# **OKANAGAN WATER STEWARDSHIP COUNCIL**

A Technical Advisory Body to the Okanagan Basin Water Board

# MINUTES OF A MEETING HELD TUESDAY, FEBRUARY 10, 2011, AT BEST WESTERN INN, 2402 HWY. 97N, KELOWNA, B.C.

Bernie Bauer, Chair

Dan Millar (alternate)

Doug Flintoft Rob Birtles Lorne Davies James Pepper Margaret Bakelaar Renee Clark (alternate)

Evelyn Riechert Kerry Rouck Elden Ulrich Bob Hrasko

**Robert Evans** 

Doug Edwards Denise Neilsen Hans Buchler Lee Hesketh Lorraine Bennest Remi Allard Ken Cunningham Rob Dickinson Ruta Fluxgold

Ted van der Gulik, Vice Chair

### **COUNCIL MEMBERS:**

#### Present

UBC Okanagan B.C. Ministry of Agriculture and Lands Agriculture & Agri-Food Canada, Research Branch Agriculture & Agri-Food Canada, Research Branch BC Agriculture Council
BC Cattlemen's Association
BC Fruit Growers Association BC Ground Water Association
B.C. Ministry of Environment, Resource Stewardship & Parks
City of Vernon
Environment Canada
Environment Canada – Pacific & Yukon Region
Kelowna Fish and Game Club
Interior Health Authority
Oceola Fish and Game Club
Okanagan Nation Alliance
Regional District of Central Okanagan
Regional District North Okanagan
Regional District of Okanagan-Similkameen
Shuswap Okanagan Forestry Association
South Okanagan Real Estate Board
Water Supply Association of BC

#### **Regrets**

Assoc. of Professional Engineers & Geoscientists of B.C.	Don Dobson
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B.C. Ministry of Environment, Fish and Wildlife Branch	Steve Matthews
Canadian Water Resources Association	Brian Guy
City of Kelowna	Mark Watt
Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
Okanagan College	Douglas MacLeod
Okanagan Mainline Real Estate Board	Howard Neufeld
Osoyoos Lake Water Quality Society	Mark McKenney
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**Urban Development Institute** 

### STAFF:

OBWB, Executive Director	Anna Warwick Sears
OBWB, Water Stewardship Director	Nelson Jatel
OBWB, Communications and Research Coordinator	Corinne Jackson
OBWB, Interim Office and Grants Administrator	Melissa Tesche

#### **GUESTS:**

B.C. Ministry of Environment, OWSC Source Protection Cttee.	Solvej Patschke
B.C. Ministry of Natural Resources and Operations	Rob Dinwoodie
Grasslands Nursery	Toni Boot
UBC, Institute for Resources, Environment & Sustainability	Kirsten Harma

## 1. CALL MEETING TO ORDER

Chair Bernie Bauer called the meeting to order at 1:03 p.m. and welcomed members and guests.

### 2. APPROVAL OF AGENDA

Moved by Ted van der Gulik

Seconded by Doug Edwards

"That the agenda for the Feb. 10, 2011 meeting of the Okanagan Water Stewardship Council be approved."

CARRIED

## 3. ADOPTION OF MINUTES

3.1 Minutes of a regular meeting of the Okanagan Water Stewardship Council held Dec. 9, 2010, at the Best Western Hotel, Kelowna.

Moved by Renee Clark

Seconded by Hans Buchler

"That the minutes from the Dec. 9, 2010 meeting of the Okanagan Water Stewardship Council be approved."

CARRIED

## 4. BOARD REPORT

Dr. Anna Warwick Sears presented her board report, noting a lengthy discussion at the last board meeting regarding the work of the OBWB. In addition to the milfoil and sewage facility grant program, the OBWB operates the Water Management Program (WMP). The WMP includes the Water Stewardship Council, Water Conservation and Quality Improvement Grants, the Water Supply and Demand Project, and many other projects, said Dr. Warwick Sears, adding the program requires board authorization every three years. The board is beginning its review of the WMP and a renewal for the next three years. Staff are consulting with regional district boards about the program and the Water Board Directors will hold a strategic planning session this spring to discuss the WMP.

Mr. Nelson Jatel reported to the board that the work of Water Stewardship Council (WSC) is being reviewed and that he is gathering recommendations to ensure an effectively operating WSC.

The board was presented with Goals and Objectives for 2011. Directors had a number of ideas on what council and staff should focus on. This will be clarified and brought to council.

An Osoyoos Lake Water Science Forum is set for Sept 18 to 20. The conference is intended to gather public input before the Canada-U.S. International Joint Commission (IJC) is asked to renew operating orders on Osoyoos Lake, which expire February 2013. The current order controls lake levels. However, a recent study by Washington State University suggests the negotiation of flows which could have significant impacts on the entire Okanagan basin, noted Dr. Warwick Sears.

The board was told that the OBWB was asked to help host a water governance workshop by the National Roundtable on the Environment and Economy. The workshop, on Feb. 22, will look at natural resource conflicts in relation to water (e.g. between fisheries, forestry, mining) and how collaborative governance can help achieve effective, efficient, and equitable water use by these sectors.

The Water Supply and Demand (WSD) Project team are continuing to develop and analyse future water scenarios. The hydrometric connectivity work is wrapping up in March. And, Environment Canada is expected to undertake a lake evaporation study on Okanagan Lake this summer.

Dr. Warwick Sears noted the Streamlined Water Use Reporting Tool was launched on Feb. 4 with MPs, MLAs, water suppliers, and media on hand. The tool is ready for use by large Okanagan water utilities and smaller ones will be brought on board at a later date.

The WSD project information and Waterviewer website will be launched in the coming weeks. Board and council members will be able to direct people to this site if they have any questions about the WSD study. A report is also being prepared for local governments on how this information can be used in planning their communities.

## 5. SUSTAINABLE WATER STRATEGY REVIEW

Mr. Jatel provided council members with copies of the Sustainable Water Strategy (SWS) Review draft and asked for feedback by next Friday. Staff are looking to provide the report to the board next month.

The original SWS was launched in November 2008. This review looks at what work has been done by the OBWB and others on the 45 actions recommended in the strategy.

There was discussion about the need to explain how action on items was determined to be "fair," "good,"or "excellent."

It was also suggested that there be some way of tracking ongoing progress on the action items as work continues. Mr. Jatel agreed with the importance of this and said he would follow up on it.

## 6. GROUNDWATER COMMITTEE PRESENTATION

Mr. Jatel and Mr. Remi Allard provided council with a PowerPoint presentation from the Groundwater Committee and recommendations for action. Mr. Jatel noted that groundwater was identified as an area that council wanted to focus on, along with source protection, an agricultural water reserve and B.C.'s Water Act Modernization process.

It was noted that not all members of the groundwater committee are members of the WSC, and committee membership is open to a number of experts in groundwater as well.

Mr. Dan Millar entered the meeting at 1:38 p.m.

Mr. Allard told council that there is a lack of information in the Okanagan Basin on how much water is available upland, lost to evapotranspiration, recharges groundwater, and ends up in surface waters. Observation wells have been operated for a number of years, he added, but more are needed. Additional wells are being drilled through an OBWB program, in areas where there are groundwater concerns and in areas where there is interest in learning what is happening to groundwater supplies.

Responding to charts shown by Mr. Allard that illustrate historical groundwater supplies in the valley, Chair Bauer remarked that they indicate we are depleting our resources and noted the fact that there are no groundwater regulations in B.C.

Mr. Allard said that the common sources of groundwater contamination include some agriculture practices, storm water discharge, unmonitored underground storage tanks, and transportation corridors via rail and road vehicles. He added that it's important to monitor aquifers and wells, ensuring that they meet existing regulations, that data is being collected and surveys conducted, and that there are back-up plans in case of an emergency. He also said public outreach is important, convincing people of the importance of groundwater and the need to protect it.

Mr. Jatel added that through a partnership between the OBWB, the province, federal and loval governments, six groundwater monitoring wells have been installed in the south Okanagan.

Following the Groundwater Committee presentation, Mr. Jatel explained that the Board of Directors requested the OBWB develop a response to the groundwater content in the province's proposed

Water Sustainability Act. The deadline for comments is Feb. 21. The board, added Mr. Jatel, asked that another submission be made to the province urging another opportunity for feedback once the draft legislation is developed.

Ms. Denise Neilsen entered the meeting at 2:06 p.m.

There was debate around the province's suggestion that groundwater be regulated based on a particular amount that is being extracted and whether the threshold was appropriate.

Chair Bauer summarized the conversation noting that there is consensus that the OWSC supports the need for groundwater legislation, and that the threshold needs to be carefully considered and justified. In addition, there was consensus that critical aquifers need to be looked at as a priority and as noted in the Water Board's original submission to the WAM process.

### 7. PRESENTATION: WEAP MODELING PROJECT

UBC, Institute for Resources, Environment and Sustainability: Kirsten Harma

Ms. Kirsten Harma presented a report "Projecting Water Supply and Demand Changes in Peachland and Trepanier Creeks" to council.

Ms. Harma completed her Masters, studying the challenges in the Okanagan Basin with Mountain Pine Beetle, population growth and climate change and used the Water Evaluation and Planning System (WEAP) model for her work. The OBWB will be using the same software for its hydrologic connectivity study.

Ms. Harma explained that WEAP looks at what's happening on the landscape and links it to human altered systems, so is able to project what the impact of our decisions will be. One of the downsides, she noted, was that complete water use data was not available. As such, estimates of activity and extraction were used in some cases.

Some of the patterns noted:

- An increase in streamflow above the withdrawal site for Peachland and reductions in meeting instream flows below the withdrawal site.

Sensitivity to demand:

- On Trepanier Creek: instream flow targets were met with lower water use estimates, but not higher use estimates in August and September of very wet years (e.g. in the 2050s).

Results: reservoir management

- Targets during the summer could possibly be met by less-fully meeting winter targets in all but the driest conditions. Tradeoffs: filling reservoir vs. meeting summer targets vs. winter targets.

Impacts on aquatic life:

- Even with storage in place instream flows weren't met even in normal years by the 2050s. This is the new normal, suggested Ms. Harma, adding there will be severe consequences.

Margaret Bakelaar entered the meeting at 3:11 p.m.

Ms. Harma's work suggests that climate change, land use change and water use patterns are going to be changing simultaneously. To improve water management, planning needs to consider social, biological and other factors at the same time.

The WEAP Model - pros and cons:

- Pros: can integrate factors simultaneously; user-friendly
- Cons: some limitations in hydrologic functionality; demand driven so need demand data; limited functionality with the reservoir function. It is possible that some of these software issues have

been addressed since she conducted her work, added Harma.

### Future work:

Ms. Harma is looking to conduct additional scenario developments in collaboration with stakeholders. Future scenarios could look at different priorities (e.g. fish vs. reservoir filling).

# 8. <u>ROUND TABLE – DIALOGUE ON OKANAGAN WATER: GROUNDWATER PRIORITIES AND</u> <u>DRAFT WATER ACT MODERNIZATION LETTER TO PROVINCE</u>

There was a return to the discussion, earlier in the meeting, regarding a letter to the province on the proposed Water Sustainability Act (WSA) – the B.C. government's proposed update to its Water Act. Ms. Lorraine Bennest said that she supports a letter of general support for the WSA, but the BC Fruit Growers Association has issues with parts of the act.

Regarding the groundwater issue, the letter needs to emphasize the importance of regulating priority areas, added Ms. Bennest, saying it was part of the OBWB's original submission and what brought people to the table in agreement.

After further discussion, Chair Bauer noted the letter needs to state that the OBWB is in support of the general direction taken so far, but more information is needed. While the Water Board wants legislative change, it needs to see what is proposed as draft legislation. If it can't see the draft legislation, it would like the opportunity to respond to some of the details.

Mr. Allard added that council members still have an opportunity, until Feb. 21, to respond as individuals and/or for their organizations to the proposed WSA and make their feelings known.

Mr. Doug Edwards noted that passing an act is one thing but regulations are the teeth and that's where the need for response will be. Dr. Warwick Sears responded, saying a letter from the OBWB should state that organization would like to also have input when the time comes to developing the regulations.

Chair Bauer concluded the discussion saying a letter suggesting general support for the WSA and asking for more opportunity for input will be provided to council for feedback before being sent to the province.

## 9. <u>NEW AND UNFINISHED BUSINESS</u>

### 9.1 Provincial silvopasture project

Mr. Ted van der Gulik told council about a proposed silvopasture project in the Okanagan that B.C. Ministry of Agriculture and other partners are looking to have funded.

Rob Dinwoodie, with B.C. Ministry of Natural Resources and Operations, noted that his work involves working with ranchers. Ranching near water is a growing concern, he added, saying source water assessments have shown the need to protect waters on ranchlands. Silvopasture involves harvesting trees and planting grass near sensitive streams for forage. This would meet the recommendations for fuel management that came out of the Filmon report following the 2003 Okanagan Mountain fire. The purpose of the project, added Dinwoodie, is to find another inexpensive tool (in addition to fencing and off-stream watering) for ranchers to use in sensitive watersheds that will help address source protection and the needs of their herd.

The project will use GPS to monitor the behavior of cattle. RDCO is making an application for funding to the OBWB's Water Conservation and Quality Improvement Grant program for the project and has support from the provincial government.

Mr. Lee Hesketh noted that silvopasture is a new way of doing business for ranchers. It shows that cattle management can be done cost effectively and sustainably, diminishing conflict with other sectors, he added.

# 10. ROUND TABLE - MEMBER UPDATES

- Mr. Dan Millar: The International Joint Commission's Osoyoos Lake Board of Control (a Canada-U.S. agency) is preparing to renew the operating orders on Osoyoos Lake, which controls water levels on the lake to assist in the operation of Zosel Dam on the U.S. side of the border. The current order expires Feb. 22, 2013. It is expected that the State of Washington will ask for the order to be renewed. The Board of Control is only mandated to deal with lake levels. However, there is discussion in the U.S. that they would like to have flows included. An Osoyoos Lake Water Science Forum is planned for Sept. 18 to 20 and the public is invited to provide input before the renewal of operating orders. It is important, Mr. Millar added, that people provide input either formally with a letter, or informally at the forum if they want to be heard. A number of studies are being completed to help inform the Board of Control's decisions. These studies will be available to the public as well.
- Mr. Edwards: Agriculture & Agri-Food Canada is holding a workshop Feb. 24 and 25 in Kelowna on Weather, Climate and Risk Prediction, looking at forecasting tools available and getting input from end-users on what they would like to see. A drought monitoring network has been set up through the Peace Country and prairies, and the federal department wants to expand throughout the rest of B.C. Staff are looking at holding a meeting to get this process started. Anyone interested in being involved was invited to contact Mr. Edwards.
- Mr. Allard: The BC Ground Water Association is holding its annual conference in the Lower Mainland, March 7 to 11. Some of the people behind the WAM process in Victoria will be speaking. Council members were invited to attend.
- Ms. Bennest: The BC Fruit Growers Association is having another year of low market returns. Ms. Bennest asked for peoples support in lobbying grocery stores to have a "buy local section." The Okanagan College speakers series had Keri Long presenting on First Nations and water issues. Ms. Bennest suggested it might be interesting to have her deliver a presentation to council.
- Mr. Bob Hrasko: The BC Water and Waste Association is holding a conference April 16 to 20 at the Delta Grand in Kelowna. There will be a technical focus. The Kelowna Joint Water Committee is continuing work on a model for planning, layering data from the OBWB's Water Supply and Demand Project, onto Google Earth which is working well and quite useful. There are problems in the upper Kelowna watershed between the snowmobile clubs and 4x4 clubs. Some of the 4x4 members want to use snowmobile club trails, but the uses aren't compatible and are ruining snowmobile trails. The watershed is suffering, added Mr. Hrasko, noting that those responsible should be banned, fines should be increased and vehicles possessed.
- Ms. Fluxgold: Environment Canada will be conducting a Lake Evaporation study on Okanagan Lake this summer. The deadline for applications to Science Horizons, a youth internship program, is closing soon.
- Ms. Renee Clark: Regional District of North Okanagan is partnering with BCWWA for Drinking Water Week. The Canadian Water Resources Association is holding a drought tournament in Alberta. Ms. Clark will be attending. Each team will work through drought scenarios with the goal of providing a toolkit for drought management. An open house is being held Feb. 24 at the RDNO offices regarding an assessment on Kalamalka Lake.
- Mr. Ulrich: A recommendation has gone out to the B.C. Real Estate Board that funds be allocated to flood mapping throughout the province, likely with the proposal out to the private sector, and to correlate and update the 200-year flood areas.
- Mr. Ken Cunningham: The province is reorganizing its ministries, including Water Stewardship, Environment, Lands, Mines, and Forests which is presenting new integration opportunities.
- Mr. Hesketh: Fraser Salmon Watershed is holding stewardship conference March 15 to 16 in Lumby. Travel grants are available for those interested in grassroots level work on stewardship. The annual tour of Silver Hills is set for June 4 and everyone is welcome.

- Ms. Bakelaar: Regional District of Central Okanagan is updating its Regional Growth Strategy. Dr. Warwick Sears noted that the strategy is extremely relevant. It looks at housing, transportation, economic development, parks & open space, and climate change. It has the potential for big impacts, added Dr. Warwick Sears, encouraging people to participate. Ms. Bakelaar added that the RGS survey also attempts to identify gaps.
- Mr. Jatel: The OBWB is organizing a panel discussion for World Water Week, March 22. Other WWW events will also be held at UBCO during that week.

## 11. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will be held March 10, 2011.

## 12. ADJOURNMENT

The meeting was adjourned at 4:50 p.m.

## Moved by Remi Allard

"That there being no further business, the meeting of the Okanagan Water Stewardship Council of Feb. 10, 2011 be adjourned."

CARRIED

CERTIFIED CORRECT:

Chair

**Executive Director**