

# OKANAGAN WATER STEWARDSHIP COUNCIL

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

## MINUTES OF A MEETING HELD THURSDAY, FEBRUARY 14, 2013, AT BEST WESTERN INN, 2402 HWY. 97N, KELOWNA, B.C.

---

### COUNCIL MEMBERS:

#### Present

UBC Okanagan	Bernie Bauer, Chair
Assoc. of Professional Engineers & Geoscientists of B.C.	Don Dobson, vice-chair
Agriculture & Agri-Food Canada, Research Branch	Denise Neilsen
BC Agriculture Council	Hans Buchler
BC Cattlemen's Association	Lee Hesketh
BC Fruit Growers Association	Lorraine Bennest
BC Wildlife Federation – Region 8	Lorne Davies (alt.)
B.C. Ministry of Agriculture	Ted van der Gulik
B.C. Ministry Forests, Lands, Natural Res. Ops. (Resource)	Ken Cunningham
Canadian Water Resources Association	Brian Guy
City of Kelowna	Greg Sauer
Interior Health Authority	Rob Birtles
Okanagan College	Leif Burge
Okanagan Mainline Real Estate Board	David O'Keefe
Regional District of Central Okanagan	Margaret Bakelaar
Regional District of North Okanagan	Renee Clark
Regional District of Okanagan-Similkameen	Evelyn Riechert

#### Regrets

Agriculture & Agri-Food Canada, Agri-Enviro. Branch	Doug Edwards
BC Ground Water Association	Remi Allard
B.C. Ministry Forests, Lands, Natural Res. Ops. (Fish/Wildlife)	Mike Burwash
City of Vernon	Rob Dickinson
Environment Canada – Pacific & Yukon Region	Kendall Woo
Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
Okanagan Nation Alliance	Zoe Masters
Shuswap Okanagan Forestry Association	Kerry Rouck
Water Supply Association of BC	Bob Hrasko

#### STAFF:

OBWB, Executive Director	Anna Warwick Sears
OBWB, Water Stewardship Director	Nelson Jatel
OBWB, Communications Director	Corinne Jackson
OBWB, Office and Projects Manager	James Littlely

#### GUESTS:

District of Coldstream	Maria Besso
EcoNORTHWEST	Ed MacMullan
Interior Health Authority	Judi Ekkert
Larratt Aquatic Consulting	Heather Larratt
Regional District of North Okanagan	Anna Page (alternate)
Regional District of Okanagan-Similkameen	Rob Palmer
Regional District of Okanagan-Similkameen	Zoe Kirk
Technical Writer	Craig Baptie
UBC Okanagan	Menno Salverda
UBC Okanagan	Tricia Brett
UBC Okanagan	Janice Brahney
UBC Okanagan	Natasha Neumann
UBC Okanagan	Grace Fan
UBC Okanagan	Jeff Curtis
UBC Okanagan	Lael Parrott
Urban Systems	Michelle Cook

**1. CALL MEETING TO ORDER**

Chair Bernie Bauer called the meeting to order at 1:11 p.m. and welcomed members and guests.

**2. APPROVAL OF AGENDA**

Moved by Denise Neilsen

Seconded by Don Dobson

*“That the agenda for the Feb. 14, 2013 meeting of the Okanagan Water Stewardship Council be approved.”*

**CARRIED**

**3. ADOPTION OF MINUTES**

3.1 Minutes of the Okanagan Water Stewardship Council held Jan. 10, 2013, at the Best Western Inn in Kelowna.

A small amendment was noted.

Moved by Hans Buchler

Seconded by Don Dobson

*“That the minutes from the Dec. 13, 2012 meeting of the Okanagan Water Stewardship Council be approved as amended.”*

**CARRIED**

**4. BOARD REPORT**

Dr. Anna Warwick Sears reported on the Feb. 5 board meeting and a presentation by Ms. Heather Larratt on invasive mussels, and a discussion about long-term permitting for milfoil control while balancing the program with environmental protection needs.

The International Joint Commission has renewed Operating Orders for Osoyoos Lake for another 25 year term and will then be reviewed. The new orders are consistent with the WSC and OBWB recommendations and allows more flexibility in the operation of Washington State’s Zosel Dam for water levels. OBWB staff are now working with Town of Osoyoos and the IJC on improving public outreach and communication.

Chair Bauer added that the new orders could have gone differently (e.g. requiring guaranteed flows into the U.S. as recommended by Washington State’s Department of Ecology) and noted the importance of the council, board and individual council members’ work in preparing reports and recommendations to the IJC.

Board directors also had a lengthy discussion about the proposed workplan of UBC Okanagan’s Water Research Chair and their wish to be involved in developing priorities.

The board was also told of the council’s nomination for an award of excellence from the Council of the Federation.

Directors also re-elected RDOS Dir. (Osoyoos Mayor) Stu Wells as chair and RDNO Dir. Rick Fairbairn as vice-chair.

There was a question about the operation of Zosel Dam and lake levels. Dr. Warwick Sears noted that Osoyoos is looking at developing a web application that allows residents and interested people to check lake levels. It was suggested that a news release go out once the tool is operating to make Okanagan residents aware.

Dr. Guy entered the meeting at 1:22 p.m.

## 5. GUEST PANEL: EMERGING WATER ISSUES IN THE OKANAGAN

**Jeff Curtis**, UBC Okanagan - Associate Professor, Earth & Environmental Sciences

**Ed MacMullan**, EcoNORTHWEST – Senior Economist

**Heather Larratt**, Larratt Aquatic Consultants – R.P. Bio.

The panel was introduced noting they would each be speaking to emerging water issues in the Okanagan and how it relates to a potential Water Management Plan for the valley.

Dr. Curtis provided an overview on his research on endocrine disruptors, noting that wastewater treatment plants have allowed our population to grow which has led to more waste being treated and released to the same amount of receiving waters. What (e.g. the types of drugs) and how much we're introducing into our water now is very different than what we were introducing a few decades ago, he added.

In addition to research on estrogen disruptor compounds (EDCs) in various Okanagan water sources, Dr. Curtis noted recent research looking at goldfish in two different ponds – one of which has treated wastewater in it. In the pond that has wastewater in it, the goldfish are much larger and are becoming feminized. The research is continuing, he added.

Mr. MacMullan spoke on an economic study being done on the last unchannelized and natural portion of the Okanagan River, determining what the impact on natural resources would be if it was diked and developed. The area, as it is now, has cultural importance, and is important to water quality, flood mitigation and fish, he noted. The study is being done in collaboration with the OBWB, ONA and the federal government.

Ms. Larratt told council about an OBWB-funded study that she completed regarding invasive zebra and quagga (Z/Q) mussels and the threat to Okanagan waters. The mussels come from Europe and are currently in the Great Lakes and in several U.S. states. They foul up water infrastructure, boats and other watercraft. They have razor-sharp shells which cause problems for beach-goers. And they completely alter the eco-system of the waters that they inhabit.

In addition to finding a significant threat, Ms. Larratt looked at various strategies to prevent the mussels from coming into the Okanagan and best methods to destroy them – including adopting the Clean, Drain, Dry approach that is being used in the U.S.

She noted that the mussels have cost the Great Lakes region \$5 billion over a decade to manage, and that once they are established there is no known way to get rid of them completely. Currently, the Americans have our backs, she said, describing their boat inspection program, adding there is nothing like this in B.C. yet.

If these mussels gained a foothold in the Okanagan, Ms. Larratt suggests it would cost at least \$43 million a year to the local economy, considering its impact on infrastructure, fisheries, tourism, real-estate values, and more.

In December, the province introduced fines for moving live or dead mussels in B.C. but there also needs to be legislation, she added. The OBWB is working to try and address the issue, recommending that senior government set up inspection stations in Saskatchewan and Alberta, and along the Canada/U.S. border. It is also working on a public awareness campaign.

There was a lot of discussion around the various presentations.

In response to questions, Ms. Larratt said that the Z/Q mussels can live for hours out of water, but for a month in a damp space. They can also make their way up into streams. There was general consensus that an inspection system should be set up, and/or perhaps a sticker program as in the U.S.

Dr. Warwick Sears added that the OBWB is taking a three-pronged approach: 1) arranging for Ms. Larratt to speak with Okanagan councils/boards and stakeholder groups about her research. Those that are interested in having her come and speak to their agency should contact the OBWB to arrange; 2) the OBWB is coordinating efforts and supporting the work of the Okanagan and Similkameen Invasive Species Society (OASIS), which is doing a “ground campaign” (also in partnership with the Invasive Species Council of B.C.) with boaters and other members of the public; 3) the OBWB/OkWaterWise is launching an “air campaign” that will be coordinated with the efforts of OASIS and the ISCBC.

Dr. Lael Parrott entered the meeting at 2:13 p.m.

Dr. Curtis said that with the research on EDCs, some surface waters are better situated than others to deal with the endocrine disruptors – especially larger waters like Okanagan Lake that can dilute them. RDNO uses wastewater for spray irrigation, cleaning the treated water one more time before it ends up back in our lakes, and this seems to be a good technique, he added. There was a suggestion about possible research into the use of carbon filtration systems as a way to address EDCs.

Ms. Cook entered the meeting at 2:25 p.m.

Ms. Page suggested that outreach efforts on the invasive mussels should include the kayaking community, fishing groups, and others that rely on water for their livelihood (e.g. boat charters).

Ms. Clark added that RDNO will be sending letters to the province and federal government, supporting the OBWB’s request for action. The regional district is also looking at ways to protect its water intakes (e.g. implementing chlorine at the end of its intake). It was suggested that Interior Health would want to be kept apprised of such changes.

Ms. Riechert said RDOS is also sending letters of support for the OBWB’s request for action.

## **6. PROJECT UPDATE: OKANAGAN RIVER ECOSYSTEM VALUATION**

**Ed MacMullan**, EcoNORTHWEST – Senior Economist

**Menno Salverda**, UBC Okanagan - PhD student, Interdisciplinary Studies

Mr. Salverda, a member of the Okanagan River Ecosystem Valuation Project team, noted that the research involves the last remaining natural stretch of river (about .65 km) which is responsible for 80% of spawning sockeye for the entire Columbia Basin. There are a couple of other river systems that have smaller spawning areas, but it’s believed that if we lose this stretch we lose Okanagan sockeye.

Mr. MacMullan said that the study’s objective is to look at economic values in quantitative and qualitative terms (e.g. cultural systems, water quality and filtration, fish) supported by the last natural portion of the river. The study will also look at how the naturalness of the area supports ecosystem services differently than more developed sections of the river. A final report will be delivered in May.

In response to questions, Mr. Salverda said there may be benefits to restoring the natural flow of the river where it is currently channelized. There are hidden benefits and values of being natural and the research team is trying to find those and bring them to the surface, he added. There are also development pressures. This study will look at what the cost is of developing vs. keeping it natural, he added.

With other communities voicing concern about losing natural areas, Mr. MacMullan responded that the model being used for this study can be used in other locations and has been used to look at the value of forests and ponds as well.

## 7. ROUNDTABLE – MEMBER UPDATES

Council members and guests were invited to provide an update:

- Ms. Bakelaar: RDCO is working with OBWB to identify potential areas for groundwater monitoring wells; The regional district is working on connecting rural area subdivision water supply issues with land use.
- Mr. Buchler: BC Ag Council met with the Investment Agriculture Foundation board which is looking at funding Water Management Plans that includes a water reserve aspect. More information is available.
- Ms. Besso: Coldstream Council has received and is now reviewing Greater Vernon Water's Water Master Plan.
- Ms. Clark: RDNO/Greater Vernon Water is hoping to have the Water Master Plan completed by June; RDNO has been talking with OBWB about milfoil rototilling and its impact on water quality and is looking to find a solution.
- Ms. Page: RDNO is reviewing its Official Community Plan and looking at water as it relates to planning; The Shuswap Lake Integrated Planning Process is continuing and soon we will be resending recommendations for a plan based on public feedback.
- Ms. Riechert: RDOS has updated and adopted changes to the wording for its watercourse development permit; Ok Falls treatment plant is almost complete; An upgrade to the West Bench water system is going out to tenders soon.
- Dr. Guy: CWRA has its BC branch conference in Vancouver March 5-7 with a number of sessions on Okanagan research. The national conference is in Saskatoon in May. Abstracts are due Feb. 16.
- Mr. Salverda: Working towards his PhD at UBC and is interested in talking with people who have a similar interest in the Columbia River Treaty consultations.
- Mr. O'Keefe: Real estate sales are down in January. Was recently in Cambodia and was interesting to see an 800-year-old civilization gone because of lack of clean water.
- Mr. Davies: Oceola Fish and Game is working with ONA to try to address the problems with the kokanee fishery on Wood Lake.
- Mr. Hesketh: BC Cattlemen's has its convention in Vernon May 23-25 and will be talking about ranching and its impact on water. There will be a trade show - those interested can contact the association. The Oyama Lake/RDCO silvopasture project is up for an award.
- Mr. Dobson: Measurements in Okanagan Lake as of Feb. 1 are showing above normal. Local governments should be preparing for the potential for flood again this year; There is concern about the state of source water protection with the loss of B.C.'s last SWP officer. Will be bringing a recommendation back to this council.
- Mr. Birtles: As a representative for IHA on a FLNRO committee and a few other agencies, we are looking to champion source water protection in the Okanagan and in general.
- Dr. Parrott: Interested in initiating project to model planning and growth and ecosystem, landscape, esthetics, water.
- Mr. Cunningham: Water licencing is being done from districts; As of Feb. 1 the Okanagan-Kettle is above normal and leading the province. Okanagan Lake is also above normal. There is concern about spring flooding with freshet and sediment. FLNRO had a dike-maintenance meeting recently.
- Mr. Baptie: Walla Walla did a Water Management Plan in 2009. A report will be made available to this group.
- Mr. van der Gulik: Ag Demand Model in Metro Vancouver was done and shows that they will have more higher value crops in the Fraser Valley than here in the Okanagan; A consultation process has been set up for proposed changes to the Ag Waste Control Regulation. Nutrient management planning and provincial compliance and enforcement meetings are also to be held. The province is looking at legislation for spring 1014 (same as Water Act).

- Mr. Jatel: Staff are working on further groundwater monitoring wells, the ecosystem valuation project and the Okanagan Water Management Plan. Chair Bauer added that the Walla Walla WMP is a very interesting and useful document and invited council members to review it.
- Dr. Warwick Sears: Staff partnered with the Polis Project on an op-ed piece that will be appearing in the Vancouver Sun regarding the need for a new Water Act.

Dr. Warwick Sears exited the meeting at 4:15 p.m.

- Ms. Jackson: Staff are organizing on the 3<sup>rd</sup> annual Okanagan WaterWise Challenge for youth as part of World Water Day/Canada Water Week celebrations. The theme is “Love your water body.” We are also organizing a panel discussion this year with the same theme. The Make Water Work committee met and reviewed last year’s valley-wide outdoor water conservation campaign and began talks for this year’s initiative. Once again, all parts of the valley have committed to staying involved ensuring consistent messaging throughout the Okanagan.
- Mr. Littley: The deadline for the OBWB’s Water Conservation and Quality Improvement grants is Feb. 22 at 4 p.m. Extension to March 1 for resolutions. For more information visit [www.obwb.ca](http://www.obwb.ca). Staff are also busy with the hydrometric project.

There was further discussion about the op-ed piece in the Vancouver Sun. Some concern was noted that the council and board have asked the province to ensure an opportunity to review the proposed legislation and have an opportunity to provide input before it is passed. The op-ed piece appears to suggest differently. The concerns were duly noted.

#### 8. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will be held March 14, 2013 at the Best Western Inn.

#### 9. ADJOURNMENT

The meeting was adjourned at 4:24 p.m.

Moved by Brian Guy

*“That there being no further business, the meeting of the Okanagan Water Stewardship Council of February 14, 2013 be adjourned.”*

**CARRIED**

CERTIFIED CORRECT:

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Executive Director