

OKANAGAN WATER STEWARDSHIP COUNCIL

A Technical Advisory Body to the Okanagan Basin Water Board

MINUTES OF A MEETING HELD ON THURSDAY, MAY 13, 2010, AT THE KELOWNA AND DISTRICT FISH AND GAME CLUBHOUSE, 4087 CASORSO ROAD, KELOWNA, BC

COUNCIL MEMBERS:

Present

UBC Okanagan	Bernie Bauer, Chair
Agriculture & Agri-Food Canada, Research Branch	Denise Neilsen
BC Agriculture Council	Hans Buchler
BC Fruit Growers Association	Lorraine Bennest
BC Ground Water Association	Doug Geller
Canadian Water Resources Association	Brian Guy
Ministry of Environment, Water Stewardship	Conrad Pryce (alternate)
Ministry of Environment, Fish and Wildlife Science	Steve Matthews
Oceola Fish and Game Club	Lorne Davies
Okanagan College	Douglas MacLeod
Okanagan Nation Alliance	Gwen Bridge
Osoyoos Lake Water Quality Society	Mark McKenney
Shuswap Okanagan Forestry Association	Kerry Rouck
Regional District North Okanagan	Laura Frank (alternate)
Regional District of Okanagan-Similkameen	Jillian Tamblyn
City of Kelowna	Mark Watt
Water Supply Association of BC	Toby Pike (Alternate)

Regrets

BC Cattlemen's Association	Lee Hesketh
Community Futures	Don Main
Environment Canada – Pacific & Yukon Region	Dan Millar
Interior Health Authority	Rob Birtles
Ministry of Agriculture and Lands	Ted van der Gulik, Vice Chair
Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
Regional District of Central Okanagan	Chris Radford
Urban Development Institute	Bal Poonian

STAFF:

OBWB, Water Stewardship Director	Nelson Jatel
OBWB, Office and Grants Administrator	Genevieve Dunbar
OBWB, Communications and Research Coordinator	Corinne Jackson
OBWB, Outreach and Education Assistant	Amanda Cadorette
OBWB, Outreach and Education Assist./O&G mat Iv.	Melissa Teche

GUESTS:

University of Lethbridge / University of South Australia	Henning Bjornlund
Texas A&M University	Ronald Griffin
UBC Okanagan	John Janmaat
Astral Media (AM1150)	Phil Johnston
BC Agriculture Council	Christine Dendy
BC Fruit Growers Association	Denise MacDonald
Global Television (CHBC)	Klaudia Ceglarz
Kelowna Capital News	Judie Steeves
Lake Country Environmental Society	Carmen Stanek

1. CALL MEETING TO ORDER

Chair Bauer called the meeting to order at 12:59 p.m. and welcomed members and guests.

Mr. Jatel provided an update on some of the programs the OBWB is currently working on. The Water Board is working with Brian Guy of Summit Environmental and Insight Environmental's Kellie Garcia to develop an application to NASA to do some remote sensing that will look at environmental flows, but also how it can help fish habitat. A meeting to discuss the proposal is planned for May 20 in Washington with project partners and stakeholders.

Dr. Bauer noted that he is also assisting on a project that is aimed at connecting social science to local water users (water overseers, planners, etc). There will be a series of discussions and keynote speakers in late August, early September. It will be held simultaneously at University of Victoria, University of Northern BC, and UBC-O.

2. PRESENTATIONS

Dr. Ronald Griffin, Water Resource Economist, Department of Agricultural Economics with Texas A&M University
Water Economics

Dr. Griffin began his presentation noting that it is hard to cajole people into doing the right thing. However, water markets (WM) – the selling and trading of water rights, create a number of benefits, including allowing people to adjust, he said.

WM enable appropriate growth to continue, it curtails the need for water supply development and the value of water is revealed, added Dr. Griffin.

In the case of Texas, which borders on three other states and Mexico, it became important to know what they had to be able to share water across the boundaries. This is where WM were useful.

The case of Lower Rio Grande Valley

The need for water markets was revealed after a lawsuit was filed between water systems. It took 15 years to settle and led to the market system. Municipal rights have the priority to a certain volume per year, and agricultural rights come after, sharing what's left over. There is strict monitoring, Dr. Griffin added.

In the Lower Rio Grande Valley, sales and leases of water are common. WM have enabled tremendous population growth but there have been no new reservoirs required in decades. Less than 80% of water rights are now dedicated to urban use and this has created no problems, Dr. Griffin continued.

Another area of contention that had to be addressed was groundwater, where overlying landowners had largely unlimited water access and where recharge to the aquifers was unreliable. The issue was further complicated in the context of the Endangered Species Act and with the need to protect the animals that relied on groundwater sources. As a result, a new authority was struck and people had to submit information showing how much they had been drawing so that the authority could quantify water use. Today, sales and leases are common.

Dr. Griffin suggested that for a water scarce region, the Okanagan is not walking the talk. He said that he wasn't sure if the area was ready for water markets and allowing water transfers when so many are still on a flat rate system. He then asked what we're going to do if not water markets and noted that something will have to be done.

Dr. Henning Bjornlund, Canada Research Chair in Water Management and Policy with University of Lethbridge / Assoc. Research Professor with University of South Australia
Water Markets in Okanagan – Equity and Economic Efficiency

As a result of climate change, we are going to see warmer winters and warmer drier summers. In turn, this will result in increased demand for crop water. There will also be less snow and more precipitation.

Scarcity is going to be an issue, stated Dr. Bjornlund.

The Okanagan has time to think about its actions, unlike Australia which had to act in a reactive, panicked way, he noted.

The challenges facing the Okanagan, said Dr. Bjornlund is the dominance of capital intensive plantings that are dependent on water (e.g. grapes, etc.). Also, the region's economy is heavily dependent on water quality and flow for recreation, lifestyle and tourism.

Conflicts over scarcity are inevitable, said Dr. Bjornlund, predicting that this will come to a head in 10 to 15 years and we will have to make some hard decisions. Adaptive and robust institutions are needed now to deal with future allocation issues, he suggested.

The WM system – having buyers and sellers – is considered the best way to make hard decisions. But to work, one must define what waters are not allowed to be traded. Water is an emotional issue and there will always be opposition, he warned, but added there is no risk to human rights.

In order to introduce water markets, Dr. Bjornlund suggested, one must: 1) develop an adaptive planning processes involving key stakeholders, 2) define protected water to secure environmental and other public interests; 3) define the consumptive pool of water; 4) introduce markets in water – permanent long term ownership, as well as short term use, and 5) reform water right structures to maximize market operations based on priority or proportional access – or a mixture.

Locally sensitive solutions are necessary, he added. However, it is inevitable so it's better to start now.

Dr. John Janmaat, Environmental/Resource Economist, Appointed Chair of Water Resources and Ecosystem Sustainability with UBC – Okanagan
First in Time, First in Right – What does it mean for the Okanagan?

FITFIR means whoever has the earliest licence has the first right to water allocation, Dr. Janmaat explained. It is a water allocation system and it would be used in a drought situation, so we do have something in place. However, there are some interesting implications with this system that people need to be aware of, he added.

The whole Okanagan is connected. So under the current system, if we are in a drought situation, a senior licence holder downstream will have priority and any junior licence holder upstream would be required to yield to meet the downstream senior licence holder's needs.

Water uses have been prioritized, noted Dr. Janmaat, adding that his research shows that agriculture is senior and institutional use is at the bottom, most likely because it holds the most junior licences.

The province is currently modernizing its Water Act and some people have come out saying we need to keep FITFIR. However, under FITFIR, Dr. Janmaat said his study shows that Osoyoos will always have water since it has senior licences. Oliver on the other hand could be forced to reduce water use early to ensure Osoyoos gets what it is legally entitled to. Is this fair, he asked.

FITFIR is a drought management system, but we need to ask if the results are what we want, Dr. Janmaat said. Do these results make the best use of water when it is scarce? Is there an acceptable alternative? These are the types of questions that need to be considered, he concluded.

In response to the presentations, Mr. Buchler said he is uncomfortable with water being owned by an individual and that it belongs to the ecosystem as a whole. Dr. Bjornlund said that it is best to sort out such issues before we are in a panic over water. If we want agriculture preserved this needs to be agreed to at the beginning.

Dr. Griffin assured Mr. Buchler that that there will always be water to drink. Drinking water accounts for such a small proportion of what we use, it doesn't actually figure into water allocation, he added.

Dr. Janmaat responded, saying that we're not in a crisis situation right now, but it could be in the future. The question is do we like the current system of allocating what is left or do we want to change it, he noted.

Mr. Buchler went on to say that water markets are not in the interest of ecosystems and human rights and will make it difficult for people who are disadvantaged. Dr. Bjornlund said that he suggests that those rights be looked after first, but that WM are a mechanism to use the water that is available for use.

In response to questions around FITFIR versus WM, Dr. Bjornlund said that with WM one can pay people out for their licence. Under FITFIR there will continually be junior licences as well as unused licences and over allocation.

Ms. Tamblyn asked if WM allow environmental and social needs to be addressed first. Dr. Griffin responded that Texas has adopted drought triggers. So when a well reaches a certain elevation that might threaten various needs, everyone's water allocation drops down a certain amount to look after spring flows. Based on the current system in Texas, there will be additional stress on the environment but that's not a problem with WM but with the way the WM was designed, added Dr. Griffin, saying that planners can make sure that the environment is cared for from the outset.

Dr. Neilsen said she disagrees with using water as a tool to determine what crop should be grown. The province has an Agricultural Land Reserve, and we know what our water requirements are. A market tool to correct behaviour is unnecessary, she said.

Ms. Bennest added that limits are already in place based on the economic value of a crop, and the type of land you have.

If we get into selling off water, said Dr. Neilsen, we could end up limiting what we can grow.

Dr. Janmaat responded saying it is still important to determine how we move water around. The ALR is not stagnant – land does get removed. Much of the region's water is not allocated, but what happens in 35 years when the snowpack is low, we don't have water storage and we are facing population growth, he asked.

Mr. MacLeod asked about the possibility of speculators, in the event of a drought, selling water rights at inflated prices to a municipality. Dr. Griffin responded that municipalities are interested in risk aversion and already own water licences and are not normally looking to purchase water rights when there is already a drought. Generally they overinvest in water rights to make sure they are covered in times of drought, he added. On the flip side, municipalities are usually not interested in leasing their own water rights when they have an opportunity to do so and make some of their money back, Dr. Griffin added.

Mr. Pike noted that scarcity is what drives water markets. In the Okanagan, the sub-basins are challenged by various water availability. The South East Kelowna I.D. Board of Trustees struggles with our willingness to sell water to our neighbours, but then what if there is no guarantee of water next year. We see that by holding onto water not being used this year, it is available to us for next year. Dr. Griffin said internal transactions work and in water short years, lease prices go up. Where it is difficult though, is leasing between districts he added.

3. ADOPTION OF MINUTES

3.1 Minutes of a regular meeting of the Okanagan Water Stewardship Council held April 8, 2010, at Kelowna and District Fish and Game Club clubhouse, Kelowna

Moved by Denise Neilsen

Seconded by Doug Geller

“That the minutes from the April 8, 2010 meeting of the Okanagan Water Stewardship Council be approved.”

CARRIED

4. ROUND TABLE – MEMBER UPDATES

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

- Mr. Matthews: Phase 1 of a large scale river restoration project in the South Okanagan – 10 years in the making – is done. The work became necessary because of development in the area. Okanagan Nation Alliance was a big partner on this. A ceremony is planned for June 5, 11 a.m. to noon.
- Dr. Neilsen: The CWRA conference is all set for Vancouver in June. Please register.
- Dr. Guy: Phase 2 of the Okanagan Water Supply and Demand project is drawing to a close after three years. A technical summary of the project is almost complete and should be finalized by the end of the month. A significant portion of this year’s CWRA conference will look at the OWSD study.
- Ms. Tamblyn: We’ve had some interesting applications come into RDOS. One was someone wanting to have their land put into the Agricultural Land Reserve in order to get water for their grapes from a municipality. The application was supported by the APC because they wanted to see the water go to agriculture instead of development, however the area is environmentally sensitive.
- Ms. Frank: Last week the RDNO board passed a recommendation for a Shuswap River management plan.
- Mr. McKenney: We’ll be hosting a town meeting in Osoyoos May 20 on the OWSD study at 7 p.m. We have been advertising the meeting on both sides of the border and are hoping for a strong turnout.
- Ms. Jackson: We’re very happy to have Melissa Teche and Amanda Cadorette join us to help launch the OK WaterWise program. We are looking to hold meetings with various groups throughout the Okanagan to make sure there is no duplication but that we are working together to deliver an effective water conservation and protection message.
- Dr. Janmaat: We have received water survey results from 300 Kelowna households and are now looking forward to seeing the results.

Mr. MacLeod exited the meeting.

5. NEW & UNFINISHED BUSINESS

5.1 Ministry of Environment – Drought Planning update

Mr. Pryce gave an update on the province's Drought Management Plan, noting that the province is looking to work more closely with the OBWB as part of its plan in the Okanagan.

In 2009, the ministry identified key streams that may experience drought, what activities were necessary and who was responsible. This year, for the first time, the province is looking at levels of drought. There are four stages that would be used to determine actions that are necessary to address drought.

As drought conditions worsen, the province will look at what impact it might have on fish, the number of licensees affected, the type of crops impacted, the economic impact to agricultural users and types of regulation that can be expected.

The OBWB's drought webinars this year have resulted in a better sharing of information between purveyors, municipalities, the provincial and federal government, noted Mr. Pryce. And, he added, kudos to purveyors like SEKID and GVWS which have initiated water restrictions in anticipation of drought conditions.

Ms. Tamblyn noted that it is interesting to hear so many people talking about the water situation this year, people who would not normally be so aware.

Mr. Pryce responded saying most people will cut back their water use if they know there is an issue, but communication is going to be important.

Ms. MacDonald added that this communication needs to reach farmers, but it can't come from government staff. It should be students, or someone who they can relate to better.

Mr. Davies noted that there seems to be a disconnect between the irrigation districts where people in some areas don't seem to realize the current water situation and that some areas are already on water restrictions. Better communication will help address this.

5.2 Hydrometric monitoring sub-committee

Mr. Jatel reported that the board is interested in improving hydrometric monitoring in the Okanagan. However, it was mentioned at a recent conference in Whistler that hydrometric monitoring is supposed to be cut this year.

The Stewardship Council's subcommittee that is looking into this matter for the board will be meeting in the coming weeks and will be talking with the province about the importance of such monitoring in this region. The subcommittee will also be looking at other directions it can go in to increase the number of monitoring stations.

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

Mr. Jatel said that Mr. Guy is looking at how remote sensing can complement some of the hydrometric monitoring needs we have in the Okanagan. There are some opportunities to pursue.

Mr. Guy added if we can improve our OWSD models with remote sensing data that could be very valuable.

6. NEXT MEETINGS

The next meeting of the Okanagan Water Stewardship Council will be held June 10, 2010 at Kelowna and District Fish and Game Club clubhouse. Guest speaker Dr. *Jim Stronach* will be

presenting some of the findings from his limnology work on Okanagan Lake, in part telling the story of the lakes water movement in the depths, on the surface and along the foreshore.

7. ADJOURNMENT

The meeting was adjourned at 4:53 p.m.

Moved by Lorraine Bennest

“That there being no further business, the meeting of the Okanagan Water Stewardship Council of May 13, 2010 be adjourned.”

CARRIED

CERTIFIED CORRECT:

Chair

Executive Director