

OKANAGAN WATER STEWARDSHIP COUNCIL
A Technical Advisory Body to the Okanagan Basin Water Board

MINUTES OF A MEETING HELD ON THURSDAY, APRIL 8, 2010, AT THE KELOWNA AND DISTRICT FISH AND GAME CLUBHOUSE, 4087 CASORSO ROAD, KELOWNA, BC

COUNCIL MEMBERS:

Present

UBC Okanagan	Bernie Bauer, Chair
Agriculture & Agri-Food Canada	Doug Edwards
Agriculture & Agri-Food Canada, Research Branch	Denise Neilsen
BC Agriculture Council	Hans Buchler
Canadian Water Resources Association	Brian Guy
City of Kelowna	Mark Watt
Environment Canada – Pacific & Yukon Region	Dan Millar
Interior Health Authority	Rob Birtles
Ministry of Environment, Water Stewardship	Ken Cunningham
Oceola Fish and Game Club	Lorne Davies

Regrets

BC Cattlemen's Association	Lee Hesketh
BC Fruit Growers Association	Lorraine Bennest
BC Ground Water Association	Doug Geller
Community Futures	Don Main
Ministry of Agriculture and Lands	Ted van der Gulik, Vice Chair
Ministry of Environment, Fish and Wildlife Science	Steve Matthews
Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
Okanagan College	Douglas MacLeod
Okanagan Nation Alliance	Gwen Bridge
Okanagan Nation Alliance	Howie Wright
Osoyoos Lake Water Quality Society	Mark McKenney
Regional District of Central Okanagan	Chris Radford
Regional District North Okanagan	Anna Page
Regional District of Okanagan-Similkameen	Jillian Tamblyn
Shuswap Okanagan Forestry Association	Kerry Rouck
South Okanagan Similkameen Conservation Program	Bryn White
Urban Development Institute	Bal Poonian
Water Supply Association of BC	Bob Hrasko

STAFF:

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

GUESTS:

Kerr Wood Leidal Associates	Chris Johnston
Grasslands Nursery	Toni Boot
Ministry of Environment, OWSC Source Protection Cttee.	Solvej Patschke
Insight Environmental, OWSC Communication Cttee.	Kellie Garcia
Ministry of Environment, Water Stewardship	Oleg Ivanov

1. CALL MEETING TO ORDER

Chair Bauer called the meeting to order at 1:02 pm and welcomed members and guests.

2. APPROVAL OF AGENDA

Amend to approval of March minutes.

Moved by Dan Millar

Seconded by Doug Edwards

“That the agenda for the April 8, 2010 meeting of the Okanagan Water Stewardship Council be approved as amended.”

CARRIED

3. ADOPTION OF MINUTES

3.1 Minutes of a regular meeting of the Okanagan Water Stewardship Council held March 11, 2010, at Kelowna and District Fish and Game Club clubhouse, Kelowna

Amendments: A couple small amendments to the minutes were suggested and incorporated.

Moved by Dan Millar

Seconded by Brian Guy

“That the minutes from the March 11, 2010 meeting of the Okanagan Water Stewardship Council be approved as amended.”

CARRIED

4. BOARD REPORT

Dr. Warwick Sears reported on the April 6 Okanagan Basin Water Board Meeting and the discussion around the success of the launch of the Phase 2 – Okanagan Water Supply and Demand Study.

Dr. Warwick Sears also introduced discussion around the awarding of Water Conservation and Quality Improvement Grants for 2010 and asked Ms. Dunbar to provide further details.

Ms. Dunbar reported that staff analyzed submissions and the board accepted the recommendations as presented. With \$300,000 available, there were 37 applications requesting a total of almost \$750,000. Eighteen applicants were successful.

Dr. Guy asked if there was any consideration to increasing the funding that’s available. Ms. Dunbar responded that the board does discuss this periodically and the OWSC can make that recommendation to the board if it wishes.

Dr. Bauer noted that the board is split on this and there is reluctance by some directors to increase taxation, but they also see the positive momentum of the program. He added that one solution might be to target funding towards certain areas of interest for a few years. Dr. Bauer asked that suggestions be forwarded to Ms. Dunbar.

Dr. Warwick Sears added that staff members are looking at how to create partnerships and leverage funding to make the biggest impact possible with the grant program.

In continuing with her report, Dr. Warwick Sears said that job postings had been sent out for a summer Okanagan Outreach and Education Leader and a temporary Outreach and Education Assistant who would transition to the Office and Grants Administrator position as a maternity leave vacancy.

Finally, the OWSC’s WAM submission to the board was received. Dr. Bauer added there were some

small revisions and that a final version would be circulated to the council once it was ready.

5. ROUND TABLE – MEMBER UPDATES

Council members provided an update on their organization's activities.

- Mr. Cunningham: Okanagan Lake is above the required criteria for inflow. The April snow bulletin will be out soon. It has been busy with the WAM and provincial drought meetings. Now preparing for an upcoming meeting of the Bear Creek drinking water task force.
- Mr. Ivanov: Okanagan Lake and River is where it should be for lake level, but there is some talk that it still may not be fully filled. How crucial this is is currently unknown. More information will be provided during the April 14 drought webinar.
- Ms. Garcia: Insight Environmental has opened a new office. Currently working on a project for the BC Wine Grape Council and the OBWB.
- Mr. Buchler : The presentation made by Ms. Dunbar at the Grape Growers Conference was very well received. Working to develop recommendations for the BC Wine Grape Council for levels of irrigation in the Okanagan.
- Mr. Edwards: The province's drought workshop in Kelowna had a great turnout. The information is now being reviewed and a Drought Response Plan is being drafted. The report will be reviewed within Ministry of Environment and then by the province's communications department since communication around drought is a key part of the plan.
- Ms. Boot: I've been writing a column in the Penticton Herald called Water Wisdom that focuses on good horticultural practices, and have been speaking every second week on the AM 1150 morning show about xeriscaping.
- Ms. Patschke: The Source Protection Plans for Kalamalka Lake and Lake Country, Peachland and Trepanier, are being reviewed. They should then be available to the public. Armstrong is looking to do one as well with its Water Conservation and Quality Improvement Grant from the OBWB.
- Ms. Jackson: A final draft of the site content for the new WaterWise website will soon be forwarded to Think Marketing. Positions have been posted for one full-time and one part-time WaterWise outreach student. The first WaterWise marketing tactic – water bottle display panels – was unveiled at the Phase 2 launch of the Okanagan Water Supply and Demand Study on March 26. The OWSD launch was a great communications success with every Kelowna media outlet in attendance (TV, radio, print and Internet). Coverage was carried throughout the valley and extended to Vancouver and Calgary. The March 22 World Water Week panel also attracted strong media coverage in the same week. As a result, there has been strong interest from local media in providing regular news coverage on water issues.
- Mr. Watt: The City of Kelowna is pleased to hear about the grants from the OBWB and has already started work on its source water quality project. Dr. Marty Allan is coming to Kelowna in early May to talk on filtration deferral from a North American perspective which may be of interest to some. The city is working on its own Drought Response Plan and is talking about moving to Stage Two – taking a water conservation approach. A communications plan will be coming out on this in the next few weeks.
- Dr. Bauer: One of our water-related funding applications was rejected. Another, which looks at water storage in Nepal and which should be of interest here, was successful. We're still waiting to hear about our application for AgriFlex funding.
- Mr. Jatel: We'll be in Victoria April 16th to talk about the Streamlined Water Use Reporting Tool Project. Phase one should be completed by the end of June and then the build phase should be completed by December. On the NASA project, two consultants have been hired and will be developing a scoping document and charter document for a funding proposal through NASA. The next drought webinar is set for April 14th, giving a snapshot of current water supplies in the Okanagan.
- Dr. Warwick Sears: Heather Larratt spoke at the last board meeting on her OBWB-funded work around source protection, protection zones and contamination around water intakes on Kalamalka Lake for the District of Lake Country and Greater Vernon Water. These Source Protection Plans will

be available for sharing. There's been a lot of outreach work being done through the OBWB which is meeting with a positive response, including Ms. Dunbar speaking with the BC Grapegrowers Association and Mr. Jatel at the BC Cattlemen's Association.

- Dr. Guy: Summit Environmental is now part of Associated Engineering. Canadian Water Resources Association looked at the province's Water Act Modernization as part of its AGM in March. Phase 2 of the OWSD Study is in the last stages of its final written report and launching its web-tool. Ms. Garcia and I are working on the NASA project which is aimed at using satellite data to help make predictions and have real-time information to work with. The annual CWRA meeting is June 17 in Vancouver and the OWSD study will be a big part of it.
- Mr. Davies: The Ocoela Fish and Game Club is working on a couple of projects, including the protection of kokanee in Winfield Creek.
- Mr. Millar: Osoyoos Lake Board of Control can declare drought based on three criteria. Based on those criteria, the board has now declared a drought and is increasing water levels on Osoyoos Lake to accommodate irrigation.
- Dr. Neilsen: We're looking for three people to be session chairs at CWRA conference. At a recent meeting in Vancouver we were looking at how to provide climate change information so it's useful for projects like the OWSD project.

6. PRESENTATION

Chris Johnston, Kerr Wood Leidal Associates Ltd.

Rainwater Management: Adapting to climate change - water quality and quantity issues in the Okanagan

Mr. Jatel introduced Mr. Johnston, noting that rainwater could be a big water quality issue in the future for the Okanagan and is something the OBWB should be looking at. In recognition of this, the OBWB is working with Mr. Johnston and organizing a rainwater management conference for late October 2010, added Mr. Jatel.

Mr. Johnston noted in his opening that the conference will involve high level discussions with policy-makers as well as technical discussions.

Stormwater is associated with large infrequent events, whereas rainwater is the term to capture all the rain cycles, Mr. Johnston explained. A lot of studies have been done and a number of bylaws put in place in the Okanagan, but the issue of rainwater is still in the background, he noted.

There are four main issues which will be impacted by rainwater and need to be considered: climate change, water quality, aquatic habitat and erosion, said Mr. Johnston.

Climate change

In Metro Vancouver, as in other places, the annual average precipitation is going up. The one- to two-hour rainfalls are increasing in intensity and yet this is what storm drains are built to deal with. It is believed that climate change will only result in more unstable-like behaviour, noted Mr. Johnston. In the Okanagan, it's expected that the volume will also go up, but we don't know about the intensity, he added.

However, these heavy rainfalls will impact existing infrastructure. As rainfall intensities increase over time the objective needs to be is to disconnect impervious surfaces from the storm sewer collection.

Stormwater Quality

Stronger stormwater is going to push more pollutants through. If we can disconnect these surfaces from the receiving waters, it will be less of a problem.

Calgary has looked at some solutions including rain garden areas, infiltration systems, absorbent landscaping, green roofs, porous pavement, oil and grit separators and high efficiency street sweeping. Regional or community solutions include wet ponds, wetlands, and sedimentation basins, noted Mr. Johnston.

Aquatic habitat

As the number of impervious areas increases, this will affect the quality, diversity and abundance of aquatic species and habitat will decrease. Climate change will affect this further, Mr. Johnston added.

We will also see fish that indicate cold and clean water, being replaced by larger numbers of fish that indicate warmer water and pollutants.

The objective then, needs to be to disconnect these surfaces from the creek systems, preferably at the lot level, or at the community level.

Impact of erosion

Erosion is natural but when hydrology changes it accelerates erosion and climate change would further amplify this, said Mr. Johnston.

Erosion can lead to capital intensive rehabilitation programs.

All four of these issues can be dealt with by disconnecting impervious surfaces. This is done through infiltration, evaporation or re-use. It is important, he added, that any disconnection or redirection be done properly to match specified criteria or new issues can emerge.

The benefit of dealing with rainwater this way (e.g. by disconnecting it from natural streams) is that it allows existing drainage infrastructure to accommodate larger storm events due to climate change. It improves the water quality in creek systems, which is better for the fish, and it decreases potential erosion. It also recharges groundwater aquifers and reduces the risk that these issues will be amplified due to climate change.

The process for change, added Mr. Johnston, should include: a watershed plan, selection of criteria, analysis of impervious surfaces, changes to development bylaw, changes to standard drawings and long-term retrofit programs.

Rainwater management is still not a mainstream issue. However, climate change may amplify the issues and force more reactive measures, concluded Mr. Johnston, noting the importance of addressing these issues now.

Mr. Ivanov suggested there should be some thought given to potential storage up high of the increasing precipitation which could eliminate flash flooding.

Mr. Johnston added that cities seem worried about the potential risk of disconnecting impervious surfaces from storm sewer collection. Dr. Bauer responded that if engineers follow the rules they can't be blamed and they need to work faster on this issue.

7. NEW & UNFINISHED BUSINESS

7.1 Okanagan Water Supply Communication strategy: Drought-proofing the Okanagan – April Webinar

Mr. Jatel noted that the next webinar is set for April 14 from 10 a.m. to 11 a.m. The first webinar was a pilot so the agricultural community will be invited to attend this next one, added Jatel. Others who feel this information would be valuable are also invited.

Mr. Millar suggested it might be valuable to invite valley mayors. Mr. Jatel will consider expanding the invitation list.

Mr. Ivanov added that time for questions may also be useful. Mr. Jatel agreed, adding he would try to incorporate this.

7.2 Hydrometric monitoring sub-committee

Mr. Jatel reported that the OWSC's Hydrometric Monitoring Sub-committee is being co-chaired by Drs. Guy and Neilsen. The big question is how do we fund implementing hydrometric monitoring in the Okanagan. This is an important issue that needs addressing and will be looked at closely, he added.

With the Groundwater Monitoring Project, Mr. Ivanov has established which aquifers in the Okanagan needed additional monitoring, said Mr. Jatel. We then looked at funding from Agriflex as well as funding from municipalities. We are also looking at whether funding from Mr. Van der Gulik's application to AgriFlex, if successful, would be something we could use for this work.

Mr. Ivanov added that this is important work – wells are going dry and we have no data. Eventually, there will be groundwater regulations, so we need to know what exists. You can't manage what you don't know you have, he added.

In addition to the funding possibilities already noted, Mr. Edwards said there may be industry interest in this. The Real Estate Foundation and the Urban Development Institute should also be considered as potential funding partners.

7.3 Project updates: NASA initiative / Streamlined Water Use Reporting Tool (SWURT)

Mr. Jatel noted that the work of Dr. Guy and Ms. Garcia will be important in going forward with the NASA initiative. Things are moving ahead from NASA's end as well, he added.

The first SWURT meeting with water purveyors went very well with about 70 per cent of water use in the valley represented. Those who attended were very happy to see this moving forward. Another meeting will be held in Victoria and will include Ministry of Environment, Ministry of Agriculture, Ministry of Culture, Tourism and the Arts, as well as others. We are looking at running a dummy pilot at the end of May to see how it works, said Mr. Jatel.

At the next OWSC meeting, there will be three presentations on water economics that will be about 18 minutes long. Those presenting include Ronald Griffin from the University of Texas, Hennig Bjornland from University of Lethbridge, and UBC-O's John Janmaat. The presentations will be videotaped and will be among nine videos produced in total. The intention is to provide a narrative on important water issues that will be put up on the OBWB website to gain a broader audience.

Dr. Janmaat is studying the First in Title – First in Right model in the Okanagan and, for example, what happens when Oliver has no water? Who has priority? Dr. Griffin will be talking about the consequences of water pricing.

8. NEXT MEETINGS

The next meeting of the Okanagan Water Stewardship Council will be held May 13, 2010 at Kelowna and District Fish and Game Club clubhouse.

9. ADJOURNMENT

The meeting was adjourned at 3:54 p.m.

Moved by Hans Buchler

“That there being no further business, the meeting of the Okanagan Water Stewardship Council of April 8, 2010 be adjourned.”

CARRIED

CERTIFIED CORRECT:

Chair

Executive Director