

# Okanagan Basin Water Board Meeting Agenda



Okanagan Basin  
WATER BOARD

**DATE:** Tuesday, October 6, 2020

**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 Sept. 4, 2020 held online ([page 1](#))

5. **DELEGATIONS**

5.1 Shaun Reimer, Section Head – Public Safety and Protection Ministry of Forests, Lands, Natural Resource Operations, and Rural Development; presenting on *Considerations for Changes to the Okanagan Lake Regulation System*.

6. **STAFF REPORTS**

6.1 Executive Director Report ([page 6](#))

6.2 Water Stewardship Director Report ([page 15](#))

6.3 Operations and Grants Manager Report ([page 17](#))

6.4 Communications Director Report ([page 20](#))

6.5 Policy and Planning Specialist Report ([page 23](#))

6.6 Special Projects Coordinator Report ([page 25](#))

7. **NEXT MEETING**

7.1 The next meeting of the Okanagan Basin Water Board will be Tuesday, November 3, 2020 at 10 a.m. at location TBD.

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. 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](mailto: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 SEPTEMBER 4, 2020, ONLINE  
OKANAGAN, B.C.**

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**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 Colin Basran	Regional District Central Okanagan
Director Toni Boot	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 James Baker	Regional District Central Okanagan
Director Christopher Derickson	Okanagan Nation Alliance

**STAFF**

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

**TECHNICAL OBSERVER**

Tessa Terbasket	Okanagan Nation Alliance
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**1. CALL MEETING TO ORDER**

Chair McKortoff called the meeting to order at 10:02 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 Sept. 4, 2020 be approved.”***

**CARRIED**

**3. ADOPTION OF MINUTES**

3.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of July 7, 2020 held online.

***“THAT the minutes of the regular meeting of the Okanagan Basin Water Board on July 7, 2020 held online be approved.”***

**CARRIED****4. STAFF REPORTS****4.1 Executive Director Report**

Dr. Sears provided her report to the board and presented the 2020 Annual Report and tracking measures. These tracking measures are intended to help staff and directors track progress on their strategic plan, she noted, adding it will be reviewed and reported on every summer as part of the annual report.

Staff are planning an OBWB 50<sup>th</sup> anniversary celebration by the water with physical distancing measures in place. The event will be limited to 50 people, per provincial health guidelines, and include current board directors, past chairs, and current and past Water Stewardship Council chairs. Further details will be sent by email. A public event with a guest speaker will be held online later in the fall.

Dir. Fleming joined the meeting at 10:13 a.m.

The board was updated on an effort by the OBWB to support RCMP volunteers in conducting invasive mussel outreach at boat launches. Chair McKortoff voiced concern about three mussel-fouled watercraft that were intercepted coming across the Canada-U.S. border. Ms. Jackson explained that the watercraft were purchased from mussel-infested regions, by B.C. residents, and came in on transport carriers. Provincial inspectors were notified by Canada Border Services to ensure proper inspections and decontaminations were done. The OBWB, through its Don't Move A Mussel campaign, also ran radio ads and other messaging, reminding residents who purchase watercraft from outside B.C. to contact inspectors before launching.

Ms. Terbasket joined the meeting at 10:21 a.m.

Dir. Fortin noted that Peachland was interested in having RCMP volunteers at their boat launches next year. Ms. Jackson offered to put Dir. Fortin in touch with the RCMP liaison.

Dr. Sears noted that the OBWB sent a letter to the Province of B.C., supporting a B.C. Watershed Security Fund as part of a COVID-19 economic recovery plan. Ms. Garcia added that the OBWB has recommended that funds could help implement the source protection toolkit that is currently in development.

Staff are working with Entrepreneurship UBC to develop a workshop for local business leaders to educate them on flood risks and the related research that is underway in the valley. The workshop will profile the OBWB's recent flood mapping efforts, as well as work by Okanagan Nation Alliance on flooding and debris flow, and City of Kelowna's Mill Creek flood response.

The board was provided a weather update and told that with La Nina, we could have a warm autumn and wetter winter. Dir. Neilsen added that although it could be wetter, La Nina often leads to cooler temperatures.

***"THAT the Executive Director's Report, dated Aug. 26, 2020, be received."***

**CARRIED****4.2 Water Stewardship Director Report**

Mr. Jatel reported on a meeting of past council chairs and discussion about past projects and a look ahead to potential future ones. Dr. Rita Winkler joined as a special guest to discuss

succession planning at the senior government level and management of legacy scientific data. It was proposed that a Council sub-committee be formed to explore needs and opportunities to store valuable Okanagan water data and have it publically available.

The next Council meeting will be held by Zoom on Sept. 10th from 1 – 3 p.m. and will include a presentation and discussion on local government accounting of natural assets.

A brief update was provided on the BC Water Use Reporting Centre tool and the Environmental Flow Needs project. The board was told about an update that will be completed this fall to some of the recent flood mapping. The update is intended to assist local governments that are using an older vertical datum for location reference points.

Mr. Jatel added he has been appointed to the St'at'imc Eco-Resources Board of Directors in Lillooet and hopes his involvement will be useful in helping address Okanagan water issues.

***“THAT the Water Stewardship Director’s Report, dated Sept. 1, 2020, be received.”***  
**CARRIED**

#### 4.3 Operations and Grants Manager Report

Mr. Littley provided an update on milfoil control noting surveys of the weed were done of various portions of Okanagan Lake. OBWB will apply to extend permits into these areas. RFPs have now gone out to purchase a new trailer and crane for the program.

In preparing for a final report from provincial invasive mussel inspection staff with recommendations for the coming year, Water Board staff are preparing to enlist support for the OBWB’s calls to action. In the meantime, Mr. Littley added that local governments should be doing an analysis of their water intakes to determine actions they can take. In response to questions, it was noted that research using copper sulphate and Zequanox to combat the mussels has been found to have issues and would not be suitable to the Okanagan.

***“THAT the Operations and Grants Manager Report, dated Aug. 25, 2020, be received.”***  
**CARRIED**

#### 4.4 Communications Director Reports

Ms. Jackson gave an update on the OBWB’s Make Water Work, summer outdoor water conservation campaign, including an update to the website ([www.MakeWaterWork.ca](http://www.MakeWaterWork.ca)) with information on new water supply and demand numbers for the valley. In response to questions it was noted that the numbers are based on water meter data from 2015-2018 and reports water use per household, rather than per person.

An update was also provided for the Don’t Move A Mussel campaign, which also included updates to the DMM website ([www.DontMoveAMussel.ca](http://www.DontMoveAMussel.ca)) and efforts to assist partner agencies with outreach materials and support. In response to questions, Ms. Jackson added that there was a request for additional DMM signs at government and private boat launches on the Westside. Staff made some calls and sent emails and are waiting for a response from those responsible for the launches.

A brief update was provided on additional projects including new water curriculum resources for teachers.

***“THAT the Communications Director’s Report, dated Aug. 24, 2020, be received.”***

**CARRIED**

## 4.5 Policy and Planning Specialist

Ms. Garcia explained that a new Thompson Okanagan Stream Watch Tab has been added to the province's B.C. Drought Information Portal. This is significant since past provincial drought declarations have lumped the Okanagan together even though it was certain streams that were of concern. This will now allow provincial officials to manage at the sub-basin level. Although most of the Okanagan has fared well this year, she added, there are two South Okanagan streams that are of concern this summer. Vaseux and Shuttleworth are important for fish spawning and have dried in the lower reaches, stranding at least one female Chinook in Vaseux. The province is working with those who have water licences on the creeks and looking at how to better manage these streams.

Work on a source protection toolkit should be completed in December.

***"THAT the Policy and Planning Specialist's Report, dated Aug. 21, 2020, be received."***

**CARRIED**

## 4.6 Special Projects Coordinator

Ms. Restrepo-Tamayo presented on the 2020 B.C. AquaHacking Challenge and plans for 2021, engaging young professionals in helping solve critical water issues.

***"THAT the OBWB host the 2021 BC AquaHacking Challenge in partnership with Aqua Forum; AND THAT the OBWB Executive Director be authorized to sign a final agreement with AquaForum on or before September 30th."***

**CARRIED**

***"THAT the Special Projects Coordinator Report, dated Aug. 25, 2020, be received."***

**CARRIED**

**5. NEW AND UNFINISHED BUSINESS**

## 5.1 Request support for review of Okanagan Lake Level Management

Dr. Sears presented a report to the board, responding to a letter from the District of Peachland asking for a review of Okanagan Lake level management to address flooding. She noted the importance of a review, adding that it should include input from local governments, Okanagan Nation Alliance and the federal government.

Provincial staff, responsible for Okanagan Lake dam management in Penticton, have offered to attend the October board meeting to begin the discussion.

Dir. Cumming noted that the issue isn't just with Okanagan Lake but with the management of the valley's mainstem lakes. Dr. Sears noted that following the October board meeting, staff can begin discussions with other regional districts.

***"THAT the Okanagan Basin Water Board receive the letter from District of Peachland and wait until October to respond after receiving more information."***

**CARRIED**

***"THAT the Okanagan Lake Level Management memo, dated Aug. 26, 2020, be received."***

**CARRIED**

6. **IN-CAMERA**

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

*Move to go in-camera at 11:59 a.m.*

**CARRIED**

Rise and report...

*“THAT the OBWB approve the Okanagan Hydrometric Program Terms of Reference.”*

**CARRIED**

7. **CORRESPONDENCE**

*“THAT correspondence from B.C. Environment and Climate Change Strategy Minister George Heyman, regarding Water Sustainability Act implementation, be received.”*

**CARRIED**

8. **NEXT MEETING**

8.1 The next meeting of the Okanagan Basin Water Board will be held Tues. Oct. 6, 2020 at 10 a.m. at location TBD.

9. **ADJOURNMENT**

*“THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of Sept. 4, 2020 be adjourned at 12:18 p.m.”*

**CARRIED**

Certified Correct:		
Chair		Executive Director

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.1

To: OBWB Directors  
From: Anna Warwick Sears  
Date: September 30, 2020  
Subject: Executive Director Report

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### **COVID-19 Considerations:**

OBWB office-based staff have mixed schedules working from home and the office. Time spent in the office is staggered with other staff, to keep infection risks low for themselves and others in the building. Staff continue to follow a mask-wearing protocol, where everyone is asked to wear masks when sharing space in an enclosed room. Milfoil staff are observing COVID-19 safety protocols while moving equipment.

### **OBWB 2022 Budget Development**

Each year, the board receives the annual budget at the November meeting. The budget can be adopted at that time, or if revisions are required, at the December meeting. I am working with staff to develop watermilfoil and water management project budgets that reflect our interest in consistency and continuous improvement.

### **Flood Resilience Planning Projects**

This continues to be an area of high demand. Okanagan flood resilience will take a very steady deliberate effort, over a number of years. We know from our flood mapping studies that the risks of flood will continue to increase each year with climate change until more is done with reducing the global concentrations of carbon dioxide. It's going to be important for all Okanagan communities to work together, and ideally coordinate plans and policies with one another.

We will be having a presentation from Shaun Reimer at this month's board meeting about the challenges and considerations needed as part of a review of the Okanagan Lake Regulation System. We are working with the Okanagan Water Stewardship Council members to identify gaps in research that need to be addressed. I'm hoping that we can partner with the province to undertake first the gap analysis, and then begin the necessary studies themselves. It's likely that the review will be a several year process, given the number of critical issues involved.

As we discussed at the last OBWB meeting, the 2020 Okanagan flood maps are in a geographical measurement format (the CGVD 2013 vertical datum) that is different from the one used by local governments and the province (CGVD 1928). We now have a proposal from our consultants to update the maps to have elevations given in both the new datum and the existing datum, and we are in the process of reviewing the proposal with our local government partners.

We are happy to see that the RDCO is moving forward with the next phase of their Regional Floodplain Management Plan, and we will be participating as partners in that work – especially to link the ongoing flood related work of other jurisdictions.

The province, through UBCM, has announced a new grant intake for Flood Planning and Mapping. The OBWB is not an eligible applicant, but we will work with our local government partners to support their applications. As Ms. Garcia describes in her memo, we are also organizing a meeting for November with local government staff from all three Okanagan regional districts to ensure that we all remain coordinated as our individual efforts proceed. We have heard that there are issues around the province where communities have worked separately on flood planning, mapping and risk assessments, and then had problems because their methods, approaches and assumptions differed from neighboring communities.

I am participating in a special workshop by Entrepreneurship UBC (e-UBC) for local business leaders to educate them about flood risks, and the variety of related research underway in the valley (including the ongoing flood policy analysis that we are undertaking with UBC Okanagan engineering researchers). Tessa Terbasket of the Okanagan Nation Alliance and I were interviewed for a segment filmed on the Okanagan lakeshore, and we will also attend the virtual workshop as resource guests.

### **Senior Government Initiatives**

As I shared last month, the province has committed \$27 million for watershed initiatives and wetland projects, as part of the COVID-19 recovery package. I've had two calls with staff from the BC Wildlife Federation, who is part of the BC Watershed Security Coalition, consulting us about how these funds should roll out, and what projects we have underway that would be appropriate. At this time, it isn't clear how the funds will be made available, but a number of our initiatives should qualify. I've attached the press release from the BC Watershed Security Coalition.

At the federal level, the Throne Speech committed to working on a federal Water Agency, bringing water under one agency roof. I have attached information provided by the Forum for Leadership on Water (FLOW), a national group that has been pushing for this for many years. I see this as a positive development, which will take some years to come to fruition. The wheels of change turn slowly.

### **Weather Report**

Environment Canada forecasts a warmer than normal autumn in Western Canada, with a moderate likelihood of higher than normal precipitation due to the La Nina conditions.



**BC Watershed Security Coalition News Releases**  
For Immediate Release – September 17, 2020

**\$27 million investment in BC watershed jobs will make our province stronger, healthier and more secure**

VICTORIA (traditional territory of the Lekwungen people) – In the face of record low salmon returns on the Fraser, wildfire, drought, erosion, water quality issues and the effects of climate change on our water today the B.C. government announced an investment of \$27 million in watershed initiatives and wetland projects across the province. This is a much needed first step in protecting our watersheds, and the fish, wildlife and people who rely on them, while putting people back to work to accelerate our economic recovery.

Coree Tull, co-chair of the Watershed Security Coalition acknowledged the significance of today's investment in watershed security to support those most heavily impacted by COVID-19.

“This is a critical investment in both BC's watershed security and in our economic recovery, said Tull. “Several studies show that a \$1 million investment in watershed restoration can create between 13 and 32 jobs and \$2.2 and \$3.4 million in economic activity. Watershed restoration will put people to work in a COVID-safe manner, while both improving the health of our watersheds and stimulating our economy.”

British Columbia's watersheds are facing ever-increasing pressures with climate change destabilizing freshwater sources, adding droughts, fires and floods to the existing threats of contamination and cumulative impacts on the land. In particular, these impacts are having profound consequences for BC's indigenous communities.

“Water is sacred, alive and the lifeblood of First Nations' traditional territories. Access to healthy freshwater is essential to the continued survival of fish and other aquatic species, and to the protection of Aboriginal Title and Rights and Treaty Rights” said Hugh Braker, president of the First Nations Fisheries Council. “This investment in watershed security is a critical opportunity to enable communities to withstand and avoid future crises.”

First Nations, local governments, and community organizations across BC are already taking responsibility to triage water problems but they lack the necessary resources to meet the scale of the challenges facing our watersheds.

“We work with literally hundreds of local groups and stewards – and we hear from them that water is critical in their communities, but insufficient resources are available to conserve or restore this asset,” said Neil Fletcher, Manager of Conservation Stewardship with B.C. Wildlife Federation. “Directing stimulus dollars towards enhancement of our watersheds will serve as a win-win. We can get people back to

work and create more vibrant and healthy waterways that can better service our communities, both wildlife and people benefit”.

While the Watershed Coalition is pleased with today’s announcement, Tull emphasizes the importance of a long-term funding investment in BC’s watershed security.

“Investment in our watersheds will generate thousands of good long-term jobs and ensure British Columbians have access to safe, clean, flowing water, said Tull. “This investment can be supported through a dedicated Watershed Security Fund supported by the water rentals paid by the largest commercial and industrial users of freshwater.”

“We commend the Province on this important first step and look forward to working with the provincial government to ensure generations of British Columbians continue to enjoy the benefits of our amazing watersheds.”

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About the BC Watershed Security Coalition:

The BC Watershed Security Coalition is a non-partisan, diverse coalition of 27 organizations representing 250,000 British Columbians from all walks of life. We have come together out of the recognition that, in every region of this province, healthy watersheds are fundamental to human health, security, prosperity and reconciliation.

The core members of the BC Watershed Security Coalition include: BC Wildlife Federation, BC Outdoor Recreation Council, Watershed Watch Salmon Society, Canadian Freshwater Alliance, Watersheds BC, Rivershed Society of BC, BC Freshwater legacy Initiative, POLIS Water Sustainability Project, and Pacific Salmon Foundation.

# Water Security for Canadians

## Building the Canada Water Agency

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.1.2





# Water Security for Canadians

Canada is facing new and intensifying **water challenges in the 21<sup>st</sup> century** that demonstrate the need for a new approach to freshwater management. Addressing these challenges and ensuring that Canada's waters are healthy, sustainable, and resilient to climate change requires **modernized federal freshwater leadership<sup>1</sup>**. In the immediate term, establishment of a **Canada Water Agency is a crucial first step**.

The exact structure and mandate of a new Agency will take time to figure out, but the **key roles** that a Canada Water Agency must fulfill are clear. It is also clear that the foundation of the **Agency can and should be established expeditiously** to take advantage of the significant support and momentum that is building across the water community. Once the foundation is established, the Agency's mandate and functions should be co-developed with Indigenous Nations and in close collaboration with provincial and territorial governments, local authorities, water organizations, and the general public.

Establishing the Canada Water Agency by November 2020 is the first step of a **broader program of reforms** to modernize federal freshwater leadership, including renewal of the *Canada Water Act*. By establishing the Agency in the immediate term, the government will fulfill its mandate commitment and provide the foundation needed to transform the way water is managed across the country. The Agency represents both a **concrete short-term achievement and the beginnings of a lasting water legacy**.

<sup>1</sup> For more detailed analysis on the need for modernized federal freshwater leadership, see previous publications from the Water Security for Canadians Initiative: [Modernizing Federal Freshwater Leadership: Draft White Paper \(2020\)](#) and [Water Security for Canadians: Solutions for Canada's Emerging Water Crisis \(2019\)](#). Available at: <https://gwf.usask.ca/outputs-data/major-outcomes/water-security-4-canada.php>

## WATER CHALLENGES IN THE 21ST CENTURY

A number of emerging and intensifying water challenges highlight the shortcomings of the status quo approach to freshwater management. The most prominent of these challenges include:

- **Climate change** is increasing the severity of existing freshwater issues and creating new and deeply complex challenges. Addressing these challenges requires a coordinated and integrated response at the federal level, yet water management capacity is currently fragmented across over 20 different federal departments and outdated federal water laws and policies fail to account for a climate-impacted future.
- **Water-based natural disasters** are increasing exponentially, and so are the costs of recovery. Droughts, floods, and toxic algal blooms are increasing in both frequency and severity, costing billions of dollars in direct disaster assistance and untold billions more in lost economic revenue. Our capacity to manage these events is severely hampered by data and reporting deficiencies, a lack of national forecasting and prediction capabilities, outdated flood plain maps, and a failure to adequately incorporate climate change impacts.
- **Indigenous water rights** are inadequately recognized in current water management systems. A new nation-to-nation governance paradigm that is consistent with the principles of reconciliation and the United Nations Declaration on the Rights of Indigenous Peoples is needed to recognize Indigenous Nations' inherent rights to self-determination.
- **Fragmented water governance** is a cross-cutting issue that hinders the ability of governments across the country to address shared water challenges. River basins are composed of many overlapping jurisdictions, yet local, provincial, Indigenous, territorial, municipal, and federal governments lack the incentives, means, and capacity to effectively work together. This fragmentation extends beyond our national borders: transboundary river basins shared by Canada and the United States are also in need of governance renewal.



## MODERNIZING FEDERAL FRESHWATER LEADERSHIP

Modernizing federal freshwater leadership will help ensure Canada's waters are healthy, sustainable, and resilient to climate change well into the future. To set the stage for this new era of federal leadership, two foundational changes are needed: a new Canada Water Agency and a renewed *Canada Water Act*.

A Canada Water Agency can and should be established in the short-term and built on over time to create a central coordinating mechanism for improving freshwater management across the country. The *Canada Water Act*, which hasn't been significantly updated in decades, requires comprehensive renewal to provide the legislative basis for modernized federal freshwater leadership. This renewal process should be undertaken through a co-drafting process with Indigenous Nations.

## A CANADA WATER AGENCY IS A CRUCIAL FIRST STEP

Creating a new Canada Water Agency is a crucial first step to modernize federal freshwater leadership. The serious and urgent threats to Canada's long-term water security cannot be addressed simply by establishing a new federal agency. But getting the Agency up and running will help align federal freshwater programs, projects, and resources. The Agency will provide the coordination and capacity that will enable the federal government to undertake the transformative change necessary to safeguard Canada's freshwater in the face of a changing climate.

## KEY ROLES OF A CANADA WATER AGENCY

- 1. Create and mobilize the knowledge needed to predict and respond to water problems and opportunities** by providing centralized and harmonized collection and dissemination of water information; supporting existing data collection efforts by academic institutions and nongovernmental organizations; generating water predictions including forecasting floods and droughts, water quality issues, harmful algae blooms, and future water supply and use; and providing decision-support services.
- 2. Strengthen transboundary water management and cooperative federalism** by prioritizing healthy and intact river basins, as well as committing capacity to anticipate, investigate, avoid, and resolve water-related disputes; providing national-scale leadership and guidance on water-related climate change adaptation strategies, including flood damage reduction; and providing guidance regarding the introduction of international best practices in Canadian water management.
- 3. Strengthen reconciliation with Indigenous peoples** by ensuring federal water law and policy is consistent with the United Nations Declaration on the Rights of Indigenous peoples; implementing a distinctions-based nation-to-nation relationship with Indigenous governments; and by co-developing the mandate and priorities of the Agency with Indigenous Nations.
- 4. Improve collaborative river basin planning** by building durable partnerships for water management and decision making with provinces, territories, municipalities, and Indigenous governments, with clear outcomes that include building resilience to extreme events, identifying priority areas for watershed restoration, and ensuring effective environmental flow regimes are in place across all levels of jurisdiction and authority.

## THE CANADA WATER AGENCY CAN AND SHOULD BE ESTABLISHED EXPEDITIOUSLY

The Canada Water Agency can and should be established by November 2020; once the initial structure is in place, the important work of deeper institutional and legal reform can begin. We recommend undertaking three key steps to make the Agency a reality:

### 1. Establish the Agency

The first step is to establish and announce the Canada Water Agency by November 2020, approximately one year since the Minister of Environment and Climate Change received his mandate letter. The Agency does not need a full complement of staff at this time; rather, it just needs the authority and resources to develop its mandate and functions over time.

### 2. Initiate Co-Development with Indigenous Nations

Once the Agency is established, it can begin the process of developing its mandate and functions, including pulling together freshwater capacity from across the federal bureaucracy and establishing intergovernmental mechanisms for working with provincial, territorial, and Indigenous governments. These tasks should be undertaken in partnership with Indigenous Nations through a co-development process rooted in reconciliation and nation-to-nation relationships.

### 3. Commit Resources in Budget 2021

Significant resources to support the Agency's first year of operation should be committed in Budget 2021. In addition to supporting co-development with Indigenous Nations, resources should be allocated to support in-depth collaboration with provincial and territorial governments, local authorities, water organizations, academic institutions, and the general public.

## EXECUTING A BROADER PROGRAM OF REFORMS

The Canada Water Agency is not an end game; rather, the Agency is a stepping stone toward broader reform of Canada's freshwater laws, policies, and institutions.

Some of this work has already begun. The government's motion to instruct the Standing Committee on Environment and Sustainable Development to review federal water policies and laws is a good starting point that will help identify ways forward. However, there is no need to wait for the results of this review to begin modernizing Canada's outdated federal freshwater legislation.

Renewal of the *Canada Water Act* is urgently needed and should begin as soon as possible. The Act is Canada's primary federal freshwater legislation, yet it has not been significantly updated in decades. It needs to be renewed to reflect our new freshwater reality, including addressing climate change, Indigenous water rights, and the evolving role of the private insurance industry in flood risk mitigation and damage reduction. This is a process that should be undertaken through a legislative co-drafting process with Indigenous Nations, one that is consent-based, rooted in nation-to-nation relationships, and consistent with the United Nations Declaration on the Rights of Indigenous Peoples.

## A CONCRETE ACHIEVEMENT AND A LASTING WATER LEGACY

Establishing the Canada Water Agency will demonstrate the government's commitment to undertaking the transformative change needed to ensure Canada's water security in a climate-impacted future. But the perceived organizational complexity of the Agency must not impede its establishment. Rather than figuring out every aspect of the Agency before it is created, the Agency can and should be established expeditiously and be tasked with collaboratively developing its own mandate and functions over time. This is the **concrete achievement**: establishing the Agency in the short-term and making its transformative purpose clear from the outset.

The Agency, together with renewal of the *Canada Water Act*, are the first pieces of a **lasting water legacy** to modernize federal freshwater leadership. This legacy will help ensure that Canada's waters are healthy, sustainable, and resilient to climate change for future generations.





Water Security for Canadians

## PARTNER ORGANIZATIONS



GLOBAL WATER FUTURES



POLIS Project on Ecological Governance

[watersustainabilityproject](#)



UNITED NATIONS  
UNIVERSITY

**UNU-INWEH**

Institute for Water,  
Environment and Health

MASSEY



COLLEGE

**AQUA FORUM**



## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.2

File No. 0550.04

To: Board of Directors  
From: Nelson R. Jatel  
Date: Sept. 30, 2020  
Subject: Water Stewardship Director's Report

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### Water Stewardship Council (Council)

In September, due to the COVID-19 pandemic we hosted our 3<sup>rd</sup> virtual Council meeting. Council heard a presentation from **Roy Brooke**, Executive Director Municipal Natural Assets Initiative, which was well attended. Ideas that were discussed include:

- Nature can be one of our most important assets in our communities and central to the resilience of our infrastructure system and is potentially an investible asset.
- There is a gap between the potential of natural assets and how they are typically being managed. A third of infrastructure in Canada is very poor to fair. Existing storm water management systems are not handling downpours effectively as 164.3 billion liters of raw sewage overflows from combined sewers.
- New service delivery solutions are needed with a changing climate. If local governments have natural assets that exist anyway which provide a range of benefits and have no capital costs communities need to treat them accordingly. The good news is that local governments in Canada are required to adopt modern structural asset management processes which have as their central organizing principle the idea of sustainable service delivery. Asset management is providing a valuable tool for managing natural assets.
- The issue with the public sector accounting board is as follows: except in a very limited number of cases you cannot consider natural assets to be assets for accounting purposes. This means practically you cannot stick them on the balance sheet – they're not considered assets.
- We will have no undeveloped lake at our current trajectory, increasing amount of flooding and other challenges and we need holistic solutions that cut across jurisdiction, ownership and other boundaries. A part of the answer is to understand the current role of natural assets in achieving sustainable outcomes. We could cut this in different ways e.g. at a micro level in Peachland/Summerland for example to understand what are the natural assets, what are their biological functions, what kind of condition are they in, what are the risks that they face e.g. what would happen in the event of a major forest fire? You can choose to either ignore the



information or have a basis for informed decisions. We want to understand the trade-offs and impacts of the decisions made at the local and watershed level.

- West Vancouver has developed an innovative local government Natural Assets program and have published an information brochure that is available online.  
([www.westvancouver.ca/naturalassets](http://www.westvancouver.ca/naturalassets))

This month's upcoming Council meeting will be held by Zoom on October 8<sup>th</sup> from 1 – 3 pm. The council will be discussing Okanagan water research priorities. A survey has been sent out to Council members soliciting feedback on research priority ideas and results will be presented at the Council meeting. Board members are welcome and encouraged to attend.

### **Project updates**

Below are updates and highlights from select OBWB projects that I am working on:

#### **1) Okanagan Hydrometric Monitoring Network – operational and budget planning**

Following-up on the Board approval of a Terms of Reference for the new Okanagan Hydrometric network program I have been working on developing a range of options for an operational budget. Discussions with our partners at the ONA, Water Survey Canada and B.C. government have been positive and are informing the operational planning for the 2021 budget cycle.

#### **2) Okanagan Wetland Strategy**

Work continues on the Okanagan Wetland Strategy ([www.obwb.ca/wetlands](http://www.obwb.ca/wetlands)). The Okanagan wetland mapping study conducted at UBCO is underway under the supervision of Dr. Matheau Bourbonnais. In collaboration with the OCCP, a workshop to support delivering on the recently developed Okanagan wetland strategy and wetland construction manuals is being planned. I have been invited to speak at the BC Wildlife Federation Wetlands Program speaker series scheduled for November 10<sup>th</sup>.

#### **3) Okanagan Flood Management – datum shift**

In the Okanagan, the application of the new datum has limited the use of the new flood model since most local government GIS departments are using the old datum. To overcome this problem the OBWB is working on converting the results from our 2020 flood model into the old datum (a relatively straight forward exercise). We anticipate the translation to be completed in the fall of this year. Having the new flood model results translated into the old datum will support the application of the new model results into water management, planning and policy throughout the Okanagan.

I am organizing a workshop with senior and local government actors to identify opportunities to develop flood plain information in both datums (CGVD28 / CGVD2013) and aid in the implementation of the recently completed Okanagan Flood Model (a Raven model – [www.OkanaganFloodStory.ca](http://www.OkanaganFloodStory.ca)) that has operational and policy implications for regional planning, engineering operations, and policy.

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.3

File No. 0550.04

To: OBWB Directors  
From: James Littley  
Date: September 30, 2020  
Subject: **Operations and Grants Manager Report**

### Invasive Mussel Update

In early September, we had prepared a letter for the province calling for new legislation requiring all watercraft to have the drain plug removed prior to transporting the vessel. The planned release of this letter would have coincided with the next sitting of the legislature, but due to the recent call for an election, we have delayed sending it. Once the new government and Ministers are in place, staff will update any relevant details and send the letter. The intervening time will also allow us to build out additional information on the Don't Move A Mussel website, and to develop a mussel video which can be shared publicly and showed at local government meetings as appropriate.

### Milfoil Control Program

#### Asset Management

Staff have been working on sourcing a new equipment trailer and a new crane truck for the milfoil program. These purchases fit within the total approved 5-year Milfoil Equipment Replacement Plan that was approved by the three Okanagan regional districts in 2017. While the 5-year plan specified that certain equipment would be replaced in certain years, we have managed to save money frontloading the purchase of a new rototiller and re-fitting rather than replacing our harvesters. This year's expenditures were anticipated in the 2021 budget.

The following table outlines the comparison in spending between the 5-year plan and the actual expenditure and reserve balance:

Year	Add to Reserve	Anticipated expenditures	Actual expenditures	Anticipated reserve balance	*Actual reserve balance
2017-18	\$150,000	\$280,000	\$118,208	\$243,000	\$357,364
2018-19	\$150,000	\$0	\$231,120	\$393,000	\$417,464
2019-20	\$150,000	\$0	\$0	\$543,000	\$662,855
2020-21	\$150,000	\$415,300	\$300,000	\$277,764	\$362,885
2021-22	\$150,000	\$0	\$150,000	\$427,764	\$362,885

\*Difference between anticipated and actual also reflects transfer of amortization, not only equipment expenditures.

We have worked with the Interior Purchasing Office to conduct the RFP process in accordance with the legal requirements for each purchase. In accordance with OBWB policy, the board must approve the expenditure of any amount over \$25,000.

**Recommended motion:**

THAT the board approve the expenditure of up to \$50,000 plus tax for the purchase of a new milfoil equipment trailer,

AND THAT the board approve the expenditure of up to \$250,000 for the purchase of a new milfoil crane truck,

AND THAT the Executive Director be allowed to approve the final purchase contract following the competitive process.

New Directions for Milfoil Research

In recent weeks I have started a conversation with the Research and Industry Partnerships office at the UBC School of Engineering on research to better understand and improve milfoil control practices. Our current methods of winter de-rooting and summer harvesting were developed in the 1970's and 1980's, with little research occurring on other potential methods after 1986. UBC Okanagan's School of engineering has specialized labs which can be used to conduct research that was not possible in 1986. In the past, OBWB has engaged UBC Okanagan in other research partnerships, including a partnership with the School of Management to assist with the design of the Milfoil Asset Management Plan. This type of partnership addresses OBWB priorities, while engaging with research faculty and students at state-of-the-art facilities here in the Okanagan. Specific details of specific research project will be brought to the board once they are better defined.

Given the increasingly restrictive permitting requirements imposed by the province, and the lack of research into mechanical milfoil control for the past 35 years, this potential research is intended to initially address the following two questions:

1. How can the mechanical rototilling process or machine design be improved to increase root-dislodgement, or to reduce sediment disturbance, mussel disturbance and limit local turbidity?
2. What alternative methods could be used as a low-impact alternative to mechanical rototilling to effectively control milfoil in the Okanagan and beyond?

We hope that this research will lead to three potential outcomes:

1. Gather data and evidence to better understand the effects (both negative and positive) of rototilling;
2. Identify improvements in rototiller design or practices to mitigate any potential incidental effects; or
3. Identify alternative methods for milfoil control.

While several other types of milfoil control have been developed globally since the OBWB program began, almost all of the research has looked at methods of chemical control, while a small portion of research has

looked at biological control. Several selective aquatic herbicides have been developed in the U.S., but are not approved for use in Canada, and would likely not be socially acceptable for use in our drinking water sources. Costs of maintaining chemical control in the Okanagan would also likely be cost-prohibitive given the scale of the milfoil infestation.

Biological control research has examined the use of other introduced species, parasites and pathogens to control invasive milfoil, but this approach has been shown to be ineffective and harmful to other ecosystem values. The most promising method of biological control uses weevils that are native to the given lake, and prefer invasive milfoil as a food source over their normal northern milfoil food source (Northern milfoil is a native species of milfoil that grows in the Okanagan). However, the numbers of weevils that it takes to control milfoil in even a small area, requires that the weevils be reared artificially in a lab, and then be reintroduced into the water. This method is cost-prohibitive and not effective in the long-term. It has also been shown to be effective at some sites and ineffective at others.

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.4

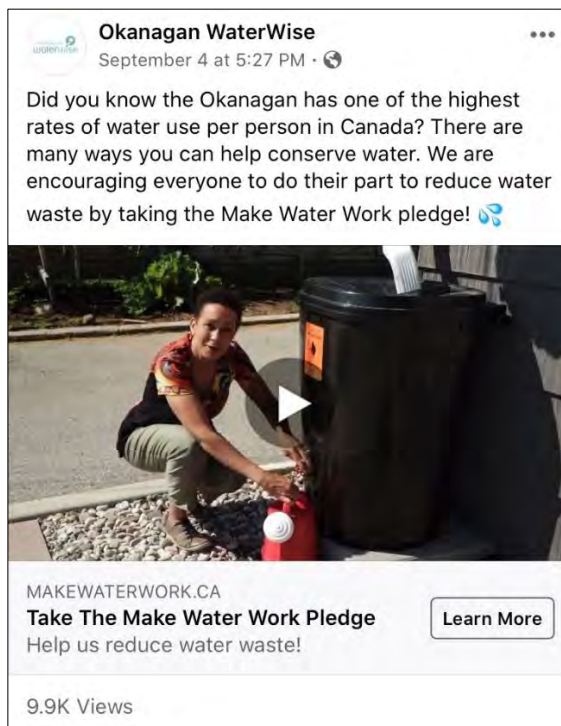
File No. 0550.04

To: OBWB Directors  
From: Corinne Jackson  
Date: September 30, 2020  
Subject: Communications Director Report

### Make Water Work & Don't Move A Mussel 2020

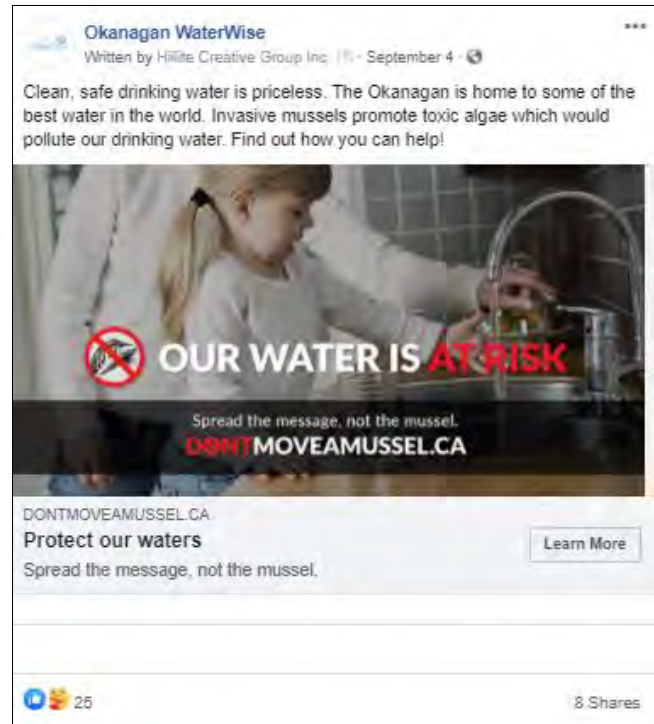
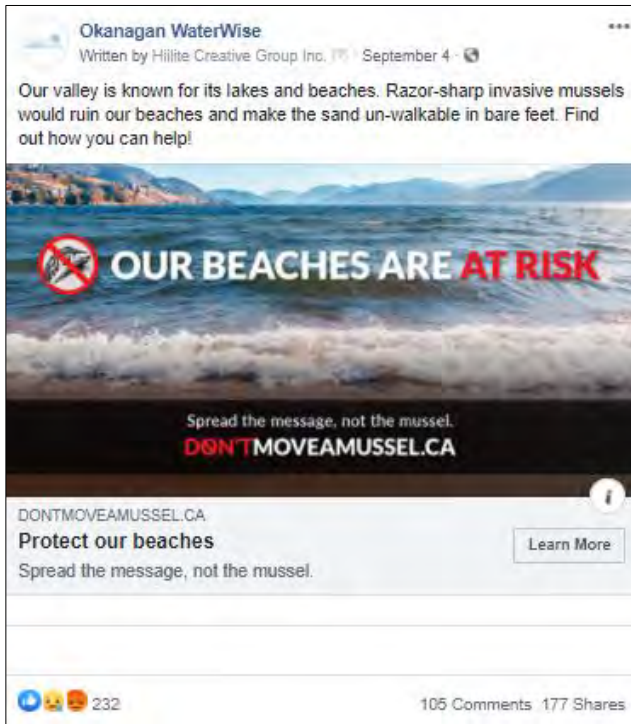
As irrigation begins to slow and outdoor water recreation wraps up, so do both the Make Water Work (MWW - residential outdoor water conservation) and Don't Move A Mussel campaigns. We will be compiling final reports over the coming weeks, but early results show some successes despite the lack of face-to-face outreach due to COVID-19.

As of Sept. 11, when the MWW pledge contest ended, we had 677 pledges – a 28% increase over 2019. (Since then, pledges have climbed to 707.) In addition, the MWW website had almost 12,000 visits between May and September, with more than 8,700 being first time visitors. Social media ads have been a large driver to the website. You can see from the images below, the traction some of the ads produced.




Don't Move A Mussel, similarly, saw success with social media driving people to the website. However, this year we ran into issues with some of the Facebook ads being flagged as "social issues, elections or politics." This resulted in a delay, and some stops and starts, with some of the advertising.

Even so, the website had 5,728 visitors between May and September, up 39% from the previous year with 92% of these being first time visitors.



**Other communication initiatives**

I have been busy working with Discovery Research, drafting an Okanagan water survey similar to the one conducted in 2009 and 2014. The survey will be conducted by phone and throughout the Okanagan in early October. It will gauge people's understanding around water issues, the OBWB and its mandate, the Okanagan WaterWise public outreach program, and the Make Water Work and Don't Move A Mussel campaigns. Also, new this time, we will be delving into source protection. The intention is to get a baseline level of understanding on this topic as we look ahead to building awareness regarding backcountry and water recreation activities and its impacts on water quality.

Work also continues on an Okanagan water curriculum project.

**Summary of OBWB-Related News Media**

- Aug. 21 "Vernon RCMP volunteers are checking boats again," *Vernon Morning Star*
- Aug. 22 "Favourite outdoor spots getting upgrades-Okanagan Rail Trail," *Kelowna Daily Courier*
- Aug. 25 "[ALC denies application for 35 site RV park at Vaseux Lake](#)," *Penticton Herald*
- Aug. 25 "Peachland believes full pool designation based on outdated model," *Castanet.net*
- Aug. 27 "Shuttleworth and Vaseux creeks are dry report to water board," *Castanet.net*
- Aug. 27 "Wood Lake worst hit this year during mild year for milfoil," *Castanet.net*
- Aug. 28 "VIDEO: [Peachland BC calling for province to update lake level management practices](#)," *Global Okanagan*

- Sept. 3 "Water board fence sits on lake level challenge," *Kelowna Daily Courier*
- Sept. 8 "Okanagan Lake water management concerns endorsed by water board," *Kelowna Capital News, Lake Country Calendar, Summerland Review*
- Sept. 10 "Make Water Work campaign concludes," *Armstrong Advertiser*
- Sept. 14 "National award for City of Vernon," *Vernon Morning Star*
- Sept. 14 "[Okanagan Basin Water Board aims to increase hydrometric information network across the valley](#)," *Castanet.net*
- Sept. 17 "[Armstrong crowned champion in Make Water Work campaign](#)," *Vernon Morning Star, Salmon Arm Observer, Penticton Western News, Keremeos Review*
- Sept. 17 "City of Armstrong wins title in Make Water Work campaign," *Castanet.net*
- Sept. 18 "Armstrong wins WaterWise event... again," *Beach Radio 107.5-VernonMatters.ca*
- Sept. 17 "Okanagan Communities Vie for Champion Title in Water Conservation Competition," *Water Canada*
- Sept. 21 "South Okanagan MP shows support for preserving chunk of Kaleden land up for sale for development," *Castanet.net*

#### **Recent Presentations**

- Sept. 18 "Eurasian watermilfoil: costs and controls in the sunny Okanagan," to Alberta Lake Management Society – James Littlely
- Sept. 24 "OBWB Flood Projects – update," to RDCO and partners – Anna Warwick Sears and Kellie Garcia

#### **Upcoming Presentations**

- Oct. 8 "Okanagan Lake Level Management Review" to RDCO Board – Anna Warwick Sears
- Oct. 21 "Okanagan Flood Mapping" to UBCO Leadership Forum – Anna Warwick Sears
- Oct. 23 "Our Relationship with Water in the Okanagan – curriculum" to Vernon School District Eco-Educators – Corinne Jackson
- Oct. 29 "Environmental Flow Needs: Governance considerations in the Okanagan" to UBC Vancouver - Sustainable Water Systems Policy – Nelson Jatel

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.5

File No. 0550.04

To: OBWB Directors  
From: Kellie Garcia  
Date: September 29, 2020  
Subject: **Policy and Planning Specialist Report**

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### Flood Planning Initiatives

I have been working on three flood-related initiatives this month. First, I assisted the RDCO in planning and holding a kick-off workshop for Phase 3 of their Regional Floodplain Management Plan (RFMP). The purpose of the workshop, which was held on September 24, was to review the purpose and goals of the RFMP, present some of the projects completed in Phase 2, and discuss any gaps and opportunities. I will continue to provide support on this project as requested by the RDCO.

Second, Dr. Sears and I are planning a workshop for the valley-wide Okanagan Collaborative Flood Planning Group to be held in November. The group was originally put together in March 2018 to coordinate grant submissions to the Community Emergency Preparedness Fund and National Disaster Mitigation Program following the 2017 flood events, and to collaborate on the LiDAR and Aerial Image Acquisition project and flood modeling and mapping projects. It includes a mix of planning, natural resources, public works, community services, emergency services, and GIS folks from Okanagan local governments and Indigenous communities. The group hasn't met for about a year so we want to bring everyone together to talk about current and future projects being completed across the valley, and to identify how the OBWB can best support local governments in their flood planning efforts moving forward.

Last, the UBCO research team has completed the first task of the project they are working on for us -- an inventory of flood policies, plans and regulatory tools, including strategies, guidelines and bylaws currently in place in the Okanagan valley. Now they are examining the gaps, challenges, successes and opportunities related to the current policy/planning tools identified in Task 1. Next they'll undertake a literature review of flood policy and planning tools being used in other regions in Canada and then prepare a final report with recommendations on how the Okanagan can shift from a flood protection approach to adaptive resilience.

### Source Water Protection Toolkit Project

The Technical Advisory Committee for this project will be meeting at the end of October. Our guest speaker will be Doug Wahl, Manager of Audits and Investigations for the Forest Practices Board. Before joining the Board 12 years ago, Doug was a consulting habitat biologist based in Summerland, where he provided advice on mitigation, policy and regulatory matters related to forestry and mining. Doug is going to tell us about his



experiences and observations in drinking water watersheds and share ideas about how source protection can be improved through partnerships, capacity-building, and stronger regulation. The project team and I will gather feedback on drafted sections of the source water protection toolkit during the second half of the meeting.

### **Okanagan Lake Responsibility Planning Initiative**

On September 9, I attended the first of two sessions focused on *Syilx* water values and perspectives as part of the Okanagan Lake Responsibility Planning Initiative. The session was led by the Okanagan Nation Alliance and steered by a *Syilx* facilitator. It included a welcome by a *Syilx* Knowledge Keeper and a presentation by a *Syilx* member. Various educational materials and videos were provided before the session to further enhance learning. The second session will be held at Sun-Oka Beach Provincial Park on October 2. It will focus on using the Four Food Chiefs model for collaboration and decision-making and on identifying and addressing barriers to protecting and restoring Okanagan Lake.

### **Thompson Okanagan Regional Drought Response Team**

The Thompson Okanagan Regional Drought Response Team met on September 2, 16 and 23 to discuss water and fisheries conditions and concerns and make recommendations regarding drought levels. There has been no change in conditions in our region since I last reported to the board. Our final regular meeting of the season is tomorrow, Sept. 30, and then we will have our annual debrief sometime in October.

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
October 6, 2020  
Agenda No: 6.6

To: OBWB Directors  
From: Carolina Restrepo Tamayo  
Date: September 29<sup>th</sup>, 2020  
Subject: **Special Projects Coordinator report**

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The Special Project Coordinator is working on four initiatives: The OBWB 50<sup>th</sup> Anniversary celebrations, the AquaHacking Challenge 2021, the Osoyoos Lake Water Science Forum 2021, and the Municipal Natural Assets Workshop for local governments. Below is a short report on the status of each of them.

### **OBWB 50<sup>th</sup> Anniversary Celebrations**

To celebrate the 50<sup>th</sup> anniversary of the OBWB three main activities have been planned for the month of October as follows:

- October 1<sup>st</sup>: OBWB 50<sup>th</sup> celebration, event in person at Bertram Creek Provincial Park, only Board members, staff and a few special guests are attending. Media have also been invited.
- October 22<sup>nd</sup>: Virtual Guest Speaker Bob Sandford, Title of his presentation: The Okanagan Basin Water Board, the Next 50 years. Free event open to the public (online). Details to be announced.
- October 29<sup>th</sup> (TBC): A second Virtual Guest Speaker on international water challenges, solutions and lessons for the Okanagan.

### **AquaHacking**

As approved during the last board meeting, the Memorandum of Understanding for the 2021 AquaHacking challenge is in the final stages of review. We are working with AquaForum to confirm potential project partners and the selection of water issues. We have defined a detailed timeline, planning a kick off for early 2021 and final event in September 2021. The scope of the challenge will include not only British Columbia but also other western provinces such as: Alberta, Manitoba and Saskatchewan. The goal is to partner with universities and water organizations in the four western provinces.

### **Osoyoos Lake Water Science Forum 2021**

The International Joint Commission (IJC) is a conference partner in planning the upcoming Osoyoos Lake Water Science Forum (OLWSF), scheduled to be held in 2021, in Osoyoos, B.C. The Science Forum will focus attention on the needs and challenges for sustaining the ecological health of Osoyoos Lake.

The IJC's International Osoyoos Lake Board of Control (IOLBC), in collaboration with water management agencies, Tribes, First Nations and communities on both sides of border, will co-organize the OLWSF with the Okanagan Basin Water Board (OBWB). The event will be coordinated with the

IOLBC Annual Board and Public Meeting. Organizers are looking at including a Saturday as one of the forum days to facilitate participation by community members.

The OLWSF provides an opportunity for residents of the Okanagan/Okanogan watershed to learn about water management and ecological issues of importance to Osoyoos Lake and the broader transboundary watershed. Resource managers and stakeholders are also invited to identify and share common challenges, concerns and goals to promote transboundary stewardship of the lake and the ecosystem it supports.

The OBWB is the primary organizer and host of the OLWSF 2021. It also organized the forum in 2007, 2011 and 2015. The IJC awarded the OBWB a total of \$20,000 to plan and execute the 2021 event and prepare a final report summarizing the dialogue and presentations made. Planning sessions will begin in October 2020.

### **Municipal Natural Assets Workshop for Municipalities:**

The OBWB is planning a mid-November workshop for local governments in the Okanagan to identify the current status and interest in Municipal Natural Assets (MNA), define next steps and determine how the OBWB can support these. MNA is part of many of the projects and initiatives the OBWB has worked on over the years, including the Wetlands Strategy, the Source Water Protection project and the Okanagan flood collaboration. Below you will find some background information.

*Asset management—the process of inventorying a community’s existing assets, determining the current state of those assets, and preparing and implementing a plan to maintain or replace those assets—allows municipalities to make informed decisions regarding a community’s assets and finances.*

*In general, local governments lack policies to measure and manage natural assets. Natural assets are ecosystem features that provide, or could be restored to provide, services just like the other engineered assets, but historically have not been considered on equal footing or included in asset management plans. As the municipal infrastructure asset management process evolves, it will be critical to ensure that all community assets that may provide municipal services—lakes, wetlands, green spaces and trees as well as roads, bridges and buildings—are appropriately identified and managed.*

*Each municipality will have a different set of natural assets that support core municipal services. The inclusion of these assets into the existing asset management framework brings them to the same level of importance and awareness as other typical engineered assets.*