

OKANAGAN WATER STEWARDSHIP COUNCIL

A Technical Advisory Body to the Okanagan Basin Water Board

MINUTES OF A MEETING HELD THURSDAY, November 12, 2015, AT OKANAGAN REGIONAL LIBRARY, 1430 KLO ROAD, KELOWNA, B.C.

COUNCIL MEMBERS:

Present

Agriculture & Agri-Food Canada, Research Branch
BC Fruit Growers Association
BC Ground Water Association
BC Water Supply Association
BC Water Supply Association
BC Wildlife Federation – Region 8
BC Wildlife Federation – Region 8
Canadian Water Resources Association
City of Kelowna
Environment Canada – West and North
Interior Health Authority
Interior Health Authority
Kelowna Chamber of Commerce
Ministry of Agriculture
Ministry of Forests, Lands, Natural Res. Ops. (Resource Mgmt)
Okanagan College
Okanagan Mainline Real Estate Board
Okanagan Nation Alliance
Regional District of North Okanagan
Regional District of Okanagan-Similkameen
UBC Okanagan

Denise Neilsen
Denise MacDonald
Remi Allard (alt)
Toby Pike
Patti Meger (alt)
Doug Flintoft
Lorne Davies (alt)
Brian Guy
Jason Angus (alt)
Ian Rogalski (alt)
Rob Birtles (Chair)
Judi Ekkert (alt)
Tom Dyas (alt)
Andrew Petersen
Grant Furness
Allison MacMillan
David O'Keefe
Natasha Lukey
Renee Clark
Zoe Kirk
Bernie Bauer

Regrets

Assoc. of Professional Engineers & Geoscientists of B.C.
BC Agriculture Council
BC Cattlemen's Association
City of Penticton
City of Vernon
Fisheries and Oceans Canada
Ministry of Forests, Lands, Natural Res. Ops. (OSNR)
Okanagan Collaborative Conservation Program
Okanagan Forest Sector
Regional District of Central Okanagan

Don Dobson/Ehren Lee
Hans Buchler
Lee Hesketh/Linda Allison
Andrew Martin
Ed Stranks/Rob Miles
Doug Edwards
Robert Warner/Ray Crampton
Carol Luttmmer
Murray Wilson
Margaret Bakelaar

STAFF

OBWB, Executive Director
OBWB, Water Stewardship Director
OBWB, Office and Project Manager
OBWB, Communications Director
Technical Writer/UBC-O

Anna Warwick Sears
Nelson Jatel
James Littlely
Corinne Jackson
Nargiz Rahineova

GUESTS

Irrigation Association of BC
Okanagan College
Penticton Indian Band
UBC-O
UBC-O
UBC-O
Urban Systems
Watt Environmental
Water Cycles Consulting
Westcoast CED Consulting

Natasha Neuman
Bruce Naka
Rob St. Onge
Calyn Glasser
Craig Nichol
John Janmaat
Jonathan Beppele
Suzan Lapp
Mark Watt
Christine Mettler
Karol Hansma

1. CALL MEETING TO ORDER

Rob Birtles called the meeting to order at 1 p.m. and welcomed members and guests.

2. APPROVE AGENDA

Moved by Bernie Bauer

Seconded by Zoe Kirk

“That the agenda for the November 12, 2015 meeting of the Okanagan Water Stewardship Council be approved.”

CARRIED

3. ADOPTION OF MINUTES

It was noted the Lauren Terbasket’s title was entered as Education Director and it should be Executive Director. Corinne Jackson’s name was spelled incorrectly in the body of the minutes (should be Corinne not Corrine). Bruce Naka’s name was spelled incorrectly (should be Naka not Maka). There was a word missing in Mr. Buchler’s member update (used needed to be inserted before more water on page 4). Ms. Jackson and Mr. Littley were not present at the October 1, 2015 meeting. The errors have been noted and corrected in the October 1, 2015 meeting minutes.

Moved by Brian Guy

Seconded by Toby Pike

“That the minutes from the October 1, 2015 meeting of the Okanagan Water Stewardship Council be approved.”

CARRIED

4. BOARD REPORT—Dr. Anna Warwick Sears

The Water Board has approved its budget for the next fiscal year, with a net zero increase over 2014-15. Kellie Garcia of Summit Environmental made a presentation to the Board on the drought planning gap project that she has been working on. Nelson attended a water leaders’ meeting in October. James attended a water funders’ gathering and Corinne attended a Water Smart Innovation conference in Las Vegas. It is the largest water conservation conference in the world.

5. CLIMATE CHANGE:(Suzan Lapp, Urban Systems)

Ms. Lapp is a water resource specialist. She works with Urban Systems and she does some work with Urban Matters. Nelson presented with Suzan at a

recent Climate Change conference that was hosted by FLNRO in Vernon. The provincial government, through FLNRO, is trying to get a handle on how to operationalize climate change adaptation. Her presentation looks at what is happening on the waterscape through the watersheds and linking observed trends to action. It looks at the work they are doing in the field, and the things that they are seeing.

The climate is changing. It has been changing and it will continue to change whether it is human induced change or change due to the natural cycles that occur. In today’s climate, we have super El Nino conditions that are setting up. The conditions are similar to the 1997/98 and 2002/03 El Nino and that, combined with a positive PDO, means we could be in for the same conditions as the spring of 2003.

What is being seen in the watersheds? When they are out in the field, they are primarily interested in community watersheds—those areas that supply us with our drinking water and/or fish sensitive watersheds. They look at what is going on in the watersheds, and how it is impacting water quality (temperature, sediment) and water quantity (how much or how little water we have and how is the timing of flow changing). Peak flow is driven by three different processes: 1) snow dominated; 2) rain on snow; 3) rain dominated. Other things that impact watersheds are natural flooding and drought. Wildfire, insects and disease, channel instability, and debris flows and landslides must also be considered when looking at impacts on a watershed. They also see the effect human interactions (mining, oil and gas, forestry, recreation, agriculture, urbanization) have on the watershed and impacting water quality and quantity. These natural systems and human interactions in the watersheds are further compounded by climate change (precipitation, drought, snow fall or extreme rain events).

When observing the watersheds, one of the key things they do is look at the channel. The channel tells them everything that is happening in the watershed. Channel stability indicators are their first indication about what is happening upstream in the watershed. However, there is a need for more data like stream flow information. There are a number of decommissioned hydrometric

stations and reestablishing them would go a long way in providing some of the necessary data. There is a report available from the BC Water Use Reporting tool (online water management and reporting system) that shows reservoir levels and thus provides some data. For instance, at this time, throughout the Okanagan, water levels are all over the place. Some water purveyors have lots of water for next year while some are dipping into 2017 reserves.

Change is certain; it is “how change will happen” that is uncertain. There has been a lot of change over the years and there have been a lot of improvements (i.e., codes and guidebooks) to help deal with the changes, and there continues to be a lot of research done. There is also more focus on cumulative effects and tying it together to look at the big picture of climate change, anthropogenic and natural processes.

Recommendations: relooking at the hydrologic recovery of canopy (based on Rita Winkler’s extension note); having Wildfire management plans; having proper roads and drainage; completing hazard and risk assessments; looking at cumulative effects (long term planning); maintaining the natural environment (MCRI); looking at increasing reservoir capacity (water purveyors).

6. **ROUNDTABLE DISCUSSION**

OBWB has been doing some preliminary work on water quality in the Okanagan (who is collecting the data, where is the data being stored, etc.) and trying to get a sense on what is happening with water quality. This involves the water quality of lakes and streams. Anna is looking to the Council to see if there is something OBWB should be working on (what information is out there, the sources, contacts). The Syilx community is also interested in water quality issues and would like to be kept in the loop of what research is being done and the information that is being collected. Ms. MacMillan (OC) thinks that this could be a good student based project. A student(s) could track down who is doing what in the valley and create a resource that could be distributed. The question was asked about whether or not the water purveyors are collecting information on water quality? Water purveyors collect information at their intake, which are presumed cleaner areas

and which provides for a part of the data being collected but there is also data from: the buoys on the lakes, people collecting information on contaminants in the fish, people looking at contaminants in storm water. It is all over the map as to who is collecting water information and why. There used to be conditions of operations for waste water treatment outfalls going into mainstem lakes and there were some sampling dollars available. ONA were the contractors but it is not clear if that program still exists.

ONA has been looking at ways to build more water quality analysis into projects and network more with people also doing water quality stuff. There was a suggestion that maybe OWSC could invite Mike Sokal with MoE to present on the state of water quality in the Okanagan. This suggestion was amended to maybe having a panel discussion.

Where are things with the WSA in regards to writing regulations? The comment process ended in September. OBWB provided three documents, including: 1) how they are keen on finding out and knowing what is going on and if there is an opportunity to comment on draft regulations that they would like to be included; 2) sending in a historical set of all the stuff that has been submitted before; 3) sending in everything they have done on groundwater regulations. There will be no draft regulations. The province will take the comments sent in under consideration while finalizing the WSA.

Ms. Clark provided comment on a recent experience in RDNO where there was spill on Vernon Creek reported to Environment. The spill was not reported to RDNO for about a week when IHA were wondering if there were any intakes on Vernon Creek. This shows a gap in how utilities or municipalities are being informed “quickly” of a spill. There needs to be a connection between water utilities and environmental spills. In the WSA, there is talk about environmental response plans but a utility/municipality can’t respond if they don’t know about a spill quick enough. Rob indicated he would look into this issue further.

What is the news on invasive mussels and the push to get the Province to take this issue more seriously? The Province is suppose to be conducting an internal audit about the program

and what was done last summer and look at a plan for going forward including, potentially, a business plan. On December 8, PNWER and Invasive Species Council of BC are holding a meeting in Vancouver with industry leaders (BC Hydro, etc.). James will be attending. In February, James will provide a detailed report.

Ms. Neilsen commented on an RFP for looking at the licensing allocation tool using the water demand model to look at things like peak flow and peak demand and the question was brought forth as to whether there could be a presentation done, either to a Committee or the Council. The RFP is about looking to create software that integrates a lot of the supply and demand throughout the province to look at supply and demand and see how it impacts on a range of things and how they are impacted by climate change. Concluded that the RFP Ms. Neilsen was wondering about was not the same as the one being discussed. She will see if she can get more information on the RFP.

7. COUNCIL WORK PLAN: Committees and Comments

A committee of past chairs plus the current chair was organized to provide an initial review and provide suggestions and recommendations for the Work Plan. Those suggestions and recommendations have been implemented. Now, Nelson is looking at which committees should be moved forward over the remainder of the OWSC term. Typically, there are two types of committees—ad hoc (pulled together to address issues as they happen), and specific committees that meet monthly or on some continuous basis to deal with specific issues. The focus that the leadership team came up with for this term was as follows: 1) Hydrometric Monitoring Stations; 2) Partnering with Okanagan First Nations (this may not require a committee but there are a number of things happen that can be reported on; 3) Drought Management Planning; 4) WSA (once the regulations are in place a committee would need to meet and look at the effect on the Okanagan); 5) Environmental Flow Needs (current state of hydrology in streams); 7) Water Conservation Programs, Education, Outreach and Communication (talk about changing the name from Water Conservation to Water Protection programs which is beyond just the focus of

mussels and conservation); and 8) Ground Water Licensing. Some of the other issues discussed at this time were: Upper Watersheds and Source Water Protection (wasn't included but should the need arise an ad hoc committee can be created).

In the past, committees have often been broken in subcommittees to address issues in a timely manner. Subcommittees are a way to engage more and utilize the expertise of the Council members.

Council members are encouraged to email Nelson about which committees they would be interested in participating on. The plan is to have one committee meeting a month and it would take place before the OWSC meeting. In addition to Council members sitting on committees, experts will also be invited to participate.

Another committee that is referred to indirectly in the Plan is a group that will be reviewing the Water Sustainability Strategy to see what has been accomplished and what still needs to be done. Moving forward, the hope is to create a version 2.0 (next term) when the new WSA comes into force.

Q: is there an ability to change some of the wording and focus? Yes, the language can be changed to reflect the needs of a committee.

The question was asked of the Council members: is there anyone that is not comfortable with this being the OWSC work plan for the next 18 months. There was no show of hands.

Nelson will formalize and send out the work plan along with a form indicating which committee members would like to be involved in.

8. ROUNDTABLE – MEMBER UPDATES

Council members and guests were invited to provide an update:

- Mr. Guy (CWRA): BC branch conference is November 18-19—Floods, Droughts and Everything in Between. Summit Environmental Consultants has had a name change to Associated Environmental Consultants.
- Ms. Warwick Sears (OBWB): following the December OWSC meeting, she will be hosting her annual Christmas party. In October, she attending a meeting of the Osoyoos Lake Board of Control in Ottawa and noted that it was

interesting to see the breadth of different kinds of projects being worked on. She also noted that there is funding available as part of the international watershed initiative. At the meeting, Anna spoke with people in Lake Winnipeg and from the Great Lakes groups that are working on Blue/Green Algae. In Lake Winnipeg, the zebra mussels are spreading beyond Lake Winnipeg into the drainages.

- Mr. Bauer (UBCO): nothing to report at this time.
- Ms. Neilsen (AFG): she was in Davis, CA last week and they had their first day of rain in a year. She finds it interesting that they are still in denial about their irrigation practices. The Pacific Agri-Food Research Centre has changed its name to the Summerland Research & Development Centre.
- Ms. Kirk (RDOS): they have two alternative power sources for two of their systems—Olalla and Faulder. There will be an alternative fuel source and power system added at Naramata. They are adding a small amount of reservoir capacity to West Bench specifically for interface fires. Feels that a lot of local governments will be doing something similar.
- Ms. Neuman (guest): The Middle Vernon Creek Action plan is just finishing Year 4 of 5. It is a complex system that had its challenges this year; in particular, getting flow out of Ellison Lake to provide habitat for spawning Kokanee. Next year will be less field heavy and more planning and water management.
- Ms. Lukey (ONA): They have just finished a number of surveys and will now be seeing what the impact of this year has been on the fish and what next year might mean. The restoration work that is part of the MCRI will be starting soon.
- Mr. O'Keefe (OMREB): nothing to report.
- Ms. MacMillan (OC): nothing to report.
- Mr. Bepple (UBCO): is working on his thesis at UBCO. He has created an agent based model on residential water use in Kelowna and is now looking at how policy changes and regimes and growth scenarios can affect residential water use.
- Ms. Lapp (guest): updating and building new modules for the Agriculture reporting system. They are just waiting on permits before MCRI work can get underway.
- Mr. St. Onge (OC): no comment.
- Mr. Petersen (MoA): The summer focus was all about the drought. There is a provincial drought meeting at the end of the month that he will be attending.
- Mr. Pike (BCWSA): They recently had their AGM and drought was the theme. One of the concerns being voiced was the need for better coordination between provincial drought notifications and local action. There is a spring workshop early in April that will follow up on lessons learned from this year's drought.
- Mr. Davies (BCWF): nothing to report.
- Mr. Angus (City of Kelowna): nothing to report.
- Ms. Mettler (guest): working on a summary report for the Osoyoos Lake Water Science Forum. It should be out in December. She is also working with the Kelowna Museum on an exhibition detailing the social life of water in the Okanagan and how people in the Okanagan have enjoyed, used, exploited water throughout the years. They have applied for funding to put this together and are targeting next fall for its' unveiling.
- Mr. Naka (IIABC): their Annual Convention & Tradeshow is being held in Richmond Nov 30–Dec 1st (Feast and Famine – Solutions and Tools in Response to a Changing Climate in BC). They are re-launching a review of the different levels of certification for irrigation. They have come up with a tool – High Efficiency Irrigation Systems (HEIS) – that will rate an irrigation system as to how efficient it will be. This will be available online and there will be an educational course available.
- Mr. Nichol (UBCO): UBCO is going to be offering a new contaminant transport course (groundwater course).
- Mr. Allard (BCGWA): their regional meeting is in Vernon on November 13th. He has been doing a lot of work dealing with legal issues regarding fan deposits and hillsides where there is more water than they know what to do with. He is also doing a lot of work with smaller communities planning for drought and fire protection.
- Mr. Furness (FLNRO): drought has been the big focus. 25 different staff members have been involved at various levels throughout the Thompson-Okanagan. Three representatives will be attending a provincial debriefing session and

looking at ways to improved the drought process. They have an EFN biologist position available. It is area based position to support the water licensing coming out though WSA. Staff have been working on the MCRI; permits are getting close. FLNRO staff presented at and attended the Wetlands Institute. They have been spending time on outreach and had a workshop dealing with species at risk, updates on WSA, Riparian areas regulation, updates to large lakes protocol, invasive mussels. They were involved in a homebuilder's workshop with a focus on understanding the environmental values while working in and adjacent to water.

- Mr. Flintoft (BCWF): ongoing interest and work with wetlands. There has been a donation of wetland area between Wood Lake and Kalamalka Lake. They are having their regional quarterly meeting on December 5th and he and Lorne will be providing an update on all of the good things that OWSC and OBWB have been doing in the area.
- Ms. MacDonald (BCFGA): their replant program has been hugely successful and there is a waiting list. They are participating in a climate adaptation initiative and watershed planning was identified as an important action item. There is a discussion paper through the Ministry of Agriculture regulating agritourism and farm retail sales in the agriculture land reserves. November 30th is the closing date for input and BCFGa will be providing some input regarding road building and asphalt on agriculture land. Perhaps they could look at eco-friendly/permeable solutions to help with water percolation. BCFGa's annual general meeting is January 29-30. They are hoping to have someone from the province present on the WSA.
- Mr. Rogalski (EC): the new Liberal Party platform is quite intentional about re-endorsing the ecosystem based approach to environmental management with specifics about watershed protection. Not sure how it will all play out but it is encouraging.
- Ms. Rahineova (UBCO): she is working on the Alderson Creek Restoration Group Farm Environmental Plan. She is looking at what motivates farmers and land owners to collaborate and participate in a restoration project. What are the barriers and obstacles and what recent climate change trends have to do with the decision to participate. Another project she is looking at is the possibility of implementation of dry year option contracts as a part of drought risk management. She has also been hired as a technical writer with OBWB.
- Ms. Clark (RDNO): the master water plan is going through public consultation and they are hoping there will be a better understanding in the community as to where RDNO is going with their Master Water Plan. They are looking at their rate structures for next year. She works as a liaison between the different ministries and the tenures and licensees in the community watersheds. They have been doing some really neat work. She is working with Recreation and Trails BC on a number of projects: 1) defining new recreational sites at Grizzly reservoir; 2) Noble Canyon is working with different motorized groups and mountain bikes in getting them to GPS their trail system. They will take those to the Province indicating that those are their designated trails and from that point on their will be no new trails unless applied for. They are working with Splatsin FN on the Shuswap part of Duteau Creek. This includes hydrometric work. She is attending a water quality conference in Salt Lake City next week.
- Mr. Janmaat (UBCO): SSHRC put together a grant that has now been submitted. They are proposing to try and measure the economic value of water quality through impact on property values with a focus on small communities. He is working with Keith Duhane (PhD student) on a study looking at cattle activity in the upper watersheds and the risks to community watersheds.
- Mr. Littley (OBWB): on November 26th OBWB is celebrating 10 years of water funding in the valley through its Water Conservation and Quality Improvement (WCQI) Grant Program with a showcase at the Westbank Lions Hall.
- Ms. Jackson (OBWB): public outreach on MWW and DMM is now complete. She is in the process of gathering feedback and planning for next year. She attended the 8th annual WaterSmart Innovations Conference in Las Vegas. Drought management was a new program stream delivered this year. They put all of their presentations up on their website at

watersmartinnovations.com if anyone is interested in taking a look.

- Mr. Jatel (OBWB): Looking at having James Tate, a lawyer from Vancouver, speak regarding an environmental appeals board ruling this summer regarding the Ft. Nelson FN taking the provincial government to the environmental board. It was a successful appeal over water licenses granted to a fracking company. The Climate Change Action Initiative focuses on developing the Okanagan Agricultural Adaptation Strategy and there are 2 workshops being held: December 2nd in Penticton at the Lakeside Resort (9-2) and December 3rd. The workshops involve the sharing of knowledge and experience and providing of input into regional agricultural adaptation strategies and learning more about climate change impacts to the region. This is part of a series of six strategies being developed across the province.

- Mr. Birtles (IH): They held a meeting for the Environmental Health officers who work on large and small water systems. Dr. Hans Schreier, Emeritus Professor at UBC, spoke on mountain water hydrology. There is a similar presentation done for the Kootenays that can be found on YouTube. The Ministry of Health is planning to take on drought management under the guise of conservation. The provincial drinking water officer is looking at water conservation as an indicator that IH has to report on.

9. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will be a joint meeting with the Okanagan Basin Water Board on Thursday, December 10, 2015 from 12:30 to 4:30 at Okanagan Regional Library, 1430 KLO Road Kelowna.

10. ADJOURNMENT

The meeting was adjourned at 4:30 p.m.

Moved by Zoe Kirk

“That there being no further business, the meeting of the Okanagan Water Stewardship Council of November 12, 2015 be adjourned.”

CARRIED

CERTIFIED CORRECT:

Chair

Executive Director