 1 Three watersheds impacted by the recent White Rock Lake wildfire (Whiteman, Naswhito and Equesis. New wildfire plume monitoring is led by the Okanagan Indian Band (OKIB).

Our next council meeting is scheduled for Thurs., March 9th from 12 to 4 p.m. at the Kelowna Coast Capri Hotel. Recently, there have been questions about B.C. government ministry responsibilities and who is responsible for various aspects of water management. Our guest speakers will be Ms. Kelly Chiatto and Mr. Ray Crampton, B.C. government staff who will provide an update on the three water ministries: Water, Land and Resource Stewardship (WLRS, led by Min. Nathan Cullan); Environment and Climate Change Strategy (led by Min. George Heyman); and Forests (led by Min. Doug Donaldson). The Ministry of WLRS is accountable for natural resource management, cumulative effects and advancing reconciliation with Indigenous peoples. The Ministry of Environment and Climate Change Strategy is responsible for the effective protection, management, and conservation of B.C.'s water. And, Ministry of Forests is responsible for the stewardship of provincial Crown land and ensures the sustainable management of water (including the administration of water licenses).

Board members are encouraged to attend.

The council is the Water Board's standing technical advisory body and meets monthly to discuss relevant and time-sensitive watershed issues, supporting information sharing and knowledge building. Two volunteers provide the current leadership: Council Chair Mr. **Scott Boswell** (Okanagan Collaborative Conservation Program) and Vice-chair Dr. **Jeremy Fyke** (Environment and Climate Change Canada). The council has a two-year term and develops a work plan at the start of each time. The new council term starts on April 1, 2023.

The council's 2021-23 work plan includes the designation of sub-committees to support and respond to OBWB Board requests/needs and advance priorities the council sets. This term, the council has seven committees: *Policy, Water and Climate, Alluvial Fans, Wetlands, Agriculture Water, Water Quality,* and *Source Protection* (a permanent standing committee). The committee chairs meet monthly to discuss progress and cross-cutting issues, inform the guest speaker selection process, and discuss council leadership and membership.

<u>OBWB Hydrometric Service</u>

Water data quality control and quality assurance (QA/QC) for recently collected hydrometric data, along with strategic planning, continued to be the focus of activity throughout February. QA/QC of hydrometric data was done by the Okanagan Nation Alliance team that had collected and reported the data. Data was then audited by third-party organization, Associated Engineering.

Hydrometric information is fundamental to water planning, operation, and management. Several activities that depend on hydrometric data include water resource planning, water licensing, regulation development and control, assessment of the impact of operational policy, allocation of flow, fish management, environmental flow and critical flow management, and contingency planning.

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

<u>Okanagan flood risk assessment project</u>

To support risk-based flood management and improve understanding of flood risk processes in the Okanagan watershed, Okanagan Basin Water Board (OBWB) retained IBI Group and partners to undertake a comprehensive flood risk assessment (FRA). FRAs are structured risk-based methods that seek to understand flooding, and its resulting consequences, to support risk-based decision-making. The objective of this FRA is to develop the data, tools, and risk maps to better understand the baseline flood risk (under a mid-century climate) within the Okanagan River basin.

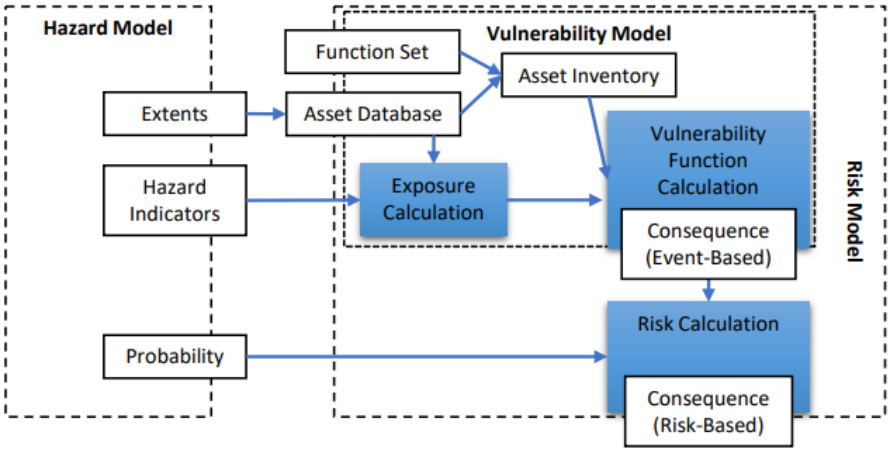

Figure 2. Object-based flood risk model conceptual diagram used for the Okanagan FRA.

From these, OBWB and regional partners are well-positioned to make informed management decisions around flood risk and develop site-specific mitigation strategies. Project objectives included the following:

- Baseline regional risk (under mid-century climate)
- A set of configured and ready-to-use flood risk modelling packages in NRCan's open-source CanFlood platform
- An interactive web-mapping tool to explore the risk modelling outputs and developing custom risk profiles and rankings from individual values and priorities
- Numerous hazard and risk layers will be generated from the set of events and the risk modelling suite. This data and the combined risk profile GIS data will be provided along with metadata and documentation
- A single static map targeted at non-experts summarizing the risk profiling results using intuitive graphics.
- A set of classic static maps showing the risk profiling results for each consequence category and risk modelling output
- Report documenting context, methods, results, discussion, and future work

CanFlood is a transparent, open-source flood risk calculation toolbox developed to support local flood risk assessments across Canada. CanFlood supports three modelling frameworks of increasing complexity, data requirements, and effort. Each of these frameworks was designed to be flexible and agnostic, allowing modellers to implement a single software tool and data structure while maintaining flood risk models that reflect the heterogeneity of Canadian assets and values. With over 200 depth-damage functions in the built-in library, CanFlood has the largest collection of Canadian vulnerability functions of any flood risk modelling tool. Version 1 of CanFlood was released in the Spring of 2021. Although this project delivery has been delayed by IBI, the final project deliverables will be completed by the end of March 2023.

Okanagan Basin WATER BOARD

Okanagan Water Stewardship Council

Technical advisory committee to the OBWB

February 2023

Council Members (Term 10, April 2021-March 2023)

*Appointed **representatives** | alternates*

- **AAFC, Research Branch**
  Kirsten Hannam | Thomas Forge | Jesse MacDonald
- **BC Agriculture Council**
  Hans Buchler
- **BC Cattlemen's Association**
  Lee Hesketh | Keith Manders
- **BC Fruit Growers Association**
  Katie Sardinha | Glen Lucas
- **Ministry of Forests**
  Sheena Spencer (Research Hydrologist)
  Kelly Chiatto | Ray Crampton
- **BC Ground Water Association**
  Marta Green | Doug Geller
- **BC Water Supply Association**
  Patti Meger | Bob Hrasko | Shawn Grundy
- **BC Wildlife Federation – Region 8**
  Lorne Davies | Jackson MacPherson | Nick Kozub
- **Canadian Water Resources Association**
  Brian Guy (past chair) | Dwayne Meredith
- **City of Kelowna**
  Rod MacLean | Ed Hoppe
- **City of Penticton**
  Mike Firlotte
- **City of Vernon**
  Ed Stranks
- **Fisheries and Oceans Canada**
  Lynda Ritchie | Sue Lemke | Teri Ridley
- **Environment and Climate Change Canada**
  Jeremy Fyke (vice-chair) | Dave Hutchinson | Alyssa Charbonneau
- **Emerita**
  Denise Neilsen (past chair)
- **Engineers & Geoscientists BC**
- **Interior Health**
  Rob Birtles | Judi Ekkert
- **Irrigation Industry Association of BC (IIABC)**
  Bruce Naka | Ted van der Gulik (past vice-chair)
- **Ministry of Agriculture**
  Stephanie Tam
- **Ministry of Environment and CC Strategy**
  Kym Keogh | Dennis Einarson
- **Ministry of Land, Water & Resource Stewardship**
  TBD
- **Okanagan Collaborative Conservation Program**
  Scott Boswell (chair)
- **Okanagan College**
  Allison O'Neill | Rob St Onge
- **Okanagan Indian Band**
  Patrick Riley | Dan Wilson | Tim Isaac
- **RD Central Okanagan**
  Jing Niu | Todd Cashin
- **RD North Okanagan**
  Tricia Brett | Zee Marcolin
- **RD Okanagan –Similkameen**
  Shelley Fiorito
- **Shuswap Okanagan Forestry Association**
  Randy Hardy | Matt Scott
- **Thompson - Okanagan Tourism Association**
  Ellen Walker – Matthews | Mike Overend
- **University of British Columbia - Okanagan**
  Bernie Bauer (past chair) | Craig Nichol | Derek Gratz

Council Meeting Highlights

Research and Environmental Projects Summary of Okanagan Indian Band (OKIB) Presentation by Mr. **Patrick Riley**, Research & Environmental Projects Manager.

One critical goal of OKIB is building relationships with the local and regional territory, creating meaningful employment opportunities for band members, developing projects based on cultural and heritage policies, and protecting and supporting culturally sensitive lands. To fulfill these aims, OKIB has a wide range of ongoing projects under different funding arrangements. Recently, the OKIB has installed fixed remote automated weather stations to measure soil moisture, snow depth, soil temperature, precipitation, air quality, visibility, etc. They have developed a protocol system to monitor wildfire-affected areas in real-time. The OKIB environmental team is carrying out drone and boat fieldwork to take videos of creeks, shorelines, and wetlands as well as monitor water quality. Plans to install new hydrometric stations, manage existing dam infrastructure, expand fixed remote automated weather stations, and increased collaboration with ONA to install wildlife cameras to study animal community populations are underway.

Council committee highlights

- **Climate Change** [Neilsen | Fyke] Modernization of the Okanagan Lake Regulation System is ongoing. New Okanagan climate change indicators are being developed.
- **Agriculture and Irrigation** [Hannam | Naka] Value of the irrigated agricultural analysis is going ahead along with funding application and interviewing for project postdoc. Planning to make irrigation education videos with a workshop is underway.
- **Wetlands** [Boswell] Cumulative effects model and habitat connectivity works are under development.
- **Alluvial Fans** [Bauer] A Primer on Okanagan Alluvial fans and associated recommendations is under development.
- **Water Quality** [Birtles | MacLean] Looking into different communities' water quality bylaws to identify best practices.
- **Policy** [Green] Finding opportunities to comment on different levels of policy documents.

Other news

- OBWB is developing Okanagan climate indicators to help track and understand the climate change effects on the region including changes in the weather pattern, snowpack, rainfall pattern, timing of inflows, and change in the growing season.
- Department of Earth, Environmental and Geographic Sciences of UBCO is offering a Micro-credential course titled 'Wetland Delineation and Assessment' with both online (May 8 -10) and field (May 16-17) components. More information coming soon at: https://eegs.ok.ubc.ca/nondegree-programs/
- Okanagan College's Water Engineering Technology two-year diploma program is looking for interested students. For more information check out: https://www.okanagan.bc.ca/water-engineering-technology-diploma.

For more information contact:

Nelson Jatel, *Water Stewardship Director*
Okanagan Basin Water board

nelson.jatel@obwb.ca (250) 469-6295

The Council provides technical advice to the Board & connects the broader Okanagan community.

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MEMORANDUM

Okanagan Basin Water Board
Regular meeting
March 7, 2023
Agenda No: 6.4

To: OBWB Directors

From: Carolina Restrepo Tamayo

Date: March 1, 2023

Subject: Office and Grants Manager Report

Water Conservation and Quality Improvement (WCQI) Grants Program:

The call for applications for the 2023/2024 WCQI program closed Fri., Feb. 24 at 4:30 p.m. The program provides funds to Okanagan local governments, improvement districts, Okanagan First Nations communities, and non-profit organizations for projects that conserve and protect water, based on the recognition that we are all part of "One Valley, One Water." The total funding available this year is $350,000.

During the month of March, OBWB staff will review and make recommendations for funding the proposals received, based on the scoring criteria established and approved by the Board of Directors. Staff recommendations will then be sent to the board for discussion and final approval at the April 4 board meeting. Awarded projects will be announced later that week. Here is some "at a glance" information about the proposals received this year.

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MEMORANDUM

Okanagan Basin Water Board
Regular meeting
March 7, 2023
Agenda No: 6.5

To: OBWB Directors

From: Corinne Jackson

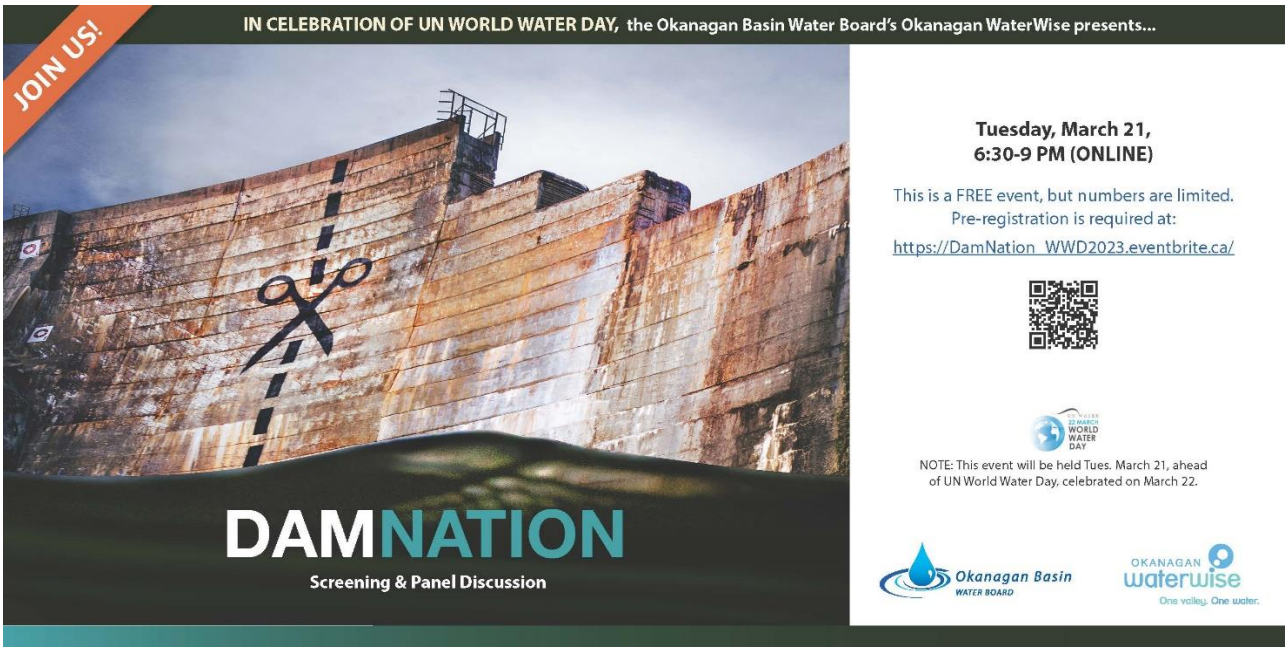
Date: March 1, 2023

Subject: Communications Director Report

UN World Water Day

The OBWB-Okanagan WaterWise will be hosting its popular film-screening and panel discussion to celebrate annual UN World Water Day (WWD), on Tuesday, March 21, 6:30-9 p.m., online (and a day ahead of WWD).

This year we are presenting a special screening of the widely-acclaimed *DamNation*.



Using bold, beautiful imagery, *DamNation* explores the change in attitude from pride in big dams as engineering wonders to the growing awareness that our own future is bound to the life and health of our waterways.

The themes in the documentary are especially moving and current as the Okanagan Basin Water Board and partners begin the work of modernizing the Okanagan Lake Regulation System (OLRS). This process,

expected to take about seven years, will look at how lake levels are managed to address climate change impacts (e.g. flooding and drought), fish management, agriculture needs, and more.

Panelists include

- Okanagan Nation Alliance (ONA) fisheries biologist **Dawn Machin**, speaking on Okanagan River restoration efforts that have been done in the valley bottom, the benefits, the challenges, and what future work is planned,
- A **Syilx Okanagan nation member (TBA)** on the importance of traditional Indigenous knowledge in helping inform the OLRS review, as well as the significance of upper watershed wetlands (e.g. for the mountain beaver and water health),
- Black Mountain Irrigation District Administrator **Bob Hrasko**, regarding dams and upland reservoirs in the Okanagan – what works and what doesn't, or needs improvement, and
- our Exec. Dir. **Anna Warwick Sears** about the OLRS and opportunities to participate as the process moves forward.

This is a FREE event, but the number of Zoom connections are limited. Registration is required. Please find details and register at https://DamNation_WWD2023.eventbrite.ca/ .

A poster is attached at the end of my memo which can be printed and posted in workplaces, etc.

Of note, the ONA is also holding its Syilx Water Forum on March 22. (An email was forwarded to the board about this last month.) The forum includes discussion about fisheries restoration efforts in the Trout Creek/Summerland area, and a keynote from Dr. Brittani R. Orona of the Hupa Valley Tribe who will be presenting on climate change and Indigenous environmental stewardship in relation to the removal of Klamath River dams. The Peachland Watershed Alliance is also holding a film screening on March 23 looking at removal of Elwha Dam. Both Klamath and Elwha are profiled in *DamNation*.

Make Water Work & Don't Move A Mussel 2023

Initial discussions have started regarding the Make Water Work (MWW) and Don't Move A Mussel (DMM) campaigns, which run May – October. This is the 3rd year in a three-year contract with Habit Creations, with an option to extend for two more years. Habit is helping with the strategy, design and delivery of the campaigns. I will be attending a discovery meeting with them in the next few weeks to review last year's campaigns and where we want to go this year with the look, feel and sound. We will then develop a strategy, followed by creative, and finally delivery which will be monitored and tweaked as needed throughout the period of the campaigns.

Other communication initiatives

I will be posting for a permanent part-time **Communications Assistant** in the coming days. As noted in my presentation to the board last month, the communications program has grown considerably since I started in 2009, which has included the launch of the Okanagan WaterWise outreach and education program, and the MWW and DMM campaigns. At the same time, the number of inquiries for information, support, and more from governments, media, non-profits, educators and the public continues to grow, as does the number of projects OBWB is taking on which require communications support. We look forward to having the new hire join us in mid-April.

We were invited by the **Vernon Yacht Club** to attend the Vernon Chamber of Commerce Business After 5 event, which they were hosting. It was a good opportunity to raise awareness regarding invasive mussels and the Don't Move A Mussel campaign. Below are a couple photos from the Vernon event.

Above: Vernon Yacht Club Commodore Fred Haight helps raise awareness for invasive mussels and the Don't Move A Mussel campaign. Right: The lucky winner of a Don't Move A Mussel prize pack.

In addition to the above, communications support has been provided to a number of in-house projects this month, including: promotion of the **Water Conservation and Quality Improvement Grant Program** with the application deadline on Feb. 24, and the Summerland mayor's podcast on **source water protection**. There were also a number of requests from media, government and non-profits looking for information, materials and support.

<u>Summary of OBWB-Related News Coverage</u>

Feb. 3	"Minimal milfoil growth reported as winter control program mostly complete," *Castanet.net*
Feb. 13	"Okanagan water board welcomes new members," *TimesChronicle*
Feb. 13	"Vernon flood mitigation update sees city preparing for the worst," *Castanet.net*
Feb. 13	"Pilot project aims to help Okanagan residents deal with climate change," *Global Okanagan*
Feb. 16	"RDOS at the Penticton Home and Reno Show - Learn about Make Water Work and more," *AM1150, iHeartRadio.ca*
Feb. 24	"Fourth Osoyoos Lake Water Science Forum Bridges Indigenous and Western Science," *IJC-Shared Waters Newsletter*

<u>Recent Presentations</u>

Feb. 2	"OBWB Update & Board Training" to RDOS board and staff – Anna Warwick Sears
Feb. 15	"OBWB Update & Board Training" to RDNO board and staff – Anna Warwick Sears
Feb. 21	OBWB overview to Society for Learning in Retirement – Anna Warwick Sears

Upcoming Presentations

March 21 "DamNation – screening and panel discussion" to public audience – Anna Warwick Sears and Corinne Jackson

March 30 "OBWB's Role in Source Protection & Watershed Security Governance" to Water Supply Association of B.C. – Anna Warwick Sears and Kellie Garcia

JOIN US!

IN CELEBRATION OF UN WORLD WATER DAY,

the Okanagan Basin Water Board's Okanagan WaterWise presents...

DAMNATION

Screening & Panel Discussion

TUESDAY, MARCH 21
6:30-9 PM (ONLINE)

This is a FREE event, but numbers are limited. Pre-registration is required at: https://DamNation_WWD2023.eventbrite.ca/

UN WATER 22 MARCH WORLD WATER DAY

NOTE: This event will be held Tues. March 21, ahead of UN World Water Day, celebrated on March 22.

Okanagan Basin WATER BOARD

OKANAGAN waterwise
One valley. One water.