

# OKANAGAN WATER STEWARDSHIP COUNCIL

*A Technical Advisory Body to the Okanagan Basin Water Board*

## MINUTES OF THE MEETING HELD THURSDAY, OCTOBER 8th, 2020, VIRTUALLY THROUGH THE ZOOM PLATFORM

---

### **COUNCIL MEMBERS:**

#### **Present**

Emeritus, Chair  
BC Ground Water Association  
BC Wildlife Federation – Region 8  
Canadian Water Resources Association  
Agriculture & Agri-Food Canada  
UBC Okanagan  
UBC Okanagan  
Ministry of Agriculture  
City of Kelowna  
Regional District of North Okanagan  
Okanagan College  
Engineers & Geoscientists BC

Denise Neilsen  
Marta Green (Alt)  
Lorne Davies  
Brian Guy  
Kirsten Hannam  
Bernard Bauer  
Craig Nichol (Alt)  
Andrew Petersen  
Rod MacLean  
Renee Clark  
Rob St. Onge  
Mike Nolan

### **OBWB:**

Director

Denise Neilsen

### **STAFF:**

OBWB, Office and Grants Manager  
OBWB, Policy and Planning Specialist  
OBWB, Special Projects Coordinator  
OBWB, Water Stewardship Director  
OBWB, Technical Writer and Researcher

James Littley  
Kellie Garcia  
Carolina Restrepo  
Nelson Jatel  
Farah Kanani

### **GUESTS:**

Regional District of North Okanagan  
UBCO  
Independent  
Ministry of FLNRO  
Regional District of Kootenay Boundary  
Agriculture & Agri-Food Canada  
Regional District of Okanagan Similkameen  
UBCO  
North West Consultants  
District of Summerland  
Water Supply Association BC  
Gorman Bros. Lumber Ltd.  
Waters Edge Engineering Ltd.

Tricia Brett  
Mathieu Bourbonnais  
Adrian Arts  
Tony Zanotto  
Kristina Anderson  
Scott Smith  
Glenn Sinclair  
Marni Turek  
Piotr Kuras  
Lorraine Bennest  
Patti Meger  
Randy Hardy  
Kalie Smith

## 1. CALL MEETING TO ORDER

Denise called the Zoom meeting to order at 1:03 pm by welcoming members and guests and acknowledging that we are meeting on the unceded territory of the syilx people, the original inhabitants of the Okanagan. Introductions commenced around the table. This is the third Zoom meeting of the OWSC.

## 2. APPROVE AGENDA

Agenda was approved as presented.

**Moved by: Bernard Bauer**

**Seconded by: Brian Guy**

***“That the agenda for the September 10<sup>th</sup>, 2020***

***meeting of the Okanagan Water Stewardship Council be approved.”***

***No objections.***

## 3. ADOPTION OF MINUTES

**Moved by: Bernard Bauer**

**Seconded by: Brian Guy**

***“That the minutes from the September 10<sup>th</sup>, 2020 meeting of the Okanagan Water Stewardship Council be approved.”***

***No objections.***

## 4. BUSINESS ARISING (from previous meeting):

a) **Sub-committee updates**

b) **Federal Canadian Water Agency**

c) **Other**

### a) **Sub-committee updates**

#### Water Source Protection (Renee Clark):

Recommendations are very similar. Would like the board to approach the province on source protection and we will be providing recommendation on that and provide that to Nelson before the November meeting.

#### Dams (Bernard Bauer):

Finished the white paper.

#### Policy committee (Brian Guy):

Had a meeting on September 21<sup>st</sup>. Discussed three topics: long term datasets generated by retiring government researchers, providing input to the federal government for the Canada Water Agency, written input to the province on their

climate resiliency strategy. To pursue each of them, a sub-committee was created. Canada Water Agency (hasn't been created yet) – high level input required for its mandate, role and structure. Sub-committee lead by Marta to provide that input which is required very soon to produce a discussion paper. That group will report back to the committee by the 21<sup>st</sup> before the next meeting. Through the winter we will have an opportunity to give more details on their discussion paper. Finally, on the climate ready document, Tina Neele from the province gave a really good presentation to the members of the Stewardship Council on September 18<sup>th</sup>. A draft of this presentation is now circulating amongst the policy committee members.

#### Agricultural Water Committee (Kirsten Hannam):

We have not had a meeting since the last WSC meeting, we will be meeting next Thursday (Oct 15<sup>th</sup>). Our work continues to focus on groundwater licensing issue. Next steps we have taken is to build on the work that Tony Zanotto has done for us answering a series of questions surrounding current practices for granting and assessing groundwater licensing applications. Now we have a series of follow up questions that we have compiled. Taking a week to discuss those questions and prioritize them. Select the top 5 priority questions and take them to Ray Crampton (Ministry of Forests) to discuss further. Ray has agreed to come talk to the WSC next month to help him prepare for the general meeting.

### (b) **Federal Canadian Water Agency**

Denise: Brian has already covered majority of this. There is very much an agricultural component to this FCWA as well as all the other interests that would be pursued in the agency.

Brian: Yes and the original mandate letter it was directed to the Ministry of Environment but it explicitly directed them to work closely with the Ministry of Agriculture on this initiative.

## 5. BOARD REPORT (Nelson Jatel):

The board met this week on October 6<sup>th</sup>. Just going to report the highlights.

- Dr. Sears on their report has talked about Covid 19 considerations and how that has impacted operations of the OBWB staff.
- OBWB in the process of developing our 2020 budget which continues to be top of mind during this time of the year.
- Flood resilience planning projects currently going on involving Shawn Riner who was our guest speaker.

- Senior government initiatives have been announced \$27 million to watershed and wetland projects as part of the Covid-19 recovery package. Anna gave the board some details on some of the details. Provided a weather forecast that the weather is a bit warmer than normal in Western Canada.
- I reported the presentation that we had from Roy Brooke from the last council meeting and some of the highlights from that discussion.
- Updated the board on three projects: 1. the Okanagan hydrometric monitoring network project – I am in the process of developing an operational budget for consideration for the overall OBWB budget. 2. Okanagan wetland strategies activities – Dr. Bourbonnais has a graduate student working on mapping the wetlands across the Okanagan and applying the most recent LiDAR data. 3. Okanagan flood management datum shift. The flood model that we developed that's housed on Okanagan flood story webpage was developed as part of the provincial contract in the new datum. Most governments including the First Nations are using the old datum ctv 28. In the process of converting the flood model back to the old datum.
- Datums are the height of land as it is referenced historically to the oceans. Today the new datum uses satellite sensor to be able to be more precise to provide reference points. Want to ensure each is correct and that they reference the correct datum.
- James Littlely provided report on invasive mussels and the milfoil control programme and had some motions around equipment specifically a new trailer for the milfoil crew.
- Corrine provided an update on the Make Water Work and Don't Move a Mussel programme talking about irrigation begins to slow down and both projects winding down at the end of summer.
- Water survey in 2019 and 2014 and some of the results that are going to be coming out of this year's efforts.
- Kellie Garcia provided some updates on flood planning initiatives and source water protection tool kit project that continues to keep going well. The Okanagan Lake Responsibility Planning Initiative which is a partnership between a number of players and spearheaded by the Okanagan Nation Alliance and facilitated by Silks facilitators.
- Carolina Restrepo reported on the OBWB 50<sup>th</sup> Anniversary. Had a socially distanced meeting at Bertram Creek Provincial park.
- October 27<sup>th</sup> we have guest speaker Bob Sanford providing a virtual presentation as part of our 50 year celebrations.
- October 29<sup>th</sup> in the process of finalizing a second speaker of which James or Carolina can provide in their updates later on.
- Carolina provided a short update on the Aquahacking file and the activities going on for this upcoming 2021 year. Also an update on the Osoyoos Lake Water Science Forum also ebbing planned for 2021. Presented on a new workshop that is under development looking a municipal natural assets and building on the conversation we had last month with Roy Brooke.

## **6. WORKSHOP: OBWB Water Research Ideas and Priorities:**

Introduction provided by Denise. Purpose of this activity is to provide direction for new projects and research that can be carried out through OBWB. We canvased your ideas about short, medium and long-term projects making use of the array of expertise in this group and the response has been fantastic. Today we will break into four groups and allow you to add project ideas that might have been missed. There will be a facilitator from the OBWB for each group. Each group will report back and then there will be a discussion. We had originally thought we would like you to identify your top 3 projects in each list but we have decided we will do a little more reflection on this and we will send you out another survey to rank the top projects from the list. The leadership team will then synthesis a document that will be provided back to the council and potentially to the board.

## **7. DISCUSSION AND POSSIBLE ACTION ITEMS**

Patti: I forgot to mention the boat capacity study. Trying to get science based information as well as community outreach on the impacts from boats. We have a couple of reports now but we need this turn basin wide and it's too big for the District of Lake Country and District of Coldstream to take this on.

Marta: Seems a little farfetched but it is connected to one that someone mentioned the idea of aquifer storage recovery. Anna mentioned there was a study done that was not feasible in the Okanagan

but this should be developed further. Did the lake climate data where we can monitor evaporation on the lake come back up because that was a big deal.

Brian: I also agree with that ASR idea because there is very little upland storage left in those upland reservoirs.

Kellie: We do have an action related to this in the Sustainable Water Strategy so links it back to that.

James: When we were preparing for the 50<sup>th</sup> Anniversary I pulled up the original Okanagan Basin study and it is interesting that the projections from that study and this year from 2020 and it might be interesting to look back at what the projections were, where we have come and compare our water quality improvements which Anna spoke about and also use that as a jumping off point for the next 50 years.

Marta: You can also repackage all the data into bite-sized chunks. There is data out there even for groundwater it needs to be reorganized.

Denise: Marta you may be able to answer this question – one of the projects that was suggested to increase groundwater monitoring and we haven't spent enough time talking about this. How much is actually out there in terms of observation wells etc.?

Marta: I think we are lucky with Skye Thompson and his crew we have some really talented hydrogeologists and we have had success working with them in the past. They have done the Leap Frog model for aquifer mapping and before you do the numerical modelling where you add some temporal and water is to have enough data loggers and wells with good lithology for all your layers. Looking at the Mission Creek groundwater surface water reaction study where they did have some good wells and surface water hydrometric station pairs and do a data gap analysis. We probably wouldn't be able to do the entire basin but if we could start with our 18 priority watersheds and looked at what would need to be done to have enough data to have a good model and have pilot areas and over time we could build up.

Brian: I was wondering the status of the source protection tool kit – we could probably design a communications outreach programme and if we had any spare money between now and March to do so.

Kellie: Just to let you know, Nelson talked about that watershed stimulus funding \$27 million that has been committed through the Covid 19 relief fund and the source water protection tool kit is a shovel ready project and we have put in an application for that (\$45,000). That is part two of this project that we have been talking about since the beginning.

Mathieu: One thing that could be interesting to look at is developing models for snowpack and snow cover in the uplands to better account or that in our water models. Most of the data is coarse or non-existent and maybe Using some new technologies and rates of sublimations and especially related to land cover change in the uplands and disturbance because that will influence what we are getting for the freshet.

Kellie: Suggestion from Peter – the OBWB leads an integrated flood management planning process and this is being done in the lower mainland by the Fraser Basin Council and I was able to attend one of their workshops last year so this idea has been percolating among OBWB staff anyways and it wouldn't be the same exact process as in the lower mainland but something similar where we work valley wide address risk through structural and non-structural mitigation measures and develop an overall plan for the valley. That's more of a long-term project (5 years) but we could started on it.

Kristen: Start thinking about the water sustainability plan for the Okanagan. Starting point maybe to look at the publication from Polis Water Project – Water Sustainability Plans: Potential, Options and Essential Content. Compiling data systematically so that it is ready – whether it is upland snowmelt or flooding that is occurring.

Andrew: They are tagging about 100 fish into the lake this year so it might be a small project but it would be interesting to see the recovery of the Sockeye in the Okanagan river channel and things have changed because they have put in dams or put in ladders – could be a project or thing of interest.

Denise: That will also have important implications on the Okanagan lake management system and having to take into account the new Sockeye population. There are a couple things that have not been mentioned: 1. Water reserve 2. Getting a better handle on evapotranspiration from natural systems. These are two large component of any large modelling effort which we keep talking about.

Thank you all for the comments. We will send out the amended list and ask you to rate your top 5 and then the leadership committee will synthesis it.

## **8. MEMBER UPDATES:**

Council members and guests are invited to provide an update on their organization's activities:

James: The water conservation quality improvement grant call for applications will go out likely next month after the board meeting. Nelson also mentioned that we maybe having a second keynote speaker for the 29<sup>th</sup> – Seth Seagel – New York Times bestseller of Let There be Water – book about the Israeli water management and governance and he has done another book in 2020 looking at water quality in the US and UK and he is writing a third book now looking at cybersecurity in water infrastructure. Those sessions are part of speaker series that we are trying to for celebrating our 50<sup>th</sup> Anniversary

Andrew: We are in caretaker mode. One of the things that has come that is a real interest is the federal infrastructure bank funding of \$1.5 billion for western Canada for irrigation projects. We can't find any information on that yet. I think this bank is some type of special loans and there are no details and vague at this point in time. North American drought monitor call and we had a good contingency on it for BC and they seem to be quite interested in how we operate our drought compared to the rest of North America and Mexico. There was a bit more information about how other jurisdictions that have hydrometric issues around flows and irrigation, the past it's mostly been dry land farming. Don't have any other updates from the Ministry.

Brian: Canadian Water Agency is a national organization and there are webinar series going on operated by several of the provincial branches.

Hans: BC Agriculture Council is going to reactivate their water committee and one of the issues is groundwater licensing. In ranching country many of the applicants for groundwater licensing are being asked in connection with the issuance of a license to install water meters and that has caused a fair bit of discontent especially for some of the ranchers on a low budget and some of the infrastructure is not cheap.

Tony: Staff is working remotely and we are doing a steady amount of issuance. The issue of metering wells is before the appeals court and it will be interesting to see how that gets resolved. There seems to be a lack of knowledge around the wells that are required to monitor water usage and installing an expensive meter is the only option. Our staff can work with the licensees to come up with ways that are more economical to monitor water usage. It will be interesting to see what the appeal board spells out on how to do things.

Marni: Partnership between UBCO and the water board. This year will be fully virtual and just confirming our speakers. Water ethics theme and anticipating a wider reach due it being remote. Boots on the Ground implementation of water values and ethics and the work that's being done. High level and big picture thinking about the watershed as a whole and indigenous water values and water declaration. Hoping that all of our partners find it useful. Tentative date is November 5<sup>th</sup>.

Patti: Could Marni send me the link when you have that ready so we could add that to the Water Supply Association website.

Marta: Tony I was just curious are there any statistics for the number of licensing that have been issues in a certain regions in BC for a report for next time.

Tony: It is tracked through APS and if you contact me offline, I will gather that for you.

Marta: Had to postpone our BC GWA Fall regional meeting due to the provincial election because our BC partners a big part of those meetings. We had our AGM and all the executives agreed unanimously agreed to send a letter to the BC political parties so Nelson on trying to get the licensing to get to be a bigger issue during the election.

Mathieu: The LiDAR that you have all contributed to: we have 5 new students working on wildfire fuel load and risk model that uses all the LiDAR that is available for the Okanagan and the other is going to be looking at different stakeholders and how attitudes and ideas around mitigation strategies related to wildfire risk – government, land owners, different user groups etc. and once that gets going I will be interested in reaching out to many of you to see if you would be interested in contributing to any part of the projects.

Patti: The Water Supply Association just met last week and we have a planning survey currently out on our website. If anyone has time to participate it would be great to help give us a better idea on how to serve our community members better. We will review that after Thanksgiving and set an AGM for late November.

Randy: A couple points of interest: working on updating the Mission Creek watershed assessment and should have that report for some time in the spring. Couple other fuel mitigation projects we are working on and one we are hoping to get underway just after Christmas. Looking at doing more harvesting and fuel mitigation projects just to help deal with the spread of the fur beetle.

Denise: Fires in the south are causing migration of some insects/pests.

Randy: With the Philpott fire it is causing the fur beetle to spread on the other south side of Mission Creek – when a fire goes through and burns timber and makes the conditions right for the beetle to spread.

Rod: Budget changes – 20 year servicing plan which looks at long-term development, 10-year and 3-year capital planning. This year's capital plan and last year's capital which was all Covid impacted – big focus there has been on biosolids management and trying to figure out about when and how we are going to deal with digestion, composting and expansions. Mill creek flood protection project - quite a bit of regulatory work to be done in the next while. In the south-east Kelowna area they have installed 1250 water meters in the last 4 months and they are all connected to the new automatic reading system. 70% of those are political systems and 30% are non-potable agriculture.

Tricia: We are continuing to work on our wildfire mitigation planning to members of our board with great support and push for more funding. There have been some announcements through the province and we are hoping to receive a little more funding and moving forward with those projects. We are also doing water reviews. Looking at bringing in more changes for ag rates. Also, there was a lot of interest from our board on the value of water licenses and how those evolved and if there is some monetary value that can be put to them.

Kalie: I was just listening in to see if anyone has mentioned NHC flood mapping studies.

Carolina: Just a reminder an invitation will go out on Tuesday about our virtual guest this month – Bob Sanford on October 22<sup>nd</sup> and the title will be the OBWB in the next 50 years. He will give a little bit of history of what we have done and all the challenges we will have in the next 50 years. Confirm the second speaker - we are thinking of October 29<sup>th</sup>. Aquahacking challenge for 2021, won't be only a BC challenge, it will be called the Western challenge covering more provinces and participants and collaborate with more members. The Osoyoos Lake Science Water Forum – we are in the preparation for the forum that will be in October 2021. We are not sure if this will be an in-person or virtual event. Planning a workshop for the municipal natural assets for municipalities working towards end of November. We want to understand the status of all the different municipalities in the region of municipal natural assets and the interest for future projects and how we can support that.

Nelson: Looking to engage in next year the environmental flow needs project with phase 2 being posted on the website. Much of my time is involved in developing the budget and governance manual for the new Okanagan hydrometric information and network programme that the board approved in terms of reference last month. Looking forward to getting more hydrometric stations around the Okanagan. Install 6 more next year with 2 of them being Environment Canada stations and 4 being stations we install with the support of the Okanagan Nation Alliance.

Rod: Nelson, did the OBWB mill rate change with the hydrometric study?

Nelson: It won't change because we have a programme cap. Our budgets have been lower than the cap and but this year we will have a budget that approaches the cap for the water management project. The mill rate isn't changing but the amount of funding we will be requesting to be able to support the hydrometric stations will be within the budget envelope there will be a small bump in the net amount we will be requesting. It doesn't impact the mill rate per say – there will be an increase in budget and that will be associated with the ask but it will all be within the current envelope that we are working with.

## **9. CHAIR REPORT – Denise Neilsen**

Thank you everyone for attending, particularly for your suggestions on the survey. We will be coming to you to rate the ideas. CANCELED webinars – the one that

sounds interesting to me is the irrigating corn and soya beans in adaptation to climate change.

Brian: The CANSID – Canadian Committee on Irrigation and Drainage and it's part of an international network with many countries each with a committee on irrigation and drainage. The Canadian committee is a sub-committee of the organization I represent which is Canadian Water Resources Association and I briefly touched on this during the round table the fact that there is are some webinars coming up – that is one of them.

**10. NEXT MEETING**

The next meeting date of the OWSC is to be confirmed for Thursday, November 12<sup>th</sup>, 2020.

**11. ADJOURNMENT**

The meeting was adjourned by Denise at 2:52 pm.

***“That there being no further business,  
the meeting of the Okanagan Water  
Stewardship Council of September 10<sup>th</sup>  
be adjourned.”***

***Moved by Marta Green and seconded by  
Brian Guy.***

**CERTIFIED CORRECT:**

-----  
-----  
**Chair**

**Executive Director**