Okanagan Basin Water Board Meeting Agenda



DATE: Tuesday, April 5, 2011

n TIME: 10 a.m. to 2 p.m.

Okanagan Indian Band – PLACE: Head of the Lake Hall 118 Head of the Lake Rd., Vernon, B.C.

1. CALL MEETING TO ORDER

2. <u>APPROVAL OF AGENDA</u>

3. INTRODUCTION OF LATE ITEMS

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of March 1, 2011 at Regional District of Okanagan-Similkameen in Penticton, B.C. (page 1)

5. <u>DELEGATIONS</u>

5.1 Gwen Bridge, Okanagan Nation Alliance - Natural Resources Department re: ONA water initiatives

6. <u>STAFF REPORTS</u>

- 6.1 Executive Director Report (page 8)
- 6.1.1 New and Ongoing OBWB Water Management Projects (page 16)
- 6.1 Water Stewardship Director Report (page 21)
- 6.2 Communications and Research Coordinator Report (page 31)

7. <u>NEW AND UNFINISHED BUSINESS</u>

- 7.1 Water Conservation and Quality Improvement Grant Program
 2011 Recommendations (page 39)
- 7.2 North Okanagan Regional Growth Strategy memo (page 46)
- 7.3 Okanagan WaterWise Action Plan Update 2011 (page 57) (includes recommendation)

8. <u>NEXT MEETING</u>

9.1 The next regular meeting of the Okanagan Basin Water Board will be held May 3, 2011 at Regional District of Central Okanagan.

9. ADJOURNMENT



Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 4.1

MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD HELD MARCH 1, 2011, AT REGIONAL DISTRICT OKANAGAN-SIMILKAMEEN 101 MARTIN ST., PENTICTON, B.C.

PRESENT

Chair Stu Wells Vice-Chair Rick Fairbairn Director Buffy Baumbrough Director Doug Dirk Director Graeme James Director James Baker Director Doug Findlater Alt. director James Pepper Director Bernie Bauer Director Toby Pike

REGRETS

Director Gordon Clark Director Michael Brydon

OBWB STAFF

Anna Warwick Sears Nelson Jatel Melissa Tesche Corinne Jackson

<u>GUESTS</u>

Brian Symonds

Regional District Okanagan-Similkameen Regional District North Okanagan Regional District North Okanagan Regional District North Okanagan Regional District Central Okanagan Regional District Central Okanagan Okanagan Nation Alliance Okanagan Water Stewardship Council Water Supply Association of BC

Regional District Okanagan-Similkameen Regional District Okanagan-Similkameen

Executive Director Water Stewardship Director Interim Office and Grants Administrator Communications and Research Coordinator

Osoyoos Lake Board of Control

1. CALL MEETING TO ORDER

Chair Wells called the meeting to order at 10:00 a.m.

2. <u>APPROVAL OF AGENDA</u>

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of March 1, 2011 be approved as amended."

CARRIED

3. INTRODUCTION OF LATE ITEMS

5.3.1 i. Additional memo re: Okanagan WaterWise Website Traffic Report

- 5.3.2 Drinking Water Week Proclamation
- 6.2 Updates from directors
- 6.3 The Letter to Hon. Stockwell Day

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of Feb. 1, 2011 at Regional District of Central Okanagan in Kelowna.

Correction to a vote was noted.

"THAT the minutes of the regular meeting of the Okanagan Basin Water Board of Feb. 1, 2011 at Regional District of Central Okanagan in Kelowna be adopted as amended." CARRIED

Dir. Doug Dirk entered the meeting at 10:05 a.m.

5. <u>STAFF REPORTS</u>

5.1 Executive Director Report

Dr. Warwick Sears told directors that the deadline for applications to the Water Conservation and Quality Improvements (WCQI) Grant Program was Feb. 21. There were 35 applications submitted with a total ask of \$703,000. There is \$300,000 available in total.

Proposals will now be ranked based on how they meet the program criteria and are linked to OBWB objectives.

Dir. Bauer asked if the current program, that provides specific funding amounts to the North, Central and South Okanagan, precludes some outstanding projects from being funded because all available funding has been allocated. Dr. Warwick Sears responded that the program was set up to allow regions to address the issues in their communities while ensuring basin-wide benefits.

There was discussion around having the Okanagan Water Stewardship Council discuss priorities for funding in advance of the call for proposals. After further debate it was noted that having the OWSC involved could result in priorities being determined based on the most pressing issue at the time. It was recommended that the priorities be linked to the Sustainable Water Strategy.

Dir. Fairbairn suggested there be a review of program funding since it is so oversubscribed.

Dr. Warwick Sears recommended that the WCQI Grant Program be reviewed as part of a Strategic Planning Session in May.

Dr. Warwick Sears and Melissa Tesche will be meeting with the Department of Fisheries and Oceans and B.C. Ministry of Environment staff regarding the Rocky Mountain Ridged Mussel and how to work around the mussel while meeting the needs for watermilfoil control in the Okanagan. Water Board staff recognize the need to balance control of milfoil for people while protecting native species like the mussel, Dr. Warwick Sears added.

The Sewage Assistance Grant review is almost complete. Dr. Warwick Sears added that as a result of the review, it was determined that the formula for calculating a grant to RDCO had been affected by the splitting off of sewage project grants to West Kelowna, resulting in the award for the Lakeview Trunk Sewer being lowered from \$9,000 to about \$6,000. The project budget was originally established based on a pooled grant award to a number of different sewer projects, and when the projects were divided it affected RDCO's eligible amount. The OBWB has already requisitioned for the original amount. Dr. Warwick Sears went on to request that the board forgive the \$3,000 and proceed with the \$9,000 and not penalize them for this split.

"THAT the Sewage Facilities Award to the Regional District of Central Okanagan for the Lakeview Trunk #605 sewer be maintained at the original award level." CARRIED

Dirs. Bauer and Pike abstained.

The board was told about \$11,000 that was remaining from the original development and printing of Environment Canada's Okanagan Waterscape poster. The Water Board has been given approval to use the funds to print additional posters, said Dr. Warwick Sears, noting that the timing is perfect since copies in the OBWB office are running low.

Chair Wells noted that copies of the poster should be made available at the September Osoyoos Lake Water Science Forum.

Dr. Warwick Sears provided the board with a report from the Director of the Regional Drinking Water Teams. She noted that the Southern Interior Regional Drinking Water Team (SIRDWT) there has been some progress on motorized vehicle regulation in the watersheds, but much of the discussion has focused on the mandate and authority of the team.

After some discussion, Dirs. Pike and Bauer agreed to develop some points for the Water Stewardship Council to discuss at their March meeting. A letter will then be drafted, which will include council input, and be brought back to the board at the beginning of April.

Dr. Warwick Sears told the board that she was invited to speak about the work of the OBWB at the Canadian Water Networks conference in Ottawa on March 2.

5.1.1 Water Supply & Demand (WSD) update

Dr. Warwick Sears provided an update on Phase 3 of the Water Supply and Demand (WSD) Study. The report was well-received with the board suggesting a greater need to communicate out to the public what the OBWB is doing and the significance of projects like the WSD study.

Dr. Warwick Sears noted that the report could be turned into a Frequently Asked Questions document and posted to the OBWB website.

Dir. Pike added that point 3, which notes Okanagan communities and water suppliers that have requested water demand data, could be expanded to include what they're using it for, allowing others to see what is possible with this information.

The OBWB has put out position papers in the past and posted them on its website, added Dir. Bauer. Perhaps the board should develop more of these on issues of significant concern to Okanagan residents (e.g. groundwater), he said. Dr. Warwick Sears added that the OBWB's recommendations on groundwater to the Water Act Modernization process can be used to help develop a position paper and brought back to the board. Dir. Bauer agreed to follow up on this item with the Stewardship Council.

Dir. Dirk suggested board members provide staff with the issues they are asked most asked about.

"THAT the Executive Director's Report, dated March 1, 2011, and the Executive Director's Report on the Water Supply and Demand Project, dated Feb. 23, 2011, be received."

CARRIED

5.2 Water Stewardship Director Report

Mr. Jatel reported that he has been meeting with Okanagan Water Stewardship Council members individually to determine what is working and what can be improved with the council.

Fred Schaad, from the City of Kelowna, will be talking about the city's stormwater management at the next council meeting, on March 10.

A blog has been added to the OBWB website to facilitate communication and it should be operating in the next three weeks, added Mr. Jatel.

Board members were provided with a copy of the draft 2010 Progress Report to the Sustainable Water Strategy to review.

"THAT the Water Stewardship Director Report from Mr. Jatel, dated Feb. 21, 2011, be received."

CARRIED

5.3 Communications and Research Coordinator Report

Ms. Jackson reported on the launch of the Streamlined Water Use Reporting Tool, noting the media attention and the fact that the story was reported in every community in the Okanagan Basin. Interestingly, she added, Castanet also ran a poll asking people about their steps to conserve water. While not scientific, Ms. Jackson noted that more than 1,200 people were further prompted to think about their own water use and responded.

In addition to providing the monthly analysis of newspaper, radio and TV media reports, Ms. Jackson commented on the growth of social media, such as Facebook and Twitter, but also blogs that are carrying the OBWB's message even further.

World Water Week planning is well underway. A public forum is planned for March 22, 5 to 6:30 p.m. at the Bohemian Café in Kelowna. Board directors were invited to attend. A project to encourage youth involvement is also underway, she added.

In an attempt to encourage greater communication around OBWB initiatives, Ms. Jackson noted that she is compiling a list of ratepayer associations in the valley to provide information to.

5.3.1 OBWB Corporate and Okanagan WaterWise Website Traffic Reports

Ms. Jackson provided the board with a website traffic analysis of both the OBWB corporate site (<u>www.obwb.ca</u>) and the Okanagan WaterWise site (<u>www.okwaterwise.ca</u>)

While the corporate site is getting a lot of traffic the report suggests a need to reorganize the WaterWise site.

The Okanagan WaterWise site is still very new and is missing some key pieces in its development that would make it easier to find. The OBWB's website manager made a number of recommendations that will improve people's ability to find the site. It was also suggested that one thing that would be helpful would be to increase the number of links to WaterWise from well-trusted and visited websites (e.g. links on local government sites, water utilities, partner non-profits and others).

4

The report notes that imbedding some of the material, now listed as links, will also keep people on the website, as would creating more material for the site.

Ms. Jackson said staff will be working to implement the recommendations and another traffic analysis study will be done in two to three months.

"THAT the Communications and Research Coordinator Report from Ms. Jackson, dated Feb. 22, 2011, and the Website Traffic Report dated Feb. 28, 2011 be received." CARRIED

5.3.2 Drinking Water Week Proclamation

There was some debate around a Drinking Water Week (DWW) proclamation and whether the OBWB should invite other Okanagan communities to proclaim the week.

While the board agreed to proclaim DWW, there was discussion about asking others to join in. Dir. Bauer noted that the OBWB is already involved in World Water Week (WWW) and asked why the Water Board is also involved in DWW. There was also a question around the potential to confuse people with two separate awareness weeks around water.

Dr. Warwick Sears noted that this is a BC Water and Waste Association initiative, following in the footsteps of the American Water and Waste Association, and they feel the need to highlight drinking water and the issues around it. The BCWWA asked the OBWB to join their provincial DWW committee. However, she added, it seems reasonable to ask them to consider linking their work to World Water Week in future years.

Ms. Jackson added that the request for OBWB to send letters to Okanagan communities encouraging their support came from RDNO and the City of Penticton's representatives on the DWW committee.

The board agreed to proclaim May 1-7 DWW and send a letter to local governments in the Okanagan suggesting they do the same. Further, the board requested that a letter be sent to the BCWWA asking that, in future years, they coordinate their efforts around WWW.

"THAT the OBWB proclaim May 1-7 Drinking Water Week and send a letter to local governments in the Okanagan asking that they also pass a proclamation. Further, the OBWB will send a letter to the BCWWA suggesting that, in future years, they coordinate their efforts around World Water Week."

CARRIED

6. <u>NEW AND UNFINISHED BUSINESS</u>

6.1 OBWB Goals and Objective 2011

Dr. Warwick Sears presented a revised 2011 Operational Goals and Objectives memo and requested that the board endorse it and move forward with a Strategic Planning Session in May to review some of the issues raised in the original memo.

"THAT the 2011 Operational Goals and Objectives memo from Dr. Warwick Sears be adopted."

CARRIED

6.2 Updates from directors:

Chair Wells reported on a new marina proposed for Osoyoos and noted a painted turtle was found. Work has stopped until the issue is addressed.

Dir. Fairbairn said Interior Health's (IH) Paul Hassleback is coming to speak to an RDNO committee about future water protection requirements and filtration. Dir. Pike noted that IH seems to have softened on filtration deferral and the big negotiating point now is source water protection strategies. The only ones that may be affected by filtration deferral requirements are suppliers who draw water from the mainstem lakes.

Dir. Pike drew attention to a survey of capital priorities conducted by the three Okanagan MLAs. Interestingly, water improvements rated among the top priorities.

6.3 Letter to Hon. Stockwell Day and federal officials: Request for Attention to Renewal of Operating Orders for Osoyoos Lake

There was lengthy discussion around the letter to officials regarding the renewal of operating orders for Osoyoos Lake and the potential for flow levels to be negotiated. It was suggested that the letter should reference the potential impact on agriculture.

Dir. Bauer noted that the letter should state that the Osoyoos Lake Board of Control should be considering lake levels only and not be looking at flow rates until studies have been done and the ramifications for fish, agriculture, and other implications are known.

Dr. Warwick Sears told the board that the University of Washington study that looks at flow is available for review. A study on climate change considerations is being conducted on the Canadian side of the border and is using the OBWB's Water Supply and Demand study results.

Dirs. Findlater and Dirk suggested that at some point, the board may want to go public with their concerns.

Dr. Warwick Sears noted that the September Osoyoos Lake Water Science Forum will include a number of topics and the renewal of operating orders will be one of the items discussed. People from Osoyoos, Oroville, and the surrounding areas are expected, as well as members of the IJC. CBC National expressed interest in covering the forum, she added.

It was decided that a decision about a letter would be made following Mr. Brian Symonds report to the board.

7. DELEGATIONS

7.1 Brian Symonds – Canadian representative to the Osoyoos Lake Board of Control

Mr. Symonds told the board that the current order, controlling lake levels on Osoyoos Lake, runs out Feb. 22, 2013.

About two-thirds of Osoyoos Lake is on the Canadian side of the border, he added, noting the Osoyoos Order controls lake levels for the operation of Zosel Dam on the U.S. side of the border.

The Osoyoos Lake Board of Control (OLBC) is responsible for monitoring the lake level, issuing and suspending drought declarations, reporting to and meeting with its parent International Joint Commission (IJC) and the public. The board, he said, has commissioned eight studies to be conducted in anticipation of the U.S. requesting a renewal of the order. Of interest to many, he added, is a U.S. study that suggests negotiation for flow rates.

Currently, the OLBC is not mandated to deal with transboundary flows, Mr. Symonds said. However, because the IJC is collaborative, the board is open to talking about flows.

Dr. Warwick Sears exited the meeting at 1:35 p.m.

In response to questions, Mr. Symonds said that it is possible that flows will come up for discussion. However, Canada's representatives on the OLBC have some influence and they will not be promoting this concept, he added.

As for a question about the merit of sending a letter to the IJC saying that negotiation of flow rates is a concern to the OBWB, Mr. Symonds said such a letter is important. He added that the letter should be sent to the U.S. and Canadian chairs of the commission and both chairs of the OLBC.

Anyone with concerns is encouraged to make their feelings known, Mr. Symonds said, adding that people can do this more than once.

The current order for Osoyoos Lake was for 25 years. Most IJC orders don't have an expiry, Mr. Symonds noted. Whether or not this next order will have an expiry date is unknown, he added.

The board agreed to send a letter to the IJC and OLBC, regarding their concern about the potential negotiation of flow rates, and cc the letter to the Hon. Stockwell Day and others. Staff will draft the letter and provide it to the board for review before it is sent.

8. <u>NEXT MEETING</u>

8.1 The next regular meeting of the Okanagan Basin Water Board will be held April 5, 2011 at Okanagan Indian Band's Head of the Lake Hall, 118 Head of the Lake Rd., Vernon.

9. ADJOURNMENT

"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of March 1, 2011 be adjourned at 2:17 p.m." CARRIED

Certified Correct:	
Chair	Executive Director

7



MEMORANDUM

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 6.1

File No. 0550.04

To: OBWB Directors

From: Anna Warwick Sears, Executive Director

Date: March 29, 2011

Subject: Executive Director Report

Strategic Planning Session - extended OBWB meeting, 10a.m. - 3 p.m. in May

The next OBWB meeting, on May 3, 2011, will mostly be a closed meeting, focused on our strategic planning session. We hope to keep the regular business of the board to a minimum. However, it is likely that we will need a slightly longer session than normal to complete our business. Allan Neilsen-Welch who is conducting the planning session has requested that the meeting extend until 3 p.m. I am hoping to meet with as many of you as possible before the planning session.

Watermilfoil Control Program

Rototilling continues in Okanagan Lake (Kelowna area), Wood Lake, and Osoyoos Lake. We will continue rototilling until the end of May.

We held a meeting with representatives from the Ministry of Environment and the Department of Fisheries and Oceans to renew our operating permits, and discuss species and habitat concerns. The DFO Pacific Region will consult on the potential listing of Rocky Mountain Ridged Mussel (RMRM) as Endangered in Fall 2011. The Governor in Council will make a decision between March 2013 and September 2013. By law, protection of endangered species takes precedence over invasive species control.

The OBWB, as a proponent of activities that are likely to disturb the mussel, will be required to undertake presence/absence surveys at our expense. If mussels are found in a treatment area, it may be possible to relocate them or build new habitat in other areas (for example, the Okanagan river channel), but the protocols for doing this have yet to be determined. For now, we are continuing to improve our mapping of treatment areas and our operational record-keeping. This will narrow the area where we might be expected to survey.

The biggest populations of mussels have been found in the waters around Summerland. Other areas include Osoyoos Lake and the Vernon Arm of Okanagan Lake.

Letter to Janke regarding the Southern Interior Drinking Water Team

At our last meeting, directors requested a letter be drafted to Brenda Janke, regarding the progress of the Southern Interior Regional Drinking Water Team. A copy of the draft letter is attached for your comment.



Osoyoos Lake Water Science Forum update

The program is rapidly shaping up for the Osoyoos conference, Sept. 18 to 20 (see attached flier). The conference name is: "**Shared Water, Shared Future: Bridges to Sustainability for Osoyoos Lake**." The conference begins with an evening reception at the Desert Centre on Sept. 18th, followed by two full days of meetings at the Sonora Centre. The first day focuses on water science for the area, including the 6 studies commissioned by the International Joint Commission for renewal of the operating orders. The morning of the second day will present local and regional solutions to water quality and quantity issues, and provide a legal context on what is required. The afternoon of the second day will be devoted to a panel discussion on the renewal of the operating orders and other priorities for Osoyoos Lake, and will include extensive public comment/question opportunities. Cosponsors currently include the Town of Osoyoos, the IJC, Environment Canada, and the BC Ministry of Environment, and we are looking for other funders.

Report on OBWB New and Ongoing Projects

This memo summarizes new and ongoing OBWB projects, whether directly related to the Water Supply & Demand project or not. This is intended as an overview of Water Management Projects as a whole, especially those for which we have received external funding or have established partnerships with other agencies.

Sewage Assistance Grants

We have completed the review of our Sewage Facilities Assistance grant program, although we are waiting on final signatures from Kelowna, Peachland, and Coldstream. During the review process, staff worked with each municipality to reconcile annual grant amounts with their MFA debt information, updating to reflect debt refinancing and other factors, and recording the information on a new, standardized annual grant report form. Beginning in 2011, all municipalities will submit invoices twice annually (in September and December), corresponding to when the requisitioned tax dollars are made available to the OBWB, and when MFA payments are due by the municipalities. This common reporting and invoicing will streamline the administration of the program, making the funds much easier to track.

As a next step, staff will be reviewing the SFA Terms of Reference and making recommendations to the Board of Directors on how to simplify the application and calculations of grant amounts.

See the attached graphs for more information on grant retirements.



1450 KLO Road, Kelowna, BC V1W 3Z4 P 250.469.6271 F 250.762.7011 www.obwb.ca





1450 KLO Road, Kelowna, BC V1W 3Z4 P 250.469.6271 F 250.762.7011 www.obwb.ca





Brenda Janke, Chair Drinking Water Inter-Agency Directors Committee Ministry of Health Services 1515 Blanchard St. 4-2 Victoria, BC V8W 3C8

Dear Chair Janke:

Your recent letter (dated January 28, 2011) to the five Chairs of the BC Regional Drinking Water Teams was forwarded to us by the Southern Interior Regional Drinking Water Team (SIRDWT), and we read it with great interest. As you know, the Okanagan Basin Water Board shares many of the same concerns and objectives as SIRDWT. Dr. Anna Warwick Sears (OBWB Executive Director) regularly attends the SIRDWT meetings and reports back about initiatives and developments. We write today to share some of our thoughts on the Regional Drinking Water Teams in light of recent provincial government restructuring and its implications for sustainable water management in the Okanagan.

The MOU that created the framework for the Regional Drinking Water Teams was a welcome development. The overarching purpose was to support inter-agency collaboration to apply the *Drinking Water Protection Act*, and other relevant policy, to protect drinking water resources. We hoped the MOU would clarify the responsibilities of the signatories in their area of influence.

The OBWB struggles with a range of concerns for water management and source protection. It is still quite difficult to identify which provincial body provides oversight, as well as the most appropriate avenue to communicate our concerns and seek resolution. At times, we continue to witness Ministries working at cross purposes with respect to water management even though we appreciate that they operate within established mandates.

One example is the tensions created by the need for water purveyors and municipalities to put in place adequate source water protection measures in upland areas of watersheds (with hopes of satisfying drinking water quality guidelines) versus the multiple use of Crown lands for livestock grazing, logging, and recreational access. The MOU held the promise of bringing the various Ministries together to consider the challenges experienced by regions in managing water resources and to create a rationally informed, coordinated process leading to practical outcomes and solutions.



We are not convinced that the mandate of the MOU has been fully met as yet, although good progress has been made. Your letter provides brief summaries of achievements by each of the RDWTs, and the variety of topics is extraordinarily diverse, ranging from very localized, action-oriented projects focused on specific issues (e.g., pilot GIS system for wells around Whistler) to regional priority setting and water quality objective development. As you correctly note, the RDWTs are all unique and therefore it would be expected that the 'flavours' might differ although one might equally anticipate that the core activities would all respond primarily to the overarching mandate of the MOU.

In this regard, we are frustrated with the lack of substantial progress in the Okanagan region. We are sympathetic to the challenges faced by RDWTs—specifically, a lack of full definition of responsibilities and little to no authority or resources to accomplish their mission. As a result, it appears that a great deal of time has been required for internal discussions of scope and mandate. In general, there remains a need for expanded communication back to the community, because it has not been clear to local governments and water providers how the RDWT can assist with their concerns, especially since the team for the Southern Interior understands its focus to be on high-level issues that affect the entire region. However, it was good to see from your report that a set of guidelines for land-use approvals is being developed by the team. We hope that local authorities will have an opportunity to review and comment on these guidelines.

The recent government reorganization and creation of the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO) presents an opportunity to review the MOU and RDWTs. To the extent that challenges remain in communicating with government around important water issues like source protection, reservoir lease lot sales, off-road vehicle use in upland areas, clean-up of contaminated spill ponds associated with grow-ops, and First Nations rights, we believe that the original MOU mandate is still valuable. However, these drinking water issues cannot be viewed in isolation, and may be beyond the scope of the RDWTs to act on directly. A new structure may be called for, one that is given a clear mandate (and authority) to respond to specific concerns and apparent inter-agency conflicts referred by local and regional bodies.

We look forward to future dialogue on this important issue.

Sincerely,

Stu Wells, Chair Okanagan Basin Water Board



Cc Valerie Cameron, Chair, Southern Interior Drinking Water Team Hon. Steve Thomson, MLA for Kelowna-Mission MLA John Slater, Boundary-Similkameen MLA Bill Barisoff, Penticton MLA Ben Stewart, Westside-Kelowna MLA Norm Letnick, Kelowna-Lake Country MLA Eric Foster, Vernon-Monashee Board and Chair, Regional District of Okanagan-Similkameen Board and Chair, Regional District of Central Okanagan Board and Chair, Regional District of North Okanagan

This summer, the Town of Osoyoos, BC,

the

Okanagan Basin Water Board and the International Joint Commission will present the second Osoyoos Lake Water Science Forum

September 18 - 20, 2011





Reception: September 18, 2011 Forum: September 19 & 20, 2011 http://www.obwb.ca/olwsf/ Mark Colosimo colosimom@washington.ijc.org

USUYOOS Lake Inter Science Form

Save the Dates

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 6.1.1



1450 KLO Road, Kelowna, BC V1W 3Z4 P 250.469.6271 F 250.762.7011 www.obwb.ca

Description of New and Ongoing OBWB Water Management Projects

DRAFT - April 2011

The following are a set of new and ongoing water management projects which the OBWB is currently leading, or closely involved in. Many of these projects are interrelated, and most are closely linked to water supply issues. For the most part, this list does not include the OBWB's policy projects or ongoing work by the Okanagan Water Stewardship Council.

 Water Supply & Demand Project (2007–current) – Current Funding Partners: Natural Resources Canada, Environment Canada, Agriculture and Agri-Foods Canada, B.C. Ministry of Environment, B.C. Ministry of Agriculture.

The Water Supply & Demand project is an ongoing effort to maintain the highest level of information on Okanagan water availability and how it may be affected by climate change.

- **a.** Future Scenarios additional work is underway, using two new climate models, to get a range of potential water impacts associated with climate change. This project will be completed by June 2011.
- b. Database Development The Water Supply & Demand Databases contain extensive data and modeling results collected through the project. While the data is well-organized, and is now established at the OBWB, more work needs to be done on the system to allow easier access by local government staff or contractors who wish to use these resources. This is an ongoing project, with funding to April 1, 2012.
- c. Data Delivery to Local Governments Local government staff and local researchers have had high interest in using Water Supply & Demand data for planning. Their questions often require custom data queries for specific areas, and sometimes new model runs. We received funding to provide these services via a contractor, at minimal cost to local governments. This is an ongoing project, with funding to April 1, 2012.
- d. Local Government User's Guide to the Water Supply & Demand Project The OBWB is developing an easy-to-read guide for local governments on how they can incorporate Water Supply & Demand data into their plans and projects. This project will be completed by June 2011.

- e. Water Demand Field survey Summer 2011 we will be collaborating with the B.C. Ministry of Agriculture on a field survey to update land use inventory for the Okanagan Water Demand model. This land use and irrigation information is in very high demand from local government. This project will be completed by October 2011.
- f. Okanagan Water Supply & Demand Website This website is the one-stop-shop for Water Supply & Demand general information and technical reports. It also houses a searchable database of all the technical water reports used in the study. The website is regularly updated, and can be found at <u>www.obwb.ca/wsd</u>.
- **g.** Okanagan Water Viewer This is a sophisticated web-tool where users can look at maps and graphical views of Okanagan water supplies. The website is complete, and can be found at <u>www.okanaganwater.ca</u>.
- h. Okanagan Irrigation Management a.k.a. OKIM (2009 current). This is a web-based pilot project to provide irrigation management information to farmers with water meters, and to provide a way for water suppliers to evaluate farm water use. It is based on the Water Demand Model developed through the Water Supply & Demand Project, and is currently being tested by Greater Vernon Water, District of Summerland, and Glenmore Ellison Irrigation District. The OBWB is hosting the tool on the Okanagan Water Database server.
- Groundwater Assessment of the Okanagan Basin a.k.a. GAOB (2005 current). Funding Partner: B.C. Ministry of Environment.

Over several years OBWB received a series of grants from the B.C. Ministry of Environment, for groundwater studies in the Okanagan. These projects are undertaken according to mutual agreements by OBWB and MOE. There is one project underway, supervised by the Ministry of Environment, evaluating groundwater quality in the southern Okanagan. The ministry wishes for remaining funds to be used for implementation of the Water Sustainability Act, specifically groundwater regulation. There is no set end-date for use of these funds.

3. Groundwater Monitoring Wells – (2010 – current). Funding Partners: Agriculture and Agri-Foods Canada, B.C. Ministry of Environment, local Okanagan governments.

The groundwater monitoring project has a goal to install a minimum of 15 new monitoring wells in atrisk aquifers identified through the Water Supply & Demand project, over a 3-year period. Funding is available until April 1, 2013. **4.** Streamlined Water Use Reporting Tool – (2010 – current). Funding Partners: Infrastructure Canada, Environment Canada.

How much water do we actually use each month? The SWURT project lets large water users in the Okanagan report their monthly water extractions on line through this web-based tool, and to track their water use and reservoir levels over time. The pilot initiative focuses on training the largest water utilities, but the goal is to have all large water users (including groundwater) report online through this tool. This project is ongoing, with funding until April 1, 2012.

5. Hydrometric Monitoring Governance and Database (2008 – current). Funding Partners: Pending application to Environment Canada.

Restoring the streamflow monitoring network has been a top-priority for many years, but it has been difficult to make progress because there is no coordination of locally-collected data. This project seeks to expand the Okanagan Water Database to include locally-collected streamflow data. All streamflow data can be uploaded through the Streamlined Water Use Reporting Tool. This project is just getting underway, with funding until April 1, 2012.

6. Hydrologic Connectivity (2010 - current) – Funding Partner: Natural Resources Canada, B.C. Ministry of Environment.

This project provides a technical basis for establishing valley-wide drought plans. It uses the Water Supply and Demand modeling results and a specially-configured Water Evaluation and Planning System (WEAP) model to evaluate how water use by one community affects water availability downstream. It includes an analysis of water license priority dates, to determine water entitlements during droughts. The pilot phase of the project is nearing completion, and the goal is to use this approach to inform new allocation decisions. This project is ongoing, with funding until April 1, 2012.

7. Okanagan Water Supply Webinars (2010 – current). In-kind Partners: Environment Canada, Agriculture Canada, Ministry of Forests, Lands, and Natural Resource Operations.

This series of webinars provides up-to-date information on water supplies, snow pack, and weather projections to help Okanagan communities and water suppliers prepare for shortages. Webinars are held monthly between February and June. They are free and open to the public. The project arose as a recommendation of the 2009 Okanagan Drought Workshop hosted by the OBWB. This is an ongoing project with funding until April 1, 2012.

8. Drought Signage (2010 - current). In-kind Partners: B.C. Ministry of Environment, Okanagan local governments.

The goal of this project is to develop a consistent, uniform communication approach for water shortages, similar to the signs indicating forest-fire danger. The group is working to align local needs with the provincial drought criteria. The project arose as a recommendation of the 2009 Okanagan Drought Workshop hosted by the OBWB. This is an ongoing project, with funding until April 1, 2012.

9. Topsoil Bylaws Toolkit (2011 - current). Funding Partners: B.C. Ministry of Community Development, Green Infrastructure Partnership.

Having adequate topsoil in developed areas is a key factor for reducing stormwater pollution and increasing water conservation, yet topsoil is often stripped off and not replaced in new developments. The goal of this project is to revise two primers developed by the Green Infrastructure Partnership, explaining the benefits of topsoil and providing draft bylaws for adoption by local governments. This project is just being initiated and has funding until April 1, 2010.

10. Agricultural Water Reserve Feasibility Study (2011 – current). Funding Partners: Pending application to Agriculture and Agri-Foods Canada.

Many groups have called for an agricultural water reserve, as a component of the new BC Water Sustainability Act. The concept is to link water supplies to the agricultural land reserve, so that these lands will have access to water and can remain productive into the future. This project analyzes what factors will make an agricultural water reserve feasible for the Okanagan, and includes extensive stakeholder consultation. This is a top priority of the Okanagan Water Stewardship Council, and will proceed in a scaled-down form even without grant funding. This project is just getting underway, supported by the OBWB's water management program.

11. Okanagan WaterWise Education Program (2010 - current). In-kind Partners: Okanagan local governments.

The Okanagan WaterWise program is the OBWB's public outreach voice and was initiated by the board under the leadership of Brian Given. Activities range from regular water columns in local newspapers or radio shows, to fun surveys and education programs for kids. This is a new program and is evolving as we develop new partnerships. It is guided by a committee that includes Water Stewardship Council members and water conservation staff from local governments.

a. Okanagan WaterWise website. This website provides friendly, easy-to-read information on Okanagan water issues and ways to conserve water and ensure clean water. It brings together tools, tips, and information to be a value-added service for Okanagan local governments who need more water information resources. The website was launched in August 2010, and new information is being added on an ongoing basis.

12. Okanagan Conservation Planning website (2010 – current). Funding Partners: Environment Canada, UBC – Okanagan, Okanagan Collaborative Conservation Program.

This website provides a home for all Okanagan GIS products and environmental mapping information relevant to local planners. These include the Foreshore Inventory Maps, Sensitive Habitat Inventories, and Source Protection Plans. The website is hosted by UBC Okanagan. The OBWB uses this site to make available all of the mapped water information collected through our Water Conservation and Quality Improvement Grants Program, as well as our maps of watermilfoil control areas. This is an ongoing project with information being added on an ongoing basis. Basic funding is in place through 2012.

13. "Slow it, Spread it, Sink it" Homeowner's Guide to Stormwater Management (2011 - current). Funding Partners: Natural Resources Canada, BC Water and Waste Association.

This project will revise a homeowner's stormwater management guide that was developed in California and customize it for the Okanagan. It arose out of a recommendation from the OBWB's 2010 Rain to Resource workshop, and uses funding provided by NRCan for climate change adaptation communication related to stormwater. The project is just being initiated, and will be led by a committee including local government engineers, local irrigation designers and landscapers, and green building experts. Funding is in place until April 1, 2012.

14. Osoyoos Lake Water Science Forum (2011 - current). Funding Partners: Town of Osoyoos, International Joint Commission, Environment Canada, and B.C. Ministry of Forests, Lands, and Natural Resource Operations.

This conference is a follow-up to the 2007 Osoyoos Lake Water Science Forum, bringing together local residents, scientists, and government staff and decision makers to discuss challenges and solutions for Osoyoos Lake. This year's conference will provide an opportunity for the public to ask questions about the renewal of operating orders for Zosel Dam, controlling water levels in Osoyoos Lake. The conference will be held on September 18-20, 2011.

15. NASA Remote Sensing Project (2011 - current). Pending application to NASA, to be determined by July 2011. Partners include Environment Canada, Agriculture and Agri-Foods Canada, UBC, and a number of U.S. agencies and universities.

The goal of this project is to determine how remote sensing can be used to improve watershed management in the greater U.S./Canada Okanagan Basin. It will draw on the extensive satellite data held by U.S. and Canada space agencies, and make use of the data and models developed by the Water Supply & Demand project. The application for this project was submitted in 2010.



MEMORANDUM

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 6.2

File No. 0550.04

To: Board of Directors

From: Nelson R. Jatel, Water Stewardship Director

Date: March 29, 2011

Subject: Water Stewardship Director's Report

This memo provides an update on some of the ongoing activities of the OBWB's Water Management Program.

1.0 OKANAGAN WATER STEWARDSHIP COUNCIL, TECHNICAL ADVISORY COMMITTEE

Highlights from the March meeting of the Water Stewardship Council included:

- A review, at the Board's request, of a draft letter to the International Joint Commission, addressing US/Canada flow requirements. A number of valuable insights were noted and incorporated into the final draft for Board consideration.
- Discussion on Source Water Protection
 - There was discussion around the need to possibly review and expand the OBWB's Sewage Facilities Grant Program to include urban stormwater infrastructure projects. The need for these types of projects is becoming a significant issue in many Okanagan communities. A number of council members noted that there is also still a need to help fund old infrastructure.
 - City of Kelowna identified sediment to be the number one problem.
 - City of Vernon identified source water protection as a significant water quality concern.
 - Ministry of Environment staff voiced support for exploring OBWB incentive programs that mitigate non-point source pollution from storm events.
- A presentation on infrastructure planning by Fred Shaad, City of Kelowna Infrastructure Planning
 - Mr. Shaad identified challenges with intensifying storm events resulting from climate change.
 - 1 in 10 year storm events are now considered 1 in 5 year event issues with intensity and frequency on hard infrastructure.
 - Reported that Kelowna has a progressive stormwater management program that includes: 66 detention ponds, 17 oil and grit separators, 4 pump stations, 8,500 catch basins. The catch basins are cleaned once a year and the pipes are cleaned every five years.

- Introduction of a new web-based discussion board to improve communication at the Council table. The discussion board is under development and will be available to Council members to further engage with different actors on a variety of priority water issues.
- A discussion on how the Council could improve the monthly Council meetings. The feedback provided staff with a number of good suggestions that will be implemented in future meetings.

This month's Council meeting will be held 12:30 p.m. to 4:30 p.m., Thursday, April 14th at the Best Western Inn in Kelowna. Board members are encouraged to attend. This month the Council will be focusing our discussion on source protection of Okanagan waters.

2.0 PROJECT UPDATES

March marked UN World Water Day celebrations and the financial year-end for the OBWB. With the end of the fiscal year, significant staff time has been spent completing projects and finalizing year-end reporting.

2.1 UN World Water Week

The OBWB, in partnership with UBC Okanagan, facilitated a number of successful events including: World Water Day opening ceremonies at UBC Okanagan, a water slam poetry competition, a talk by Oliver Brandes (Associate Director of the POLIS Project on Ecological Governance, University of Victoria) as part of UBC Okanagan's Distinguished Speaker Series, and the annual public water forum held this year at the Bohemian Café in downtown Kelowna.

Many thanks to the UBC-O World Water Week team, including Dr. John Wagner (Chair), Leanne Bilodeau (UBC-O's Director Sustainability Operations), Allisha Luther (Project Manager), students and professors, and OBWB staff, who together, made this year's week of celebration an opportunity to recognize the importance of water in all aspects of our lives.

2.2. Okanagan Groundwater Monitoring Project

As we wrap-up this year's groundwater drilling activities, the addition of three weather stations will complement well sites located at: Anarchist Mountain, Twin Lakes and Upper Plateau. For this project, groundwater data is being collected by the Ministry of Environment and posted on the government observation well website <u>http://www.env.gov.bc.ca/wsd/data_searches/obswell/</u>. All climate data will be publically available on the BC Farmwest website.

2.3 Sustainable Water Strategy Action Plan 1.0: 2010 Progress Report

The progress report has been completed and circulated broadly to Council and Board members. This report provides for an update on the progress of the 45 actions identified in the Sustainable Water Strategy(2008).

2.4 Okanagan Water Supply Webinar

The OBWB hosted the first in this year's series of Water Supply Webinars on March 15th. Hosted by the OBWB's Nelson Jatel, guest speakers included: Dr. Anna Warwick Sears (OBWB), David Campbell (BC River Forecast Centre), Des Anderson (B.C. Ministry of Forests, Lands, and Natural Resource Operations [FLNRO]), Oleg Ivanov (B.C. FLNRO), Dan Millar (Environment Canada/IJC), and Doug Lundquist (Environment Canada).

The webinar series is intended to bring together water professionals to report on current water supply conditions throughout the Okanagan basin, without the added burden of travel expenses and increased pressure on water professionals' time. The series provides participants with practical information to support water management activities,. The webinars are free of charge and everyone is invited to join the conversation by phone and personal computer.

At the webinar, participants heard this year's snow pack is looking normal and all reported storage reservoirs are anticipated to fill to capacity. The full PowerPoint presentation is available on the web at: <u>http://www.obwb.ca/water_supply/</u>.

For more information about any of the water projects or the Water Stewardship Council, please contact Mr. Jatel at (250) 469-6295 or <u>nelson.jatel@obwb.ca</u>.

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
6	
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
	-

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.

1

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

3

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

4

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.

29

- 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



MEMORANDUM

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 6.3

File No. 0550.04

To: OBWB Directors

From: Corinne Jackson

Date: March 30, 2011

Subject: Communications and Research Coordinator Report

World Water Week

The Okanagan Basin Water Board used some tried and true, as well as some new methods this year, to bring attention to water issues in the Okanagan. There was also an attempt to reach people we haven't normally connected with for World Water Week events.

As in the past, the Water Board held a panel discussion/public forum. However this year, instead of holding it in the morning or afternoon, we held it from 5 to 6:30 p.m. at the Bohemian Café in downtown Kelowna. The hope was to attract people to pop in after work. The result was a very comfortable, relaxed atmosphere with some business folks joining us, as well as a number of students who came in after completing their classes for the day. Others in attendance included a couple of elected officials and others connected to water in the valley (e.g. Okanagan Xeriscape Assoc., water utility staff).

New this year was the Water Board's partnership with AM 1150's The Early Edition to create "A Conversation on Okanagan Water" radio series. The premise was to have a discussion on various local water issues each day between March 21 and 25 (World Water Week). The line-up included:

 MONDAY, MARCH 21 – Oliver Brandes (Polis Water Sustainability Project – University of Victoria)

Topic: "Thinking like a watershed when planning a community."

- TUESDAY, MARCH 22 Lee Hesketh (BC Cattleman's Assoc.) Topic: The changing face of ranching, moving away from traditional management practices in favour of ecologically sustainable methods.
- WEDNESDAY, MARCH 23 Tricia Brett (UBC-Okanagan) Topic: Endocrine Disruptor Study, looking at estrogen compounds in treated wastewater from Vernon, Kelowna and Penticton, shows need to be aware of how we are affecting our streams and lakes, its impact on fish, the water we swim in, and the water we drink.
- THURSDAY, MARCH 24 Don Degen (City of Kelowna) Topic: City of Kelowna's new landscape and irrigation standards. How Kelowna is encouraging water conservation to ensure adequate supply for neighbours up and down the valley, the fish, etc.
- FRIDAY, MARCH 25 Anna Warwick Sears (OBWB Executive Director) Topic: Osoyoos Lake Water Science Forum

Also, we launched the "Okanagan WaterWise Challenge" for kids in the Okanagan. Children, 5 to 15, are invited to take the challenge – an online scavenger hunt using the Okanagan WaterWise website – to learn more about Okanagan water issues. Participants are then entered to win a pool and pizza party for themselves and nine friends. A pool party will be awarded in the North Okanagan, the Central Okanagan and South Okanagan. In an attempt to build on the number of children visiting the website, and to create an event that fits with Drinking Water Week (May 1-7) the contest will run until May 3 with winners being announced May 5.

Okanagan Regional Library, Okanagan Boys and Girls Clubs and the three Okanagan school districts have helped distribute the Okanagan WaterWise Challenge poster to their facilities between Armstrong and Osoyoos. We have also distributed the posters to appear in recreation centres and local government offices in the valley.

Finally, Mr. Jatel also participated in the opening ceremonies for World Water Week at UBC-Okanagan, representing the OBWB.

Osoyoos Lake Water Science Forum

We are beginning to publicize the upcoming Osoyoos Lake Water Science Forum, Sept. 18 to 20, 2011. A "Save-the-date" e-mail was sent out. The forum has been mentioned in Facebook and Twitter updates and is listed as an event on our Facebook page, providing more detail. Please see attached article on the forum that ran in the Kelowna Capital News. It can also be found at http://www.bclocalnews.com/okanagan_similkameen/kelownacapitalnews/news/118677109.html.

Drinking Water Week Proclamation

Further to our discussion last month around a proclamation for Drinking Water Week (DWW), May 1-7, please find attached a copy of the proclamation for signing by the OBWB. Similar proclamations have been adopted by the City of Armstrong, City of Kelowna, and the Town of Osoyoos. The regional districts of North Okanagan and Central Okanagan are also expected to proclaim DWW.

Summary of Recent Media

- Feb. 26 "West Kelowna council concerned about Jackpine Lake development plans," *Kelowna Capital News*
- Feb. 27 "Canada's role grows amid looming world water shortages in some places, more flooding in others," *Bioscience Technology*
- Mar. 2 "Water demand will 'outstrip supply by 40% within 20 years' due to climate change and population growth," *Britain's Daily Mail*
- Mar. 7 "OBWB receives 35 applications for water grant program," AM1150 Kelowna, Sun FM Vernon, Sun FM Penticton, EZ Rock Summerland
- Mar. 4 "'Thinking like a watershed'" talk to begin UBC's World Water Week," Castanet
- Mar. 8 "U.S. interested in new approach to international water discussions," Keremeos Review
- Mar. 16 "La Nina leading to a wet, cooler spring," Kelowna Capital News
- Mar. 19 Feature on milfoil control efforts, CHBC TV Roberts on the Road
- Mar. 20 "Time to recognize our wealth," *The Okanagan Sunday*
- Mar. 20 "Variety of activities put fun and serious focus on water," *Kelowna Capital News*
- Mar. 21-25 Okanagan water issues, AM1150 The Early Edition
- Mar. 22 "Lawns threaten Okanagan water supply," The Juice, HQ Kelowna.com
- Mar. 23 "RDCO Board Highlights Draft Water Sustainability Act Review," Castanet
- Mar. 23 "Concerns voiced for
- Mar. 25 "Water 'IQ' should be determined before suggesting changes," Kelowna Capital News
- Mar. 25 "RDCO approves 2011 budget," Castanet
- Mar. 25 Feature on milfoil control efforts, Shaw TV Okanagan Today
- Mar. 26 "Close-up: Whose water is it? Conflicted interests overshadow Canada-U.S. water agreement," *Kelowna Capital News*

Summary of Upcoming Presentations

- Apr. 18 "Are Water Prices in the Okanagan Effective?" to BCWWA Annual Conference and Trade Show (Kelowna) – Mr. Jatel
- Apr. 19 "Introduction to the Streamlined Water Use Reporting Tool: Measuring water use and information management," to BCWWA Annual Conference and Trade Show (Kelowna) – Mr. Jatel
- Apr. 19 "One water one watershed," to Naramata Town Hall Meeting Mr. Jatel
- Apr. 15. "Practical water governance: The OBWB case study as an example of a distributed multi-level governance model grounded in community and sense of place," to the Columbia Basin Watershed Network – Mr. Jatel

Recently Delivered Presentations

- Mar. 3 "Planning for climate change and rapid population growth trials and innovations in the Okanagan," to Canadian Water Network National Conference (Ottawa) – Dr. Warwick Sears
- Mar. 7 "Update on OBWB activities," to Kelowna council (Kelowna) Dr. Warwick Sears
- Mar. 10 "OBWB Plans and Projects for 2011-2012," to Regional District of Central Okanagan (Kelowna) – Dr. Warwick Sears
- Mar. 22 "Water and the Okanagan," to opening ceremonies of World Water Day at UBC-O (Kelowna) – Mr. Jatel
- Mar. 25 "Streamlined Water Use Reporting Tool: Practical information management tools to support water management in the Okanagan Valley" to the BC Water Supply Association – Mr. Jatel



THIS DAM at the outflow of Okanagan Lake in Penticton, is the main control on water flowing from the Okanagan Valley south across the border into the United States. Flows being released at present are very low.

There's no place like ...

lighte

t may not be Osoyoos Lake or the Columbia River you see when you look out your window or drive between Kelowna and West Kelowna, but it's the same water that flows south across the international border and ultimately into the Pacific Ocean at Portland, Oregon.

Decisions about how much must flow south are made by an international commission and it's gathering information now to make a decision about renewing those orders in 2013.

Some are concerned new orders might impact how much water is available to Canadians in the Okanagan, and everyone involved says you should keep informed, particularly as international water week draws to a close.

Capital News reporter Judie Steeves asked some questions of the experts and provides a primer for the information that's still to come.

SEAN CONNOR/CAPITAL NEWS

uny leather (appears the Life of a transmission presse at See story on A3

CLOSE-UP

Our water supply faces impact from international decisions



JUDIE STEEVES TAFF REPORTER

hile the shore lines are dotted with beaches and resorts for those who love the recreational opportunities, to others, the Okanagan's lakes are less things of beauty than conduits providing life-giving water to hundreds of thousands of people and millions of other living things-in two countries. We're at the top end

of what is an enormous watershed, all feeding the Columbia River through Washington and Oregon in the U.S., before it dumps into the Pacific Ocean at Portland.

And, in a couple of years, the orders gov-eming water levels in the cross-border Osoyoos Lake in the sonthem part of the valley, must be renewed by the Internation-

al Joint Commission. That decision will imOKANAGAN BASIN WATER BOARD chairman Stu Wells, mayor of Osoyoos, invites everyone to attend the Osoycos Lake Water Science Forum in Osoyoos Sept. 18 to 20 to discuss the sharing of water in this watershed.

water

pact everyone in the Okanagan Basin.

how the new orders im-pact Central Okanagan

in the current orders for

both natural drought and

the lake's level may go up

flood conditions, when

There are provisions

residents.

ary lake's level is con-If the current orders requiring that the lake lev-els remain between eletrolled by the Zosel Dam in Washington State, and vations of 911.5 feet and that state's Department of 909 feet are kept, there could be little change in

to 913 feet or above

The trans-hound-

Ecology manages it. However, if changes are made to consid-er not only lake level but the flows, there could be water losses to upstream users, particularly during drought years, which are predicted to be more likely as climate change

impacts natural flows of And, that's an issne that concerns the Okanag-an Basin Water Board,

which wrote to both the IJC boards in Canada and the U.S. and to Okanagan-Coquiballa MP Stockwell Day requesting that no such change be made in the orders. The board was re-

sponding to a report by Washington State University researchers recommending a shift in water management policy from lake levels to flow ré-

quirements. "We believe this is a substantial shift from the status quo, and, despite our ongoing studies, there is still insufficient science to inform such a change-especially considering the high level of uncertainty about water availability in any given year," wrote board chair Stu Wells.

Ralph Pentland, former director of water management for the federal government and now chairman of the Canadian Water Issues Council, says there is a trend now toward consideration of flows for environmental reasons whenever transboundary water issues are discussed, particularly in the west He admitted when

SEAN CONNOR/CAPITAL NEWS

such changes are made in a water management re-

gime, there must be trade offs, so upstream users should insist on an understanding of what tradeoffs would be needed upstream if such a change is

Climate change imnacts are not normally taken into account by the UC in making decisions on orders for trans-bound ary waters, he said People should be in-

formed about the possible upstream impacts of changes in orders for the watershed's trans-border waters, he added. There are 17 boards of

control across the coun-try, to which the IJC issues orders regarding requirements for such waters, with the International Osoyoos Board of Control carrying out the orders governing the Okanagan watershed.

SEE WATER A4

35


CLOSE UP

www.kelownacapnews.com

w

Ŵ

age col

> gaı W≀

pec sai

rea

big thi

is s ma me

up,

thr

na Ok

Sir Sir

trik

an the

ent

nec

tar

tio

tro bai

the as

flu

are an era

+

36



REGIONAL DISTRICT NEWS

O K.L.O. Road, Kelowna, B.C. V1W 3Z4 • 763-4918 • Fax 763-0606 • www.regionaldistrict.com

REGIONAL BOARD HIGHLIGHTS – MARCH 2011

WESTBANK FIRST NATION – VOTING RIGHTS

The Regional Board has authorized staff to initiate discussions with the Provincial Government and Westbank First Nation (WFN) to determine the process that would allow full voling membership on the Regional Board. Since 2007, the WFN Council has appointed a non-voling representative to the Regional Board.

OKANAGAN INDIAN BAND RESERVE EXPANSION

The Regional Board has received a presentation from the Okanagan Indian Band regarding a proposed expansion of its Reserve #1. The Board has authorized Regional District Development Services staft for meet with the band staff regarding the reserve expansion request and to prepare an updated report for Board consideration.

FEBRUARY BUILDING STATISTICS

During February, nine building permits were approved for projects worth \$1,057,000 in the Central Okanagan East and Central Okanagan West Electoral Arnas. That compares with nine permits issued in February 2010 for projects worth \$991,000.

NEXT REGIONAL BOARD MEETINGS

Thursday, April 7th following Governance and Services Committee meeting at 8:30 am.
 Monday, April 18th – 7:00 pm

GOVERNANCE AND SERVICES MEETING *Thursday, April 7th at 8:30 am - Woodhaven Board Room. Residents are welcome to attend.

OPEN HOUSES -OFFICIAL COMMUNITY PLANS

The Regional District of Central Okanagan is hosting community consultation Open Houses as it drafts the first Official Community Plans for the Brent Hoad Trepanier area of the Central Okanagan West Electoral Area and South Slopes area of the Central Okanagan East Electoral Area.

> Brent Road-Trepanier area Open House Monday, April 4th 5:00 pm - 8:00 pm Peachland Community Centre, 4450-6th Street Summary presentations at 5:30 and 7:00 pm

South Slopes area Open House Tuesday, April 5th 4:00 pm - 7:30 pm RDCO office, 1450 KLO Road Summary presentations at 4:30 and 6:00 pm

Staff from the Development Services Department and HB Lanarc Consultants will be on hand during the interactive sessions to provide preliminary information received from recent surveys, receive feedback and to answer any questions.

Information on the Official Community Plans may be viewed on the Regional District website regional/district.com/OCP or at the Development Services Department, second floor at 1450 KLD Road. AIR, WATER AND WILDLIFE pay no attention to political boundaries such as that between Canada and the U.S. Our watershed naturally drains south of that border just as the Zosel Dam, on the far left in this photo, backs water north of the border in Osoyoos Lake, for storage. It instantiated and lecisions about management of Osoyoos Lake's level affect everyone in the watershed, from Salmon Aira south.

▼ WHOSE WATER IS IT?

Conflicted interests overshadow Canada-U.S. water agreement

WATER FROM A3

Brian Symonds, director of water stewardship for the province, sits on that board. He says Canada's position is that we don't want to see transboundary flows included in the orders.

In progressive drought years, the inclusion of flow requirements could make a difference in the amount of water available to upstream users. "However, even in sell drought years, we trade to e maintain flows in the ecosystem," he noted els. There's good com-

munication among caroperators on both cites of the border, so centrollers of the main dam on the Okanagan system, at the outflow of Okanagan Lake in Penticton, as well as the dams on Skeln Lake at Okanagan P dis,

at McIntyre Dam 20 al

of Vaseux Lake, and Ze-

sel Dam in the U.S., talk to each other about any changes in operating levels

Symonds acknowledges it's necessary for upstream users to be concerned about conserving water, simply because little water falls in this valley. But he said popula-

But he said population increases in the valley haven't yet had a significant impact on downstream volumes or on management of lake lev-

"New development should be conscious of the footprint that will have on water supplies," he noted. "We'll never get away from that. We're not living in a place where we can take water for granted."

SEAN CONNOR/CAPITAL NEWS

In drought situations, "we should try and man-

SEE WATER A5



CLOSE UP



WATER FROM A4

age it cooperatively and collectively," he added. The OBWB slogan One Watershed, One

Water, is important for people to remember, he said. "People just need to

bigger picture. Instead of thinking that what you do is so small that it doesn't matter. You have to rememher that it all adds up," he warned. From Armstrong,

through Vernon, Kelow-na and south through the Okanagan-and even the Similkameeu because the Similkameen River is a tributary to the Okanag-an River, which flows into the Columbia River-the entire watershed is connected, he noted.

Daniel Millar, secretary for the Canadian Section of the board of control, says it's a delicate balancing act to maintain the level of Osoyoos Lake as dictated by the orders. The largest factor in-

fluencing water levels are flows in the Okanagan River, which is generally based on a fish

MANNETHENHO

Order a reprint of a Capital News

photo at our website:

66

PEOPLE JUST NEED TO REALIZE THEY'RE PART OF A BIGGER PICTURE. Brian Symonds,

B.C. Ministry of Environment.

water model that takes into account when sock-eye migrate into the system, and when the young emerge-to ensure flows are adequate-as well as by keeping water lev-els at the optimum for the spawning and emergence of kokanee in Okanagan and Skaha Lakes and tributary streams. Other factors influen-

cing water level are evap-oration and irrigation. He noted the Simil-

kameen River enters the system two miles below the Zosel Dam and some-times it piles water up and actually flows upstream, even back into Osoyoos Lake

"Man has no control ley's residents, he feels it

over that." Millar commented. However, it occurs very seldom, he noted.

Although Millar said he's never seen the water level down near the lowest level permitted by the orders, it is possible in a drought year that those minimum water levels couldn't be maintained.

Currently, in prep-aration for the commission to decide on renew-al of the orders governing Osoyoos Lake, a series of studies are being done to inform board members about issues surrounding the decision.

Although hearings haven't yet been scheduled, likely there will be public hearings next year and all the studies will be available online.

Anyone can write to the IJC at any time with concerns about the renewal decision, just as the OBWB has.

While the level of Osoyoos Lake may not seem like a pressing matter to the rest of the val-

should be. "It's important for everyone to be informed about all water use, especially in water short

areas." Millar said. The OBWB, IJC, federal government and City of Osoyoos have joined. forces to put on the 2011 Osoyoos Lake Water Sci-

ence Forum, taking place Sept. 18 to 20 in Osoyoos. The theme will be Shared Water, Shared Fu-

bility for Osoyoos Lake. The idea is to provide an opportunity for resi-deuts of the Okanagan watershed on both sides of the border to come

ture: Bridges to Sustains

together to ask questions and share information. Wells said everyone is invited to attend and to

comment on studies leading up to renewal of the orders for the lake. jsteeves@kelownacapnews.com

TRUST YOUR INTUITION INNER PEACE MOVEMENT OF CANADA 7 Presents seminors with president Judy Gnido

> TUESDAY MARCH 29 1pm & 7pm Days Inn 2649 Hwy.97 N

Experience the power of your own energy, and see how you can 'move mountains' effortlessly. Learn about trusting your intuition, adapting to change and having clearer direction in your life. Hear about the four cuerter offection in your life, risen audort ne rour psychie gifts of perception and how to develop them. Understand how to communicate with your team of grardian angels, your life purpose, and the 7-year cycles of Hie. Receive aura impressions. 14/6 hours os \$16 1 877 969-0095 www.ianerpeacemovement.ca

A non-profit educational program







- WHEREAS we are all stewards of the water infrastructure which future generations depend upon, and
- WHEREAS each citizen of our community is called upon to help protect our source waters from pollution, to practice water conservation, and to get involved in local water issues, and
- WHEREAS federal, provincial, and local governments as well as concerned organizations, are cognizant and supportive of measures which promote safe, clean, and abundant water, and responsible wastewater management, and
- WHEREAS one such measure involves heightening public awareness of the value of our drinking water resources, and encouraging the public to promote this awareness,
- THEREFORE The Board of Directors of the Okanagan Basin Water Board hereby proclaim May 1-7, 2011 "Drinking Water Week"





MEMORANDUM

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 7.1

File No. 0550.04

To: OBWB Directors

From: Melissa Tesche

Date: March 30, 2011

Subject: <u>Water Conservation and Quality Improvement Grant Program – 2011 Recommendations</u>

The intent of the WCQI grant program is to assist local governments in addressing issues that enhance valley-wide sustainable use of water. Through this program, the OBWB seeks to foster innovative and collaborative projects that might otherwise lack funds to be implemented in a timely manner. Projects were selected for recommendation based on a range of factors – including how well the project meets the goals of the program, the amount of funding available, and whether the project supports other regional initiatives. Recommendations aimed to give substantial funding to as many projects as possible, while maximizing the success rate of the funded projects. As in previous years, the 2011 WCQI grant program was over-subscribed. The total ask was \$703,331, down from \$753,911 last year. The applications were split between the districts as follows:

	Number of Applications	Total Ask	Total Available
RDNO	8	\$127,530	\$58,500
RDCO	11	\$287,293	\$175,800
RDOS	16	\$288,508	\$65,700
Totals	35	\$703,331	\$300,000

The proposed projects were extremely varied. The criteria and weighting used to rank the applications include the following:

20	Basin-wide benefit
10	Leveraging of funds
10	Focus on action
10	Collaboration
10	Promotion of best practices
10	Complements current OBWB initiatives
10	Financial need
10	Track record/capacity
5	Innovativeness of project
5	Quality of proposal
100	

Organization	Project Title	Grant Requested	Funding Received
	Regional District North Okanagan		
Okanagan Science Centre	Water, Water (Every) Where?	\$30,000	\$22,000
Greater Vernon Water	Stormwater Outfall Improvements	\$20,000	\$20,000
UBC-O	Groundwater discharge	\$23,450	\$10,000
Otter Lake Water District	Ultrasonic Flow Meter	\$6,000	\$4,500
Bishop Wild Bird Foundation	Bishop Wild Bird and Native Plant Garden	\$8,080	\$2,000
Steele Springs Waterworks	Radio/Solar Control of Water Pumps	\$12,500	-
Steele Springs Waterworks	Filtration and Collection of Spring Water	\$12,500	-
Otter Lake Water District	Round Prairie Road Project	\$15,000	-
		\$127,530	\$58,500
	Regional District Central Okanagan		
RDCO	Silvopasture Pilot Program - Phase 1	\$25,000	\$20,800
Okanagan Xeriscape Association	Promoting Xeriscapes in the Okanagan	\$30,000	\$20,000
District of Peachland	Peachland Creek Water Monitoring	\$30,000	\$27,500
District of West Kelowna	Water Systems Master Plan	\$30,000	\$22,500
Okanagan Greens Society	Okanagan Wetlands Generation Alliance	\$30,000	\$20,000
City of Kelowna	Mill Creek Riparian Management Plan	\$30,000	\$25,000
City of Kelowna	Water Cons. Manual for Green Spaces	\$25,000	\$20,000
City of Kelowna	SHIM (within city boundaries)	\$20,000	\$20,000
City of Kelowna	Goose Management Outreach/Education	\$10,000	-
District of Lake Country	Landslide Risk/Modified SHIM Vernon Cr.	\$27,293	-
Benvoulin Water Users Comm.	Fish Screening and Streamflow Protect. Plan	\$30,000	-
		\$287,293	\$175,800
Re	gional District Okanagan Similkameen		
Town of Osoyoos	Osoyoos Lk FIM & AquaticHabitatIndex Proj.	\$28,977	\$27,450
ONA (Fisheries)	Ok. River Water Intake Feasibility Study	\$12,241	\$12,000
RDOS	Water Ambassador	\$10,000	\$10,000
Okanagan Falls Parks/Rec	Park Beautification and Water Conservation	\$10,000	\$8,500
District of Summerland	Stream Assessment	\$4,240	\$4,000
RDOS	Hart's Pond Fencing	\$7,500	\$3,750
Kaleden Irrigation District	Agricultural Demand Reduction Study	\$16,800	-
District of Summerland	Aeneas Creek Rehabilitation	\$10,000	-
Lower Nipit I.D.	Fencing for water protection	\$12,000	-
En'owkin Centre	Water Education/Indigenous Perspectives	\$30,000	-
RDOS	Naramata Commercial Metering	\$30,000	-
RDOS	Aquifer Vulnerability Study Pt 2	\$30,000	-
RDOS	Faulder Water System Metering	\$30,000	-
City of Penticton	Storm water baseline study and installation	\$30,000	-
District of Summerland	Rain Barrel Program	\$21,750	_
Oliver Communities in Bloom	Xeriscape trade show and booklet	\$5,000	
		JJ,000	-

Regional District North Okanagan Available funds:\$58,500 Total Ask:\$127,530

Project Title: Organization: Description:	Water Water (Every) Where? Okanagan Science Centre The OSC will create new interactive water exhibits at the centre and develop three new programs including
Staff Notes:	outdoor water use camps for youth, lake tours, and low impact gardening. The project fits well with the OBWB's focus on outreach and education and will work with the OBWB's WaterWise program. The OSC has a wide reach in the Okanagan and has shown a high degree of collaboration.
Project Budget:	\$210,000Amount Requested:\$30,000Recommended Funding:\$22,000
Project Title: Organization: Description:	North Kalamalka Intake Protection Zone – Storm Water Outfall Improvements RDNO – Greater Vernon Water The project will develop a locate storm outfalls, develop a sampling/monitoring plan to determine the risk that storm water outfall poses to water quality, and work with District of Coldstream to plan improvements to the system.
Staff Notes:	This project addresses both storm water management (identified as a priority in the SWS) and works to improve water quality. The report may be of benefit to other areas looking to do similar projects.
Project Budget:	\$23,000 Amount Requested: \$20,000 Recommended Funding: \$20,000
Project Title: Organization: Description: Staff Notes: Project Budget:	Groundwater Discharge to Okanagan Lake from Deep Creek WatershedUniversity of British Columbia OkanaganThe project will quantify groundwater discharge into Okanagan Lake.Groundwater monitoring and regulation has been identified as a priority for the basin by the WSC and others.The results of the project can be used to evaluate models used in the WSD study.\$75,700Amount Requested: \$23,450Recommended Funding: \$10,000
Project Title: Organization: Description: Staff Notes: Project Budget:	Ultrasonic Flow Meter Otter Lake Water District A flow meter will be installed to measure flow and draw down on the well. Groundwater monitoring has been identified as a priority by the WSC and others. Funding for this project would be contingent on OLWD working with the SWURT team to input their data. \$6000 Amount Requested: \$6000 Recommended Funding: \$4,500
Project Title: Organization: Description: Staff Notes: Project Budget:	Bishop Wild Bird and Native Plant GardenBishop Wild Bird FoundationThe foundation will convert a large area of turf grass and perennial flower bed into low-water demonstrationgardens using native plants. An outreach and education component will include on-site signage and hosting ofpublic workshops.This project promotes best practices in water conservation and exhibits a high degree of collaboration. It istangible and on-the-ground.\$50,564Amount Requested: \$8,080Recommended Funding: \$2,000
Project Title: Organization: Description: Staff Notes: Project Budget:	Radio/Solar Control of Water PumpsSteele Springs WaterworksProject would install radio/solar-controlled pumps that would reduce overflow of reservoir.Although an innovative approach, benefit is mainly to Steel Springs consumers and funding is very limited.\$30,000Amount Requested:\$12,500Recommended Funding:
Project Title: Organization: Description: Staff Notes: Project Budget:	Natural Filtration and Collection of Spring WaterSteele Springs Waterworks DistrictProject would filter water for use by Steel Spring consumers.Project is focused on a single water supplier, without the necessary valley-wide benefit.\$25,000Amount Requested: \$12,500Recommended Funding:-
Project Title: Organization:	Round Prairie Road Project Otter Lake Water District

Description: Project would replace pipe to improve water to a specified neighbourhood Staff Notes: Project is focused on a single water supplier, without the necessary valley-wide benefit. Project Budget: \$70,000 Amount Requested: \$15,000 **Recommended Funding: Regional District Central Okanagan** Available funds: \$175,800 Total Ask: \$287,293 Project Title: Silvopasture Pilot Project – Water Stewardship Phase 1 Organization: **Regional District Central Okanagan** Description: Project is an operational trial of integrating livestock and forest production with conservation practices and water stewardship. Staff Notes: The projects focuses on risks identified in the recently developed source water assessment plans for Oyama and Vernon Creeks. It is very collaborative and has received many letters of support from both local and provincial stakeholders. Project Budget: Recommended Funding: \$86,500 Amount Requested: \$25,000 \$20,800 **Project Title:** Promoting Xeriscapes in the Okanagan Valley to Reduce Outdoor Water Consumption Organization: **Okanagan Xeriscape Association** Description: OXA will continue their very successful workshops and educational presentations, develop a demonstration rain garden, work with strata complexes to convert to xeriscaping, and establish a pilot rebate program for homeowners go xeri. Staff Notes: OXA's website and materials have value valley-wide, and they continue to be a collaborative success story with outreach and education. Project Budget: Recommended Funding: \$20,000 \$72,850 Amount Requested: \$30,000 **Project Title:** Peachland Creek Water Monitoring Organization: **District of Peachland** Description: The District will update existing Water Survey of Canada infrastructure to collect real-time stream flow and water quality data. Staff Notes: The proposed monitoring station was identified as a priority in the 2007 Hydrometric Network Requirement report, and will extend the period of record for the existing station. The data collected will allow better management of fish flows. Project Budget: \$46,000 Amount Requested: \$30,000 Recommended Funding: \$27,500 **Project Title: District of West Kelowna** Organization: Water Systems Master Plan Description: The plan will provide direction for infrastructure development, water conservation policies, regulatory requirements, and identify source protection priorities. Staff Notes: The District has recently merged five separate water utilities, and there are opportunities for implementation and promotion of best practices that will improve water conservation and source protection for the area, benefitting the valley as a whole. Project Budget: \$300,000 Amount Requested: \$30,000 Recommended Funding: \$22,500 **Project Title: Okanagan Wetlands Regeneration Alliance** Organization: **Okanagan Greens Society** Description: The project will form a multi-stakeholder committee that will inventory and map wetland areas in and around Lake Country, work with landowners to remediate wetlands where possible, and develop a public outreach program on the importance of wetlands. Staff Notes: This project is very collaborative and could set a precedent for working with wetlands in the Okanagan. Wetlands play an invaluable role in maintaining water quality, but are often seen by the public as low-value lands. Funding would be contingent of cooperation with OKCP and the Ok WaterWise program. Project Budget: \$45,000 Amount Requested: \$30,000 Recommended Funding: \$20,000 **Project Title: Mill Creek Riparian Management Plan** Organization: **City of Kelowna** Description: The City will identify areas of the creek in need of protection and restoration, identify possibilities for

The City will identify areas of the creek in need of protection and restoration, identify possibilities for mitigation, evaluate strategies to minimize storm runoff into the creek, and identify areas of land acquisitions

Staff Notes:	required for compensation areas. Mill Creek is a major fish bearing stream in the Okanagan that drains into Okanagan Lake. Improvements to the creek will benefit all downstream users, as well as improve fish habitat.
Project Budget:	\$100,000 Amount Requested: \$30,000 Recommended Funding: \$25,000
Project Title: Organization: Description:	Water Conservation Manual for Municipal Parks & Green Spaces City of Kelowna The City of Kelowna will complete assessments and compile the results of the numerous projects undertaken since 2005 to reduce the amount of water used in city parks and green spaces, including the use of compost tea
Staff Notes:	as fertilizer and use of drought tolerant grasses. The City of Kelowna has been a leader in water conservation in city parks. The report delivered from this project will benefit all Okanagan municipalities, most of which would not have the capacity to do the research on their own.
Project Budget:	\$80,000 Amount Requested: \$25,000 Recommended Funding: \$20,000
Project Title: Organization: Description: Staff Notes:	 SHIM Mapping within city boundaries City of Kelowna This project will locate and describe remaining streams, wetlands, and springs within city boundaries and local ALR lands. This project complements the numerous other SHIM projects that have occurred throughout the valley. Funding would be contingent on cooperation with the OKCP and making the data available through their
Project Budget:	conservation planning website.\$23,000Amount Requested:\$20,000Recommended Funding:\$20,000
Project Title: Organization: Description: Staff Notes: Project Budget:	Ok Regional Goose Management Committee Outreach and Education ProgramCity of KelownaThe project would hire student ambassadors to do water quality outreach in public spaces.This is a worthy project and has been funded in previous years, but funding is limited.\$100,000Amount Requested:\$10,000Recommended Funding:
Project Title: Organization: Description:	Landslide Risk Assessment and Modified SHIM of Vernon Creek District of Lake Country The project would determine the risk that slope failure poses to Vernon Creek and suggest possible mitigation options.
Staff Notes: Project Budget:	This is a worthy project, but funding is limited.\$27,293Amount Requested:\$27,293Recommended Funding:
Project Title: Organization: Description: Staff Notes:	Benvoulin Ditch: Fish Screening and Stream flow Protection Plan Benvoulin Water Users Community The project would involve installation of a screen at the Benvoulin Ditch intake to reduce maintenance for the water users and prevent fish from entering the irrigation waters. This project is focused on a specific group of water users, without demonstrating the necessary basin-wide benefit to water conservation or quality improvement.
Project Budget:	\$70,000 Amount Requested: \$30,000 Recommended Funding: -
	: Okanagan Similkameen \$65,700 Total Ask:\$288,508
Project Title: Organization: Description: Staff Notes:	Osoyoos Lake Foreshore Inventory Mapping and Aquatic Habitat Index Project Town of Osoyoos This project will inventory and map the shoreline of Osoyoos Lake and develop an aquatic habitat index that will be shared with the Community Mapping Network. This FIM work complements other FIM work done in the valley and will also aid in our milfoil permitting
Project Budget:	processes. Funding would be contingent on cooperation with the OKCP.

	p				
Project Budget:	\$37,797	Amount Requested:	\$28,977	Recommended Funding:	\$27,450

Project Title: Okanagan River Water Intake Feasibility

Organization: Description:	Okanagan Nation Alliance The ONA will identify water licences with intakes on the Okanagan River and connecting oxbows to determine which intakes would be negatively impacted by if mid-summer flows were reduced (which would aid with water management for Sockeye).
Staff Notes:	This project is highly collaborative and could lead to water conservation, benefitting valley residents and sockeye.
Project Budget:	\$127,241 Amount Requested: \$12,241 Recommended Funding: \$12,000
Project Title: Organization: Description:	Water Ambassador Regional District Okanagan Similkameen RDOS will hire a summer student who will work in the Naramata area to promote water conservation methods through public visits and print material, assisting with setting of irrigation timers, and identifying water restriction violations.
Staff Notes:	Funding will be contingent of heavy cooperation with OBWB's WaterWise coordinator to avoid duplication, as well as an expanded area of service.
Project Budget:	\$15,000 Amount Requested: \$10,000 Recommended Funding: \$10,000
Project Title: Organization: Description: Staff Notes:	 Park Beautification and Water Conservation Okanagan Falls Parks and Recreation Ok Falls will convert their flower beds/gardens to xeriscape demonstration gardens, update their irrigation systems, and set up a school stewardship program to maintain the gardens. There has been limited promotion of xeriscapes in the south Okanagan, despite the greater need for it. The project will result in water conservation, promotion of best practices, as well as education and outreach. Funding would be contingent on collaboration with the Okanagan Xeriscape Association.
Project Budget:	\$15,000 Amount Requested: \$10,000 Recommended Funding: \$8,500
Project Title: Organization: Description: Staff Notes:	Stream Assessment District of Summerland District of Summerland and the South Okanagan Similkameen Conservation Program will inventory and mapping unconfirmed watercourses within Summerland, which are currently not included in the District's Watercourse Development Permit Area (and so receive no protection from development). The water courses are too small to justify/prioritize full SHIM mapping, but identification of the watercourses by
Project Budget:	a QEP will enable protection and regulation of the activities around the streams.\$10,390Amount Requested:\$4,240Recommended Funding:\$4,000
Project Title: Organization: Description: Staff Notes:	Hart's Pond Fencing Regional District Okanagan Similkameen RDOS will install cattle fencing to exclude cattle from the pond and reduce coliform and E. Coli contamination by manure. Hart's Pond is on crown land and in spring discharges into Okanagan Lake north of a water intake. This project will improve water quality both at the pond and within Okanagan Lake. Funding will be contingent on RDOS
Project Budget:	soliciting collaboration from other stakeholders.\$7,500Amount Requested: \$7,500Recommended Funding: \$3,750
Project Title: Organization: Description:	Agricultural Demand Study Kaleden Irrigation District KID would install meters on irrigation services to determine water consumption by crops grown and irrigation technique used.
Staff Notes: Project Budget:	This is a worthy project, but funding is very limited.\$29,600Amount Requested:\$16,800Recommended Funding:
Project Title: Organization: Description: Staff Notes: Project Budget:	Aeneas Creek RehabilitationDistrict of SummerlandThe District would work to control invasive plants and plant native vegetation, and investigate ways of reducing flood potential as a result of winter ice build-up.This is a worthy project, but funding is very limited.\$20,000Amount Requested: \$10,000Recommended Funding:
-, <u></u>	

Project Title: Organization: Description:	Fencing for Water Protection Lower Nipit Improvement District/Twin Lakes Aquifer Group The project would see the installation of fencing at waterways in Twin Lakes area to prevent cattle access and reduce algae growth in the lakes.
Staff Notes: Project Budget:	This is a worthy project, but funding is very limited.\$14,000Amount Requested:\$12,000Recommended Funding:
Project Title: Organization: Description:	Water Education and Indigenous Perspectives En`owkin Centre This project would facilitate the translation of Traditional Ecological Knowledge on the Okanagan's water resources, with the goal of better water policies and greater cross-cultural understanding. It would be aimed at public schools, colleges, water policy makers, and community members.
Staff Notes:	This is a worthy project, but funding is very limited. As the program is a natural fit with/complement to the OBWB WaterWise program, staff recommend exploring other opportunities for collaborating on this project.
Project Budget:	\$60,000 Amount Requested: \$30,000 Recommended Funding: -
Project Title: Organization: Description: Staff Notes:	Naramata Commercial Metering Regional District Okanagan Similkameen This project would see meters installed for several large volume commercial users in Naramata. This is a worthy project, but funding is very limited.
Project Budget:	\$35,200 Amount Requested: \$30,000 Recommended Funding: -
Project Title: Organization: Description: Staff Notes:	Aquifer Vulnerability Study Pt. 2 Regional District Okanagan Similkameen This project indentifies sensitive aquifers in the area. Phase 1 of the project received funding from OBWB in 2010 (\$15,000), but it cannot proceed until funding is secured for Phase 2. They have been unable to secure other funding for Phase 2. While this is a worthy project, funding is too limited to support additional funding.
Project Budget:	\$55,000 Amount Requested: \$30,000 Recommended Funding: -
Project Title: Organization: Description: Staff Notes: Project Budget:	Faulder Water System MeteringRegional District Okanagan SimilkameenThis project would see the installation of meters for residents of Faulder on the community water system.This is a worthy project, but funding is very limited.\$80,000Amount Requested:\$30,000Recommended Funding:
Project Title:	
Organization: Description:	Storm Water Baseline Study and Installation City of Penticton This project aims to reduce the impacts of storm water in the city oxbows by installing stormceptors, flow meters, and water quality sensors.
Staff Notes: Project Budget:	This is a worthy project, but funding is very limited.\$60,000Amount Requested:\$30,000Recommended Funding:-
Project Title: Organization: Description:	Rain Barrel Program District of Summerland The District would raise awareness of its rain barrel program through development and distribution of a pamphlet and monitor the success of the program with follow up surveys.
Staff Notes: Project Budget:	This is a worthy project, but funding is very limited.\$21,750Amount Requested:\$21,750Recommended Funding:
Project Title: Organization: Description:	Xeriscape Tradeshow and Booklet Oliver Communities in Bloom The project would see a one day tradeshow held, featuring xeriscape concepts, as well as the development and printing of a xeriscape manual.
Staff Notes: Project Budget:	This is a worthy project, but funding is very limited.\$7,300Amount Requested:\$5,000Recommended Funding:



MEMORANDUM

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 7.2

File No. 0550.04

To: OBWB Directors

From: Anna Warwick Sears, Executive Director

Date: March 30, 2011

Subject: North Okanagan Regional Growth Strategy review

RDNO is nearing completion of their Regional Growth Strategy (RGS) and is consulting with associated agencies. I attended a meeting on March 28 of the Intergovernmental Advisory Committee. Many government representatives were there, including those from B.C. Ministry of Forests, Lands and Natural Resource Operations who once worked for B.C.'s Integrated Land Management Bureau, Forestry, and other agencies associated with Crown Land tenures. They were concerned that the RGS would interfere with their ability to grant leases or sell crown lands under government jurisdiction, and wanted recognition of their authority written directly into the RGS.

Given recent history with the Reservoir Lots issue, it would be appropriate to have the OBWB review current water-related goals given in the RGS and ensure that there is sufficient language to protect drinking water reservoirs and other community water sources. I have attached pages 9-12 and 15-20 for your review. In my reading, I note only very weak language (p.20, Env-3-1) for preventing pollution of reservoirs or aquifers. This will be extremely important for protecting the quality of water entering the Duteau Treatment Plant, and reducing costs to the community. The OBWB is asked to send a letter with recommendations. Comments are due by April 21st.



"More community gardens, less lawn and more food being grown, stores buying fresh produce from local farmers instead of importing them" (Age 15, from the Youth Survey)

WHY IS THIS IMPORTANT?

The North Okanagan has an abundance of agricultural lands, which is unique in British Columbia. Only 5% of the province can be used for agriculture and the North Okanagan contains 39% of all Agricultural Land Reserve (ALR) lands in the Okanagan. Although 9% (or about 70,000 ha) of the Regional District is within the Agricultural Land Reserve, most of those lands are located in the valley bottoms where development pressure is greatest. Since 1974, we have lost over 6.3% (almost 6,000 ha) of our best ALR lands. The protection of our agricultural land base, our agricultural heritage and continued support for our farmers will be critical to the long term sustainability of the North Okanagan.

GOAL AG-1: WATER IS MANAGED SUSTAINABLY SO ALL REASONABLE NEEDS, IN INCLUDING AGRICULTURE, ARE MET IN A BALANCED MANNER

The Regional District of North Okanagan and member municipalities agree to work as partners and individually to:

- AG-1.1: encourage water metering systems, where applicable, to ensure the efficient use of water allocations.
- AG-1.2: collaborate and cooperate with the provincial government and relevant agencies during the development of policies and methods that encourage more efficient water use.
- AG-1.3: explore opportunities to expand the use of reclaimed water for agriculture in a safe, cost effective and efficient manner.
- AG-1.4: based upon GOAL WS-3, explore opportunities for expanding reclaimed agriculture water infrastructure outside of existing serviced areas.

The actions requested of other governments and agencies are:

AG-1.5: the province and relevant parities are encouraged to explore the feasibility of a North Okanagan Agricultural Water Reserve that would provide the appropriate amount of water to agricultural lands in drought years without compromising stream health or other community needs.



介

I











REGIONAL DISTRICT OF NORTH OKANAGAN REGIONAL GROWTH STRATEGY "One Region, One Future"



REGIONAL GROWTH STRATEGY DESIGNATIONS

a

 \square

血

The Rural Protection Area Map (**Schedule 'B'**) identifies Growth Areas, Future Growth Areas and Rural Protection Areas. The purpose of this map is to guide land use planning processes by defining long term rural protection areas and boundaries that are not suitable for 'urban' levels of development.

GROWTH AREAS: are serviced by water and sewer infrastructure and are defined by the Rural *Protection Boundary.* Growth Areas are intended to contain the diversity of the region's established communities with urban densities (lots less than 1 hectare). Urban levels of service, including water and sewer infrastructure extensions, will be limited to Growth Areas. Growth Areas do not necessarily correspond to municipal or electoral area boundaries (existing or proposed). Growth Area boundaries respect past agreements and comprehensive neigbourhood planning initiatives that have access to existing water and sewer infrastructure.

FUTURE GROWTH AREAS: are areas have been identified in Official Community Plans or strategic planning initiatives for future development of residential, commercial or industrial uses. These areas may require further review to determine their development potential and viability. The objective within these areas, as in Growth Areas, is to encourage compact, complete, mixed use and serviced communities with well defined Rural Protection Boundaries. The development of these areas should be contingent on the establishment of services, including water infrastructure and emergency response capacity. Criteria and thresholds should be established through Official Community Plans prior to consideration of Future Growth Area for compact, complete community development. Once development begins within Future Growth Areas, then these areas will be considered Growth Areas as defined within the Regional Growth Strategy.

RURAL PROTECTION AREAS: are areas that will not have access to water and sewer infrastructure, consist of large lot sizes and are associated with rural uses. Rural Protection Areas are intended to provide for a variety of rural land uses, including low density rural residential development, natural resources, and agricultural and existing small scale neigbourhood commercial uses. Rural Protection Areas help protect rural landscapes and agricultural lands, prevent unsuitable urban development and densities, limit water and sewer infrastructure extensions beyond the Rural Protection Boundary and maintain rural lifestyle options. Natural lands, open spaces, agricultural lands and environmentally sensitive lands that are unsuitable for residential development are included within the Rural Protection Areas, including: the Agricultural Land Reserve, watersheds, conservation areas, natural habitats, grasslands, forests, wetlands, major parks and recreation areas.

RURAL PROTECTION BOUNDARY: *is the line that divides lands that have access to water and sewer infrastructure and lands that must rely on local water and septic solutions.* The Rural Protection Boundary is intended to retain rural and agricultural lands for appropriate rural uses and residential densities. The Rural Protection Boundary focuses urban levels of development, densities and services levels into Growth Areas. Rural service levels and appropriate uses are preserved within the rural protection area.



REGIONAL DISTRICT OF NORTH OKANAGAN REGIONAL GROWTH STRATEGY "One Region, One Future"



"I would like more protection of our waters (lakes, streams and rivers)" (Age 14, from the Youth Survey)

and the set of the second data of the

WHY IS THIS IMPORTANT?

Water is one of the most precious and important natural assets in the North Okanagan. Even though we are endowed with several large lakes, community watersheds and groundwater resources, the supply of clean, reliable water is inherently limited. Water shortages have already occurred in some areas of the North Okanagan and are expected to occur more widely and frequently in the future. Local residents, elected officials and Regional Growth Strategy working groups expressed that their greatest concern about regional growth is the availability and quality of water. Some are concerned about drought and water shortages; others about climate change, agricultural viability, economic development and increasing residential use. Balancing the water requirements of the environment, basic human needs, agriculture, irrigation, tourism, recreation and industry has become more of a challenge as more people live, work, and play in the North Okanagan.

()

 \square

GOAL WS-1: PROTECTION OF OUR GROUNDWATER

The Regional District of North Okanagan and member municipalities agree to work as partners and individually to:

- **WS-1.1:** develop policies, within the authority of local and regional government that will evaluate proposed developments based upon local hydrological conditions, access to long term water supply and an adherence to the precautionary principle.
- **WS-1-2:** consider adopting groundwater best management practices and policies, as they apply to local governments.
- WS-1.3: develop lot size policies that are based on local groundwater conditions so that the cumulative effects of development do not compromise the sustainability of the community.

The actions requested of other governments and agencies are:

WS-1.4: encourage the province and relevant parties to develop a regional groundwater quality and quantity monitoring program and undertake enhanced aquifer and groundwater limited areas mapping to be used in planning and approval decisions.





REGIONAL DISTRICT OF NORTH OKANAGAN REGIONAL GROWTH STRATEGY "One Region, One Future"





REGIONAL DISTRICT OF NORTH OKANAGAN REGIONAL GROWTH STRATEGY "One Region, One Future"



The Regional District of North Okanagan and member municipalities agree to work as partners and individually to:

- **WS-3.1:** collaborate on the development and implementation of a consistent full cost accounting framework (that includes the cost of construction, maintenance, operation, and replacement) for water and sewer infrastructure that reflects the true cost of delivering a long term sustainable service.
- **WS-3.2:** use local full cost accounting methods for water and sewer servicing as an integrated strategic tool for land use planning, development proposal evaluation, and infrastructure investment decision making.
- **WS-3-3:** discourage the approval of new water and wastewater utilities under private ownership. The evaluation of the liability of transfer to public ownership should be considered as part of the decision making process for allowing such systems.

The actions requested of other governments and agencies are:

- **WS-3.4:** the province and relevant agencies are encouraged to provide guidelines and/or best management practices to water and sanitary sewer providers, as well as local governments, for recovering the full cost of providing water and sanitary sewer services, including the environmental and resource costs.
- **WS-3.5:** the province and relevant agencies are encouraged to explore, and where feasible, implement equitable, effective and transparent groundwater licensing and pricing mechanisms that encourage efficient and sustainable use of this limited and valuable resource.





61

Ĩ

REGIONAL DISTRICT OF NORTH OKANAGAN REGIONAL GROWTH STRATEGY "One Region, One Future"



ENVIRONMENT AND NATURAL LANDS

"The best thing about living in the North Okanagan is the nature around us, the lakes, rivers, mountains and forest." (Age 14, from the Youth Survey)

WHY IS THIS IMPORTANT?

The North Okanagan is home to many diverse ecosystems, including wetlands, forests, lakes, rivers and grasslands. These ecosystems and the features they contain are valuable in their own right. They also provide important benefits. In addition to filtering pollutants, preventing erosion and controlling crop pests, many natural areas provide habitat for our plant and animal species. Open spaces and the natural environment make possible the many recreational activities and opportunities our citizen enjoy, the success of the tourism industry and the quality of life of residents. Growth over the last 20 years has impacted some of our most vulnerable ecosystems, our hillsides and our viewscapes.

The natural environment is one of the reasons that the North Okanagan is such a popular destination. When we asked the public what was the most important thing they valued about the North Okanagan, the overwhelming response was 'the natural environment and landscape, and the lifestyle and opportunities it provides' Local and regional governments have tremendous opportunities for environmental stewardship and providing a park system that is the best in British Columbia. However, the need to coordinate local and regional environmental initiatives and parks planning in the face of strong growth presents many challenges.

GOAL ENV-1: PROTECT OUR WATERSHEDS

The Regional District of North Okanagan and member municipalities agree to work individually and collectively to:

- **ENV-1.1:** develop consistent, integrated environmental policy that will protect water ecosystem function and conserve and enhance biodiversity and ecological services through the protection of ecological features and corridors, including floodplains, shorelines, stream and river systems, aquifers, wetlands and forested watersheds.
- **ENV-1.2:** create a Regional Foreshore Strategy, using foreshore inventory mapping, that will be incorporated into the application and permitting process for new and existing developments.

The actions requested of other governments and agencies are:

ENV-1.3: provincial and federal governments are encouraged to support the local and regional initiatives that protect watersheds, waterways and riparian areas.













MEMORANDUM

Okanagan Basin Water Board Regular meeting April 5, 2011 Agenda No: 7.3

File No. 0550.04

To: OBWB Directors

From: Corinne Jackson

Date: March 30, 2011

Subject: Okanagan WaterWise Action Plan – Update 2011

Okanagan WaterWise

The first Okanagan WaterWise Outreach Strategy and Action Plan was presented to and adopted by the Board in 2009. Please find attached an update to the original Action Plan, noting the achievements to date and focusing on plans for the coming year and beyond. The update includes a number of new tactics for reaching out to the public with our message of water conservation and protection, and is based, in part, on feedback provided by local government staff and other stakeholders in the Okanagan basin.

We are very pleased with the results and are looking forward to continuing our work with local government and stakeholders, encouraging the people of the Okanagan to join our efforts to ensure a healthy water supply now and into the future.

It is recommended that the board adopt the updated Action Plan.





One Valley. One Water.

ACTION PLAN UPDATE 2011

April 2011

Table of Contents

Introduction	3
Launch of the Okanagan WaterWise Program – Phase 2 (2011-2012)	
Internal Launch	-
External (Public) Launch	
Launch of the Okanagan WaterWise Program – Phase 3 (2012-2013)	6
Launch	9
Okanagan WaterWise Ongoing Communications	. 11

INTRODUCTION

The Okanagan Basin Water Board (OBWB) initiated its public education and outreach initiative, Okanagan WaterWise, in 2010 based on the creation of an **Outreach Strategy** and **Action Plan**.

Since then, the Water Board has developed and launched the Okanagan WaterWise website (<u>www.okwaterwise.ca</u>), a WaterWise Facebook page and Twitter page (which are continually attracting new "followers"). There has been public outreach conducted. And, a series of WaterWise banners were created and have been displayed in high traffic areas in 11 out of 13 Okanagan communities. The banners have been very well-received, and requested and used by a number of groups to be part of their display in various parts of the valley.

The WaterWise **Outreach Strategy** is meant to remain consistent and unchanging. It lays out the findings regarding the need for public outreach, the mission statement, goals, target audience, logo and positioning line.

The target audience is a "younger, more socially and environmentally aware demographic." The reason for this choice is that "initially, the program must rely on early adoption to gain traction from which to build the program out to the broader community over time."

The majority of stakeholders consulted, representing communities throughout the valley (including many with senior populations), agree with the above statement and direction of the strategy. At the same time, staff recognize that many Okanagan communities have very large senior populations. These communities are important partners in the OBWB and initiatives like Okanagan WaterWise. In response, staff will keep these demographics in mind when developing materials.

Whereas the Outreach Strategy remains consistent, the Okanagan WaterWise **Action Plan**, is designed to be fluent and adaptable. As such, some of the tactics have been completed or are ongoing. In addition, as a result of further staff research and stakeholder input, some of the tactics included in this update have been revised, others removed and new ones added. The tactics will be developed based, in part, on interest from stakeholders, funds available and staffing levels.

Okanagan WaterWise Action Plan – Phase 2 (2011-2012)

Please note the communication tactics, timelines and budgets proposed in the following action plan are presented as recommendations, to be considered fully and dependant on available budget and opportunities that arise. Input on tactical recommendations will be sought at every step of the way, ensuring the Board and other key stakeholder voices are heard.

INTERNAL LAUNCH - PHASE 2 (2011 - 2012)

Timeline

April 15, 2011 – June 15, 2011

Strategy #1

Engage members of various stakeholder groups to assist in the development and delivery of Okanagan WaterWise marketing pieces to the public.

Proposed Tactics:

- 1. Assign the WaterWise Communications Manager to gather committee to prioritize tactics that help deliver a water conservation message that can be adopted valley-wide.
- 2. Assign the Okanagan Water Stewardship Council Communications and Outreach Committee to assist the WaterWise Communications Manager deliver the program.
 - a. Ensure the committee includes students, business and political leaders, environmental educators, environmental planners, First Nations representatives, and others as the committee sees fit.
 - b. The committee will consider, create and execute outreach strategies within the community and in particular provide leadership, guidance and networking among their own peer groups.
 - c. The committee concept adds credibility and diversity to the various tactical outreach campaigns delivered to the community and reinforces the grass roots community-based principles of the program.
 - d. Create subcommittees, as necessary, to inform and develop particular tactics (e.g. editorial board sub-committee to plan and create an "Okanagan WaterWise Story/Radio Series."

Strategy #2

Create general awareness amongst key stakeholders and potential partners of the Okanagan WaterWise program; engage and excite them in the WaterWise vision.

Proposed Tactics:

1. Identify all key stakeholders and potential partners:

- a. Water Stewardship Council members, elected officials, Okanagan regional districts and local municipalities (including staff), irrigation/improvement districts, water-focused programs, potential corporate partners (Fortis, and Unilever for example), etc.
- 2. Continue to identify strategic partnership opportunities
 - a. with local organizations disseminating messages around water use to the public, and
 - b. with corporations/businesses looking to develop their own Corporate Social Responsibility (CSR) initiatives around water.
- 3. Continue to leverage existing communication channels available between these organizations/corporation and the general public of the Okanagan Valley.
 - a. Depending on the channel, gain access to these channels to distribute the Okanagan WaterWise message (e.g. Living Greener calendar, possibly expand to include Living Greener TV spots, bus banners).
- 4. Ensure key messaging is consistent:
 - a. Work with these organizations to streamline messaging, so one party's message isn't "diluting" another's, but instead augmenting it.
- 5. Leverage budget dollars:
 - a. Once strategic partnerships are formed, consider co-op advertising efforts, and
 - b. Share available budget dollars in order to get more out of each dollar spent.
- 6. Empower small organizations and further their communications efforts by providing consistent literature, developed under the Okanagan WaterWise program name (e.g. for Oliver, Spallumcheen, and Armstrong).

EXTERNAL (PUBLIC) LAUNCH – PHASE 2 (2011)

Timeline

Launch: April 15, 2011 - March 31, 2012

Strategy #1

Introduce Okanagan WaterWise and promote a general awareness of the program in the marketplace.

Proposed Tactics:

- 1. Build upon the Okanagan WaterWise website, adding additional pages on frequently asked questions (e.g. greywater use, rainwater collection, environmentally friendly ways to address hard water, etc.).
 - a. Add: Send to a Friend feature
 - b. Add: "How Blue Are You" survey
 - c. Add: Forum/Blog
 - d. Add: Photo submission functionality section for people to upload pictures of their water-saving ways
- Arrange printing, promotion and distribution of Okanagan Waterscape posters to the three Okanagan school districts and other educational facilities (e.g. Okanagan Science Centre). Promote the locally-created curriculum developed for the poster as a source of Okanaganspecific teaching material on local water issues.
- 3. Develop and launch Okanagan WaterWise print/radio series
 - a. Gather a series of articles related to Okanagan water issues to run in community newspapers in the Okanagan (primarily Black Press with strong circulation figures), and corresponding people to speak on AM1150.
- 4. Develop a media plan to support the launch of the Okanagan WaterWise website and drive traffic to the website (while at the same time driving broader awareness of Okanagan WaterWise)
 - a. Internet/social media ads (Facebook, Castanet)
 - b. Radio PSAs
 - c. Transit buses/shelters
 - d. Print ads
 - e. Others TBD (e.g. billboard)
- 5. Design/develop collateral materials to begin promoting Okanagan WaterWise more broadly.
 - a. Lawn signs Invite politicians to donate old campaign signs and put Okanagan WaterWise message stickers on them to help with cost and to stay in keeping with our message of conservation; the stickers would have a call to action to encourage conservation with the OkWaterWise logo, "One Valley. One Water.," and <u>www.okwaterwise.ca</u> address.

- The lawn signs can be part of, or in addition later to, a guerrilla marketing campaign to create an unexpected fun tactic that speaks to lawn watering/outdoor use in the Okanagan.
- Host a press conference with Okanagan media. Partner with high profile participants, preferably municipal mayors, regional district chairs to host. Distribute media advisory and prepare and distribute news release.
- 6. School curriculum
 - a. Develop a curriculum based on the Okanagan Water Supply and Demand Study findings, the Okanagan WaterViewer and "Where's your water from" app. Post material to Okanagan WaterWise website.
 - Goal: to provide Okanagan educators with up-to-date, practical and hands-on tools to use with their students to better understand regional water issues.
 - Students and educators will be better informed of water issues, making it more likely that they will wise choices regarding water in the Okanagan.
 - Students will be better equipped to become ambassadors of the Okanagan WaterWise message, sharing it with their friends, family, neighbours and coworkers.
 - The "Where's my water from" app is being developed by BCIT students. Using GPS, students are developing a web-tool that will allow users to type in their physical address and trace it to their water source. The goal is to foster an appreciation for and protection of our water sources.
 - The Okanagan WaterViewer is a web-tool being developed out of the OBWB's Water Supply and Demand Study. The tool will allow users to look at water supplies and licences in the valley, and look at future scenarios of water availability based on climate change and population growth.
- 7. Water bills
 - a. Work with Okanagan water utilities and schools to bridge the water conservation message.
 - Encourage utilities to provide space on their bills to include a message from Okanagan WaterWise. Invite youth to write short poems (e.g. haikus, or poems with a certain number of syllables/words) to keep them consistent. The poems would be about water, conservation, xeriscaping, sustainability, or similar themes. The poems would be accompanied with the first name, age and community the contributor is from, as well as the website address for OkWaterWise.
- 8. Youth forum
 - a. Organize and host a forum to engage youth leaders, identified by school teachers in the Okanagan, to learn about Okanagan water issues, and inspire them to lead water conservation and protection measures in their school and community.
 - Create a roster of youth who can join Team WaterWise in their community.
- 9. Create TeamWaterWise partnerships with Okanagan communities
 - a. Work with Okanagan communities to train, monitor and engage Okanagan youth in public outreach efforts around water issues.
 - Purpose: help deliver a united "One Valley. One Water." message in the Okanagan.

- Such partnerships would assist those communities who have abandoned public outreach because of lack of resources.
- The partnership would also allow Okanagan WaterWise to share outreach materials (e.g. booth display).

LAUNCH - PHASE 3 (2012 - 2013)

Timeline

Launch: April 1, 2012 – March 31, 2013

Strategy #1

Begin the process of informing the Okanagan public about the responsible use of water.

Proposed Tactics:

- 1. Recruit Team WaterWise members throughout the valley.
 - a. Goal: to unite community members to participate and share the WaterWise message on behalf of the entire community.
 - b. Both the literal, on-ground embodiment of the WaterWise program and symbolic reflection of the community itself, Team WaterWise would deliver the on-ground message at community events and functions.
 - c. Students (suggest team of two 1 male, 1 female) would comprise Team WaterWise and be clad in Team WaterWise T-shirts (see initial design below) and hand out promotional material.
 - d. Volunteers could also join with Team WaterWise and help hand out promotional items.
 - e. Work would entail manning booths and attending local functions on behalf of WaterWise.
 - f. It is recommended that physical display materials be developed for static use at events throughout the Okanagan. (See Proposed Tactic #3 below for more details.)
 - g. Again, this inclusion of all members of the community as participants in the WaterWise program rather than simply passive recipients of the message will further reinforce the community-focused vision of the outreach strategy as community members share the responsibility of advancing the WaterWise message among their friends, family and coworkers.

Initial T-Shirt Design



- 2. Launch Team WaterWise (conservation ambassadors) (June to August 31)
 - a. Public outreach
 - Have youth in various Okanagan communities "catching people in the act" of water conservation. Focusing on rewarding good behavior.
 - Initial interest from Fortis BC in teaming up in areas where they operate (i.e. Central and South Okanagan and include energy conservation as well). Potential to approach BC Hydro to team up in the North Okanagan.
 - b. Public events (June to August 31)
 - Have youth/Team WaterWise operate a booth with an interactive display at various community events, providing basic information on Okanagan water issues, giving out prizes and encouraging people to visit the OkWaterWise website for more info.
- 3. Develop collateral materials for Team WaterWise
 - Create door hangers or print on reusable cloth bags "I'm with Team WaterWise" for ambassadors to place on people's doors, acknowledging conservation and giving a prize;
 - b. Create an interactive booth game/display for community events; and
 - c. Arrange useful giveaway prizes with <u>www.okwaterwise.ca</u> web address (something fun and functional that is outdoor water focussed).
- 4. Launch a WaterWise neighbourhood challenge
 - a. Hold a challenge within a neighbourhood with a few homes who agree to go WaterWise and the same number who agree to maintain their current watering methods.
 - Goal: to hold a friendly challenge, making it fun but showing what is possible with a WaterWise home and landscape.
 - Initial interest from WaterKind in helping with the challenge.
- 5. Initiate Guerrilla Campaign
 - a. Create strong, impactful visual campaign to communicate that the average Okanagan resident needs to reduce outdoor water use. Secondary message: the average Okanagan resident uses more than two times the amount used by the average Canadian, and yet we have less available than nearly anywhere in Canada. Combat the misconception around availability of water.

Examples of fun and effective guerrilla tactics: 1) Denver Water's running toilet. Someone in toilet costume appears at local football games and other sports events and is tackled by security. The message: "Stop running toilets." Also, speech bubbles put on public lawns suggesting the grass is making silly comments. Part of Denver Water's "Grass is dumb" campaign, encouraging people to water 2 min. less each day because grass is dumb and won't know the difference.

- Goal: to create a strong, impactful visual display to communicate how much water on average an Okanagan resident uses per day (to combat current misconceptions around the availability of water)
- Depending on the campaign, it may require little manning, or it may require the help of Team WaterWise co-op students/volunteers

Okanagan WaterWise Ongoing Communications

Timeline – PHASE 4 (April 1, 2013 – March 31, 2014)

Strategy #1

Continue to build general community engagement in Okanagan WaterWise throughout the Okanagan Valley community.

Strategy #2

Drive increased awareness of issues surrounding water use throughout the Okanagan Valley, and begin to work with Okanagan businesses and educate the Okanagan public about the need for responsible water use.

Proposed Tactics:

- 1. Blue Certified Business Program
 - a. Launch Blue Certified Program
 - Goal: to drive engagement of businesses and schools in Okanagan WaterWise
 - We recommend developing a Blue Certified standard for businesses and schools based on acceptable water usage standards. These organizations (through their employees in the case of businesses, and students, in the case of schools) can use the information and suggested initiatives available on the site to improve water efficiency.
 - Businesses or schools wanting to become "Blue Certified" would contact Okanagan WaterWise, and prove they meet criteria (to be developed by the OBWB/WaterWise Strategic Communications Manager and others e.g. Green Step Certification, Institute for Green Business Certification, Fortis); If they qualify, they would be presented Blue Certified Window Sticker/Decals to demonstrate their business is "Blue Certified."
 - Blue Certified business/schools would also receive the "Blue Certified" by Okanagan WaterWise logo to place on their website and other communications material, to further the efforts of Okanagan WaterWise.
 - Local businesses and schools would be encouraged to pledge a commitment to sustainable water management in their businesses (which will cascade to employees'/students' level of awareness around responsible water management at home, too).
- 2. Landscape/Irrigation workshops
 - a. Explore partnerships with the Irrigation Industry Association of BC, City of Kelowna and similar organizations to support workshops for landscape and irrigation companies to learn the newest and most water efficient methods to operate.
 - Organize a workshop in the Central Okanagan, and possibly North and South Okanagan.
 - Partner with communities leading the way, like City of Kelowna, and irrigation companies like WaterKind.

- 3. Events/Displays
 - a. All on-ground outreach campaigns must include participation in high profile, relevant community events.
 - b. In addition, high impact informational displays in high traffic locations throughout the Okanagan will help reinforce the WaterWise message
- 4. Develop a "One Simple Act"/ "One Day"
 - a. Team WaterWise would drive awareness around a community-wide program that would see community members celebrate what they do every day to conserve water and maintain water quality
 - b. A local campaign could provide content around simple ways to make a difference, and host contests and challenges to engage the community at all levels (for example, pit industries against each other, to award "Most WaterWise Bank", "Most WaterWise Marketing Company", etc.), where participants would need only report their watersaving ways to the One Simple Act website to increase their rating and therefore chances of winning
 - c. Contests and challenges would be supported by radio promotions/partnerships with local media
 - One Day is a campaign currently running in the City of Vancouver, with its purpose being to make it easy for residents to reduce energy use. The goal: making Vancouver the greenest, cleanest and healthiest city in the world.¹

The theory behind One Day is transportable to the Okanagan WaterWise program, as it provides a vision for what it would be like "one day" to live in a community where all community members understand the importance of responsible water management, and use water appropriately to maintain both quality and quantity.

• One Simple Act is being executed in Alberta, and encourages Albertan's to engage in the campaign by "doing the small things" that will make a big difference on Alberta's environment.²

A similar campaign could be developed in the Okanagan, inviting Okanagan residents to make a commitment to sustainable water choices; Also, invite them to join a Facebook group, visit YouTube, post/view Photos, follow us on Twitter, etc.

- 5. Launch Okanagan WaterWise Pilot Project in an Okanagan School:
 - a. Working with an Okanagan School District, team up with a school, an irrigation auditing company, and irrigation supply companies to retrofit a school.
 - b. Engage children in assisting with the audit, learning about water waste and conservation.
 - Goal: While a great deal of effort can be invested in educating an adult audience, perhaps the most receptive consumers of the WaterWise message are children. As the future beneficiaries of OBWB's work, children are untainted by "old habits" and keen to participate and embrace new ideas. They also represent a direct communications line to parents and teachers. Children can take a direct leadership role in helping to make their own schools more water efficient.
 - c. Would include educational visits by WaterWise, speaking to students and advocating the benefits of responsible water management.

¹<u>http://vancouver.ca/oneday/</u>, accessed November 5, 2009.

² <u>http://www.onesimpleact.alberta.ca/</u>, accessed November 5, 2009.

- d. Would include a news conference at the launch of the project and at the end of the project. before and after the pro
- e. In the final analyses, this youth component of the program is perhaps one of the most important components of the entire outreach strategy and over time may prove to be the most effective advocates and influencers of water management in our community.