

OKANAGAN WATER STEWARDSHIP COUNCIL

A Technical Advisory Body to the Okanagan Basin Water Board

MINUTES OF A MEETING HELD THURSDAY, October 9, 2014, AT BEST WESTERN INN, 2402 HWY. 97N, KELOWNA, B.C.

COUNCIL MEMBERS:

Present

Agriculture & Agri-Food Canada, Research Branch
Assoc. of Professional Engineers & Geoscientists of B.C.
BC Agriculture Council
BC Fruit Growers Association
BC Ground Water Association
BC Wildlife Federation – Region 8
Canadian Water Resources Association
City of Kelowna
Environment Canada – West and North
Interior Health Authority
Okanagan Collaborative Conservation Program
Regional District of Okanagan-Similkameen
Regional District of North Okanagan

Denise Neilsen
Don Dobson, Chair
Hans Buchler
Denise MacDonald
Remi Allard
Doug Flintoft
Brian Guy
Jason Ough
Ian Rogalski
Judi Ekkert (alt.)
Carol Luttmmer
Evelyn Riechert
Anna Page

Regrets

BC Cattlemen's Association
B.C. Ministry of Agriculture
B.C. Min. Forests, Lands, Natural Res. Ops. (Ecosystems)
B.C. Min. Forests, Lands, and Natural Res. Ops. (Resource Mgmt)
B.C. Water Supply Association
City of Vernon
Fisheries and Oceans Canada
Okanagan College
Okanagan Forest Sector
Okanagan Mainline Real Estate Board
Okanagan Nation Alliance
Regional District of Central Okanagan
Regional District of North Okanagan
UBC Okanagan

Lee Hesketh
Andrew Petersen
Grant Furness
Ray Reilly (alt.)
Toby Pike
Rob Dickinson
Doug Edwards
Leif Burge
Kerry Rouck
David O'Keefe
Natasha Lukey
Margaret Bakelaar
Jen Miles (alt.)
Bernie Bauer

STAFF:

OBWB, Executive Director
OBWB, Water Stewardship Director
OBWB, Office and Project Manager
OBWB, Communications Director
OBWB, Intern, UBCO Student

Anna Warwick Sears
Nelson Jatel
James Littley
Corinne Jackson
Ted Wannop

GUESTS:

AF Consulting Ltd,
BC Wildlife Federation – Region 8
B.C. Min. Forests, Lands, Natural Res. Ops.
Capital News
BC Min. Forests, Lands, Natural Res. Ops. (Ecosystems)
Regional District of Okanagan-Similkameen
Regional District of Okanagan-Similkameen
UBC Okanagan
UBC Okanagan
Westcoast CED Consulting

Natasha Neuman
Tricia Brett
Eva Antonijevic
Johanna Faccini
Lorne Davis (alt.)
Shaun Reimer
Jennifer Smith
Richard McLeary
Zoe Kirk (alt.)
Graham Watt
Grace Fan
Craig Nichol
Karol Hansma

1. CALL MEETING TO ORDER

Don Dobson called the meeting to order at 1:00 p.m. and welcomed members and guests. Each person introduced themselves.

2. APPROVE AGENDA

**Moved by Ian Rogalski
Seconded by Doug Flintoft**

***“That the agenda for the October 9, 2014 meeting of the Okanagan Water Stewardship Council be approved.”
CARRIED***

3. ADOPTION OF MINUTES

Minutes of the September 11, 2014 Okanagan Water Stewardship Council meeting held at the Best Western Inn in Kelowna.

There were a couple of small amendments noted, as follows:

- On page 9, there was a reference to the Ecological Action Fund. The correct name for this program is the EcoAction Community Funding Program, as pointed out by Ian Rogalski.
- Evelyn Riechert noted that her last name was misspelled in a number of spots. This was noted and changes made to the Sep 11, 2014 minutes.
- Denise MacDonald noted that the date of the Pacific Agri-Food Research Centre’s open house celebrating the 100th Anniversary was wrong. The correct date was October 4th not October 24th. Sorry for any inconvenience this may have caused.

**Moved by Lorne Davis
Seconded by Evelyn Riechert**

***“That the minutes from the Sep, 11, 2014 meeting of the Okanagan Water Stewardship Council be approved as amended.”
CARRIED***

4. BOARD REPORT—Dr. Anna Warwick Sears

Dr. Warwick Sears provided an update on the most recent board meeting. The really big news was that the OBWB’s Water Management Program has been renewed for a 4-year term. OBWB has funding and staffing available to continue with their programs. Everything they do at the water board besides sewage grants and milfoil control got reapproved. The 2015/16 budget was passed and OBWB is ready to move forward with their next round of planning. With the budget approved, all of the renewals in place and some little bits of local seed funding; OBWB is ready to start on some new ‘big’ things.

At the meeting there was an update on the development on the project at Okanagan Falls with Tricia Brett and Natasha Neumann. The three of

them are trying to come up with a project and funding to use lab facilities at UBCO and local research expertise to look at the endocrine disruptors in the waste water outfall in Okanagan Falls. Right now the outfall goes directly upstream from new Sockeye spawning habitat and also directly upstream from Vaseux Lake and there is concern among the local communities about this. Okanagan Falls want to build a treatment wetland to discharge into but so far have not been able to do it because of some miscommunications with Environment Canada. This is being worked on. The project being worked on focuses on water quality testing and getting the baseline information needed (baseline risk analysis). The project is not up and running yet but it is a project that is in development.

There were a bunch of zebra and quagga mussel updates. OBWB is continuing its correspondence with senior government officials. They Mayor of Vernon had an opportunity to meet with Gail Shea, Federal Fisheries and Oceans Minister, following which she called up OBWB requesting all copies of correspondence on zebra and quagga mussels. The package is 69 pages of correspondence over the last two years mostly between OBWB and other senior government agencies but also local government correspondence. Some work is getting done. Matis Hurbert is the one employee with the government that is working on zebra mussels. He is able to work on some training with border agents to help them identify mussels. This is something that they want to be able to do but are waiting on approval of federal legislation to be able to do this. There is some very preliminary training being done and preliminary work being done on perimeter defense in order to keep mussels out of the province. The early detection and rapid response plan that is going on is for all invasive species and the zebra and quagga mussels have gotten caught up in that and it will take some time for the plan to be approved and implemented. The Kelowna Chamber of Commerce took a motion to the National meeting and nationally the Chamber of Commerce’s of Canada are asking the Federal government to enact legislation to empower FAA to stop boats carrying mussels. UBCM had a similar motion. More and more noise is being generated from all sorts of groups on the mussel issue.

D Dobson—has there been any update on the situation in Manitoba. *J Littlely*—the potash did not work and they have confirmed the presence there. It is his understanding that they are not requiring decontamination of boats leaving Lake Winnipeg yet so there is still the possibility that they will leave Lake Winnipeg with water and dump it into

another water body. He does not believe that Manitoba has any inspection stations yet. The only inspection stations in Western Canada are at the Alberta border and they are seasonal. They are sharing mussel sniffing dogs with one of the States (Montana). They have caught about 12 infested boats this year since about May at the Alberta station.

N Jatel—one of the things that happened at the Board meeting that was quite interesting was that OBWB has directed the Council, for the first time, to work on a topic of particular interest to OBWB. They have passed a motion to that extent. They have asked OWSC to focus in on Valley wide drought management planning which is of key interest to the Board. This directive will drive some of the OWSC's agendas moving forward. The Board is looking for OWSC to provide some technical guidance on drought management planning.

5. DISCUSSION: Draft Council Work Plan 2014-15—Nelson Jatel

The Draft Council Work Plan 2014-15 was circulated last month [September]. All recipients had one month to review the document and provide feedback. The document has since been updated and it was resent last Friday [October 3]. Mr. Jatel reviewed the Plan noting that there were not many changes but he wanted to respond to some of things that were talked about at the last meeting. There are a couple of messages at the beginning from Don Dobson and Nelson Jatel about what they are trying to accomplish in this document which is to ground a conversation about where the committee structures are, both within OWSC and with OBWB and staff.

The Work Plan brings together a number of pieces into one document. They were able to draw from the OBWB Strategic Plan 2014-19, OWSC Governance Manual, OWSC Terms of Reference for 2006, and a couple of other documents. The Work Plan then looks at the role of the Board and how it relates to staff and OWSC. Chapter 1 is the operational context for the committees to be formed. Chapter 2 talks about the priorities that have been discussed in the past and it puts them into the context of committees. The one thing that has been added that was not in the previous version is a section on the Agricultural Water Reserve Committee. That committee has decided they want to meet which needs to happen in the next little while and have a discussion about where they go from here. Three new committees have been formed and they all met in the morning: Groundwater, Water Pricing, and Environmental Flows. Earlier this year, flagship projects were discussed. These committees will meet a little less

regularly, probably quarterly, and will be dealing with source water protection, water governance and wetlands. These are the six committees highlighted in the document and provide an opportunity to have a discussion about "Where do these fit within the broader governance structure. The committees will be formulating their own scoping documents and bringing product to the Council.

Discussions around the Work Plan

D MacDonald—in light of the directive to look at drought management planning, how does that fit into what the scope of this document is? *N Jatel*—what we will probably do is have that as part of the water governance section, so it will be a flagship. Or, we will create a new flagship. We can't change (wouldn't want to change) the scope of the environmental flow committee to take on drought planning.

E Riechert—discussion of timing and location of committees. People from away find it difficult to get to a 9 a.m. meeting. What are some of the alternatives? Concurrent sessions, conference calls, etc. *N Jatel*—one way we can address the issue is to utilize the conference call in order to get everyone involved. The committees need to meet in a smaller meeting room and he will look into that for next month. Staffing issue is the problem with concurrent sessions going on. One of the things that he has heard strongly from many is that they don't want to have committee meetings on a separate day. However, it is becoming apparent after this morning that committees will need to meet for more than just an hour if they are going to accomplish their goals between now and April. They will try and utilize the conference call system next time and see if they can get more involved in the conversation.

N Jatel—are there any pieces in the document that are unclear or is anything missing within the document. One of the things that the leadership team (Chair, Vice Chair and past Chairs) requested was to have one document that grounded the Board/Council/Staff and the relationship between them. It is intended, in part, to be a governance document for the Council.

G Fan—the term water pricing is confusing. What we are really talking about is water resource rents so why wouldn't the committee be called that? It should be tightened to better reflect what it is. *N Jatel*—this was something that was discussed in the committee meeting.

D MacDonald—discussion on process for consensus of different issues. How does this group reach consensus? i.e., silence and nods. Is that what is considered agreement? Need to have

that outlined. *N Jatel*—those are the details that we want to pull together. *A Warwick Sears*—in the terms of reference doesn't it say that the Council seeks consensus but doesn't necessarily have to achieve consensus. *N Jatel*—it wasn't included in this document so it needs to be pulled into it. *D Macdonald*—for example, if the room is asked if they are in agreement with an item/issue, how is this measured? *N Jatel*—that is one of the appendices so we need to turn that into a section of the document so it is up front and not buried in the appendix.

N Jatel—note, this Council is designed and set up to be a technical advisory committee to OBWB so it doesn't have any authority or influence on its own. It is intended to provide input and backup for the Board. This is clearly laid out but needs better positioning in the document.

D Flintoft—found it interesting to have one document to find out just about how anything works. If we want to do up a summary, this is the document to use that gives the information about what OBWB/OWSC does. This type of document can be taken back and presented to other groups. The document lays out the information quite well. It is a good background for a wider audience.

A Warwick Sears—this work plan was in part derived from OBWB's governance manual. The governance manual is the most concise way of looking at the official, legal structure of OBWB and OWSC. The work plan has more detail.

C Nichol—the document explains to “us” what we do. Members can create a summary document that explains why they have been asked to sit on this council.

N Jatel—this is version two. If there are any further comments or feedback that needs to get back to Nelson in the next couple of weeks so the comments can be integrated. This will then be turned into a final document posted on the website as the go to document. He is anticipating that the Chapter 2 part of the document will change for every term, but Chapters 1 and 3 will remain the same.

E Riechert—wondering if the overall objective of the three committees can be stated, i.e., what deliverables or objectives are being met? *N Jatel*—one of the challenges with this document is that it is kind of late in the game as OWSC is almost two-thirds of the way through their term. They wanted to be able to pull together the context but didn't want to assume what the committees were going to decide on. The overall objective/deliverables will be set out later in the reports from the committees.

Another discussion topic in the morning meetings was timeflow—between now and April 1st which is when the province would like feedback on the Water Sustainability Act. This means that the committees need to wrap up their recommendations by February, in order for them to present those recommendations to OWSC for their review and discussion, and possible presentation to OBWB for their review. To meet this timeline, the committees will need to meet more frequently and for longer to address some of the things identified as key priorities. Another interesting aspect of the morning meetings was the process of identifying other key players in the community that should be part of these ongoing discussions, i.e., colleagues and friends that Nelson can follow up with. OWSC has an opportunity and window to present to the Province what are the priorities of the Okanagan within these three files that are important to us. The timing is incredibly important and rarely do we have the opportunity to provide this type of input pre-regulation development.

Please review and circulate the final draft within your organizations. Anything that is wrong, needs to be added, or has been missed needs to be brought to Nelson's attention soon.

6. COMMITTEE REPORTS: Groundwater, Water Pricing, Environmental Flows

One of the hopes for committee meetings was to end up with co-chairs. This is still being worked on. Nelson is the staff person on all three of the committees. One of the key focuses for the meetings was to identify the scope, and key deliverables and questions for each of the committees. The progress made in the meetings was good.

Environmental Flows Committee—talked about identifying key indicators. There were conversations around fish being more than just about volume. There is temperature and other issues that need to be looked at. There is a call for the committee to define what environmental flows are. There was discussion on finding out and cataloguing what has been worked on so far and how to incorporate the research and recommendations into a legal and policy framework. There are two showcased areas—Mission Creek and Trout Creek that could inform some policy recommendations to the Province. There is a cautionary note about identifying stream flow needs—how to collaborate and make sure all of the partners are at the table. There was a lot of discussion on refining the topic. The committee decided not to include flood and droughts. They really need to focus on environmental flows but noted that it would

ultimately inform both extremes on the hydro graph. There is a need to differentiate between fish and environmental flows. The committee came up with two areas they could move forward with to bring to OWSC and turn into recommendations for OBWB and the Province. First, what is working in the Okanagan and how can that be used to inform other policies for environmental flows. Second, complete a GAP analysis to see where there are deficiencies.

As an aside, there is a meeting in Victoria at the end of the month that will provide an opportunity to touch base with regards to work OBWB/OWSC is doing. This meeting will be reflective of all three committees. There is a leadership group for water governance headed up by the POLIS Institute and this will give Anna and Nelson an opportunity to connect with many of the Ministry staff (high level). They are also hoping to meet with the Province on the BC Water Use Reporting Centres and give an update on what is working in the Okanagan and how we can connect and tie into resource rent collection.

Groundwater Committee—one of the key issues was what are the gaps. Two areas were identified as being important. First, there are a number of databases and information sources for groundwater. They need to identify what exists and to communicate to the government what is working and what is not working in terms of lessons learned from the Okanagan and be able to help with the process of institutionalizing groundwater management within BC. This gives an opportunity at the committee level to think and talk about where those information needs are. Second, the concept of decision points and having focussed discussion around how local government and provincial government can collaborate or share information so when decisions are being made by multiple levels of government then the management of the resource and water, and land use decisions are made in an environment of informed management. What does that look like and what are the things we are bumping up against within groundwater and how does that relate to decision points and decision making? Those two pieces will drive a set of recommendations that will be coming back to OWSC.

In the discussion that followed, it was noted that there are some concerns about licensing and making sure there is some kind of harm reduction taking place at the local level when and if the Province comes in and starts issuing groundwater licences. For example, are there specific harm reduction recommendations that we can make that can provide a little more protection, or enable

a local government to say they are not comfortable with this level of risk? What are some of the different kinds of intervention we can take? The hope is that the committee, given the expert knowledge around the table, can come up with some ideas like, for example, what are the common sense solutions, the most straightforward things we can do, to keep 30 year licenses from being issued where they are not appropriate? There was also a comment regarding the implications for the Water Stewardship Act and specifically where you can implement FITFIR, whether surface water rights transferable, and also the registration and licensing process. These issues came up strongly in the meeting,

Water Resource Rents Committee—the committee identified that they need to focus on rents versus water rates (cost of delivery). They need to bridge the connection between resource rents and water licensing fees. They were asking the question: What is the best way to provide untreated water to agriculture and ensuring inputs of water to agriculture are included in this principle for ensuring that food security remains on the table. The economic implications of subsidizing agriculture by domestic use and tax base were discussed. There was discussion about where this committee needs to go and what do we recommend to the province in terms of the white paper that has already been developed? What additional information can we recommend to the Board to submit to the Province? There were not many people at this meeting and they need to have more input. Need a more concerted effort getting others out. Some confusion was expressed on what direction the committee is taking, i.e., is it moving away from water prices and focusing on water rents? The committee had spent some time discussing subsidy and how that works into the overall pricing for water and decided that they are moving away from this discussion entirely and focussing on water resource rents.

All Council members are encouraged to come out and join the committees as they move forward. They will be moving quickly. There will be updates monthly at the Council level and hopefully there will be some product ready for OWSC to agree to and submit to OBWB in February or at the latest March. As a Council, there is the opportunity to discuss and debate some very specific recommendations that will be coming out of the committees.

There were a few comments regarding drought management planning and what will be happening. *Mr. Jatel* noted that now that there is direction from OBWB, they have to go back and look at whether there should be a separate, new

flagship that will deal with drought or whether it is something to be put on the back burner and re-engage it when they do the next round in 2015/16? This discussion still needs to happen as it is a priority but it can't be accomplished by the end of April so the thought is to turn it into a flagship and meet quarterly. It was also brought up that it is important to look at drought management in the context of other water planning. There is a lot of work involved in looking at all of the water master plans and drought plans and liquid waste management plans from all the utilities. They need to figure out where the deficiencies are and go from a deep understanding of the deficiencies and being able to build a drought plan. Not starting the drought plan for two or three months works well for the baseline process. Once there is a good sense of the all of the information available and what is in them, then a summary report can be provided to Council and the drought plan can be built on this information.

7. GUEST SPEAKER: Shaun Reimer—Ministry of Forests, Lands, and Natural Resource Operations (Public Safety and Protection)

How do we look at the hydrology of the Okanagan? There are questions around climate change, i.e., how is the hydrologic nature of the Okanagan changing? How does that specifically relate to the infrastructure needs at both a local government and provincial government level? What came of the following two studies: 1) Mission Creek and 2) Okanagan River? How do we take what was looked at in terms of the hydrology, dikes and setbacks and lead into a bigger conversation around flood plain management at a broader scale throughout the Okanagan? Shaun Reimer was invited to give an update on the Mission Creek and Okanagan River studies. Also, to discuss if, with climate change, what used to be a 1 in 200 year event may have changed and what that looks like now. What are some of the highlights or surprises that might have come out of the two studies? FLNRO, Public Safety and Protection, is basically responsible for flow management and water level management within Okanagan River and Okanagan Lake and all the main stem lakes between Okanagan Lake and Osoyoos Lake. They also have a responsibility for flood control structures on lower Mission Creek. He does not have a lot to say on flood plain management as the position of the Province is that flood plain management or planning is the within the function of local governments. Mr. Reimer's focus will be on some of the conclusions and general discussion about what happened and what led to these things happening, particularly in 2012/13. Those

years saw high inflow into Okanagan Lake and record flows in Mission Creek. Those events allowed him to access some budget to commission the studies.

Okanagan River Study

Basically, they wanted an update of the hydrology and 1 in 200 year events based on the most current statistical data available. The Okanagan River is highly regulated through the Okanagan Lake Dam and that skews the numbers in terms of the flow data that is available for the updated hydrology. The concern for the Okanagan River is where the bottlenecks or vulnerabilities are on the system. Instead of just modelling a 1 in 200 year flow down the system, they wanted to see where they would be over top of the dike. One of the biggest bottlenecks or vulnerabilities they wanted to confirm was at Vaseux Lake. There is a dam 1.8 km below Vaseux Lake but it doesn't really control the out flow from Vaseux Lake, only a little. When they want to push water down Okanagan River, they have to raise the level in Vaseux Lake. There is a pinch point between Vaseux Lake and McIntyre Dam. So, the question becomes what is the limiting factor? Is it the dam or is the channel? They found that the channel would send lots of water down through McIntyre Dam but if there is too much milfoil growth in that section then that would become a limiting factor. This is something they have to be very mindful of in terms of monitoring milfoil in the area.

The river system was modelled in terms of reaches. Reach A is between Okanagan Lake and Skaha Lake; Reach B is between Skaha Lake and Vaseux Lake; and Reach C is down to Osoyoos Lake. There was a lot of resurveying of cross sections completed. They didn't have enough funds to complete all of the cross sections, approximately 273, so there was a focus on areas where there they knew there had been changes made in the river and in places where sediment had built up over time. One of the limiting factors of the report was the use of the most up to date survey techniques. This is a catch 22 as you want to use the best, most up-to-date methods but surveying methods have recently changed (2013). 1928 was the last change prior to 2013. Data is so much different than any numbers he has used. The important thing that the study showed was that, in terms of the Provincial standard of a 1 in 200 year flow, the channel is fine. We do have that channel capacity for the entirety of the Okanagan River system. We do have better numbers of where the actual flow would ever come in particularly in the case of a real extreme event, like the rain events of 2012 and 2013.

Mission Creek

Mission Creek saw historically high flows and peak over the same general time period as Okanagan River. A study was commissioned to look at new hydrology and new cross sections. In this case, they revisited all of the historic cross sections, surveyed 84 cross sections on Lower Mission Creek, completed dike and river profiles, had a new hydraulic model completed, and a long discussion on climate change and the effects of it was entered into. The other piece of this study was the modelling that was done to determine the vulnerabilities on the dike. These are the numbers in terms of freeboard elevation on the dike. The provincial standard is that there is to be 30 cm (1ft) of freeboard above where the water surface elevation would be on the dike for a 1 in 200 year instantaneous flow or 60 cm (2 ft) freeboard on a daily maximum flow. In this study, it was the instantaneous flow profiled for the entirety of the dikes on Mission Creek, on both sides. They got a table showing areas where the dike did not meet the freeboard requirements. They are low in approximately 2.4 km, primarily between Gordon Road and Casorso Road, with a little piece between KLO Road and Casorso Road. Above KLO Road was shown to have lots of capacity. The final component of the study was a discussion on how stable the creek was in terms of sediment. The study showed that the creek is fairly stable but they must keep watching it. There is a little erosion above KLO Road and aggregation (Casorso Swamp area) below KLO Road. There were no real big surprises with this study. The Lower Mission Creek Hydrologic Capacity Study is available on line. The Okanagan River Study is not yet available on line.

Questions/Comments

Some of the questions that followed were centred around sediment flux in the creek, with one of the complicating factors being the gravel removal in sections of the creek complicating the results in the area around KLO Road. The plan of FLNRO is to get some budget money in order to pick a number of cross sections in the area that have already been completed and get them done between every freshet in order to get a better idea of the flux. Chair Dobson noted that there have been huge fluxes upstream in the Joe Rich area and there is concern regarding: 1) the timing of it, 2) the potential impacts as it moves downstream, and 3) the kind of rates are being seeing. S Reimer—if the channel is stable and yet there is a deficit in terms of freeboard than they can raise the dikes. However, if it is unstable and degrading then they will have to start looking at other options. Furthermore, with regard to sediment affecting the capacity in the creek, the 1 in 200 year tells what the high water is going to be in the

flood plain for that particular flow reach so the channel capacity needs to be monitored because it affects the risk but the hydrology will tell you the consequences of where the water is rising.

Another question/concern focused on climate problems being a good indication of changes in rainfall intensity or not. The sense is that there are not very good at predicting extreme events. We have seen extreme events happen but in conversations with Doug Lundquist, about something like the cell that hit Calgary, Doug's opinion was that, for topographical and other reasons, they could not see/predict that happening. D Dobson—understands Shaun's caution on this; for example, Sicamous during the 2012 storm where there was 7" of rain in five days. If someone had spoken to Doug prior to the event occurring and asked if they could have seen it coming, he probably would have answered "unlikely". We are seeing changes. For instance, there were several occurrences that brought about the 2013 peak in Mission Creek that were unusual. The 2013 peak was brought about by a rain generated peak. We have not seen a rain generated peak, as opposed to a rain on snow or snow generated peak, previously.

Further discussion ensued with regards to the changes in survey data and what happens when the numbers change and how that gets filtered out to become the real number used to compare new data against. Closing comments surrounded the concerns with freeboard and whether the province has any thoughts on how to deal with the concerns. Over the winter, the Province will look into this more. Between the cross-sections, it has been identified that there is at least one area where there isn't sufficient freeboard. They need to do some better surveys to identify those points more precisely and get a better understanding of the dike along those stretches in terms of what is the land base and go through a design process to identify land base issues, critical vegetation issues, and even land ownership. Some of the 2.4km incorporates the set back dike for the proposed for the first phase of the Mission Creek Restoration Initiative.

The following exited the meeting following the coffee break: Ms. Brett, Ms. Fan, Ms. Page, Mr. Flintoft, Mr. McLeary, Mr. Watt, and Mr. Rogalski.

8. Survey of Okanagan Local Government: Water Management: Anna Warwick Sears and Tricia Brett

The project was started about a year ago. OWSC has embarked on some discussions about having a water stewardship plan for the valley and while there were a lot of good ideas and motivation for

the development of such a plan some of the questions were “How are we going to do a valley-wide drought plan?” and What needs to be included in such a plan? OBWB felt what was needed was to go out and get some data. The other motivation was to check in with the water utilities to find out what their concerns were and what input they had on the planning process. OBWB began checking with all of the large water utilities, interviewing them, and getting a look at their different plans.

This project relates back to the OBWB’s strategic plan goal (Okanagan Local Governments, First Nations, Water Purveyors and Stakeholders have up-to-date coordinated plans and policies to protect water quality and water supply, and prepare for extreme events). That was the playbook in terms of what OBWB was interested in and relates back to the question of water sustainability. There is a lot that is promised and promoted with water sustainability planning but it is vague in terms of what people want. OBWB wants to get a better handle on what is needed and what is lacking. They know that valley-wide coordination is wanted along with more uniform by-laws related to water conservation and water quality and some more consistent plans across the valley.

A book called “The Big Thirst” was a source of inspiration for this project as it looked at places where communities have crashed and burned (nearly had all their drinking water supply dry out) and compared that with communities that were proactive and organized in water planning. What was in place to keep them better prepared for water shortages? It seems that it is the simple things that need to be recognized—water meters, data organized, realistic about the situation, basic plans in place, communication structure in place. Simply going back to the basics within the watershed.

There was a review completed on the OCPs, RGS and other water bylaws last year. It is not an exhaustive review but a high level summary document with references. Next, interviews were conducted with local government and irrigation districts. This is a work in progress with many already surveyed and others still needing to be surveyed. Tricia has been conducting the follow up work coming out of interviews, tracking down references to other plans, and pulling the data together. Questions being addressed are things like: Who is metered and who isn’t? How much water are we actually using? If we have a lot of metering in place then shouldn’t we be able to figure out a closer actual value of water use? Who has drought plans and source protection plans?

Who doesn’t? Who has flood plain mapping? So far, the numbers gathered are rough and definitely in progress. Once the survey/interviews and plan reviews are completed, the report will be developed. The report will then be reviewed and validated by those interviewed. It will then be brought to OBWB and OWSC for discussion. After that, the desire is go back to discussions on the Water Sustainability plan based on the evidence collected from this process.

Open to any suggestions that anyone may have on specific questions they should be asking or information they should be looking for. There is a lot of data available. For instance, they know how much land is being watered by each utility and how many licenses they have but the applications are so far apart that it is difficult to find a way to compare apples to apples. Every utility is managed very differently.

There was some discussion centred on separating who is using ground water vs surface water. It was noted that data is being collected on what proportion of your water source is ground water vs surface water and whether plans were in place to change that in the future. Other discussions centred around how the capital cost of treatment is putting tremendous pressure on how utilities operate both agriculture utilities and urban utilities. It is pushing the demand side management of this issue. Can’t afford to ignore lost or treated water on the land.

OBWB will be working on this project for a while so send in ideas as you have them.

9. ROUNDTABLE – MEMBER UPDATES

Council members and guests were invited to provide an update:

- Ms. Jackson (OBWB): They have just started a telephone survey which is an update to a survey from 2009 and looks at where people are at in understanding water issues in the Valley and their knowledge about OBWB and projects like: Make Water Work and Water Wise campaigns. The Make Water Work campaign has wrapped up for the year but work is underway for the coming year including a line of Make Water Work plants. Working on a compiling a report for their partners.
- Ms. Kirk (RDOS): Compost application on lawns program has seen lots of success with people saying they are greener and using less water. This past year 250 tonnes of compost was moved out of the landfill. The City set up a challenge for next year to quadruple that amount and see if 1000-2000 tonnes could be moved out of the landfill. The West Bench is now metered (375 connections) and they will

- be able to track the data to get a clear picture of usage/person/day. 101 connections will soon will be added from Naramata. They received a \$90000 grant from the RBC Water Grant for rain gardens.
- Ms. Riechert (RDOS): The Community Plan for Electoral Area D-1 is rolling along. They are looking at groundwater risks for potential development in that area.
 - Ms. Ekkert (IHA): strategic planning is moving into a stage of focussing on smaller water system over the next four months.
 - Ms. Luttmmer (OCCP): The Central Okanagan Land Trust is hosting a Gala event October 17th to celebrate the parkland places that define the unique natural landscape beauty of the Central Okanagan and honour leaders in this conservation work. OCCP's flagship project right now is a biodiversity conservation strategy. They are currently working on an action plan to implement strategic direction in all three districts. The action plan will be done by March 31st. They are working with their education partners to create consistent messaging on why nature is important.
 - Mr. Guy (CWRA): There is a branch level national conference in Winnipeg June 2-4 which will focus on extreme flows and implications for the future. The Canadian Society for Hydrologic Sciences is hosting a 10-day course in January in Kanaskis Country for those wishing to technically advance their knowledge of hydrology. Summit Environment recently celebrated its 20th Anniversary. Over the years, they have hired a lot of UBC students and have now established a scholarship in the amount of \$1500 for a 4th year student in the environmental sciences program at UBCO.
 - Mr. Allard (BCGWA): The most pressing issues are: 1) artisan wells—there are a number of court cases and litigation going on in the Province regarding some of the wells, 2) GUDI—groundwater under the direct influence of groundwater quality treatment objectives. Differences on how the treatment for surface and groundwater is handled and working with the Ministry as a stakeholder providing input on the development of those regulations. A prominent, long time driller, Leo Litwin, has passed away. Most hydrogeologists are very busy right now. This is an improvement over past years and is expected to continue.
 - Mr. Davis (BCWF): another work party has been out on the Bald Range grasslands doing more project work. Some clubs have been very active with Kokanee. Other volunteer work going on in Lake Country.
 - Mr. Nichol (UBCO): Nothing to report.
 - Mr. Ough (City of Kelowna): very interested in Anna's project. City of Kelowna is at the end of their life cycle on the first round of universal metering and there are some huge decisions that need to be made now. Amazing what the industry has come with metering technology.
 - Ms. Neumann (UBCO/guest): working with OBWB expanding the hydrometric network in the valley—a third station is being added next week. The first two are in the Vernon Creek system—Clark Creek and Upper Vernon Creek. Shorts Creek (westside of the lake) is being added. There is a definite lack of hydrometric stations in the NW part of the catchment. They are managing Middle Vernon Creek and continuing to do water budgeting project. The concerns are: water for people, water for agriculture, water for fish, as well as rare plants that occur on the south end of Ellison Lake. The Kokanee are spawning in Middle Vernon Creek. However, there have been some challenges—debris jams not allowing fish to go very far and no water in the creek in one section. There are management practices in place that are still learning to adapt in order to support flow in the best way. Continue with partnerships (Fish and Game Club (sandbag dam structure on Ellison Lake), local community partnerships). Interesting to balance everyone's views and needs.
 - Ms. MacDonald (BCFGA): The Pacific Agri-Food Research Centre open house was hugely successful with over 1000 people coming through the door. There were a large number of displays and information available for guests to look through. Panel appointments to the ALR have been made. Richard Bullock term up in November 2015 so whole dynamic may change.
 - Mr. Buchler (BCAC): As a result of the failed dam in Oliver area, the Ministry of Environment has performed dam site safety across the province. They have visited all of the agriculture dams and audited. There are consequences as a lot of storage facilities will be destroyed because the requirements are now so high. Agriculture storage now requires 1 m of freeboard and most dams (built in the 1950s) were not designed for that. In many cases, increasing the freeboard is financially prohibitive. In some areas, the dams perform an ecosystem function. Not sure if agriculture will try and take action and cause them to take another look. Might be some impact on wetlands.
 - Ms. Faccini (engineering consultant): Hydrologic modelling and engineering for water utilities.

- Mr. Littley (OBWB): Deployed the integrated hydrometric data system, designed by Summit and programmed by Spot Solutions (Vancouver). It now forms part of the BC Works System and it allows all grades of data to be inputted into the system. It provides links to the Water Survey of Canada stations in the valley. In January, they are planning a showcase of this new system. (Q: 3-4 years of data from the N. Okanagan, is there a timeline or process for people to bring data sets in? A: Get in touch with James to set up a user account. The system also integrates historical data.)
- Mr. Dobson (APEGBC): Projects of interest include: working on Ellis Creek in Penticton to restore fish passage in the lower part of the creek. The design has been finished. Ministry of Transportation is paying for this as part of the compensation for the widening of the road along Skaha Lake. This will probably take two seasons as construction but had to be put on hold as a result of the Kokanee return and spawning in this area. With funding from the water grant program they have just finished a channel assessment on Peachland Creek for the District of Peachland—creek assessed from the reservoir to District's current intake. They will be looking at the condition of the channel and where sediment is coming from as there were turbidity spikes at the intake. The field work is completed and they have identified a few problem areas and are working with stakeholders to deal with those areas. Post fire risk assessments for the two fires in the area. For the Smith Creek Fire (larger of the two), there was water repellent soils created in high burn severity areas but not extensive enough to cause problems. They are working with Nelson and Natasha in getting the new station at Shorts Creek. Looking for opportunities for additional stations. The NW corner is lacking so it would be nice to find some cooperators in that area.
- Mr. Jatel (OBWB): Two projects: 1) the Wetland project—the leadership team has met and is in the process of looking for three hands on

projects to complete between now and April 1st;
 2) BC Water Use reporting centre and the integration of the agricultural water reporting piece is going well. They are working with Spot Solutions to integrate recommendations. Next version of software is anticipated to be ready for January 1.

- Ms. Warwick Sears (OBWB): this is a funny time with the upcoming municipal election. Not sure what it will be like in a couple of months. There is no OBWB meeting in December or January. It is a time of gathering and organizing and getting prepared. RBC Blue Water project is putting out a call for applications on November 3rd. (RBC want to have good projects that make their group look good. They are looking for projects they can showcase that are a good fit with their priorities. Their website provides a clear indication of how they want you to apply.) The Real Estate Foundation is going to be doing a tour in the Okanagan. There will be another BC Water Funders gathering in November. They are very interested in the WSA and what kind of issues need funding. Anna's goal is to bring more money into the valley. Keen to see more happening with more resources flowing in.

10. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will on November 13, 2014 at 4:30 at the Best Western Inn in Kelowna. The meeting will be followed by a special event. Anna Warwick Sears will be hosting a holiday party at her place from approximately 6pm to 8pm.

11. ADJOURNMENT


The meeting was adjourned at 4:30 p.m.

Moved by Hans Buchler

"That there being no further business, the meeting of the Okanagan Water Stewardship Council of October 9, 2014 be adjourned."

CARRIED

CERTIFIED CORRECT:



Chair



Executive Director