

# OKANAGAN WATER STEWARDSHIP COUNCIL

*A Technical Advisory Body to the Okanagan Basin Water Board*

## MINUTES OF A MEETING HELD THURSDAY, April 13, 2017, AT COAST CAPRI HOTEL, KELOWNA, B.C.

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### COUNCIL MEMBERS:

#### Present

Agriculture & Agri-Food Canada, Research Branch  
BC Agriculture Council  
BC Fruit Growers Association  
BC Wildlife Federation – Region 8  
Canadian Water Resources Association  
City of Kelowna  
Interior Health Authority  
Irrigation Industry Association of BC  
Ministry of Forests, Lands, Natural Res. Ops. (Resource Mgmt)  
Okanagan Collaborative Conservation Program  
Regional District of Central Okanagan  
Regional District of North Okanagan  
Regional District of Okanagan-Similkameen  
Shuswap Okanagan Forestry Assn  
UBC Okanagan

Denise Neilsen (Vice Chair)  
Hans Buchler  
Kevin Day  
Doug Flintoft/Lorne Davies  
Brian Guy (Chair)  
Andrew Reeder  
Rob Birtles  
Ted Van der Gulik/Bruce Naka (alt)  
Grant Furness  
Scott Boswell/Tanis Gieselman (alt)  
Margaret Bakelaar  
Renee Clark  
Zoe Kirk  
Murray Wilson  
Bernie Bauer/Carolina Restrepo-Tamayo (alt)

#### Regrets

Assoc. of Professional Engineers & Geoscientists of B.C.  
BC Cattlemen's Association  
BC Ground Water Association  
BC Ministry of Agriculture  
BC Water Supply Association  
City of Vernon  
Environment and Climate Change Canada – West and North  
Fisheries and Oceans Canada  
Kelowna Chamber of Commerce  
Ministry of Forests, Lands, Natural Res. Ops. (OSNR)  
Okanagan College  
Okanagan Mainline Real Estate Board  
Okanagan Nation Alliance

Don Dobson/Suzan Lapp/Shawn Badasha (alt)  
Lee Hesketh  
Marta Green  
Andrew Petersen/Stephanie Tam (alt)  
Bob Hrasko  
Ed Stranks/Rob Miles (alt)  
Kendall Woo/Ian Rogalski (alt)  
Doug Edwards  
Caroline Grover/Tom Dyas/Jeff Robinson  
Robert Warner  
Allison MacMillan  
David O'Keefe/Howard Newfeld (alt)  
Natasha Lukey/Zoe Eyjolfson/Elinor McGrath

### STAFF

OBWB, Executive Director  
OBWB, Operations and Grants Manager  
OBWB, Communications Director  
OBWB, Policy & Planning Specialist  
OBWB, Communications & Outreach Coordinator

Anna Warwick Sears  
James Littley  
Corinne Jackson  
Kellie Garcia  
Alyssa Bougie

### GUESTS

City of Kelowna  
Freelance Writer  
Friends of Summerland Ornamental Gardens  
OBWB, Chair  
OBWB, Hydrology Intern  
OPUS  
Sylvis  
Trail Mix Author/Columnist  
UBC-O  
UBC-O  
UBC-O  
Watt Environmental  
Westcoast CED Consulting

Natasha Neumann  
Gordon Light  
Tom Walker  
Eva Antonijevic  
Tracy Gray  
Sabrina Mittag  
Tim Phelon  
Mike Van Ham  
Judi Steeves  
John Janmaat  
Lisa Lye  
Nargiz Rahimova  
Mark Watt  
Karol Hansma

1. **CALL MEETING TO ORDER**

Chair Brian Guy called the meeting to order at 1:00 p.m. and welcomed members and guests.

2. **APPROVE AGENDA**

Moved by Bernie Bauer  
Seconded by Scott Boswell

*“That the agenda for the April 13, 2017 meeting of the Okanagan Water Stewardship Council be approved.”*

**CARRIED**

3. **ADOPTION OF MINUTES**

Moved by Bernie Bauer  
Seconded by Margaret Bakelaar

*“That the minutes from the March 9, 2017 meeting of the Okanagan Water Stewardship Council be approved”*

**CARRIED**

4. **BOARD REPORT (Ms. Warwick Sears)**

The OBWB held their meeting on April 4, 2017. They have awarded \$300k in WCQI grants to 17 projects in the Okanagan valley. The United Nations Association of Canada has given the OBWB an additional two month of support. This support funds a portion of their communication intern’s wages. OBWB has been working with Agriculture and Agri Foods Canada and the BC Ministry of Agriculture on updating the water demand model. BC Assessment expressed interest in the work being done and provided research valued at \$90,000 to OBWB for \$1,200. There was a big announcement from the Province that they will be stepping up efforts this year with regards to the mussel issue. Canada Water Week events were discussed. They had a presentation from Harmony Bjarnson of the BC Climate Action Initiative who provided on Overview of the Climate Action Initiative, and Current Projects in the Okanagan.

Chair Guy introduced Tom Siddon. Mr. Siddon is the RDOS Director for Rural Area D. He was an MP for 9 years and served as the Minister of: Science & Technology, Fisheries and Oceans, Indian & Northern Affairs and National Defense. Mr. Siddon was the first OWSC Chair in 2006.

5. **OKANAGAN BIO-SOLIDS (Tim Phelon, Opus; Mike Van Ham, Sylvis; and Andrew Reeder, City of Kelowna)**

Mr. Jatel introduced the group of speakers for this section. He noted that the presentation had a dual purpose: 1) providing an opportunity for the City of Kelowna to address the broader regional initiative and issues related to bio-solids locally; and 2)

providing an opportunity to hear from the consultants involved in bio-solids and get a perspective around the legislative framework, the proposed changes that are being introduced, and how some of the issues may relate to Okanagan bio-solids. To meet the demands of a growing population, Kelowna and Vernon have been evaluating options for the management of wastewater solids. They have a joint regional compost facility on Commonage Road near Predator Ridge that is at or near capacity (can’t generate compost any faster and has a growing inventory) and both communities are planning for growth. The facility opened in 2006, and produces a product called Ogogrow (wastewater solids mixed with wood chips). In 2010, the facility was upgraded and capacity was increased. Now, the cities are relooking at their options and identifying and assessing all the risks associated with the production of biosolids.

Mr. Phelan’s group has been providing service to the cities of Kelowna and Vernon and he presented what they have looked at in terms of a strategic review of wastewater solids management, the directions they are pushing forward on, and how they are now reaching out to the communities to get input on the decision making process. He feels that OWSC is a good sounding board and the comments received will be important and essential to this process. The objectives were outlined as: 1) looking at all of the options from both a cost and risk point of view; and 2) providing a defensible recommendation to Kelowna and Vernon Councils on the next steps. To date, they have assessed the capacities at the facilities (forecasts, preliminary sizing, options, market) and now they are seeking input from the regional stakeholders as well as the public. To start the process, they looked at four pretreatment options: digestion, thermal drying, lime stabilization, and chemical pretreatment. In terms of final disposal, they looked at continuing to compost and producing a marketable product, as well as soil amendment options and thermal destruction. In a workshop held with Kelowna and Vernon city staff, they narrowed the options down, based on cost and risk, to three pretreatment options (digestion, thermal drying and chemical pretreatment) and two outlet options (soil amendment and composting).

Mr. Van Ham brought up one of the issues being faced with the composting of biosolids. He noted that the dewatered solids being produced require a carbon source for the composting process. The issue with this is that the amount of carbon (wood) available is diminishing while the price of it is rising which is something that must be kept in mind moving forward. The study also looked at different

soil amendment opportunities for using the biosolids directly (not as part of the composting) including: agriculture, forestry, fabricated soil, reclamation, land fill covers, and biomass woodlot. Examples of each of the opportunities were presented and the Council members had a group discussion around the use of biosolids on agriculture land. In North American, the majority of biosolids' products go into agriculture land (i.e., dryland agriculture, intensive irrigation systems). The issue was brought up about food safety regulations and the requirements for Canada Gap food safety certification. The consultant noted that biosolids and biosolids compost cannot be used in an organic operation but other group comments indicated that it cannot be used in other food industries (i.e. tree fruit) if they want certification. One other comment stated that the CFIA mandates that Ogotrow as a compost meets the Canadian Fertilizer Act/regulation. However, the question was again raised if work is being done in order for users (Ogotrow/biosolids) to be food safety certified for any fresh food. Mr. Van Ham then spoke to biosolids use risks. The North West Biosolids organization put together a chart to convey risk, which is difficult to do. The chart shows that it would take many lifetimes of working or playing around biosolids or compost made with biosolids to equal everyday exposure to many common products (like toothpaste or antibacterial hand soap). The Soil Amendment Code of Practice oversees composting, biosolids and biosolids use and it is currently under review. The Organic Matter Recycling regulation is under review and a series of proposed changes will be coming out around June. Q: Is there an opportunity for OBWB/OWSC to provide input into these changes. Yes, the current consultation website will be provided.

Mr. Reeder with the City of Kelowna spoke to some of the municipal challenges. The Cities of Kelowna and Vernon are trying to create a strategic direction. Their key issues are: capacity problem, market problem (too much Ogotrow for the market to bear), and woodwaste. In terms of land application, they are wondering if there are specific things they just should not consider doing. This leads into the public consultation process and learning about the things the public considers to be "no go zones of application". One of the things they are trying to do is bring the human/social component to the direction that is being taken due in part to what was experienced by RDCO and surface spraying in the Merritt area (the public was against this and now RDCO is shipping their biosolids to Alberta—an extreme solution). Q: why don't they give away Ogotrow to generate a larger market for it? A: this is an option and will be looked into

further. One of the biggest challenges they face is a limited market due in part to international markets and regulation. There is also a perception issue (compost created from biosolids seems to have a negative stigma) and regulatory issues. Another big issue is nuisance: odor, dust, noise. These tend to be complaint driven which causes the City many challenges in dealing with them. There is also the issue of NIMBY (person who objects to the siting of something perceived as unpleasant or potentially dangerous in their own neighborhood) and where to locate a facility. The challenge is going to be public acceptance/perception—people don't want application used or a facility located in close to their property as they don't agree that there isn't a risk associated with it.

Mr. Birtles with Interior Health provided a brief overview of the process IH uses which comes under OMRR. They have a smaller role in the administration of the regulation. It is shared between MoH and MoE. A proponent would provide notification to IH that they will be applying biosolids to land then IH will have a say but generally only if that application is in a watershed that is a drinking water source or being applied to agricultural lands.

Comments: Mr. Jatel made a final comment before opening the discussion to group comments by reminding the Council about the City of Kelowna's question – what are your perceived risks? This was to be kept in mind when making comments.

In the South Okanagan Similkameen, they are looking at creating a centralized biosolids composting facility. There are two preferred sites and the public engagement process starts next month. This should be factored into the work being done. There are concerns with water table consequences and they do not know if it will be anaerobic or aerobic. One of the reasons they are doing it is to stop putting biosolids into the landfill. Public engagement and public backlash will be a big factor in this.

### **Round Table Discussion**

ZKirk: Cameron Bond has been doing the research for the RDOS and has done extensive odor modeling and behind the scenes work on identifying the locations. Q: is any of the biosolids or compost application being thought of for fire area remediation? A: It is part of land application outlets/part of forestry portfolio.

MBakelaar: if biosolids are to be applied in a watershed it would be good to ensure they are part of source water protection planning.

SBoswell: feels that there needs to be more public awareness on the benefits of biosolids.

TVan der Gulik: significant savings with water can be made if there is better topsoil. Developments should not be allowed to put down turf without proper topsoil application. Q: How many local governments/irrigation districts in the valley have top soil amendment bylaws? A: This is being done in Kelowna. The Irrigation Management committee spoke about it in their meeting in terms of soil amendments and OWSC and OBWB could work towards figuring out how it can be done and how it can be a part of water stewardship.

DNeilsen: Q for Rob in terms of community watersheds—if applying biosolids how are Class A and Class B used and are the concerns microbial? The differences are the targets (strengths) for micro organisms for each and the different considerations regarding metals. The consideration is with regards to the storage (i.e. store on site) and the spreading (setbacks, safeguards) of the materials.

RClark: RDNO had an incident with biosolids from Sunrype to the Coldstream Ranch area. They had an agrologist look at it to ensure proper application, etc. However, one of the things they were not sure about was the monitoring process. Q: who is responsible for the monitoring process and what are they responsible for monitoring? A: 90-95% of the time it's the biosolids generator that is responsible because it is their product.

MWilson: They would like to see applications of biosolids go ahead as there are a lot of benefits; however, being that 95% of the land is Crown owned the opportunity is likely to come from the provincial government perspective rather than the public forest sector. Just over \$200mil was allocated into the forest enhancement carbon fund and the use of biosolids might be a good application use of some of the funds.

LDavies: public education is important and maybe a factsheet explaining the process and differences between being organic and being green would be helpful. There is a lot of lingo that is used that most won't understand.

TGieselman: making sure to look at the biodiversity perspective and the effects of application on the smaller biological parts of an ecosystem.

BNaka: agriculture is the largest prospective user of biosolids and, being part of the irrigation industry, one of the biggest issues around efficient irrigation is soil. There is a local product that can help with the soil. Somehow the use of biosolids needs to work.

KDay: the big issue seems to be that in order to sell commercially, within the food industry, he is not able to use OgoGrow. There was a lot of

discussion around this issue and it needs to be flagged at and looked into further.

JJanmaat: Q: if you drop the price on the product will it have an impact? A: There have been some extensive marketing studies done but it is more of a saturation issue versus a price based issue.

HBuchler: Q: do they measure air emissions (toxins) in the digestion process? A: Typically, with digesters it is a closed process and any off gases will be captured.

AWarickSears: spoke to the importance of a commitment to monitoring for building public trust. There is a need to be open about the process and public messaging may be helpful in developing a positive understanding and awareness of biosolids use.

There is a website available for people to make additional comments – [getinvolved.kelowna.ca](http://getinvolved.kelowna.ca). This is a public forum and they would appreciate any comments. Gord Light, City of Kelowna, offered tours of the composting facilities for anyone interested. Please contact him at the City of Kelowna.

Mark Watt of Watt Environmental provided some comments to Nelson after the meeting. These have been attached as an addendum at the end of these meeting minutes.

## 6. COMMITTEE REPORTS

The **Communications Committee** (Zoe Kirk) had a good meeting in the morning. They have some action plans that they will be working. These revolve around “test driving, reviewing and modifying.” Three areas of focus that they have identified are: improving internal communication between Council and its members; improving communication on activities and projects; and strengthening relationships with the local academic community.

The **Policy Committee** (Rob Birtles) lead coordinated development of recommendations when requested by Fed/Prov government as well as seeking opportunities proactively. Some of the committees will likely be generating recommendations that will have policy implications and therefore a good linkage between the committees needs to be established. The committee met last week by teleconference and have generated an understanding of its scope and the level it wants to operate at.

The **Sustainable Water Strategy committee** (Kellie Garcia) put together a survey for Council members to complete. To date, 20 have been submitted. They are encouraging members to share the survey with their alternates as well. April 17 is the closing date for submissions. Kellie will begin compiling results on April 18 and generating a report for the editorial board and working on a draft table of contents. They will be meeting on May 1<sup>st</sup>.

## 7. **MEMBER UPDATES: ROUNDTABLE**

Council members and guests were invited to provide an update:

- Ms. Jackson (OBWB): Canada Water Week was a great success. The showing of River Blue was sold out. They would still like to see more participation for the panel discussion. The H2O Bingo challenge, the Okanagan WaterWise Challenge for youth, will close on April 28. Rain barrel sales sold out in week two of a one month sale. MWW has had lots of meetings and all of the local government partners are back this year. The contest sponsors and garden centers are also on board. DMM conversations are happening with campaign partners. OBWB is partnering with OASSIS on a public event being held April 25 at the Penticton Okanagan College Theatre. Stephanie Hestor from Montana and Cindy Sawchuk from Alberta will be there. Cindy will have their mussel dog and will talk about what Alberta is doing. The Province of BC has announced an increase in funding and will have a mussel sniffing dog starting July 1. They have already been receiving calls from the boating public regarding decontamination of boats and they have heard of an event where sailboats are being transported on rail and will need to look into this further.
- Ms. Kirk (RDOS): On April 26, they have arranged to have Stephanie Hestor and Cindy Sawchuk speak. The participants are by invite only and will not include media outlets. The plan is to allow for some very frank discussion on what will happen if the invasive mussels get to BC. RDOS has received five infrastructure grants that are all water related.
- Ms. Restrepo-Tamayo (UBCO): 10 faculty members are preparing a grant application through the CREATE program (Collaborative Research and Training Experience). The focus of the application is Fires in resilient ecosystems.
- Ms. Bougie (OBWB): has been very busy working on events for the summer. She will be going to a school to talk with them about water. She is working on developing education materials and is working with Ana on an infographic.
- Mr. Littley (OBWB): On March 30, the Province announced: two new inspection stations; the extension of hours to daylight hours for inspection stations; doubling of the number of inspectors; the addition of a mussel sniffing dog; increasing public education; expanding monitoring; and extending the inspection season. Also, the Golden station will be open 24hrs. The Premier misspoke when announcing that it will be illegal to bring boats into BC unless they first report to an inspection station but the message is getting out there and the announcement did respond to a number of items that the Board has called for.
- Ms. Bakelaar (RDCO): working with UBCO on digestion. Interested in the City of Kelowna work. They have had some major changes at RDCO. The Director of Community Services has left and Ms. Bakelaar will be leaving to go back to school and complete her PhD. Someone from RDCO will need to be appointed to the Council. She extended a thank you to everyone on the OWSC for all the work and collaboration they do. "It has been an honor to be sitting on Council."
- Mr. Boswell (OCCP): they are finalizing the boat impact assessment for Kal and Wood Lakes. The consulting team will be presenting it at the meeting in May. They have received half of the funding needed to do outreach to land owners around Okanagan Lake as well as work on two demonstration restoration sites.
- Mr. Reeder (City of Kelowna): they are doing a city wide plan for water systems within Kelowna. He will be doing a modeling exercise to see how the systems would connect. If Council would like, he would be happy to present it.
- Mr. Van der Gulik (IIABC): the Agriculture water calculator has been working well and now the Province would like to enhance the tool.
- Ms. Clark (RDNO): Reservoirs are at normal range or slightly above. They have received a UV disinfection grant. They are completing their drought management update.
- Mr. Siddon (guest): they have received about \$6.6mil from Fed/Prov governments to connect Skaha Estates into their new waste water treatment plant. This is phase 1. They are hoping to get further funding to connect the West side as well. It is about \$10-12mil for each side of the lake but the plan is to get rid of all of the septic tanks.
- Ms. Mittag (OBWB intern): she has been continuing work on data management and transferring of related data from BC Work into a centralized database (Aquarius). She has been contacting water purveyors regarding data storing and data sharing and setting up agreements. She will also be taking time series data, converting it and putting it in Aquarius. This will only happen for a limited time.
- Mr. Wilson (OFA): hauling is pretty much shut down right now. The snow pack continues to grow. There is concern around runoff and slides.
- Mr. Furness (FLNRO): they have been receiving a number of emergency works applications for instream works (flooding incidents). These are often turning out to be non-emergencies. They

have completed their funding applications and are now waiting for the results. Two of the main projects they can see resulting from this process are: 1) a local government workshop to establish/work towards continuity for wetland conservation; and 2) a qualified professional workshop to bring them up to speed on policy guidelines that have been brought out regarding water (docks, riparian areas, etc.).

- Mr. Flintoft (BCWF): BCWF AGM is May 4-6 in Nelson. He is hoping that there is some potential for OBWB/OWSC to do a mussel presentation. The Android version of the Conservation App should be out in the next couple of months.
- Mr. Davies (BCWF): pass
- Ms. Garcia (OBWB): the revised guidelines will be coming out in a couple of weeks regarding mainstem drought triggers. Work continues on how they will further engage water suppliers.
- Mr. Naka (IIABC): networking needs to continue to improve.
- Mr. Day (BCFGA): he is compiling a list of jobs for BCFGAs to look into and work on with membership. The list is getting long.
- Ms. Gray (OWSC/Guest): pass
- Mr. Birtles (IHA): pass
- Mr. Buchler (BCAC): the accumulated rainfall for April so far is over 50mm which is almost 20% of the yearly average for his area (around Oliver).
- Mr. Bauer (UBCO): pass
- Mr. Jatel (OBWB): at the next meeting Heather Loret and Jason Schleppe will be presenting on the boat studies that have been taking place in

the North Okanagan. OBWB received a \$10,000 provincial grant to look at a wetland engineering framework and will be looking for input and support as they put together an RFP and ToR.

- Ms. Warwick-Sears (OBWB): pass
- Mr. Guy (CWRA): pass

#### 8. CHAIR REPORT

Chair Guy thanked the Council for coming, participating and contributing at the meetings. There are many issues that the OWSC are beginning to look at and strong participation will go a long way to improve and contribute to improving water ecosystems in the Okanagan.

#### 9. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will be Thurs., May 11, 2017 from 12:30 to 4:30 at the Coast Capri Hotel, 1171 Harvey Avenue, Kelowna.

#### 10. ADJOURNMENT

The meeting was adjourned at 4:40 p.m.

**Moved by Hans Buchler**

***“That there being no further business, the meeting of the Okanagan Water Stewardship Council of April 13, 2017 be adjourned.”***

**CARRIED**

**CERTIFIED CORRECT:**

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Chair

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Executive Director

## ADDENDUM TO THE MEETING MINUTES OF APRIL 13, 2017

From: Mark Watt <mwatt56@outlook.com>  
Date: April 14, 2017 at 10:30:47 AM PDT  
To: Nelson Jatel <nelson.jatel@obwb.ca>  
Cc: Anna Warwick Sears <anna.warwick.sears@obwb.ca>  
Subject: Kelowna Biosolids  
Hello Nelson

Interesting meeting yesterday...a few items for future discussion.

What was the objective for Andrew to present? Is he asking for Stewardship Endorsement? not clear? It seems part of a strategy for consultation without forming a technical advisory group.

fyi Renee issue for near creek and Sunrype material was not related to biosolids (it is not a biosolid). That material was a liquid material (3% solid) from the winery-sunrype plant run by City of Kelowna and the material was under contract to Chuppertusk Farm (sp ?). This should be clarified for the minutes.

I am still not clear from the round table what jurisdiction "whole food" or "organic certification" has to do with the ability to use Class A product (maybe at the commercial level?)...the consultants and the group seemed to be not clear.

This whole issue is a very sensitive issue politically and a difficult communication issue. It is a social science issue. I have dealt with this for 30 years. Andrew took over my portfolio.

The lifecycle use and cost of processing OGOGROW is far less expensive than potential alternatives (except land application within 150 km). OGOGROW today represents a 30% (\$675,000) return towards the \$2.2 million in annual operation costs.

As the technology gets further up the ladder and as trucking gets further out of the area costs go up.

If you are considering any response from the Stewardship group I would be happy to assist...since OGOGrow was my invention.

Thanks  
Mark