



**MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD
HELD MAY 4, 2010, AT REGIONAL DISTRICT OF CENTRAL OKANAGAN,
1450 KLO RD., KELOWNA, BRITISH COLUMBIA**

PRESENT

Chair Stu Wells	Regional District Okanagan-Similkameen
Vice-Chair Rick Fairbairn	Regional District North Okanagan
Director Buffy Baumbrough	Regional District North Okanagan
Director Gyula Kiss	Regional District North Okanagan
Director James Baker	Regional District Central Okanagan
Director Doug Findlater	Regional District Central Okanagan
Director Graeme James	Regional District Central Okanagan
Director Michael Brydon	Regional District Okanagan-Similkameen
Director Gordon Clark	Regional District Okanagan-Similkameen
Director Toby Pike	Water Supply Association of BC

REGRETS

Director George Saddleman	Okanagan Nation Alliance
Director Bernie Bauer	Okanagan Water Stewardship Council

OBWB STAFF

Nelson Jatel	Water Stewardship Director
Genevieve Dunbar	Office and Grants Administrator
Corinne Jackson	Communications and Research Coordinator
Amanda Cadorette	Outreach and Education Assistant

GUESTS

Dr. Jeff Curtis	UBC Okanagan
Tricia Brett	UBC Okanagan

1. CALL MEETING TO ORDER

Chair Wells called the meeting to order at 10:05 a.m.

2. APPROVAL OF AGENDA

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of May 4, 2010 be approved."

CARRIED

3. INTRODUCTION OF LATE ITEMS

No late items.

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of April 6, 2010 at Regional District of North Okanagan in Coldstream.

Amendment: Correction of vote

“THAT the minutes of the regular meeting of the Okanagan Basin Water Board of April 6, 2010 at Regional District of North Okanagan in Coldstream be adopted as amended.”
CARRIED

5. **STAFF REPORTS**

5.1 Executive Director Report

Mr. Jatel provided an overview of Dr. Warwick Sears' report, noting a tour of the Westbank Treatment Plant will be rescheduled when plant staff members are available.

Training seminars were conducted on the Okanagan Water Supply and Demand Study's (OWSD) Okanagan Hydrology and Water Accounting Models in March. They included 20 people at the one-day manager's training, and 17 researchers, government staff and consultants at a three-day technical session.

Ms. Jackson noted that a submission to the Water Act Modernization process, prepared by the Phase 2 OWSD Working Group, was distributed to board members.

Dir. Baker entered the room at 10:08 a.m.

Dir. Clark asked how performance of the milfoil operation is measured to ensure accountability.

Ms. Dunbar responded that the operators report at the end of the day what areas have been worked and for how many hours. If they haven't moved far, it is often because the milfoil is dense in that area, she added. Based on growth patterns, there are times when the program needs to review the areas in which they are working. There are also maps of the areas where work has been done, Ms. Dunbar said.

Dir. Wells agreed with Dir. Clark and asked that staff look at other ways to measure the effectiveness of the milfoil program.

Dir. Fairbairn asked whether OBWB staff are still considering offering the milfoil control program in other areas. Ms. Dunbar said that that was considered some years ago, but that staff are kept busy controlling the weed in our own jurisdiction. If the Water Board were to consider expanding this service it would have to be done on a cost-recovery basis and is not being looked at at this time.

In response to a question from Dir. Kiss, Ms. Dunbar noted that most of the work is de-rooting. Harvesting is not as effective, she said, adding the fragmentation that occurs with harvesting causes more growth. As well, harvesting season is in the summer which is also boating season, making it difficult to get the work done.

“THAT the Executive Director Report from Dr. Warwick Sears, dated April 28, 2010, be received.”

CARRIED

5.2 Water Stewardship Director Report

Mr. Jatel reported on the April Okanagan Water Stewardship Council (OWSC) meeting and Chris Johnston's presentation on rainwater, adding the subject will be the focus of a conference in October. The conference will be jointly hosted by the OBWB and the BC Water and Wastewater Association.

Staff are looking to videotape upcoming presentations at OWSC meetings and post them to the OBWB website, making them available to board members and the public. Videotaping will begin next week with presentations from UBC-O's Dr. John Janmaat, who has been studying First-in-Title, First-in-Right in the Okanagan and from two water economic specialists: Dr. Ron Griffin (University of Texas) and Dr. Henning Bjornlund (University of Lethbridge).

Phase 1 of the Streamlined Water Use Reporting Tool (SWURT) development is underway. The tool will have water suppliers record their water use monthly, instead of annually, allowing for better drought planning. There is great interest from various provincial ministries, including Ministry of Environment, Community Services, and Healthy Living and Sport – which is looking at developing a database of water quality from water purveyors.

The next phase will be to build a template to take back to water suppliers and ministry staff, determining our target. Phase 2 is expected to be completed by Dec. 31.

It is interesting to note, said Mr. Jatel, that the Columbia Basin Treaty is up for renegotiation in 2013. Fish and First Nations issues are required to be addressed. Water for fish flows in the US, so the government can meet its commitments to the First Nations fishery, will be part of these discussions. As such, we need to be aware of potential implications for the Okanagan Basin.

“THAT the Water Stewardship Director Report from Mr. Jatel, dated April 28, 2010, be received.”

CARRIED

5.3 Communications and Research Coordinator Report

Last month, the board requested that staff review how to improve communication with the public about upcoming board meetings. Ms. Jackson reported that, in response, staff have posted the Water Board meeting schedule and front page of the agenda package to the OBWB website. The website also notes that full packages are available on request, allowing staff to point out items that are merely in the draft stages.

After lengthy discussion it was agreed that full agenda packages should be posted to the website, with the exception of in-camera items, to ensure full transparency. It was further noted that draft documents should be watermarked “Draft” so that there is no misunderstanding from the public.

Dir. Pike also suggested that minutes, included in the board agenda, be marked draft until they are approved.

Dir. Clark noted that the Local Government Act sets out procedures and the OBWB operates under Letters Patent. However, he said, perhaps the Water Board needs a Procedural Bylaw. A survey of Procedural Bylaws in other jurisdictions and what they do around posting of agendas might be helpful, he added.

“THAT the Okanagan Basin Water Board post the full board meeting agenda package, except in-camera material, to its website.”

CARRIED

There was much discussion around minute taking and the recording of a mover and seconder on motions. It was noted that often someone will “move” an item to merely get it on the table

for discussion. However, this is not understood by a number of people who think that a vote to move or second is a vote in favour of a particular motion.

Dir. Clark exited the meeting at 11:08 a.m.

Dir. Kiss suggested that he would like to see the mover and seconder recorded since there are 12 board members representing different sectors. However, Dir. Brydon noted that moving and seconding is random but can be misconstrued too easily. After further discussion it was decided that movers and seconders would no longer be recorded, only votes of opposition will be recorded.

“THAT the Okanagan Basin Water Board adopt a policy that minutes will no longer record a ‘mover’ or ‘seconder,’ and that all votes of opposition be recorded.”

CARRIED

Dir. Clark reentered the meeting at 11:10 a.m.

Ms. Jackson noted that Dir. Saddleman contacted OBWB staff, thanking them for keeping him apprised of Water Board activities and stated that other commitments have made it difficult to attend board meetings. He copied ONA administration in on his correspondence and requested they find a replacement for him.

Board members noted that ONA representation, whether it’s an elected official, staff or perhaps a member of the community, is what’s important. Input on water issues from a First Nations perspective would be extremely beneficial.

“THAT the Communications and Research Coordinator Report from Ms. Jackson, dated April 27, 2010, be received.”

CARRIED

6. NEW AND UNFINISHED BUSINESS

6.1 Update on Drought Webinar

Mr. Jatel provided an update on the Drought-Proofing the Okanagan webinars, noting that the second session had 36 people tuned in. The first session had 28 in attendance. This latest session had farmers and agriculturalists participating, added Mr. Jatel. The intention, he said, is to inform the public about water levels in the Okanagan basin, allowing them to prepare accordingly.

An overview of the April 14 webinar was provided, which included input from Ministry of Environment, Osoyoos Lake Board of Control, Agriculture Canada, and Environment Canada. Most areas in the valley were showing warmer temperatures, and less precipitation, noted Mr. Jatel. In fact, the day before the webinar, Osoyoos Lake Board of Control declared a drought which allows them to increase the water level on Osoyoos Lake to meet agricultural demands, he added.

In response to people’s request, the second webinar was set up to allow people to ask questions which Mr. Jatel could then refer to the appropriate presenter. This worked well. The board will be made aware of the next session once a date is set.

6.2 Watermilfoil program – work truck purchase

There was some question about going to a regional district for repairs on OBWB vehicles as a cost-saving measure. However, after some short discussion it was decided that the fleet is small enough and the OBWB's milfoil staff are capable mechanics, having been able to keep their 1997 Chevrolet half-ton pick-up operating with 285,000 km on it.

“THAT the Okanagan Basin Water Board approve up to \$30,000 from the equipment reserve fund for the purchase of a new work truck for the watermilfoil control program.”
CARRIED

7. CORRESPONDENCE

7.1 MLA John Slater, Parliamentary Secretary for Water Supply and Allocation, response to OBWB letter re: Brown's Creek source protection

“THAT the Okanagan Basin Water Board receive the correspondence from MLA John Slater, Parliamentary Secretary for Water Supply and Allocation in response to the OBWB letter re: Brown's Creek source protection.”
CARRIED

7.2 Chris Branch, President of North Central Washington Resource Conservation and Development, re: joint NASA project

“THAT the Okanagan Basin Water Board receive the correspondence from Chris Branch, President of North Central Washington Resource Conservation and Development, regarding the joint NASA project.”
CARRIED

In response to questions from the board, Mr. Jatel gave an update on the NASA project, noting that a joint application is being put forward by the OBWB and a group of U.S. partners to NASA for ROSES (Research Opportunities in Space and Earth Sciences) funding. Mr. Jatel will be attending an upcoming meeting in Chelan, WA.

The remote sensing satellite technology will improve the OWSD models and should also allow for greater hydrometric monitoring. Project partners are also looking at how to support fish and fish habitat with remote sensing, Mr. Jatel added.

The \$20,000 Mr. Branch referred to in his letter was for developing three management tools: 1) a scoping document, 2) a project charter, and 3) a funding proposal to NASA's ROSES program. Satellite data is not useful without interpretation. These proposals address the conducting of research to interpret the data, concluded Mr. Jatel.

“THAT the Okanagan Basin Water Board receives the NASA project report.”
CARRIED

Dir. Baker exited the room at 11:48 a.m.

Dir. Kiss exited the room at 12:20 p.m.

8. DELEGATIONS

8.1 Dr. Jeff Curtis and master's candidate Tricia Brett, UBC Okanagan: Okanagan Endocrine Disruptor Research Project

Dir. Wells introduced the agenda item, noting the Endocrine Disruptor Compounds (EDCs) Project was of great interest to him during his time on the Okanagan Water Stewardship Council and that he's happy to hear some results. Project partners besides the OBWB include the Okanagan Indian Band, Health Canada, Ministry of Environment, Interior Health, and UBC-Okanagan, he added.

Dr. Curtis began by providing some background to the research, noting that the Okanagan has among the lowest per capita water supply in Canada, and that estrogens are an emerging contaminant but they are still not well understood.

In the Okanagan, there is a lot of variability in the effluent coming out of treatment plants. For one thing, they were never designed to remove estrogens, but also the effects of loading, chemical matrix, treatment plant design and seasonal changes result in that variability.

This project measured estrogens in treated wastewater in treatment plants in Vernon, Kelowna and Penticton, and measured them again in the receiving waters, where they come out. In the case of Vernon, the treated water ends up and was tested at the MacKay Reservoir, in Kelowna – Okanagan Lake, and in Penticton – Okanagan River Channel. The study looked at the level of dilution of the EDCs and rate of degradation.

Studies indicate that concentrations of 5 ng L⁻¹ (parts per trillion) have caused collapse of fish species, said Dr. Curtis. The numbers found in the receiving plants, particularly in Vernon and Kelowna, were high and what one would expect, added Dr. Curtis. In Vernon, it was 5.0 ng/L (\pm 1.9); In Kelowna, 64.8 ng/L (\pm 10.8); In Penticton, 1.2 ng/L (\pm 0.7). However, the compounds are diluted in large volume in Kelowna with Okanagan Lake. In Penticton, they are diluted in small volume through the Okanagan River channel; and not at all with the MacKay reservoir in Vernon, he added, explaining that in the latter case, the wastewater is used as spray irrigation.

Looking at the amount of EDCs in receiving waters, levels were detected in the MacKay Reservoir, but not in Vernon tailing waters, added Curtis. Levels were also not detected in Okanagan Lake, but they were noted in Okanagan River.

Following up on the Vernon wastewater being used as irrigation, research was conducted on EDCs entering Kalamalka and north end of Okanagan Lakes, and none was detected, noted Dr. Curtis.

In the case of Kelowna, the fact that the compounds end up in a body of water allows them to degrade over time. However, there was no measured degradation with the Penticton effluent in Okanagan River.

Also, although no EDCs were found in Kelowna's Okanagan Lake, researchers also couldn't find the plume where the treated wastewater was entering the lake. As part of the next phase of their study, they will continue to look for the plume to measure the EDC's coming from it and see if it is near any kokanee populations. At this point, it is predicted that levels would be .026 ng/L total estrogens, well below what would collapse fish populations, added Dr. Curtis.

The next phase will also look at seasonal affects on dilution and degradation.

Such research is important in light of the low per capita water supply in the Okanagan, stressed Dr. Curtis. It will also assist others who want to conduct EDC studies elsewhere, he concluded.

In response to Dir. Pike and why the plume in Okanagan Lake needs to be found, Dr. Curtis said that without that information much is still unknown. For example, is the pipe where it should be, is it installed correctly, what is the rate of EDCs coming out of it?

Ms. Brett, who was heavily involved in the research, responded to questions about the affect of EDCs on fish and noted they have been known to cause male fish to develop ovaries and reduce their testicle size.

Dir. Fairbairn asked if work is being done to remove EDCs specifically in the treatment of wastewater. Dr. Curtis said he believes those studies are being conducted, as well as ones to improve on removing the compounds the plants are meant to remove.

In response to Dir. Clark’s question about the safety of inner-tubing on Penticton’s channel, Ms. Brett said that any exposure to EDCs would be negligible. Fish are different, she added, saying that the EDCs enter their system through the gills.

Dir. Findlater asked if there was any concern about eating fish from the lake. Dr. Curtis said that wasn’t part of the study. Ms. Brett added that although EDCs affect fish, it is unclear if it affects humans who digest the fish. Whereas this study looked at endocrine disruptors in water, there are other sources of EDCs – for example in plastics – where this has been a concern and some chemicals have been banned, they noted.

Dir. Findlater left the room at 1:18 pm.

Dr. Curtis noted that fish in our lakes are the equivalent of the canaries in the coalmine. If we have fish collapse, then we know we have a serious issue. There is no suggestion this is an issue at this time.

9. NEXT MEETING

The next regular meeting of the Okanagan Basin Water Board will be held on June 1, 2010, at the Regional District of Okanagan-Similkameen.

12 ADJOURNMENT

“THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of May 4, 2010 be adjourned at 1:22 p.m.”

CARRIED

Certified Correct:		
Chair		Executive Director