

## Okanagan Basin Water Board Meeting Agenda



**DATE:** Friday, Sept. 8, 2017

**TIME:** 12:30 p.m. to 2 p.m.

**PLACE:** Westbank Lions Community Centre  
2466 Main St. West Kelowna, B.C.

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1. **CALL MEETING TO ORDER**

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 August 1, 2017 at Regional District of Central Okanagan ([page 1](#))

5. **CHAIR'S REPORT**

6. **STAFF REPORTS**

6.1 Executive Director Report ([page 7](#))

6.1.1 E-mail correspondence between OBWB and B.C. Minister of Environment

6.2 Water Stewardship Director Report ([page 13](#))

6.3 Operations and Grants Manager Report ([page 19](#))

6.4 Communications Director Report ([page 22](#))

6.5 Policy and Planning Specialist Report ([page 26](#))

7. **NEXT MEETING**

7.1 The next meeting of the Okanagan Basin Water Board will be Tuesday, October 3, 2017 at the Regional District of North Okanagan.

8. **ADJOURNMENT**



**MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD  
HELD AUGUST 1, 2017, AT THE REGIONAL DISTRICT OF CENTRAL OKANAGAN  
1450 KLO RD., KELOWNA, B.C.**

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**PRESENT**

Chair Tracy Gray	Regional District Central Okanagan
Vice-chair Juliette Cunningham	Regional District North Okanagan
Director Doug Dirk	Regional District North Okanagan
Director Rick Fairbairn	Regional District North Okanagan
Director Doug Findlater	Regional District Central Okanagan
Director Cindy Fortin	Regional District Central Okanagan
Director Sue McKortoff	Regional District Okanagan-Similkameen
Director Peter Waterman	Regional District Okanagan-Similkameen
Director Brian Guy	Okanagan Water Stewardship Council
Alt. Director Sarah Alexis	Okanagan Nation Alliance

**REGRETS**

Director Ron Hovanes	Regional District Okanagan-Similkameen
Director Lisa Wilson	Okanagan Nation Alliance
Director Toby Pike	Water Supply Association of BC

**OBWB STAFF**

Anna Warwick Sears	Executive Director
Nelson Jatel	Water Stewardship Director
James Littlely	Operations and Grants Manager
Kellie Garcia	Policy and Planning Specialist
Alyssa Bougie	Communications & Outreach Coordinator
Alison Thorpe	Water Demand Model Specialist

**GUESTS**

Mel Arnold	MP North Okanagan - Shuswap
Bonnie Gavin	Assistant to MP, North Okanagan – Shuswap
Krista Derrickson	Westbank First Nations

**1. CALL MEETING TO ORDER**

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

**2. INTRODUCTIONS OF LATE ITEMS**

7.3 Water Conservation and Quality Improvement Program Review - Awarding Procedures Memo

**3. APPROVAL OF AGENDA**

***“THAT the agenda of the regular meeting of the Okanagan Basin Water Board of August 1, 2017 be approved as amended.”***

**CARRIED**

**4. DELEGATIONS**

Mel Arnold, MP North Okanagan-Shuswap – discussion of potential invasive species initiatives

Mr. Arnold spoke to the board on his concerns about invasive aquatic species, including zebra and quagga mussels, and the need to prevent them from coming to the Okanagan. Mr. Arnold described the history in the Shuswap of eradication attempts for invasive fish species like perch and bass, and the cost of those treatments – between \$60,000 and \$600,000 per lake. Given that there are no proven ways to eradicate invasive mussels once established, Mr. Arnold expressed an interest in working with the OBWB to support local prevention efforts, and spoke of the need for rapid response at all levels of government. The board discussed ways to improve coordination with Ottawa on aquatic invasive species issues.

Mr. Arnold informed the board he is organizing a roundtable discussion next week between multiple levels of government to share information on invasive species and identify ways to prevent aquatic invasive species from being introduced.

**5. ADOPTION OF MINUTES**

5.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of June 6, 2017 at Summerland Waterfront Resort in Summerland.

***“THAT the minutes of the regular meeting of the Okanagan Basin Water Board of June 6, 2017 at Summerland Waterfront Resort in Summerland be approved.”***

**CARRIED**

**6. CHAIR REPORT**

Ms. Gray noted it is important to keep pushing at the provincial level on all the issues under the OBWB mandate.

**7. STAFF REPORTS**

7.1 Executive Director Report

Dr. Sears announced that the Annual Public Meeting will be Friday, September 8 at the Westbank Lion’s Community Centre. The keynote speaker, Maximilian Kniewasser, is from the Pembina Institute, and will be discussing B.C. climate policy.

Dr. Sears discussed the lack of direct mentions to water in the new provincial government’s Letters of Mandate and noted that it is important to inform the current government about Okanagan water issues.

Dr. Sears mentioned the flood review that the City of West Kelowna requested from the province of B.C. The board discussed the potential of extreme weather events including fire and flood in future years and the importance of pressing forward on these issues.

Dr. Sears informed the board about floodplain mapping grant applications that would allow regional districts throughout the Okanagan to update floodplain information and maps, and improve resilience to flooding events.

Ms. Alison Thorpe was introduced, who will be working as the Water Demand Model intern. Ms. Thorpe will be with the OBWB until the end of January 2018.

Dr. Sears noted Regional District of the Central Okanagan's service review has been delayed due to spring flooding. She also mentioned that OBWB's milfoil equipment will be transferred to RDOS in the coming months.

The board discussed upcoming weather and water restrictions. Ms. Garcia noted that Greater Vernon Water has now moved to Stage 1 water restrictions. The board noted that water restrictions were questioned by many residents throughout the valley due to flooding this year, and Dir. Fortin stressed the importance of standardizing water restrictions across municipalities.

***"THAT the Executive Director's Report, dated July 26, 2017, be received."***  
**CARRIED**

## 7.2 Water Stewardship Director Report

Mr. Jatel reminded the board that there was no Water Stewardship Council meeting in July, and there won't be one in August.

From the June Joint Council and Board meeting, Mr. Jatel discussed the possibility of having communication sent to qualified environmental professionals regarding the threat of invasive mussels in their work.

The board heard an update on the Environmental Flow Needs (EFN) project, and noted that flows slowed considerably due to dry weather, with some creeks drying entirely.

Mr. Jatel informed the board about an internal audit of data collection and storage on the EFN project occurring in the fall.

An update was also provided on the Mission Creek surface-groundwater interaction project. The project will provide more accurate data on groundwater supplies, as well as environmental flow needs in Mission Creek.

The board discussed challenges around legislation on groundwater supplies. It was noted that new legislation will be soon passed, and that there will likely be some time once it is passed to work out any problems. Dir. Fairbairn noted the difficulty for those applying for water licenses. The board discussed the potential to provide recommendations on groundwater legislation.

***"THAT the Water Stewardship Director's report, dated July 25, 2017, be received."***  
**CARRIED**

## 7.3 Operations and Grants Manager Report

Mr. Littley updated the board on milfoil control. The program was only delayed at most two weeks (Okanagan Lake), less than the delay anticipated due to winter freezing and spring flooding.

Mr. Littley announced the successful bid from Multi-Power Products on a new rototiller for milfoil removal. The board discussed OBWB purchasing policy.

***"THAT the OBWB award the contract for the Design and Build of Aquatic Rototilling Vessel for Milfoil Removal to Multi-Power products Ltd. Of Kelowna B.C., pending final contract Terms and Conditions acceptable to OBWB."***

***AND THAT the Operations and Grants Manager be authorized to finalize the Terms and Conditions with Multi-Power Products Ltd. with the final approval of the Executive Director.***

***AND THAT the final contract price excluding GST shall not exceed \$350,000”***  
**CARRIED**

Mr. Littley recently attended the Pacific Northwest Economic Region (PNWER) summit meeting, and provided the board with new initiatives on the invasive mussel issue. Updates from member provinces and states included increased communications initiatives between states and provinces, dialogue with boat manufacturers, and more comprehensive inspection and decontamination procedures. The Canadian Department of Fisheries and Oceans attended the meeting for the first time, providing federal government representation. Mr. Littley provided clarification on provincial funding for invasive species initiatives.

The board reiterated the importance of meeting with provincial and federal representatives. Mr. Littley noted that increased inspection stations and/or increased hours would be one of the most important ways to move forward.

Dir. Fortin noted educational materials such as pipes coated with invasive mussels could be an effective education tool to take to meetings with provincial/federal representatives. Ms. Bougie said staff are already looking into purchasing similar items to add to the invasive mussel samples they already have, and will look specifically into the pipe. Mr. Jatel suggested a risk map for invasive species throughout B.C.

Mr. Littley presented proposed updates to the Water Conservation and Quality Improvement Program. The board discussed the proposal and the possibility of a full review next year and potential shifting to a valley-wide program.

***“THAT the OBWB adopt the three recommendations to update the WCQI process, as presented.”***

**CARRIED**

The board discussed how funds are allocated for the Sewage Facilities Grants Process.

***“THAT the OBWB changes the SFA grant program requirements for provincial review as presented”***

**CARRIED**

***“THAT the Operations and Grants Manager’s Report, dated July 24, 2017, be received.”***

**CARRIED**

#### 7.4 Communications Director Report

Dr. Sears presented the report on behalf of Ms. Jackson.

Dir. Fortin noted it has been difficult to encourage the community to conserve water in the face of flooding and fires, but is keen to retain Peachland’s title as Make Water Work champions.

Dir. Fairbairn noted that the communications initiatives from the Okanagan Basin Water Board are continually improving and noted how effective they are.

Dir. Guy noted that talking points on the flooding and flood mitigation would be useful to ensure

the OBWB's message is consistent. The board noted that many Okanagan citizens have suggested that increasing agricultural usage, increasing watering, etc., would be an effective way to lower lakes. Ultimately, this would not work for a number of reasons. The board discussed the importance of preventing the spread of misinformation. Dr. Sears noted that talking points had been developed. A radio ad to address this issue was also developed and aired on stations across the valley.

Dir. McKortoff noted that Osoyoos is working to spread the message "New Normal" – letting citizens know that drought and flood in the same year will likely be seen in the coming years.

Different methods to reduce water use were discussed by Dir. Waterman. One effective way, he noted, is to allow drip irrigation on any day of the week while other irrigation methods are restricted to certain days.

Dir. Gray pointed out Saskatchewan's interest in the Don't Move a Mussel campaign. The board discussed the benefits of consistent messaging on the mussel issue.

***"THAT the Communications Director's Report, dated July 26, 2017, be received."***  
**CARRIED**

#### 7.5 Policy and Planning Specialist Report

Ms. Garcia updated the board on the Okanagan Sustainable Water Strategy. She noted that the Water Stewardship Council was surveyed on actions that should be included in the update. A number of new actions will be included including invasive mussels and the provincial Water Sustainability Act.

Ms. Garcia provided an update on the Agriculture Water Supply Communications Pilot Project. The project is aimed at improving communications between utilities and agricultural users regarding water supply. Thirty-nine producers are signed up with City of Penticton and seven with Greater Vernon Water. Purveyors are able send out alerts via email, text, etc., to producers to inform them of water availability.

The board was also updated on the Mainstem Drought Triggers project.

Ms. Garcia also provided an update on the Toolkits and Guides project. The OBWB is partnering with CivicInfo BC to help improve the use of resources throughout the Okanagan and B.C. We are also working on a grant proposal to further assist local governments with planning.

***"THAT the Policy and Planning Specialist's Report, dated July 25, 2017, be received."***  
**CARRIED**

## 8. NEW AND UNFINISHED BUSINESS

### 8.1 Okanagan water policy priority communications

Mr. Jatel introduced the memo on Okanagan Water Policy priority communications, and asked the board about gaps in communication to the new provincial government. He indicated it might be appropriate to write letters to the new provincial government to inform them on Okanagan water issues.

The board discussed strategies for meeting with new ministers, and avoid inundating them with new information. Dir. Waterman suggested limiting requests to a few very important issues, invasive mussels being one of them. He also highlighted the importance of being coordinated

and unified within municipalities and with other communities as well. Dir. McKortoff also noted that the ministers' time will be limited at UBCM (Union of BC Municipalities), which some directors will be attending.

The board discussed the importance of writing a letter to the Premier's Office, and to relevant ministries including FLNRORD, Ministry Of Environment, Ministry of Agriculture, Ministry of Public Safety, and the Ministry of Municipal Affairs. Dr. Sears suggested some of the most important topics for OBWB are invasive mussels as well as extreme weather (fires and floods).

***"THAT staff send a letter to introduce OBWB to key ministers, deputy ministers, assistant deputy ministers including the premier and Okanagan M.L.A.s, Minister of Environment, Minister of FLNRORD, Minister of Agriculture, Minister of Health, and Minister of Public Safety outlining key issues of concern for the OBWB."***

**CARRIED**

***"THAT the Okanagan Water Policy priority communications memo be received."***

**CARRIED**

**9. NEXT MEETING**

The next meeting of the Okanagan Basin Water Board will be an abbreviated meeting following our Annual General Meeting on Friday, September 8, 2017 at the Westbank Lions Community Centre in West Kelowna, 12:30 – 2:00 pm.

**10. ADJOURNMENT**

***"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of August 1, 2017 be adjourned at 2:04 p.m."***

**CARRIED**

Certified Correct:		
Chair		Executive Director

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
September 8, 2017  
Agenda No: 6.1

File No. 0550.04

To: OBWB Directors  
From: Anna Warwick Sears  
Date: August 30, 2017  
Subject: **Executive Director Report**

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### Flood Recovery Meetings

Kellie Garcia and I have attended Flood Recovery workshops in RDNO and RDOS, with another planned in RDCO. These workshops were organized by Associated Environmental Consulting, and brought together local government and provincial staff and members of the consulting community and emergency response workers to discuss the flood response and recovery efforts. We hope to organize a joint valley-wide workshop later in the fall to increase communications between the regional districts. Each has a different experience, and lessons to share.

We also attended a public meeting in Oliver, and heard rural resident's concerns about the need for better flood management in those areas. People living north of Oliver expressed frustration with drainage on the river floodplain, and those living south of Oliver had concerns about excessive runoff and the potential for debris flows from burned areas around Mt. Kobau. For both areas, the challenges appear to relate primarily to excessive rainfall and stream flows, rather than lake and river management – although high flows in the river slow the drainage.

### Flood Mapping Applications

The 2017 floods highlighted a significant gap in floodplain mapping in the valley. There are a few scattered maps for some of the lakeshore areas, but those that exist are very old (before digital mapping technology). Fortunately, the primary grant program that funds flood mapping (the National Disaster Mitigation Program) had an application opportunity this summer, with a deadline of August 25. I contacted all three Okanagan regional districts, and assisted RDCO and RDOS to submit applications to map the mainstem lakeshore and Okanagan River channel. The Okanagan Nation Alliance also submitted an application for flood risk assessments in areas not covered by the floodplain mapping proposals. All three applications were coordinated and cross-referenced, and we are optimistic that they will be funded (given the millions of dollars in flood costs accrued this year).

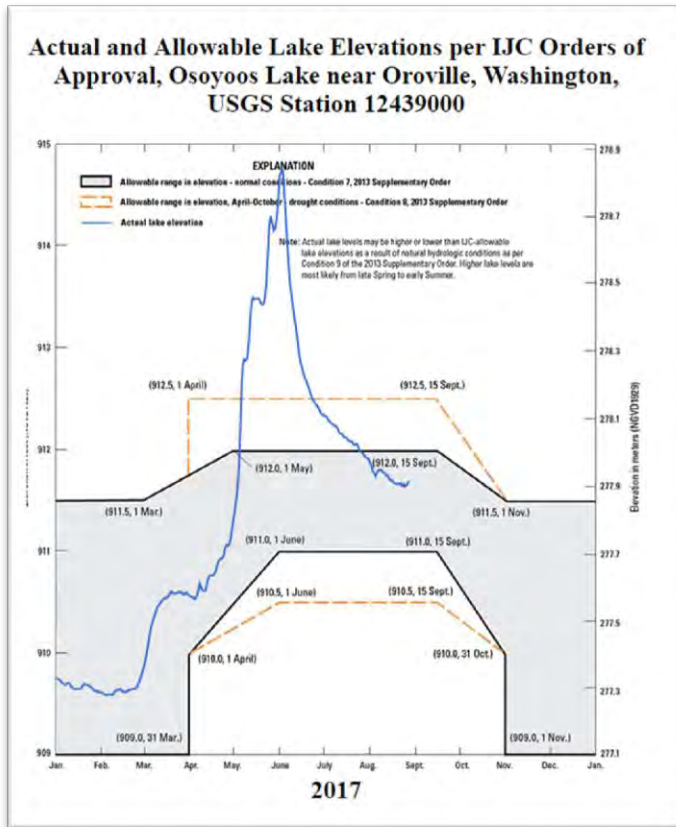
As part of the larger flood mapping effort, we have been communicating with FLNRO and Emergency Management BC to urge the province to do a low-water LiDAR flight this fall. LiDAR is a radar technology that provides very accurate digital elevations, allowing us to predict which areas will flood at which lake elevation. This is a great tool for flood response planning and developing flood construction regulations, and is considered essential for accurate flood mapping. LiDAR was flown at



the peak of the flood, and that is a useful reference but not as helpful for lower levels of flooding. *If any of the Okanagan local governments are meeting with the FLNRO or Public Safety ministers at UBCM, please consider making a request for a low-water LiDAR flight directly to the ministries.*

**Osoyoos Board of Control Meeting and River Film Premier**

The International Osoyoos Lake Supplementary Board of Control will be holding their annual public meeting in Osoyoos this year at the Sonora Centre on October 17<sup>th</sup>. There was a significant high-water event on Osoyoos Lake this year as well, primarily because Zosel Dam was not able to release the water coming from Okanagan Lake and the tributary streams south of Penticton.



The graph on the left shows the actual lake levels through the year, compared with the grey area that represents the allowable operating range. The dam operator can go outside of the range when the dam is physically unable to pass that amount of water. The public meeting is an opportunity to ask questions about the management of Osoyoos Lake, and express concerns.

This year, as part of the public meeting, there will be a special screening of the River Film, produced by the Washington State Department of Ecology, funded by the International Joint Commission and supported by the OBWB. The film, 40 minutes long, describes the trans-boundary challenges of managing Osoyoos Lake, and the many uses and needs of the residents and ecosystem along the Okanagan River and Osoyoos Lake system. A second

screening is planned October 25<sup>th</sup> at the Oliver Theatre, with additional plans for broader distribution.

**2017 Salmon Feast**

The Okanagan Nation Alliance is hosting their annual Salmon Feast in Okanagan Falls on September 17<sup>th</sup>, at the provincial park campground. The ceremony begins at 10 a.m., followed by the feast at noon. It's a wonderful community event and opportunity to share in an important cultural event of the Syilx Nation. The OBWB provided \$500 in sponsorship for this event.

From their website: *“The Annual Salmon Feast is an essential practice in the continued organized efforts of the Okanagan Nation Alliance and member communities to raise the importance of the habitat protection and rehabilitation of local ecosystems, watersheds and a renew connections and*

*relationships between all residents of the Region with water and fish. It is vitally important that we honour the salmon so they will always come back to feed the people.”*

### **UBCO Water Research Chair Advisory Committee**

I am in ongoing discussions with UBCO about revamping the Water Advisory Committee. The committee was originally established to provide advice from members of the local water community to the Water Research Chair, John Janmaat, but has had challenges with turnover on the university end, and attrition at the community end. The vision for the new committee is to have it be a regular workshop/forum, hosted by the university twice a year, and broadened to include the 20+ faculty with water-related research. The faculty are excited about solving community challenges and having more dialogue to align faculty and the community, and support collaborations.

### **Ministerial Review of Hullcar Aquifer**

The new B.C. Environment Minister, George Heyman, has requested an external review of the management of the Hullcar Aquifer in the North Okanagan. The Polis Institute at the University of Victoria is leading the review. I was requested, and have committed, to provide the reviewers any information the OBWB has from our water supply and demand models and data, and any information we have on water quality studies in the area. For more information, see:

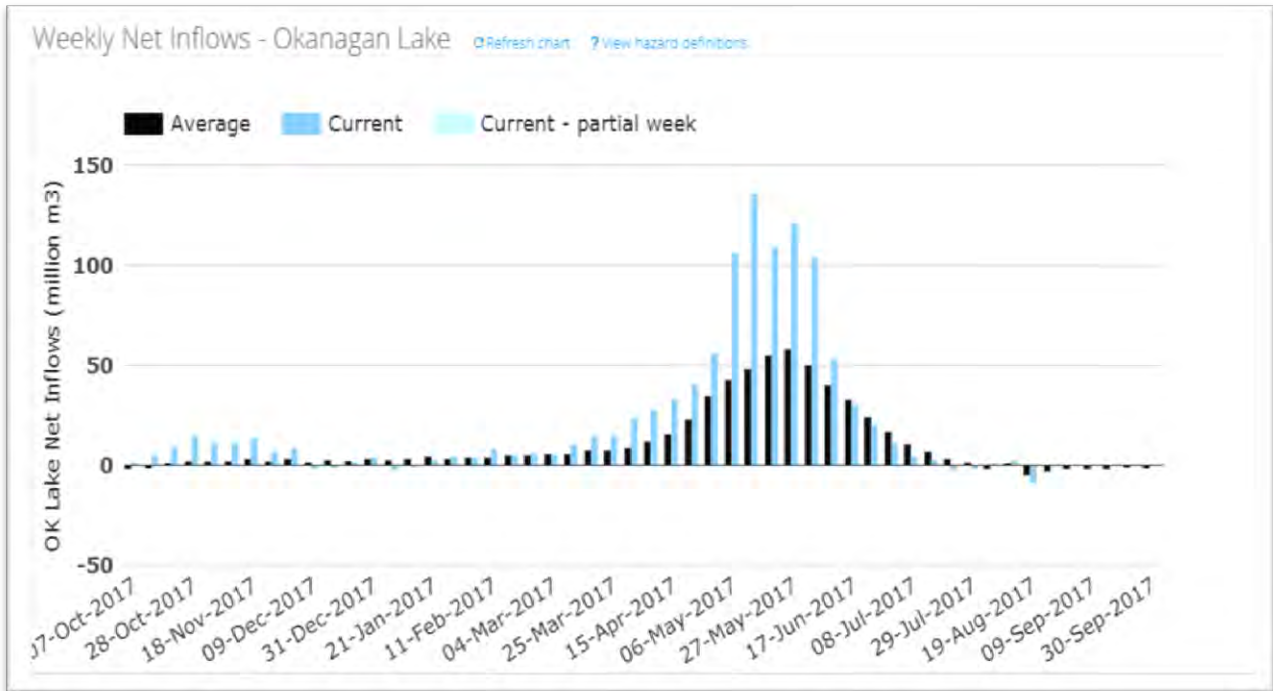
<https://news.gov.bc.ca/releases/2017ENV0043-001376>

### **Imagine Kelowna**

I was invited to contribute a blog post on water conservation to the Imagine Kelowna website. It was a good opportunity to share our valley-wide perspectives, with a focus on the Central Okanagan. The topic fits well with our AGM theme of “Weathering Extremes”: <https://imagine.kelowna.ca/special-blog-series-one-valley-one-water>

### **Weather update – from floods to droughts**

According to FLNRO staff, the March to May 2017 recorded precipitation levels ranked 2<sup>nd</sup> (highest ever recorded) for the City of Vernon, 4<sup>th</sup> for the City of Kelowna, and 1<sup>st</sup> for the City of Penticton, out of 100 years of precipitation records. Now, Environment Canada is reporting we are having one of the driest summers on record.



Short-term weather forecasts call for continued dry weather for the next 10 days (as of August 29<sup>th</sup>), and flows in Okanagan streams that are not supported by reservoir releases are reaching critical levels. The watersheds surrounding the Okanagan have all been moved to Drought Level 3 or 4. However, we are reaching the end of the irrigation season, and due to the wet spring, most large water suppliers report having sufficient supplies for the rest of the season.

## Anna Warwick Sears

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Okanagan Basin Water Board  
Regular meeting  
Sept. 8, 2017  
Agenda No: 6.1.1

**From:** Anna Warwick Sears  
**Sent:** Friday, August 18, 2017 12:46 PM  
**To:** 'Minister, ENV ENV:EX'  
**Cc:** Tracy Gray  
**Subject:** RE: My priorities as Minister of Environment

Dear Minister Heyman,

Thank you for your email. I really appreciate your interest in engagement.

The Okanagan Basin Water Board is looking forward to continuing our excellent working relationship with your ministry, on all aspects of water supply and water quality protection, groundwater science, the implementation of the Water Sustainability Act, expanding water monitoring and reporting, and preventing the spread of aquatic invasive species.

B.C. is a big and varied province, and we recognize that each region has its own challenges. Here in the Okanagan, we try to be a proving ground for different water science and policy approaches, that may apply to other parts of the province. The Ministry of Environment is one of our key partners, with some of the best staff in government.

Please don't hesitate to contact me if you have any questions about water in the Okanagan, and interior water issues in general.

Regards,

Dr. Anna Warwick Sears

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**Anna Warwick Sears, Ph.D.**  
**Executive Director**  
**Okanagan Basin Water Board**  
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Kelowna, BC V1W 3Z4

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*Building Bridges* blog: [www.obwb.ca/blog](http://www.obwb.ca/blog)

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**From:** Minister, ENV ENV:EX [<mailto:ENV.Minister@gov.bc.ca>]  
**Sent:** Friday, August 18, 2017 12:13 PM  
**To:** Anna Warwick Sears  
**Subject:** My priorities as Minister of Environment

Reference: 311251

*August 18, 2017*

Anna Warwick Sears

Okanagan Basin Water Board  
Email: [Anna.Warwick.Sears@obwb.ca](mailto:Anna.Warwick.Sears@obwb.ca)

Dear Ms. Warwick Sears:

As the newly appointed Minister of Environment and Climate Change Strategy for the Province of British Columbia, I want to take this opportunity to introduce myself and my priorities.

Our government put forward a progressive vision for a better BC including taking action on climate change. I look forward to working with you to achieve our mutual goals of building a strong, sustainable, innovative economy, while protecting our air, land and water.

Premier Horgan directed me to make progress on the following priorities:

- Renew BC's Climate Leadership Team within the first 100 days of my mandate;
- Implement a comprehensive climate action strategy, including setting a new legislated 2030 reduction target and establishing separate sectoral reduction targets and plans, while providing a pathway for BC to prosper economically;
- Work with BC's Minister of Finance to implement an increase of BC's carbon tax by \$5 per tonne per year, beginning April 1, 2018 to meet the federal government's carbon-pricing mandate. I am also directed to work with the Minister of Finance to take measures to expand the carbon tax to fugitive emissions and to slash-pile burning;
- Revitalize BC's Environmental Assessment process and review the professional reliance model to ensure the legal rights of First Nations are respected, and that British Columbians' expectation of a strong, transparent process is met;
- Employ every tool available to defend BC's interests in the face of the expansion of the Kinder Morgan pipeline, and the threat of a seven-fold increase in tanker traffic on our coast; and
- Enact an endangered species law and harmonize other laws to ensure they are all working towards the goal of protecting BC.

If you are interested in learning more about any of my key priorities listed here or would like to discuss opportunities to work together, please do not hesitate to get in touch with me by emailing my office at [env.minister@gov.bc.ca](mailto:env.minister@gov.bc.ca).

I look forward to building a collaborative relationship with you.

Sincerely,

George Heyman  
Minister

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
Sept. 8, 2017  
Agenda No: 6.2

File No. 0550.04

To: Board of Directors  
From: Nelson R. Jatel  
Date: August 29, 2017  
Subject: Water Stewardship Director's Report

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### Water Stewardship Council (Council)

All board members are encouraged to attend our September 7<sup>th</sup> Council meeting at the Coast Capri Hotel from 12:30pm - 4:30pm. Guest speakers include:

2017 forest fire impacts

- **Rob Schweitzer**, BC Wildfire Service's Kamloops Fire Center Manager: review of 2017 forest fires

Panel review of EFN project

- **Elinor McGrath**, ONAFD
- **Natasha Neumann**, consultant
- **Drew Lejbak**, Associated Engineering



The Council's 18 month work plan led to setting up seven working committees. Council committees continued to meet and develop action plans throughout the summer. Below are select council committee updates:

### *Water allocation committee*

What can improve the accuracy of decision-making? FLNRO staff have identified strong value in the development of a transparent and reproducible water allocation decisions 'flow chart' that is defensible in front of Environmental Appeal Board. Co-chaired by **Doug Edwards** and **Brian Guy**, this committee intends to inform the development of this flow chart.

### *Communication committee*

This committee chaired by **Zoe Kirk** is improving internal communication within the Council and between council members. Among other activities, the committee has developed a new web-based chat room to support virtual meetings. The chatroom is undergoing testing and has the following attributes:

- Simple and works across multi-platforms
- Supports pdf and ppt file formats
- Safe and secure for users

### *Policy committee*

The policy committee chaired by **Rob Birtles** is working on pro-actively identifying Okanagan water policy issues and developing communication strategies to ensure they are brought to the Board in a timely manner. Recent efforts focused on supporting the Board communicate Okanagan water priorities and historic collaborative projects to the new B.C. government.

### **Project updates**

#### *Environmental Flow Needs Project*

August was a busy field month for the EFN team. With lower water levels all of the flood-damaged hydrometric stations were replaced and field measurements to collect required hydrometric data are ongoing. This project uses a collaborative approach to establish EFNs for Okanagan streams that are at a risk of over-allocation or where past over-allocation decisions led to frequent low-flows through over-extraction. Considering that a wide range of flexible approaches to protect streams became available upon the adoption of the new Water Sustainability Act (WSA), this project will



provide a scientifically-justified tool to protect and enhance stream flows while reducing economic impacts on water users from last-minute compulsory restrictions.

Better EFNs are the essential next step for revisiting the water license allocation process in the Okanagan and across B.C. During dry years water use restrictions used to be triggered by DFO regulations under the B.C. Fish Protection Act (Section 9) in response to low stream flows. These regulations are now incorporated into B.C.'s new WSA that prescribes the establishment of critical flow thresholds for sensitive streams and develops a process for ordering restrictions to protect aquatic ecosystems and fish populations (Sections 86-88).

Water shortages and resulting water use restrictions create conflict and disrupt the economy. Accurate EFNs help ensure that water is not over-allocated in the first place, which will help communities and agricultural producers make better development and planning decisions, to better match water demands to available supply. The new WSA provides new opportunities to share water as needed during drought or to meet other users' seasonal needs, including environmental needs.

Therefore, establishing EFNs for fish and ecosystems can also help inform regulators at a time of scarcity to enter timely reallocation agreements and minimize the economic and environmental harm.

As part of the ongoing EFN project, OBWB hosted an Aquarius training workshop with Grant Gilron, Training Manager with Aquatic Informatics on August 30<sup>th</sup>. The technical workshop focused on developing stream hydrology rating curves, a graph of discharge versus stage for a given point on a stream, usually at gauging stations, where the stream discharge is measured across the stream channel with a flow meter.



1 Replaced hydrometric station on Shorts Creek



2 Replaced hydrometric station on Mission Creek - upper reach.

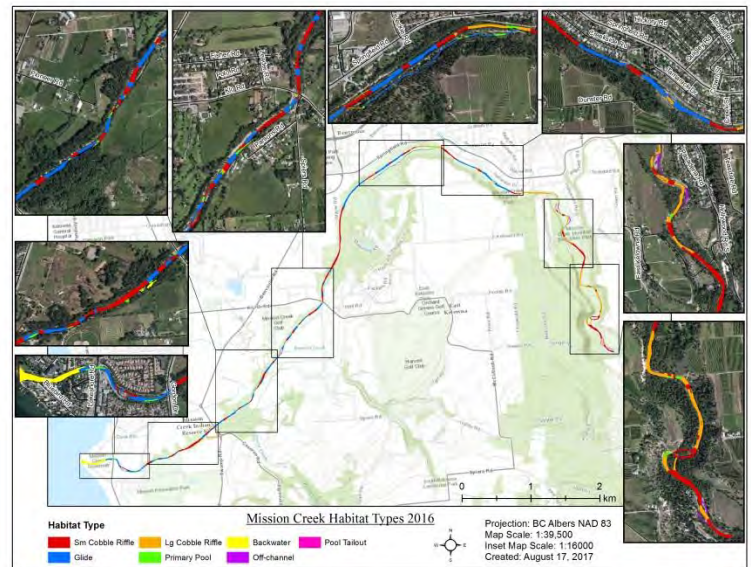
### Completion of Mission Creek Habitat and Intake mapping

As part of the Mission Creek groundwater-surfacewater study and the EFN project a habitat and intake assessment was completed by the ONA Fisheries Department in August. Appendix A has a selection of photos taken throughout the project showcasing identified intakes and outlets, some without associated licenses.

### Project executive summary

Mission Creek, kel'wna (Kelowna) BC, provides about one quarter of flows into the kłuxənɪtkw (Okanagan Lake) and has a watershed of approximately 860 square kilometers (MCRI 2015). Extensive channelization in the 1950s on Mission Creek has resulted in the following reduction (Alex et al. 2016);

- 60% of total channel length,
- 80% of spawning and rearing habitat for fish, and
- 75% of wetland and riparian habitat.



3 Habitat mapping of Mission Creek



The three main objectives for this project are to:

- 1) Map the main habitat types within the wetted parameter of Mission creek (lower 12km).
- 2) Map the intakes and outlets along Mission Creek, both known and unknown.
- 3) Complete a thermal profile of the creek based on the discovered locations of surface-groundwater interactions.

Summary of key findings are:

- ✓ Mission Creek is largely dominated by glides with little habitat diversity.
- ✓ As slope increases upstream, large-cobble riffles appear in areas with more hydraulic energy.
- ✓ In the more natural reaches upstream, there is a more even distribution of habitat types in Reach 6 and a larger diversity of habitat types in Reach 7.
- ✓ There are many intakes/outlets of varying condition, some unknown, throughout the study area.
- ✓ Thermal profiling methods were proved to be unsuccessful for this project.

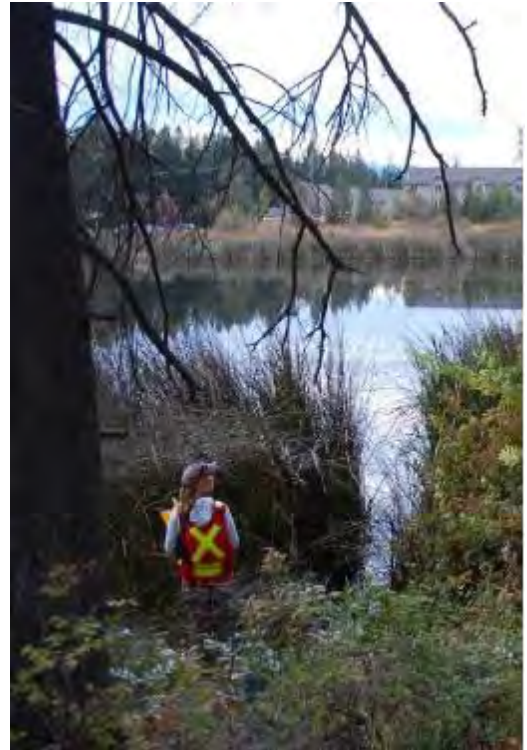
*Local government guidebook for establishing constructed wetlands in the Okanagan*

The OBWB posted two public Requests for Proposals on Civic Info and received one completed proposal that met the project guidelines and criteria. The contract has now been awarded to Associated Engineering. The project kick-off meeting is scheduled for September 6<sup>th</sup> with a proposed completion date of February 28<sup>th</sup>, 2018.

This project was made possible through an Infrastructure Planning Grant from the B.C. Ministry of Municipal Affairs and Planning.

**Background and project scope**

Since 1970, the Okanagan Basin Water Board (OBWB) has identified and addressed water management and water quality issues in the Okanagan. Over the last 5 years, OBWB has identified that source water protection is a growing area of concern, as well as the expanding urban development pressure on water infrastructure that leads to an increase of volumes of stormwater runoff, which increase water quality concerns. The use of constructed wetlands in stormwater management planning could help reduce water quality concerns and increase the protection of Okanagan's water sources. OBWB's Okanagan Wetland Strategy Project (currently in Phase III) has identified the need to organize and provide resources for wetland-related activities, including the need for further wetland inventory, prioritization of high value conservation wetlands, reduction of urban development pressure on wetlands, and reduction of impacts of stormwater discharge into natural, native wetlands. Recommendations also include the development of comprehensive and reliable



wetland information to support effective planning, law-making, and policy development (Okanagan Wetland Strategy Project Phase I, Patterson et. Al. 2014).

This guidebook will satisfy these recommendations by producing clear location-specific guidelines for implementing constructed wetlands in the Okanagan.

Key concepts to consider when constructing a wetland for stormwater management in the unique Okanagan Basin include:

- Hydrologic regime of the Okanagan Basin, the driest region in B.C.;
- Water supply and demand of the urban and agricultural setting (i.e. extensive vineyards in South Okanagan);
- Climate change predictions on precipitation patterns in the basin (i.e. warmer wetter winters, hotter drier summers); and
- Flooding of natural river systems in urbanized floodplains (i.e. channelized sections of Okanagan River, Mill Creek and Mission Creek).

Select photos from completed Mission Creek Habitat and Intake mapping project





## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
September 8, 2017  
Agenda No: 6.3

File No. 0550.04

To: OBWB Directors  
From: James Littley  
Date: August 30, 2017  
Subject: **Operations and Grants Manager Report**

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### Milfoil Control Program Update

Summer harvesting work is now finished in valley lakes. Despite being unable to treat some areas adjacent to private land, our regular priority public beach areas were harvested over the summer. We expect to have a full winter rototilling season, employing all the machines available throughout the winter, as lake and weather conditions allow. We will also be re-applying for 5-year environmental permits starting in 2018.

### Invasive Mussel Update

Following the June 1<sup>st</sup> meeting between OBWB Directors and the Ministry of Fisheries and Oceans Canada, we have received no formal response from the federal government to the board's recommendations. However, there has been some movement related to two of the recommendations which is outlined here:

1. Minister to allocate targeted funding to match provincial spending toward improved invasive mussel education, containment and prevention regimes for summer 2017.

While there has been no allocated funding announced for this specific recommendation, the federal Aquatic Invasive Species Prevention program has seen an increase in their planned budget this year to around \$7 million. This funding will be allocated regionally, but is meant to account for all invasive aquatic species programming nation-wide for both marine and fresh water environments.

2. Minister to appoint senior department staff to participate in the PNWER Invasive Species Working Group to coordinate federal, provincial and international efforts to stop the spread of invasive mussels.

Becky Cudmore, Senior Science Advisor for DFO presented in July to PNWER on the Aquatic Invasive Species Component of the Fisheries Protection Program (FPP) as summarized at the August OBWB meeting. Attached is a summary of a December 2016 evaluation by DFO for the federal AIS component of the FPP. This evaluation makes recommendations on how to improve the federal program. Unfortunately, the Fisheries and Oceans Departmental Plan 2017-18 provides a very limited overview of the program, in that it "helps to address the issue of aquatic invasive species through federal-provincial/territorial cooperation and the development of regulatory tools to prevent the introduction and spread of aquatic invasive species." Funding for the FPP is slated to be reduced from over \$71.3 million in 2017-18 to just under \$53.5 million by 2019-20. <http://www.dfo-mpo.gc.ca/rpp/2017-18/dp-eng.html#B6.1>

### Evaluation of the Fisheries Protection Program and its Aquatic Invasive Species Component

Fisheries and Oceans Canada's Fisheries Protection Program (FPP) and its Aquatic Invasive Species component support the Minister of Fisheries, Oceans and the Canadian Coast Guard's responsibility to protect fish and fish habitat. The FPP administers the fisheries protection provisions of the *Fisheries Act* and certain provisions of the *Species at Risk Act*. The Aquatic Invasive Species (AIS) component of FPP aims to protect fish, fish habitat and fisheries by preventing the introduction, establishment and spread of aquatic invasive species into Canadian waters. Both FPP and its AIS component are led by the Ecosystems and Fisheries Management Sector; however, employees working under the Ecosystems and Oceans Science Sector deliver the majority of AIS activities.

#### WHAT THE EVALUATION FOUND

##### Fisheries Protection Program – Key Findings

- The Fisheries Protection Program aligns with federal roles and responsibilities, and supports the Government of Canada and Fisheries and Oceans Canada (DFO) priorities. The FPP fulfills an ongoing need to protect fish and fish habitat across Canada, because all projects near or in Canadian waters, from large-scale developments to small private docks, have an impact on proximal aquatic ecosystems.
- FPP's performance in the six DFO regions has been impacted by a substantial reduction (50%) in its workforce and the consolidation of DFO offices (from 63 offices into 16 offices). Regulatory review workload was found to be imbalanced within and among regions. Additional standards and guidelines are needed to continue to harmonize regulatory review across the country and to make it more efficient; the development of standards and guidelines has not advanced as anticipated due to the implementation of the Recreational Fisheries Conservation Partnerships Program; a contribution program, which has grown every year.
- Monitoring of projects remains a challenge for FPP. The implementation of a self-assessment tool that does not capture any data has exacerbated this challenge. A lack of oversight and monitoring, combined with the introduction of this tool, has increased the risk that the Department is not adequately safeguarding fish and fish habitat.
- The corporate governance structure of FPP functions well but there are challenges related to the integration of the Aquatic Invasive Species component within the Fisheries Protection Program (i.e., reporting challenges and a need to clarify roles and responsibilities of both the Ecosystems and Fisheries Management Sector and the Ecosystems and Oceans Science Sector).

##### Aquatic Invasive Species Component – Key Findings

- The Aquatic Invasive Species component is aligned with federal priorities and a broader strategy against AIS and partially responds to an ongoing need to prevent the introduction, establishment and spread of AIS into Canadian waters. The AIS component has successfully prevented the introduction and establishment of Asian Carp, and controlled Sea Lamprey in the Great Lakes; however risk analyses and the presence of AIS in many parts of Canada demonstrate that freshwater and marine waters across Canada are also threatened.

- The economic and environmental damage that some AIS have caused and can cause far outweighs the cost of prevention. Once AIS are established, they can multiply and spread rapidly; and control measures can take many years to produce results. With the continued increase in international trade and travel, the threat of AIS introduction will continue to grow. This supports the need for AIS-related research, prevention and/or control activities across Canada.
- There is an opportunity to address AIS related issues on a broader scale across Canada; however, the current governance and funding model, and lack of clear national objectives restrict the AIS component from achieving an impact beyond the Great Lakes.

## RECOMMENDATIONS

1. It is recommended that the Senior Assistant Deputy Minister, Ecosystems and Fisheries Management Sector, develop a clear plan to ensure that the required standards and guidelines are developed and implemented.
2. It is recommended that the Senior Assistant Deputy Minister, Ecosystems and Fisheries Management Sector, ensure that there is adequate oversight and monitoring of projects taking place in or near water, to mitigate potential impacts on fish and fish habitat.
3. It is recommended that the Senior Assistant Deputy Minister, Ecosystems and Fisheries Management Sector, in collaboration with the Assistant Deputy Minister, Ecosystems and Oceans Science Sector, identify clear national objectives for the AIS component, which are achievable based upon resource allocations, and a governance structure that ensures accountability for results.

## ABOUT THIS EVALUATION

This report presents the results of the evaluation of Fisheries and Oceans Canada's Fisheries Protection Program and its Aquatic Invasive Species component. The evaluation also incorporates an assessment of the Recreational Fisheries Conservation Partnerships Program and an evaluation of the Asian Carp Initiative. In 2014-15, total spending on the FPP and its AIS component was \$60.9 million.

The evaluation covers the period from April 2010 to January 2016 and was conducted by DFO's Evaluation Directorate. This is the first evaluation of the Fisheries Protection Program. Aquatic Invasive Species was evaluated in 2008-09.

For more information about this evaluation and its findings, please consult the [Evaluation of the Fisheries Protection Program and its Aquatic Invasive Species Component report](#), including the Management Action Plan.

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
Sept. 8, 2017  
Agenda No: 6.4

File No. 0550.04

To: OBWB Directors  
From: Corinne Jackson  
Date: August 29, 2017  
Subject: **Communications Director Report**

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### **Make Water Work**

Our Make Water Work (MWW) contest ended on Aug. 20. We will be announcing winners soon and acknowledging our “Make Water Work Community Champion” at next week’s Annual Meeting. Although the contest is over, we are still encouraging people to conserve outdoors, especially as the drought in our valley deepens.

The MWW website has been updated throughout the campaign, but most recently to address the current drought. We are encouraging residents to find watering restrictions in their community, and consider making changes to their landscape that will help them create “resilient landscapes that can handle wet and dry years, and help ensure a sustainable water supply for our valley.”

At this time, MWW advertising and outreach is scheduled to continue until the end of September.

### **Don’t Move A Mussel**

Our Okanagan WaterWise Communications and Outreach Coordinator Alyssa Bougie has attended a number of invasive mussel training opportunities. These include: a decontamination information session with the province; a session on how to find mussels on boats with the Okanagan and Similkameen Invasive Species Society (OASISS) and Vernon Yacht Club; water sampling for invasive mussels training with local biologist Heather Larratt; a joint provincial/OASISS presentation to West Kelowna RCMP volunteers on boater interaction, as well as on-the-ground boater interaction training with OASISS. Although Ms. Bougie has been doing outreach at various events throughout the summer, she will also be doing targeted outreach at boat launches.

We wish to acknowledge the efforts of RCMP volunteers in West Kelowna and Vernon, helping raise awareness of invasive mussels at boat launches in both communities this summer, extending the reach of the Don’t Move A Mussel and Clean-Drain-Dry messages.

Ms. Bougie will provide an update on Okanagan WaterWise outreach efforts this summer, including MWW and DMM, at the September board meeting. She is with us until Sept. 22, and this will be her last board meeting.

As with the MWW campaign, DMM advertising and outreach is scheduled to continue until the end of September.

Below are a few images of our outreach efforts this summer! Many more can be found on our social media sites including Facebook (<https://www.facebook.com/OkWaterWise/>) and Instagram ([https://www.instagram.com/okanagan\\_waterwise/](https://www.instagram.com/okanagan_waterwise/)).



#### **Other communication initiatives:**

Staff have been busy getting ready for our **Annual Meeting**, Sept. 8 at Westbank Lions Community Centre, 8:30 AM – noon. The theme of the meeting is “Weathering Extremes.”

The meeting will feature keynote speaker Max Kniewasser, director of the Pembina Institute’s B.C. climate policy program who will be presenting on “The State of Climate Action and Clean Growth Opportunities for B.C.” A second presentation, providing a review of this year’s provincial flood response, will be given by Shaun Reimer, Section Head for Public Safety and Protection with the B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development. Our Make Water Work 2017 Champion Community will also be announced, followed by Dr. Sears presenting our 2016-2017 Annual Report, *Weathering Extremes*.

The event is free, however seating is limited. Registration is required. Please register at <https://weatheringextremes.eventbrite.ca/>. Find the full agenda on our [OBWB website](#).

Also this month, staff created and delivered a newly formatted **Drought Bulletin** on August 22 in response to some confusion to drought levels in our region. The communication piece is intended for water utilities, however, this was also sent to media to provide an update on the current water situation in our region. It has now been posted to the [OBWB website](#) as well as linked on the [Make Water Work website](#).



I received an e-mail on Saturday, Aug. 12 with an update to some questions I had asked during a conference call with provincial mussel inspection managers, specifically with mussel inspection numbers. We were given permission to share the information. As such, I forwarded it to our Chair, Vice-Chair, and staff. With no time to prepare a news release, I posted the details on Facebook which was then shared a number of times, as well as picked up by some media outlets, some of which who followed up for an interview. (Related stories are noted below.) As noted in years past, the way this story ended up being picked up and shared indicates the importance of social media use in helping tell our water story.

You can find the post with inspection details and more, below. You can also find it here: <https://www.facebook.com/OkWaterWise/posts/1638134066217444>.

Post Details


**Okanagan WaterWise** added 4 new photos.  
Published by Corinne Jackson [?] · August 12 at 9:30am · 🌐

#DontMoveAMussel! The numbers are in, and since the province began mussel inspections in April... **FIVE MUSSEL-INFESTED WATERCRAFT WERE SNAGGED HEADING TO THE OKANAGAN!**

It's another hot, Okanagan weekend - perfect for boating, and other water recreation! If you play in our waters, remember to #CleanDrainDry ALL water equipment before launching in another water body! 🇨🇦🇺🇸🇨🇦

And, if you love our lakes... #HaveTheTalk!  
Help 'Spread the message. Not the mussels.' Talk to fellow water recreationists about the importance of protecting our waters. Learn more at [www.DontMoveAMussel.ca](http://www.DontMoveAMussel.ca).

The full story:  
As of July 30, over 19,800 watercraft have been inspected.  
⚠️ Of these, 1,100 were identified as high risk.  
⚠️ Of these, 166 Decontamination Orders issued, 117 issued quarantine periods to meet the required 30-day drying time to ensure the invasive mussels were dead.  
Where were these watercraft coming from, and where were they headed? Of the 19,800 inspected:  
⚠️ 15 were confirmed to have adult invasive mussels. These came from Ontario (7), Texas (2), Arizona (1), Ohio (1), Illinois (1), Michigan (1), New York (1) and Quebec (1) and were destined for the Lower Mainland (6), Okanagan (5), Kootenays (1), Thompson-Nicola (1), Vancouver Island (1) and Alaska (1).



**846** People Reached

**22** Reactions, Comments & Shares

<b>7</b> Like	<b>3</b> On Post	<b>4</b> On Shares
<b>1</b> Love	<b>1</b> On Post	<b>0</b> On Shares
<b>1</b> Wow	<b>1</b> On Post	<b>0</b> On Shares
<b>2</b> Comments	<b>2</b> On Post	<b>0</b> On Shares
<b>11</b> Shares	<b>11</b> On Post	<b>0</b> On Shares

**94** Post Clicks

<b>33</b> Photo Views	<b>0</b> Link Clicks	<b>61</b> Other Clicks
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**NEGATIVE FEEDBACK**

<b>4</b> Hide Post	<b>1</b> Hide All Posts
<b>0</b> Report as Spam	<b>0</b> Unlike Page

Reported stats may be delayed from what appears on posts

👍 **Get More Likes, Comments and Shares**  
Boost this post for \$6 to reach up to 370 people.

846 people reached Boost Post

👍❤️👍👍👍 5      2 Comments 11 Shares

👍 Like    💬 Comment    ➦ Share      Top Comments ▾

Write a comment...

**Leanna Bomba** Stop allowing boats to enter our province from other provinces or the USA, unless they have been in quarantine for 30 days. I'm afraid it's not if these mussels show up in our lakes, it's when.  
Like · Reply · Message · August 16 at 8:47pm

**Sue Spicer Dionne** I do think we need even stricter regulations. It is like the wildfire situation.  
Like · Reply · Message · August 14 at 11:03am

## Summary of Recent Media

- August 2 "MP takes on invasive mussels," *Vernon Morning Star, Kelowna Capital News, Salmon Arm Observer*
- August 3 "Combatting mussels spread," *Castanet*
- August 3 "New government in Victoria presents challenges," *Summerland Review, Kelowna Capital News, Salmon Arm Observer*
- August 3 "Okanagan flooding reoccurrence feared," *Kelowna Capital News*
- August 3 "Report of invasive mussel on trailer in lake false alarm," *Kelowna Daily Courier*
- August 9 "Ottawa urged to join mussels fight," *Kelowna Capital News, Vernon Morning Star*
- August 10 "Swimmer gets entangled in milfoil," *Vernon Morning Star, Salmon Arm Observer*
- August 15 ["Five boats heading to the Okanagan caught with invasive mussels."](#) *InfoNews*
- August 15 "Invasive mussels found on 15 boats entering B.C.," *Kelowna Capital News, Salmon Arm Observer*
- August 15 "Mussels headed our way," *Castanet*
- August 16 "Water advocates say feds need to do more to prevent invasive mussels from moving into BC," *BC - CBC News*
- August 17 "How Vernon RCMP volunteers are protecting us from a new threat - invasive mussels," *InfoNews*
- August 17 ["Inspections find 15 boats entering BC with adult invasive mussels, 117 boats quarantined."](#) *Osoyoos Times*
- August 17 "Recently restored sections of Mission Creek damaged by spring flooding," *InfoNews*
- August 23 "Drought could worsen," *Castanet*
- August 23 ["From spring flooding to drought conditions in the Okanagan."](#) *InfoNews*
- August 23 "Residents urged to consider drought," *Vernon Morning Star, Kelowna Capital News*
- August 24 ["Tough year for milfoil."](#) *Castanet*
- August 25 "Boat inspections in West Kelowna," *Kelowna Capital News*
- August 25 "Flood victims want better drainage, better communication," *Oliver Chronicle*
- August 25 "West Kelowna RCMP volunteers doing boat safety checks," *InfoNews*

## Recent Presentations

- June 7 "WaterWise school presentation," Anne McClymont Elementary (Kelowna) – Alyssa Bougie
- June 8 "WaterWise school presentation," Harwood Elementary (Vernon) – Alyssa Bougie
- June 19 "WaterWise school presentation," Ellison Elementary (Vernon) – Alyssa Bougie
- June 27 "WaterWise school presentation," Shannon Lake Elementary (West Kelowna) – Alyssa Bougie
- August 23 "Floodplain mapping," to Oliver public meeting – Anna Warwick Sears
- August 23 "One valley. One water," to Kelowna-Kasugai Agriculture Expo – Alyssa Bougie

## MEMORANDUM

Okanagan Basin Water Board  
Regular meeting  
September 8, 2017  
Agenda No: 6.5

To: OBWB Directors  
From: Kellie Garcia  
Date: August 29, 2017  
Subject: **Policy and Planning Specialist Report**

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### Okanagan Drought Response

After historical flooding this spring, we've had a hot, dry summer, with no measureable rain for more than two months. On July 20, the province moved the Okanagan to a Drought Level 2, which triggered the OBWB's Okanagan Drought Response Strategy. The goals of the strategy are to facilitate timely communication with local water purveyors and the province and to bring a more consistent and cooperative valley-wide response to drought. It also defines how the OBWB will work with provincial staff to evaluate emerging drought conditions in sub-basins throughout the valley.

After several conversations with the province, Dr. Sears and I decided not to notify Okanagan water suppliers of the Level 2 drought declaration because it was based on low flows in only a few Okanagan streams, and our water suppliers were reporting normal supply conditions. However, on August 18 the province released a bulletin asking Cariboo and Thompson-Okanagan residents to conserve water due to Level 3 drought conditions. This brought about some confusion because the Okanagan basin was actually still in Level 2. We put together a bulletin (attached) to help clarify the situation and provide information on local water supply conditions. The bulletin was emailed to major water suppliers, elected officials, Chief Administrative Officers, provincial and federal government staff, and industry organizations.

As of today, the basins surrounding the Okanagan are at Level 3 (Similkameen, Nicola, Salmon River, Middle Fraser, South and North Thompson, and Kettle) or Level 4 (Coldwater River). The province is closely monitoring the Okanagan, and will decide tomorrow morning if the drought level needs to be escalated. We are ready to send out another drought bulletin if the Okanagan is moved to Level 3.

### Toolkits and Guides Project: FCM Grant Application

Over the last year, the OBWB has been working on a project to investigate the use and accessibility of toolkits and guides designed to help support climate adaptation and sustainable water management and land use. When we surveyed 50 planners, the main barriers to the widespread use of the toolkits were identified as a lack of time and resources to consider the information in the documents and a lack of outreach after the toolkits are released.

Given that, Dr. Sears and I are submitting an application to a Federation of Canadian Municipalities grant program that provides funds to help communities adapt to the impacts of climate change. The proposed project will provide three services to Okanagan local governments:

- 1) One-on-one advisory and technical support by professional planners, legal experts or other specialists to help build capacity to integrate water sustainability, climate change adaptation, and resilience to weather extremes into their planning processes;
- 2) Workshops/webinars to share approaches and best practices municipalities can apply in their communities, and connect municipalities undertaking similar initiatives; and
- 3) Enhanced access to the wide range of toolkits and other resources that contain bylaw provisions, language, policies or guidelines.

We've reached out to all municipalities and regional districts in the valley to request letters of commitment to support our funding application. The response has been very positive. We have letters in hand from Armstrong, Coldstream, and Lake Country, and are expecting letters from Summerland, West Kelowna, RDOS, RDCO, and RDNO. We have also asked the Fraser Basin Council, Columbia Basin Trust, and Planning Institute of BC to collaborate with us on the project. The \$312K project would be delivered over two years starting in November 2017. The grant provides 80% funding, and the OBWB would need to match \$62K. We have sufficient funds to provide half the match in the current fiscal year, and would need to budget for the remainder next fiscal. Only nine projects will be funded nationally, so there is significant competition.



## OKANAGAN IN DROUGHT LEVEL 2

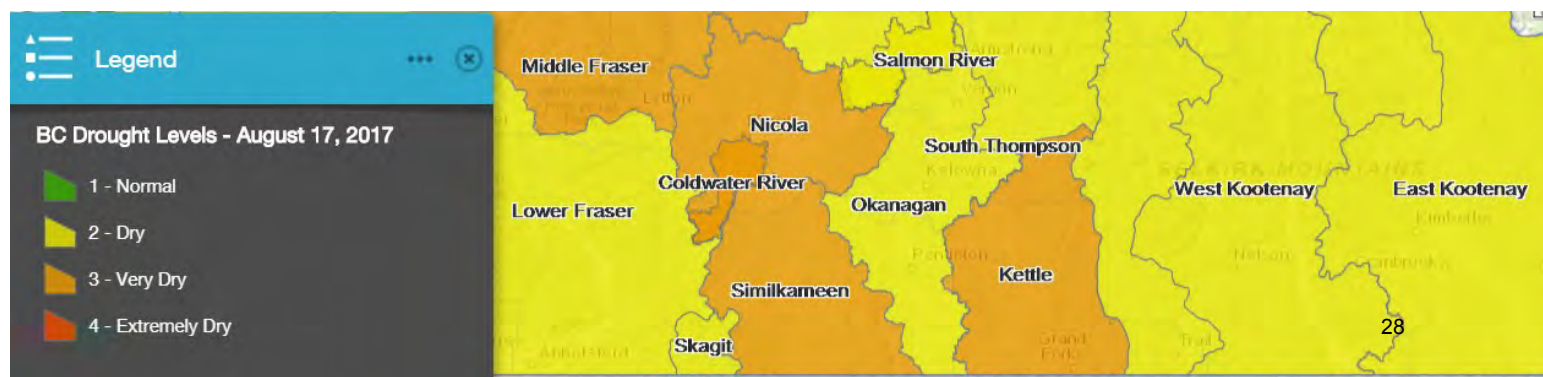
There has been some confusion recently regarding what drought level the Province of B.C. has declared for the Okanagan. While some regions around us have been moved to Drought Level 3, the Okanagan, as of August 22, remains at **Level 2**. That said, we haven't had any significant rainfall for many weeks, and the forecast is calling for more hot and dry weather.

According to provincial staff, at least two Okanagan streams are experiencing low flows: Vaseux Creek and Inkaneep Creek. Streams backed by storage are doing okay. After historic highs this spring, Kalamalka, Okanagan, and Osoyoos lakes are nearing average levels. Aquifers throughout the Okanagan are at, or above, historical averages. Real-time aquifer conditions are available on the [BC Groundwater Observation Well Network](#). Information on drought levels and average streamflows is available on the [BC Drought Information Portal](#).

Drought Level 2 calls for a voluntary 10% reduction in water use, but the province acknowledges that most water users on municipal systems have water conservation bylaws that differ from provincial targets due to local water supply and demand, and the availability of storage. Okanagan water purveyors are generally reporting normal supply conditions. We know of only two purveyors who have moved to higher restrictions. Kelowna has moved to Stage 1, not because their supply is insufficient (Okanagan Lake), but because their water system is running close to capacity due to high demand. Greater Vernon Water has moved to Stage 1 because their Duteau Creek reservoir is below average.

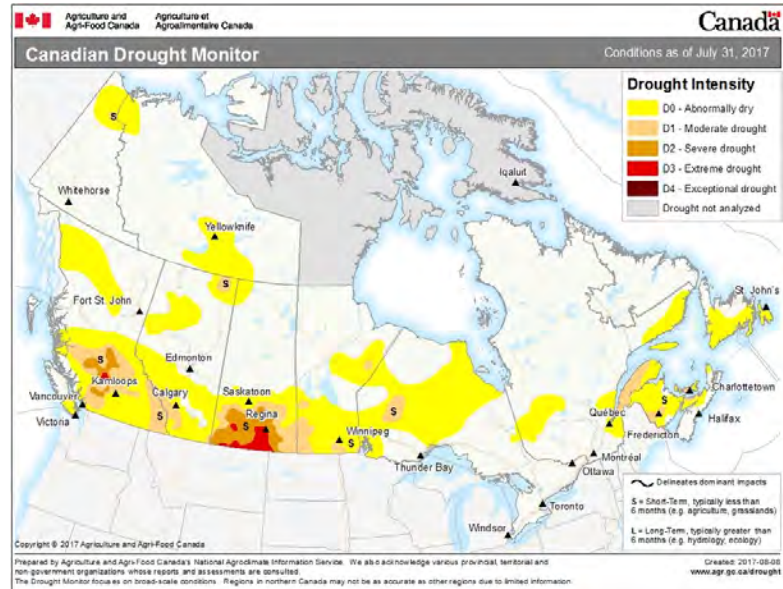
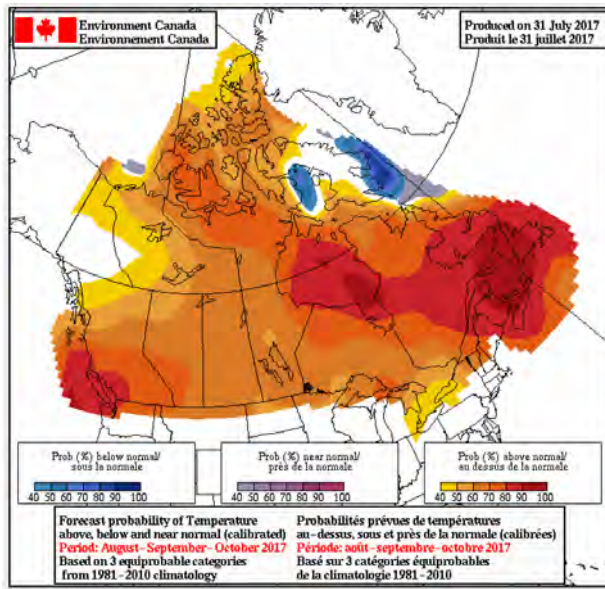
**The province is asking licensees with upstream storage to follow the release schedule requirements in their licences to avoid potential instream flow issues.**

We are in close communication with the province, and will send out a bulletin if the Okanagan is moved to Drought Level 3.



## WEATHER FORECAST

The forecast is for above normal temperatures into October. There is more uncertainty about precipitation, but as of July 31, conditions across Western Canada ranged from abnormally dry to extreme drought.



## COMMUNICATING WATER CONSERVATION WITH THE PUBLIC



The OBWB, through its Okanagan WaterWise outreach and education program, has developed the **Make Water Work** campaign in partnership with Okanagan water utilities. Make Water Work is aimed at tackling the 2nd largest use of water in our valley—residential outdoor use.

Visit [www.MakeWaterWork.ca](http://www.MakeWaterWork.ca) for tips to make water work more effectively and efficiently on residential landscapes. Also, find water restrictions for communities in the valley, and information on the “Make Water Work Plant Collection,” carried at garden centres throughout the Okanagan. Each year, a contest is held, inviting residents to visit the website and take the challenge and pledge to conserve for their chance to win a WaterWise yard upgrade. We also award the title of “Make Water Work Champions” to the community that collects the most pledges per capita.

We also have an **Okanagan Agricultural Water Users Resource Page** to help this sector take proactive steps to use water effectively and be ready to respond if drought conditions worsen during a growing season. Visit [www.OBWB.ca/ag](http://www.OBWB.ca/ag) for more.

## KEEP IN TOUCH!

The OBWB would like to hear about your water supply. Please let us know if you move from one stage of watering restrictions to another, and any other factors that influence water availability in your communities. Please contact Kellie Garcia at [kellie.garcia@obwb.ca](mailto:kellie.garcia@obwb.ca) or 250-469-6321.