

OKANAGAN WATER STEWARDSHIP COUNCIL

A Technical Advisory Body to the Okanagan Basin Water Board

AMENDED MINUTES OF A MEETING HELD THURSDAY, February 9, 2017, AT COAST CAPRI HOTEL, KELOWNA, B.C.

COUNCIL MEMBERS:

Present

Assoc. of Professional Engineers & Geoscientists of B.C.
BC Agriculture Council
BC Water Supply Association
BC Wildlife Federation – Region 8
Canadian Water Resources Association
Canadian Water Resources Association
City of Vernon
Environment and Climate Change Canada – West and North
Irrigation Industry Association of BC
Okanagan Collaborative Conservation Program
Okanagan Nation Alliance
Regional District of North Okanagan
Regional District of Okanagan-Similkameen
UBC Okanagan

Don Dobson/Suzan Lapp (alt)
Hans Buchler
Patti Meger (alt)
Lorne Davies
Brian Guy (Chair)/
Rod MacLean (alt)
Rob Miles (alt)
Ian Rogalski (alt)
Bruce Naka/Ted Van der Gulik
Scott Boswell
Natasha Lukey
Renee Clark
Zoe Kirk
Bernie Bauer/Carolina Restrepo-Tamayo (alt)

Regrets

Agriculture & Agri-Food Canada, Research Branch
BC Cattlemen's Association
BC Fruit Growers Association
BC Ground Water Association
City of Kelowna
City of Penticton
Fisheries and Oceans Canada
Interior Health Authority
Kelowna Chamber of Commerce
Ministry of Agriculture
Ministry of Forests, Lands, Natural Res. Ops. (Resource Mgmt)
Ministry of Forests, Lands, Natural Res. Ops. (OSNR)
Okanagan College
Okanagan Forest Sector
Okanagan Mainline Real Estate Board
Regional District of Central Okanagan

Denise Neilsen (Vice Chair)/Scott Smith (alt)
Lee Hesketh/Linda Allison
Kevin Day/Richard McDonald (alt)
Marta Green/Remi Allard (alt)
Andrew Reeder/Jason Ough
Andrew Martin
Doug Edwards
Rob Birtles/Judi Ekkert (alt)
Caroline Grover/Tom Dyas
Andrew Petersen/Stephanie Tam (alt)
Grant Furness/Lora Nield (alt)
Robert Warner/Ray Crampton
Allison MacMillan/Rob St. Onge (alt)
Murray Wilson/Michael Bragg (alt)
David O'Keefe/Howard Newfeld (alt)
Margaret Bakelaar/Chris Radford (alt)

STAFF

OBWB, Executive Director
OBWB, Water Stewardship Director
OBWB, Operations and Grants Manager
OBWB, Communications Director
OBWB, Policy & Planning Specialist

Anna Warwick Sears
Nelson Jatel
James Littley
Corinne Jackson
Kellie Garcia

GUESTS

BC Water Supply Association
OBWB, Chair
OBWB, Hydrology Intern
OBWB, Student
ONA, Fisheries
Triton Environmental Consultants
UBC-O
UBC-O
UBC-O
UBC-O
UBC-O
Westcoast CED Consulting

Bob Hrasko
Tracy Gray
Sabrina Mittag
Alyssa Bougie
Richard Bussanich
Bill Rublee/Kellen Smith
Craig Nicol
Lael Parrett
Marni Turek
Mary Botkin
Nargiz Rahimova
Karol Hansma

1. **CALL MEETING TO ORDER**

Chair Brian Guy called the meeting to order at 1:00 p.m. and welcomed members and guests.

2. **APPROVE AGENDA**

Moved by Bernie Bauer
Seconded by Don Dobson

“That the agenda for the February 9, 2017 meeting of the Okanagan Water Stewardship Council be approved.”

CARRIED

3. **ADOPTION OF MINUTES**

Moved by Bob Hrasko
Seconded by Bernie Bauer

“That the minutes from the December 8, 2016 meeting of the Okanagan Water Stewardship Council be approved”

CARRIED

4. **BOARD REPORT & WATER SUPPLIER SURVEY—
Ms. Warwick Sears**

The OBWB held their meeting on February 7, 2017. A new board was elected. There was only one major change. Tracy Gray (RDCO Director/City of Kelowna Councillor) was elected as chair. Doug Findlater (former chair) remains on the Board as a Director. The Board heard from each of the Board members on the main water issues facing each of their areas. Infrastructure topped the list of concerns. They had a presentation from Lisa Wilson who shared about how important it was to the ONA to respect and protect water. They have put forward an infrastructure planning grant application to come up with a guidebook for building constructive wetlands in the Okanagan. There was a brief ground water update and there has been an extension to Dec 31, 2017 for those wanting to get ground water licensing. The Board is also working on a couple of water law projects with the U of Victoria. There was an invasive mussels call to action framework that came out of a meeting in December in response to the discovery of invasive mussels in Montana and there have been a number of specific recommendations that the Board will be forwarding to the Provincial government and this letter will be going to the Province soon.

The Water Supplier Survey began in 2014 with a series of interviews which created a large data set. There was follow up in 2016 and the information

was updated. It allows for a baseline snapshot about the state of water conservation, drought preparedness, and water planning of water utilities across the valley. One of the really interesting pieces of information that came out of the survey was that there is 84% residential metering across the valley and this is very high compared to other areas in BC and the valley is at 79% for Agricultural metering.

5. **NATURAL CAPITAL (Lael Parrott, UBCO),
OKANAGAN RIVER CASE STUDY (Richard
Bussanich, ONAFD)**

This presentation is about putting a value on natural and managed assets which is an interesting topic and somewhat controversial. There are many people who don't think that a value should be put on nature while there are others who feel that if we don't put a value on nature then how will it be preserved.

Ms. Parrott is the Director of BRAES and a Professor of Earth and Environmental Sciences at UBCO. She will be looking at the topic of natural capital valuation. In 2014, Ms. Parrott wrote a report on the value of natural capital in the Okanagan. Natural ecosystems and biodiversity provide humans with a range of provisioning, regulating, and cultural services upon which we depend for our quality of life and well-being. The Okanagan Valley is rich with natural capital that provides us with enormous benefits to our well-being and quality of life but which are taken for granted until they are gone. Then we are left trying to figure out how to restore those services or replace them with costly technological solutions, or we are faced with implications in our own health and well-being. These things are called ecosystem services (ESS) (ecosystem conditions or processes that support and sustain human life). *Over the past 20 years, extensive research has been carried out to estimate the values of ESS flows provided by different ecosystem categories at global, regional and local scales. The most current estimates available suggest that the global value of ecosystem services in 2011 was \$125 trillion/yr (from the Value of Natural Capital in the Okanagan).* Ms. Parrott provided a few examples of case studies relevant to the Okanagan where ESS valuation was used by people at a regional level to help make decisions and take action that will have immediate benefits for their own health and well-being. The Greenbelt

around Toronto was one such example. The Greenbelt is mostly forested with some agriculture land. An assessment of the monetary value of the greenbelt was conducted and as a result a total value of \$2.6 billion/year was estimated to be provided to Ontario by the protection of the Greenbelt. Maury Island in Washington was another example where ESS was used to determine the cost of developing the coastline with waterfront homes. As a result of the assessment, development has not occurred and a Marine Park and Sanctuary has been declared around the park. With regard to the Okanagan, Ms. Parrott has completed a rough estimate of the natural capital of the Okanagan to be valued at \$6.7 billion/year and she estimates that this is a low value. They continue to do ongoing work to refine and get a better understanding of ESS provided by the Okanagan landscape.

Mr. Bussanich is the senior Fisheries Biologist with ONA and he reviewed a specific case study which looks at the economic value of a short stretch of the Okanagan River which is still in its natural state.

The ONA and OBWB partnered on the development of the *Economic Analysis in the Okanagan Basin* and helped provide an understanding of the complex socioeconomic issues being examined. The study was developed with 2011/12 data but has since been used at CERF meetings in Portland, integrated into the trans boundary negotiations, and taken to the United Nations regarding food security. The objective of the report was to describe the importance and economic values of ESS in the study area (a section of the Okanagan River) supports. This section is the only section of the Columbia system that is still natural and it is where 90% of the Columbia Sockeye spawns in the entire Columbia Basin. The study has shown: the uniqueness of the area and, therefore, that the ESS it provides are unique; development of the area would decrease the supply of ESS; the cultural importance of the area has no substitutes; salmon-related benefits have few substitutes; other ESS are also important; and local residents are not the only beneficiaries. One of the biggest wins for ONA around this has been with the Pacific Salmon Treaty. In the 2010 interim negotiations, they wouldn't talk to ONA. In 2017, the Okanagan has a chapter in the Treaty.

6. COUNCIL WORKPLAN & COMMITTEES: 2016-18

There are 7 committees of Council with an 8th to be led by Kellie Garcia. The committees have been staffed but are not yet fully staffed. Each of the committee chairs were asked to speak to their ToR and what they hoped to achieve.

7. COMMITTEE REPORTS

Communication committee will be chaired by Zoe Kirk. This committee will involve Corinne in her role as Communications Director. They will focus on the seven items brought forward from the working session. A number of people have stepped forward already. They will be getting together within the next month. Bernie Bauer commented on the importance of getting those on the ground floor educated in the use of things like the Groundwater by-laws toolkit. The committee may want to look at recruiting some members from planning departments/Councils, etc. in order to make the transition from development of the instruments to putting those instruments into practice/use.

EFN committee will be chaired by Doug Edwards. OBWB, FLNRO and ONA are in the midst of a large project to identify EFN flow needs required to sustain healthy aquatic ecosystems in the Okanagan. One of the things this committee is being charged with is designing a process of engagement and information gathering that can help FLNRO make decisions.

OK Supply & Demand Study committee will be chaired by Denise Neilsen and will involve updating the study and assessing where it is at and design a new technical study on supply and demand that reflects current knowledge. The committee will develop a scope of work and terms of reference to leverage funding for this update.

Irrigation Management committee will be chaired by Bruce Naka. It arose from the realization that 85% of all water used in the Okanagan is used for irrigation and about two-thirds of that is for Agriculture. The committee will be well rounded in order to address a number of the issues.

Source Water Protection/Wetlands committee is a combination of the two areas and will be chaired by Renee Clark. Source protection involves a number of pieces including urban watershed, agriculture, industrial, community watersheds and understanding the Acts and Regulations that govern it; where the conflicts are; where there are gaps; and what the similarities are. The plan is to

have a planning session (face-to-face) to work out an action plan and then meet through teleconference or Skype after the initial meeting.

Drought and Flood committee will be chaired by Scott Boswell and will look at specific ways to improve communication on flood and drought issues across all levels of government, plan for funding, updating floodplain management, increase the number of municipalities with drought and flood management plans, and increase the consistency of plans.

Policy committee will be chaired by Rob Birtles and the hope is that the committee will be more focused and proactive (try to anticipate legislation coming down that might affect the Okanagan) in order to influence legislation and policy before it comes down from government.

Sustainable Water Strategy committee will be chaired by Kellie Garcia. This has been a guiding document since 2008. The plan is for an editorial Board that will look at the big picture and identify the gaps, provide text and review text. The timeline is about 18 months to complete the document.

A leadership committee has been created that is comprised of the leaders of the committees to ensure linkages between committees and that they are working together on the issues and there is integration and communication between the committees.

8. **MEMBER UPDATES: ROUNDTABLE**

Council members and guests were invited to provide an update:

- Mr. Jatel (OBWB): their largest project right now is a partnership with ONA Fisheries Department/EFN project. They have completed the 1st year of sampling for EFN values over three different sampling periods. The 2017 EFN workplan should be developed and finalized by the end of the month. Work continues, with ONA help, on Mission Creek developing a better understanding of the relationship of groundwater to surface water. They are in the process of finalizing Phase 3 of the Wetlands Initiative ~ Okanagan Wetlands Strategy.
- Ms. Meger (BCWSA): their annual spring conference is being held April 6-7 at Quail Ridge.
- Mr. Littley (OWBW): open letter to the Province specifically calling for: legislative change to require all boats entering BC to report to an inspection station prior to launching in provincial waters; early detection rapid response plan formalized as an emergency plan under the provincial emergency plan program; provide funding for extended inspection hours to daylight hours and increased monitoring and education; consider the effects of an infestation. A letter was sent to the Federal government in December calling for increased training and funding to Border Service agents; increased funding for containment; a commitment to research and education; and asking that senior public servants be directed to participate in forums like PNWER on the issue.
- Mr. Bussanich (guest): pass
- Ms. Lukey (ONA): they are working with Lisa Wilson (NR Team) strategizing and looking at how the Nation can be a best utility under their restricted capacity. They want to be able to maximize their impact and involvement with OBWB. Their brood collection was a massive success with 5.3 million eggs collected this year. They also have about 15,000 Chinook at the hatchery and they have a Chinook Action Recovery Plan. They are expecting 1,000 Chinook to be coming back to the Okanagan.
- Mr. Buchler (BCAC): has submitted his application for a groundwater license. There was a lot of information that he needed to go through and feels that there are still lots of things that are not clear with the process.
- Ms. Bougie (OBWB): working on plans for Canada Water week. She has just graduated from U of Fraser Valley with BSc in Biology/Geography. She has a big interest in resources and human use and balancing those. She spent two years as the Sustainability Coordinator at the U of FV.
- Mr. Dobson (APEGBC): phase 1 of the MCRI was completed last fall and they are now in the monitoring phase. Interested to see where they end up with water supply this year as there is more water in the ground and the water suppliers went into the season already full. There could be a potential for flooding in the spring. The conditions are very different then past years.
- Ms. Lapp (APEGBC): the first prototype of the BC Water Use tool is out and they are now looking at ways to improve on it. Hoping to have something new out in the next couple of weeks.

- Ms. Botkin (UBCO/Guest): 4th year student at UBCO and part of the WiSE (Women in Science and Engineering) mentoring program. Suzan is her mentor.
- Ms. Turek (guest/UBCO): she is part of the communication committee and the source water projection committee and sees some synergies with extension work. There are some value added opportunities for the community as well as UBCO.
- Mr. Rublee (guest/Triton Environmental): from the Thompson area and is finding it very informative to see work being done in the Okanagan. He is quite interested in the work that is being done with the Sockeye.
- Ms. Smith (guest/Triton Environmental): pass
- Mr. Maclean (CWRA): their National Water Conference is June 5-7 in Lethbridge. The title is Water: A Continental Asset. He is the Western Director for the Commission on Irrigation and Drainage. Their 2018 International Congress will be held in Saskatchewan. It brings in 300-400 international guests over a 5-day period.
- Mr. Hrasko (BCWSA): noted that IH will be releasing a report in May on the state of drinking water in the Southern Interior.
- Mr. Van der Gulik (IIABC): IIABC has over 400 members and over 1000 certified individuals. Last year, they made the decision to start implement CEUs to add professionalism to the irrigation industry. He is a member of the Partnership for Water Sustainability in BC which built the BC Ag Water License Calculator and it has been quite successful. The province is using it as a starting point to build to determine how much water they should be licensing for. There are a lot of requirements and the group have been asked, and funded, for work on a better drawing tool application.
- Mr. Naka (IIABC): cognizant of the fact that a number of irrigation systems are aging and there are wastages and a number of communities are looking at their systems and evaluating earlier landscapes looking at ways to improve on the systems.
- Ms. Garcia (OBWB): working on the farm water planning Okanagan pilot project. This involves taking a simple farm water toolkit developed for the Cowichan Valley RD and modifying it so it is suitable for Okanagan needs. Ms. Garcia is ensuring that it is integrated with all the other toolkits and hoping to reduce redundancies The other project is the Agriculture Drought Communications project which they will be piloting in the spring. They are trying to figure out ways to have better communication mechanisms (i.e., digital, electronic communication, Smartphone applications) between purveyors and producers.
- Ms. Clark (RDNO): updating their drought management plan. They are also working on vulnerability mapping in their upper watershed and it should be finished in the next week or so. She has had some talks with the Ministry of Environment around testing they are doing on Coldstream Creek and source water and some of their observations, i.e., bacterial loading.. They had two vehicles charged last May long weekend for mud bogging. In terms of water quality, they are looking at lead contamination in tap water.
- Ms. Rahimova (guest/UBCO): provided an update on her PhD project. She has been working with the farming community and the environmental farm plan.
- Ms. Mittag (OBWB): providing support on the EFN project and working mostly on data acquisition from purveyors in the Okanagan and transferring the information to the database.
- Mr. Boswell (OCCP): finishing work on the foreshore inventory of Okanagan Lake which is showing a lot of noncompliance. They have developed an outreach program. They are working with the District of Lake Country/Coldstream/RDNO looking at boating capacity on Wood Lake and Kal Lake and how that is affecting the water source.
- Mr. Rogalski (ECCC): the Canadian Aquatic Biomonitoring network is having its annual Science forum in Edmonton on Feb 28 – Mar 1. It is designed to provide partners an opportunity to learn and share their experiences and provide advice on the direction of the program. He spoke about the policy work of the ECCC and how they plan on delivering on the Ministers' and the government priorities around freshwater and ecosystem governance. In the short term, there will be a broader focus than the Okanagan which will pull Ian away from participating at the OWSC level. (Let Brian/Anna/Nelson know of their concerns with the possible diminution of the role of ECCC in the Okanagan and help restore ECCC's interest in OWSC.)
- Mr. Davies (BCWF): the hatchery in Summerland is being threatened from development. The

concern is that run-off from the site could pollute the natural springs, that supply water to the hatchery, with oil or sediment. Anyone with any ideas that could help out Summerland is asked to get in touch with the Mayor and Council.

- Ms. Kirk (RDOS): attended the Invasive Species Council of BC Annual Meeting. Steph Hester from Montana was in attendance and she is part of the Montana Weed Committee and part of the Montana Department of Natural Resources. She was the frontline person when the positive tests were received. She gave a dissertation on what they did and how they did it which was open up an emergency operations centre. She roughly calculated out a \$10.2 million cost. They have quadrupled where they will be sampling. They shut down two lakes to boating. They have mandatory inspections. The Alberta team went to Montana and scoured all of the beaches. They haven't found any adult mussels yet. Shows how important it is to remain vigilant. Alberta has reported that most of the infected boats they discovered came in late October. There was a biologist from Ireland that spoke and they have mussels, milfoil, parrot feathers and a red leaf weed. Their approach to clean drain dry is slightly different with a bigger focus on disinfect, then clean drain dry. ISSBC is writing letters to the Ministers and have had some meetings. They are also asking for some targeted funding.
- Mr. Petersen (MAG): Ms. Kirk provided an update on his behalf. He will be at the South Okanagan Growers day on February 21 at the Oliver Community Centre. His presentation will be on how to use new tools to not drown your vegetables; he will also be available to talk about well licensing. The same meeting is being held in Kelowna the week before.
- Ms. Jackson (OBWB): the final reports on MWW and DMM are complete. The MWW campaign total cost was over \$80,000 with \$48,000 provided by OBWB and its partners and the

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remainder coming as in kind funding. The DMM campaign total cost was over \$105,000 with over \$58,000 leveraged in in-kind funding. Canada Water Week/UN World Water Day is March 22. They will be showcasing the film RiverBlue by Mark Angelo and the Director will be attending and be part of a question and answer session.

- Ms. Warwick-Sears (OBWB): working a lot in the last little while on things that strengthen the organization, i.e. internally. It is stronger and healthier now. There is a good energy between the Board/Council/Staff.
- Mr. Guy (CWRA): there will be information on the current state of science and negotiations regarding the Columbia River Treaty at the Annual Conference.

9. CHAIR REPORT

The hope with the OWSC is to be able to maintain an environment where everyone feels contribution is valued and everyone feels they can speak up. Committees are where a lot of the work gets done so please make sure to sign up and contribute, have a voice and influence the direction of Council. He is looking forward to the work that will be getting done this term.

10. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will be on Thurs., March 9, 2017 from 12:30 to 4:30 at the Coast Capri Hotel, 1171 Harvey Avenue, Kelowna.

11. ADJOURNMENT

The meeting was adjourned at 4:40 p.m.

Moved by Ian Rogalski

"That there being no further business, the meeting of the Okanagan Water Stewardship Council of February 9, 2017 be adjourned."

CARRIED

Chair

Executive Director