

Okanagan Basin Water Board Meeting Agenda



DATE: Tuesday, Sept. 7, 2010

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

PLACE: Regional District Okanagan Similkameen
101 Martin St., Penticton, B.C.

1. **CALL MEETING TO ORDER**

2. **APPROVAL OF AGENDA**

3. **INTRODUCTION OF LATE ITEMS**

4. **ADOPTION OF MINUTES**

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

5. **DELEGATIONS**

5.1 UBC-Okanagan: Dean Cynthia Matheson, Professor Louise Nelson, on the BC Regional Innovation Chair in Water Resources – response from the Okanagan regional districts.

6. **STAFF REPORTS**

- 6.1 Executive Director Report
 - 6.1.1 Sewage Facilities Grants information package
 - 6.1.2 Water Resources Chair memo to RDNO
 - 6.1.3 Water Supply & Demand scenarios workshop
 - 6.1.4 Salmon Feast & Celebration poster
- 6.2 Water Stewardship Director Report
- 6.3 Communications and Research Coordinator Report

7. **NEW AND UNFINISHED BUSINESS**

- 7.1 Milfoil Program Update
- 7.2 Milfoil Program Succession Plan

8. **NEXT MEETING**

8.1 The next regular meeting of the Okanagan Basin Water Board will be held on October 5, 2010 at the Regional District of North Okanagan.

9. **ADJOURNMENT**



**MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD
HELD JULY 6, 2010, AT REGIONAL DISTRICT NORTH OKANAGAN,
9848 ABERDEEN ROAD, COLDSTREAM, BRITISH COLUMBIA**

PRESENT

Chair Stu Wells	Regional District Okanagan Similkameen
Director Rick Fairbairn	Regional District North Okanagan
Director Buffy Baumbrough	Regional District North Okanagan
Director Gyula Kiss	Regional District North Okanagan
Director James Baker	Regional District Central Okanagan
Director Doug Findlater	Regional District Central Okanagan
Director Graeme James	Regional District Central Okanagan
Director Gordon Clark	Regional District Okanagan-Similkameen
Alt. Director Bill Schwartz	Regional District Okanagan-Similkameen
Alt. Director Ted van der Gulik	Okanagan Water Stewardship Council
Director Toby Pike	Water Supply Association of BC
Alt. Director Steve Bryson	Okanagan Nation Alliance (Osoyoos Indian Band)

REGRETS

Director Michael Brydon	Regional District Okanagan-Similkameen
Director George Saddleman	Okanagan Nation Alliance
Director Bernie Bauer	Okanagan Water Stewardship Council

OBWB STAFF

Anna Warwick Sears	Executive Director
Nelson Jatel	Water Stewardship Director
Genevieve Dunbar	Office and Grants Administrator
Amanda Cadorette	WaterWise Outreach Assistant

1. CALL MEETING TO ORDER

Chair Wells called the meeting to order at 10:04 a.m.

2. APPROVAL OF AGENDA

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of June 1, 2010 be approved as amended."

CARRIED

3. INTRODUCTION OF LATE ITEMS

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of June 1, 2010 at Regional District Okanagan Similkameen in Penticton.

“THAT the minutes of the regular meeting of the Okanagan Basin Water Board of June 1, 2010 at Regional District Okanagan Similkameen in Penticton be adopted as presented.”

CARRIED

5. DELEGATIONS

5.1 Ted van der Gulik, Senior Engineer, BC Ministry of Agriculture and Lands: Okanagan Irrigation Management (OKIM) Tool Presentation

Mr. van der Gulik has worked extensively on Okanagan water projects, especially the Okanagan Water Supply and Demand Project; he is also the Vice-chair of the Okanagan Water Stewardship Council. Mr. van der Gulik was also a participant on a water policy tour to Australia with Dr. Warwick Sears in May 2010. In Australia, individual irrigators have the ability to accurately track their water use and use it to manage their irrigation practices. A similar tool has been developed for use in BC by the Ministry of Agriculture and Lands and other partners, and currently is being trialed by irrigators in the Okanagan. The tool is named the Okanagan Irrigation Management Tool.

Mr. van der Gulik informed the board that this tool uses the irrigator's own water meter information to compare theoretical water demand generated by models with actual water use. Mr. van der Gulik described the components that went into creating the Water Demand Model, that can determine theoretical water usage for a particular crop on a particular type of soil, using a particular irrigation system, in the Okanagan Valley. The model is sophisticated so that a single piece of property can be separated and analyzed according to these factors (crop, soil, irrigation type), as it is common for properties to have a variety of crops or irrigation systems, which affect the water demand for that parcel. For individual irrigators, theoretical water use can be calculated based on all of these factors and includes climate data. To use the tool, the irrigator logs on to the website where the model has run to show how much water should have been used for their property over the time period in question and the water meter data showing actual use. The irrigator can then make adjustments to their water use based on the information presented; some crops might have been over irrigated based on the comparison, some might have been under irrigated. To maximize efficiency, crop production and farmer success, this comparison and the resulting irrigation adjustments are valuable.

The water utilities currently using OKIM include Greater Vernon Water, Glenmore Ellison Improvement District and the District of Summerland. Black Mountain Irrigation District has expressed interest in adopting the tool. Mr. van der Gulik informed the board that additional information can be incorporated into the tool, such as year to year comparisons and information about total water allocation for each irrigator, who can monitor overall usage throughout the irrigation season.

Director James asked if crop changes can be incorporated into the model, for example if a property owner wishes to switch from apples to wine grapes; Mr. van der Gulik's response was that these changes can be input into the model at any time. The farmer would report the changes to the water utility and the utility will re-GPS the data.

Director Wells asked if an individual farmer had additional equipment, such as a soil moisture meter, could it be included into the model. Mr. van der Gulik responded that currently the model is not set up to include information such as soil moisture or able to handle individual types of data gathered by the farmer, but that the model could be tailored for that information in the future. He also added that soil moisture is an accurate way of measuring water demand, much better than climate alone.

6. STAFF REPORTS

6.1 Executive Director Report

Dr. Warwick Sears reported that Environment Canada has provided the OBWB with another grant opportunity from their Strategic Integration Division; they would like to see OBWB use this funding to enhance current water projects and science initiatives, such as groundwater protection.

Director Baker noted that the information from Environment Canada indicated the grant should be directed toward Habitat Protection and was curious to know if this was accurate. Dr. Warwick Sears responded that recent conversations with Environment Canada staff confirm the funding was from that branch of EC, but there is some flexibility in the projects funded.

6.1.1 Draft Water Supply and Demand Project Phase 3 Core Team

The new Team Structure to oversee the completion of Phase 3 of the Water Supply and Demand Project was approved by the Working Group on June 4, 2010 and Dr. Warwick Sears provided it to the board for their adoption.

“THAT the Okanagan Basin Water Board issue invitation letters to the proposed participants of the new Phase 3 Core Team and their respective agencies to continue to contribute to the project on an in-kind basis.”

CARRIED

6.1.2 Topsoil Primer – Law & Policy Primer and Technical Primer

Staff proposed that the Board consider applying for a grant to revise and expand two topsoil bylaw ‘primers’ written by the Green Infrastructure Partnership, a committee of the BC Water and Waste Association. Having adequate topsoil promotes water efficiency by retaining more moisture resulting in less water applied to the ground and vegetation. Topsoil also reduces stormwater runoff. Mr. van der Gulik felt that both of these guides could benefit from a re-write to make the text appear more ‘user friendly’.

Director Findlater asked how these guides fit within the various soil removal bylaws being created by communities. Mr. van der Gulik said that while topsoil requirements are different than soil removal bylaws, there are likely places within those bylaws to incorporate the topsoil requirements a community wishes to enact. Director Findlater then suggested that a component of the proposed re-write would be to identify those options for communities.

Director Fairbairn asked if partners to provide matching funds have been identified. Dr. Warwick Sears indicated that a number of partners, including members of the Green Infrastructure Partnership are likely to provide matching funds or in-kind support for this project.

“THAT the Okanagan Basin Water Board applies for an infrastructure planning grant from the Ministry of Community Development to develop a topsoil bylaws guide for water conservation and quality improvement in the Okanagan”

CARRIED

“THAT the Executive Director Report from Dr. Warwick Sears, dated May 25, 2010, be received.

CARRIED

6.2 Water Stewardship Director Report

Mr. Jatel reported on the June Stewardship Council meeting, noting that the Council heard a presentation on Okanagan Lake Limnology and recent work conducted for the City of Kelowna on the Okanagan Lake Limnology Model by Hay and Co. Consultants.

Mr. Jatel also updated the board on the Streamlined Water Use Reporting Tool (SWURT) with the information that prototypes of the interactive web tool have been developed; reviews of the prototype are being conducted by Okanagan water purveyors, Ministry of Community Development and the Ministry of Environment.

The Okanagan Water Stewardship Council member agencies are represented in 18 month terms as approved by the OBWB; September 2010 is the renewal date for another 18 month term, until March 31, 2012. Mr. Jatel presented a list of the recommended member agencies for the Okanagan Water Stewardship Council and noted that there have been a couple of minor changes, such as including Chamber of Commerce representation from around the valley in some way, and that the Kelowna Fish and Game Club also be recognized as another community stewardship member. Mr. Jatel explained that there is not a regional Chamber of Commerce and perhaps the best style of representation would be to have someone from each of the three major municipalities in the Okanagan (Vernon, Kelowna and Penticton) rotate attendance in addition to distributing OBWB and OWSC material to these Chamber of Commerce's and their membership.

Director Clark asked about potential inclusion of the Ministry of Forests and Range to the OWSC. Mr. Jatel responded that the agency isn't specifically a member of the Water Stewardship Council, but that it can be looked into.

Director Findlater asked if there were any agencies that were not renewing membership at this time and Mr. Jatel replied that the Urban Development Institute and Community Futures both appeared to be no longer participating as members.

Some discussion of the attendance to the Water Stewardship Council meetings took place. As the members of the OWSC are volunteers, there is a need to be flexible with attendance as not every member is able to attend all meetings. Typically the meeting attendance balances out over the course of an 18 month term.

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

CARRIED

6.3 Office and Grants Administrator Report

6.3.1 Milfoil Program Updates

Ms. Dunbar provided a report on work that will be ongoing throughout July and August 2010 to help enhance the tracking and reporting for the Eurasian Watermilfoil Control Program. This work will involve using handheld GPS units to map the areas the OBWB currently controls, any underwater hazards that need to be avoided (such as water intakes, utility infrastructure and sewer outfalls) and determine relative effort of control in each area.

Director Findlater asked if there were additional expenses to this project with the RDCO GIS staff and Dr. Warwick Sears explained that our current contract with the Information Services staff at RDCO will cover this project.

“THAT the Office and Grants Administrator Report from Ms. Tesche, dated June 28, 2010, be received.”

CARRIED

6.4 Communications and Research Coordinator Report

Ms. Cadorette provided an update on the Okanagan WaterWise program. The WaterWise staff team has met with a number of staff from smaller municipalities in the Okanagan to ask for input to the WaterWise Outreach Strategy and Action Plan and discuss ways to partner.

The water bottle display banners are moving throughout the communities of the Okanagan, spending at least a couple of days in various municipal offices, community centers and other public places.

Ms. Cadorette also asked Board directors for input on the idea of a time capsule at the Annual General Meeting coming up in September and explained that staff were looking for ideas around items to include, an appropriate site to locate it and how long it should be buried for.

“THAT the Communications and Research Coordinator Report from Ms. Jackson, dated June 29, 2010, be received.”

CARRIED

7. NEW AND UNFINISHED BUSINESS

7.1 Database Management Contract

Dr. Warwick Sears spoke to the memo, explaining that the contract is proposed as a direct award. Dr. Warwick Sears explained that Mr. Fretwell has designed or worked closely with most of the very complex databases and models for the Okanagan Water Supply and Demand Project. It would require a large amount of training and specified knowledge for another contractor to learn; this training could potentially be expensive.

Mr. van der Gulik spoke to previous work that Mr. Fretwell had completed with the Ministry of Agriculture and Lands, stating that he produced an impressive product and quickly understood the requirements of the project. In the current situation, with the complex models of the Water Supply and Demand Project and with the large amount of funds already spent on the project, there is no one else who knows this as well as he does and so to have another contractor handle the project could potentially be a risk.

Director Fairbarin asked if the OBWB had the ability to direct award this type of contract. Dr. Warwick Sears replied that there is some leeway in this regard.

Director Schwartz asked if the Ministry of Agriculture and Lands could provide a letter of recommendation for Mr. Fretwell to the Okanagan Basin Water Board. Mr. van der Gulik responded that a letter would be written as a reference for Mr. Fretwell.

Director Baker felt that bid process for this has the potential to be more problematic than a direct award process, and also thought that the total worth of the contract should be within Director's discretion to direct award.

“THAT the Okanagan Basin Water Board approve a contract with RHF Systems for Okanagan Basin Water Board Information Management, for time and materials up to \$75,000.”

CARRIED

Directors van der Gulik and Pike abstained.

7.2 Sponsorship of “Dirt” Movie Event

The Fresh Outlook Foundation is asking for sponsorship of an outdoor screening of DIRT! The movie, in Kelowna on August 14th as part of the Foundation’s goal of having 10,000 people view the movie before October 2010. Dr. Warwick Sears explained that the OBWB could use this event to link topsoil to water conservation, and that it would be an opportunity to use resources from the WaterWise Outreach and Education Program as well.

Director Baker explained that the Fresh Outlook Foundation had already asked a number of local governments directly for sponsorship of this event and had received some funds. If the OBWB were to provide sponsorship, it could be considered as ‘double dipping’.

“THAT the Okanagan Basin Water Board not approve the Fresh Outlook Foundation’s request to sponsor a screening of DIRT! The movie.”

CARRIED

7.3 Draft Letter on Reservoir Lease Lots

Dr. Warwick Sears presented a draft letter written to Minister Pat Bell as requested by Board directors at the June 2010 meeting, asking that the moratorium on the sale of leased lots on drinking water reservoirs be made permanent.

Director Clark noted that MLA Ben Stewart had not been included on the CC list for the letter; staff noted the omission and assured a copy would be sent to him.

“THAT the Okanagan Basin Water Board approves the letter to Minister Pat Bell on the moratorium on the sale of leased reservoir lots as presented.”

CARRIED

7.4 LEEF Chair Request from UBC-O

Dr. Warwick Sears informed the Board that the Okanagan Basin Water Board was being asked to help provide funding to help support a BC Regional Innovation Chair in Water Resources through the Leading Edge Endowment Fund (LEEF). The OBWB contribution would help match a \$1,250,000 grant offered by the province and \$250,000 from the Real Estate Foundation of BC. UBC-O must have \$1,000,000 in commitments by September 2010 or the endowment grant will be withdrawn. The university has requested a contribution from OBWB in the range of \$250,000 to \$500,000.

The OBWB budget was analyzed to show that providing \$250,000 would be possible under our governing legislation without a reduction in program budgets.

Director Baker lead the conversation by stating that a LEEF chair can bring additional funding and research to the region. He went on to say that by providing funds the board can have input into the types of research conducted.

Director Schwartz mentioned that funding a university initiative through the OBWB in this manner means that the public is supporting the institution without making the individual choice to contribute.

Director James mentioned that he likes the idea of supporting research, not faculty or university personnel.

Director Pike noted that the Water Supply Association of BC had also been approached to provide some funding and his understanding is that contribution of funding increases the likelihood of research work specific to the Okanagan; any one agency is not able to influence the direction of research entirely.

Chair Wells wondered about the reaction of the other Regional Districts in the Okanagan.

Director Findlater asked if it would be possible to provide a contribution of \$85,000 a year for three years to reach the \$250,000.

Directors Kiss and Fairbairn said that RDNO would want to have a presentation on this proposal specifically.

Director Schwartz said that he thinks the Regional Boards should hear about this proposal from folks at UBC-O and not just the OBWB and supports the idea of it being taken to each of the Regional Districts.

Director Clark agreed, saying that this proposal is of the nature that it should be presented at each of the three Regional Districts by a UBC-Okanagan representative and the Executive Director of the OBWB.

Alt. Director van der Gulik re-iterated that this proposal has a tight timeline, with a decision needed by September 2010. He felt that the board might have an easier time of receiving a favorable response from the Regional Districts in pursuing the option of providing \$85,000 a year for three years.

Dr. Warwick Sears indicated that she is comfortable with attending a meeting at each of the Regional Districts over the summer (July and August), in conjunction with UBC-O representatives. She will have the same UBC-O folks attend the September OBWB meeting and report on the outcomes from each of the Regional Districts at that time. The Board can then make a final decision just in time for the deadline.

“THAT the OBWB directs the Executive Director to appear as a delegation to each of the three Regional Districts over the course of July and August 2010 with appropriate representatives from UBC-Okanagan in order to receive support for a \$250,000 OBWB contribution to a UBC-O Innovation Chair in Water Resources.”

CARRIED

7.5 Groundwater Monitoring Well Project

Mr. Jatel informed the Board that in partnership with the BC Ministry of Environment, Agriculture and Agri-Food Canada and Environment Canada, the OBWB has developed a proposal to establish 5 monitoring wells a year over three years to address the need of groundwater monitoring in 15 sensitive aquifers. A package has been developed so that information can be provided to local governments, whose jurisdictions incorporate one or more of these 15 sensitive aquifers. A letter has also been developed to determine if Okanagan local

governments are interested in participating. There will be a cost to participate – each local government will need to contribute approximately \$6,500. Through previously identified OBWB funds and additional sources from senior governments on this project, the \$6,500 contribution will leverage almost \$30,000 in well establishment and monitoring. Dr. Warwick Sears added that the sensitive areas identified for monitoring don't currently have a well or any way to monitor groundwater quality. Mr. Jatel also said that the 5 monitoring wells to be established this year have not been chosen, it depends on which local governments show interest and are able to provide the \$6,500 contribution.

Director Schwartz asked if the Twin Lakes area was on the list of priority aquifers to be monitored. Mr. Jatel responded that this area indeed was on the list and has two aquifers of concern, so it would need two monitoring wells established. Director Schwartz showed enthusiasm for the project adding that this area was a part of the Electoral Area he represents; he indicated that he would look into finding the matching funding.

Director Findlater said that he was pleased to see the District of West Kelowna identified as a local government that would be included in this program as there are two aquifers of concern in the District – both Crystal Mountain and the Upper Glenrosa areas are having water supply challenges.

“THAT the OBWB send letters to local governments that have one or more of the 15 identified sensitive aquifers in their jurisdiction, inviting them to participate in the Groundwater Monitoring Well Project.”

CARRIED

7.6 Adoption of Audited Financial Statements

Dr. Warwick Sears brought the 2009-2010 audited financial statements forward for board adoption, noting that they would be forwarded to the three Regional Districts and included in the Annual Report.

There was some discussion of approval of OBWB budgets each year by the Regional Boards, and Dr. Warwick Sears informed the board that the three CAO's from each would be meeting with her in mid-July to further those discussions.

Director Pike asked if the OBWB had reserves for replacement of capital assets. Dr. Warwick Sears replied that in the past, the OBWB has maintained an equipment reserve fund, which currently holds approximately \$250,000 for replacement or upgrade of milfoil equipment..

“THAT the Okanagan Basin Water Board adopts the 2009-2010 audited financial statements as presented.”

CARRIED

8. CORRESPONDENCE

8.1 Ian MacLeod, Ecosystem Coordination Office, Environment Canada, notice of funding for \$40,000 to enhance current water projects and science initiatives in the Okanagan

“THAT the Okanagan Basin Water Board receives the correspondence from Ian MacLeod, Environment Canada, regarding funding for Okanagan water projects.”

CARRIED

9. NEXT MEETING

The next regular meeting of the Okanagan Basin Water Board will be held on September 7,

2010, at the Regional District Okanagan Similkameen.

10. ADJOURNMENT

"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of July 6, 2010 be adjourned at 1:47 p.m."

CARRIED

Certified Correct:		
Chair		Executive Director

DRAFT

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
September 7, 2010
Agenda No: 6.1

File No. 0550.04

To: OBWB Directors
From: Anna Warwick Sears, Executive Director
Date: August 30, 2010
Subject: **Executive Director Report**

New Information Package for Sewage Facilities Grants

As part of our systematic updating of the Sewage Facilities Grants program, Genevieve Dunbar and I have developed an information package for local governments. This package includes our new application form, as well as the program's terms of reference, an invoicing form, and a new reporting form. I have included a draft of the package, and welcome comments and questions.

In the past, as staff changes have occurred in different municipalities, history and information about the grants received and the program as a whole have been lost. We will provide each finance and engineering department with the program information in a neat binder, and send updates when they become available. An additional goal, to help with grant tracking, is to have regular reporting from each of our grant recipients, with the status of their debt payments (these change from time to time, depending on the Municipal Finance Authority). Using these annual reports, it will be possible for our accountant to provide regular updates on the program retirement schedule and support future budgeting.

Watermilfoil Control Program

It has been a busy month for the milfoil program, with heavy weed growth in the South Okanagan. I have also been working on succession planning, anticipating upcoming retirements (see New and Unfinished Business).

Water Resources Chair

Throughout August, I have been attending regional district meetings with the UBC-O delegation seeking support for the Water Resources Chair, and providing information about the OBWB budget and mandate. RDCO and RDOS have approved the OBWB's involvement in this effort. The RDNO meeting will be on Wednesday, September 1st, and I have included in this report the memo to the RDNO board.

UBC-O has asked to appear as a delegation at our September meeting to discuss the outcome of this process. If all three regional districts approve the proposal, the OBWB will need to make a final decision and pass its own resolution to formalize the commitment.

Water Supply & Demand Project Update

The final technical report for the Water Supply & Demand Project - Phase 2 (WSDP) has been completed. We are revamping the WSDP portion of our website to make all water supply & demand public information easier to access. We are also moving forward with our development of a system to make the associated data and models more accessible.

The Phase 3 management team for the WSDP will have its first meeting Sept 16, kicking off with a workshop to select future scenarios. This is a highly technical exercise, and depends on the strengths and weaknesses of our models and data. I have attached the memo that was provided to the workshop attendees, but would appreciate feedback from OBWB Directors about the scenarios suggested here.

Similkameen Water Governance

On Aug. 25, I was invited to make a presentation to Similkameen Valley Planning Society members who are interested in forming a water board or similar structure of their own. The Planning Society includes representatives from all Similkameen local governments and rural areas, as well as the two Similkameen Indian Bands, who have been active participants. John Slater opened the meeting, and Stu Wells also attended.

The full-day workshop included presentations from the Ministry of Environment and Ministry of Agriculture about the state of water supplies in the Similkameen Basin. There were also presentations on First Nations water ethics by Jeanette Armstrong, of the Enowkin Centre, and Marlowe Sam, a PhD student at UBC Okanagan. My talk focused on the strengths of the OBWB governance model, and what could be replicated in the Similkameen. There will likely be new enabling legislation available through the Water Act Modernization to establish water boards in B.C.

Salmon Feast

The Okanagan Nation Alliance is having their annual Salmon Feast at Okanagan Falls, September 17 to 19. The feast itself is on Sunday, and is free and open to everyone. It ends with a ceremonial return of salmon bones to the Okanagan River. This year's event is likely to be very festive, given the historic Okanagan sockeye run. A poster is attached to this report.



Okanagan Basin Water Board – Sewage Facilities Assistance Grant Program

A Guide to the Program – Terms of Reference, Applications,
Reporting and Invoicing



Welcome to the OBWB's Sewage Facilities Assistance Grant Program

A few notes about using this guide:

The Okanagan Basin Water Board has created this resource for communities who have received, or are thinking of applying for, a Sewage Facilities Assistance Grant, so that all materials for the program are in one central location. In this information package, you will find the Terms of Reference for the program, a detailed list of required application components, the application form (including a How To guide for completion), and all resources related to reporting and invoicing.

There have been some recent (2010) changes to the manner in which the OBWB administers this program, with this guide being the final outcome. The process has been changed to be more streamlined and uniform for both grant recipients and the Okanagan Basin Water Board.

The Okanagan Basin Water Board provides support and information throughout all stages of the grant process – please do not hesitate to contact staff at any time.

We are here to help!

Please note:

- Application, Reporting and Invoice Forms will **not** be made available on the internet. For this program, most forms are Excel based and will be emailed upon request.

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OKANAGAN BASIN WATER BOARD SEWAGE FACILITIES GRANTS

TERMS OF REFERENCE UPDATED 2010

PREAMBLE

- The Okanagan Basin Study completed in 1974 identified increasing nutrient pollution as the cause of algal blooms and other signs of deteriorating water quality in Okanagan and Skaha Lakes. The major contributors to nutrient input into the lakes were the municipal sewer outfalls.
- The three valley regional districts opted to levy a tax through the Okanagan Basin Water Board (OBWB) on all properties within the Okanagan watershed. The purpose of the tax was to establish a Sewage Facilities Grant program to provide subsidies for construction of tertiary sewage treatment plants and collection systems by valley communities.
- There were two reasons for instituting this property tax: (1) local government considered the lakes a regional resource so that all citizens should pay toward restoring and maintaining the quality of the water regardless of whether they received sewers or not; and (2) the grants would assist smaller communities with a limited tax base in funding advanced treatment systems.
- The expenditures made on nutrient removal technology resulted in a decrease in phosphorus input into the lakes from municipal effluent of about 92.5%, from 59,000 kgs in 1970 to less than 5000 kgs in 1997.
- A significant proportion of the funds allocated through this program have gone toward community sewerage projects intended to decrease water pollution coming from developments with small lots and failing or over-capacity septic systems. To avoid repeating these costly fixes in the future, the OBWB now requires applicants to have in place zoning policies or bylaws prohibiting new development of lots less than 1.0 hectare that are not serviced by community sewers. This requirement is not intended to deter responsible development.

OPERATING PRINCIPLES FROM SLPS

The following principles were established in the OBWB Supplementary Letters Patent held by each regional district.

- The Water Board can levy up to 21¢ per \$1000 assessed value (for Sewage Facilities Grants) on all properties within the Okanagan drainage area.
- The OBWB will pay 18% of the total project cost of sewage improvement projects. The community must first pay the equivalent of 2.5 mills.
- Both treatment plants and collectors are eligible.

- Communities must submit applications for Sewage Facilities Grants prior to the commencement of project works. Grants will not be paid retroactively.

OBWB POLICIES

The following policies were made through OBWB resolutions to further define the operating principles of the grant program.

Qualifying

- Only communities employing tertiary treatment of sewage effluent are eligible for grants. (1977)
- Projects which qualify for Provincial government funding do not automatically qualify for OBWB funding. Qualifying for provincial funds is a necessary but not sufficient qualification for an OBWB Sewage Facilities Grant. (*policy revised: 2007*)
- The grant program is intended to address point source pollution from treatment plants utilizing old technology and to fund qualifying projects extending sewer service to subdivisions created prior to 1977 that are still on septic. New sewage treatment plants, expansions, or refits made necessary by growth or replacements due to age or outmoded technology are not eligible for OBWB grants. These works should be funded by DCCs and other mechanisms put in place by local government so that new infrastructure is paid for by the component causing the infrastructure needs. (1994)
- Lots on septic at the time of the original grant program (1977) will be eligible for funding when sanitary sewers are installed – providing infilling does not exceed the average annual growth rate for the community.
- At its discretion, the OBWB may decline approval of sewage infrastructure applications in communities that create lots smaller than 1.0 hectare which are not serviced by community sewers, and that do not have zoning policies or bylaws in place by January 1, 2008 prohibiting future creation of such lots. (*Policy adopted January, 2000 to follow Provincial policy for infrastructure funding and revised in 2007*)
- Each local government with subdivision approval authority is responsible for adopting the '1.0-hectare' policy. For example regional district grant status is not affected if a member municipality does not comply. Electoral area bylaws which contravene the 1.0 hectare lot size policy of the OBWB are considered to be in non-compliance with the requirement for the Regional District.
- Homesite severance lots are exempted from the '1.0-hectare' policy (2004).
- The '1-hectare' requirement is limited in geographic scope to the portions of the regional districts within the Okanagan watershed. Areas outside the watershed are not taxed for OBWB programs and are not eligible for grants. Districts should be aware that subdivision of 1.0-hectare lots on septic outside the watershed may still jeopardize funding from provincial sources (2007).
- The 1.0 hectare requirement may be waived through preparation of an approved (by Ministry of Environment) Liquid Waste Management Plan (LWMP) for decentralized wastewater. The LWMP must address on-site sewage in a sustainable fashion with the understanding that the system will be considered as permanent infrastructure and will be

ineligible for sewerage assistance funds in the future. The LWMP must be supported by appropriate bylaws (e.g., OCPs, zoning, subdivision standards). In addition, local government bylaws must be in place for the enforcement of operation and maintenance of these systems. All Type II and III package treatment systems serving multiple homes must be registered under the Municipal Sewage Regulations, which among other requirements specifies that developers must post a bond equivalent to the value of the plants.

Financing

- Annual assessments are made on the projected draw on the fund in that fiscal year – it is not always necessary to levy the full 21¢ per \$1000.
- Water Board grants are made on a debt repayment basis. There is not enough money to fund project costs up-front.
- Communities that do not incur debt are still eligible for 18% funding with that portion being on a debt repayment basis. This policy is not retroactive prior to April 1985.
- Grants are tied to a Municipal Finance Authority (MFA) issue and repaid over a twenty year period.
- If the amounts to be paid recipients are greater than the funds available for distribution, the 18% will be reduced proportionately such that all recipients are reduced by the same percentage. An exception is made for communities which have not previously qualified for assistance from the Board. In such cases the reduction will not apply for the first three years and any shortfall will be born proportionately by the other qualifying communities.
- The OBWB will not approve any Sewage Facilities Grants or retroactive payments if the application is made more one year after confirmation of eligibility for provincial funding (2001).

Future of the Program

- There will be an end point to the Sewer Grant Program when project debt is retired from all tertiary treatment plant construction and extension of sewers to developed areas that were present at the time of the grant program commencement (1977).
- *Recommendation for review: that OBWB investigate further infrastructure improvements, plans and research needed to protect the quality of valley lakes.* This program was specifically designed to avoid funding upgrades and expansion required by new development, stipulating that these should be paid by DCCs or other local government funding mechanisms. However, blanket policies prohibiting support of sewage plant upgrades due to age or outmoded technology reduce the ability of communities to maintain the highest possible levels of effluent treatment. In addition, new treatment technology may enable communities to expand wastewater re-use, reducing burdens on the supply system. Substantial pollution also arises from non-point sources – including stormwater run-off from roads, urban and agricultural areas. The OBWB should investigate the need and appropriateness of extending the Sewage Facilities Grants program to address other infrastructure upgrades that protect the quality of valley lakes (2007).

APPLICATION POLICIES

Requirements

- Communities should inform the OBWB of their intention to claim a grant for a new project at an early stage of their planning process so that adequate funds can be requisitioned.
- A general description of the project and a schedule of costs should be included in the application. Engineering detail is not necessary.
- Proof of eligibility for Provincial Infrastructure assistance should be attached. The project need not receive infrastructure funding as long as it meets appropriate standards and the lack of Provincial approval is due only to insufficient grant funds.
- The community must first pay the equivalent of 2.5 mills. Assessment is capped at 105% of the 1988 converted value for purposes of calculating the 2.5 mills to be paid by the community. {Revenue Sharing Act, Sections 6(4) and 35.1(1)(b)} The Provincial Infrastructure Grant Program of 1977 required communities to pay the 2.5 mills however later iterations of the Provincial program paid on the total project cost. The Okanagan Basin Water Board retained the original financial formula so that the basis for grant amounts would remain consistent.
- Applicants will provide a copy of a bylaw or a letter stating that a policy has been put in place prohibiting creation of lots less than 1.0 hectare in size not serviced by community sewers. Lots less than 1.0 hectares created by homesite severance on lands within the ALR are permissible.

Payments

- Communities meeting the criteria of the OBWB Sewage Facilities Grants receive 18% of the cost of treatment and collection systems upon completion of the project. Payments are made on a debt repayment schedule over a twenty year amortization through an MFA issue.
- Should a community refinance the debt from a project, the Okanagan Basin Water Board debt payments will be altered according to the new MFA rates. Changes in finance rates should be incorporated into the community's grant invoice.
- Payments for a successful Sewage Facilities Grant will only begin after the project has broken ground and that the following criteria are both fulfilled:
 - a.) payments have been initiated on a MFA note (or equivalent for self funded projects)
 - b.) the funds have been budgeted for and requisitioned for by the OBWB.
- It is the responsibility of the applicant to notify the OBWB by September 30th of the year prior to when their debt payments begin. The OBWB fiscal year begins April 1st.

Application Form:

In the following pages, please find the Sewage Facilities Assistance Grant Program Application forms. This form is provided as an example in order for applicants to review the required information and assemble the components needed to complete it successfully.

In order to *fill out and submit* an application, please email grants@obwb.ca for the digital version.

Also included in this section is a “Guide to the Application” that explains how to fill out each section of the form and an “Application Checklist” for the necessary components to submit a complete application package to the Okanagan Basin Water Board.

Please make *at least two copies* of the application package – one for submission to the Okanagan Basin Water Board and one for your files. You will need to refer to these materials when completing future reporting and invoicing.

Application Checklist

Please include the following components in your application package to the Okanagan Basin Water Board. Include a copy of this page with your application package, showing items included upon submission.

- Hardcopy of Sewage Facilities Grant Application Form with original signature of Treasurer/Chief Financial Officer and Chief Administrative Officer
- Proof of eligibility for Provincial Infrastructure Assistance
- General description of the project – engineering detail NOT required
- Schedule of Costs for the project
- Converted Area Assessment Calculation for project area
- Copy of Bylaw or Letter stating a policy is in effect that prohibits creation of lots less than 1 hectare in size not serviced by community sewers in the jurisdiction applying for this grant
- Documentation for all MFA notes related to the project, including MFA Issue, Interest Rate, Payment Schedule and Date of First Payment
- Digital submission of Microsoft Excel-based Sewage Facilities Application Form to the Okanagan Basin Water Board

Sewage Facilities Assistance Grant Application

Guide to the Application

Applicants should complete the Sewage Facilities Assistance Grant Application to the best of their ability prior to submitting a funding request to the Okanagan Basin Water Board. Application forms can be obtained from the Okanagan Basin Water Board office at 1450 KLO Road, Kelowna BC or electronically by emailing the Office and Grants Administrator for the Okanagan Basin Water Board (grants@obwb.ca).

Before submitting the application:

There will be background information necessary to have on hand before completing the grant application. Please review the application and assemble information relating to sewage treatment plant and community sewer capacities, percentage of the development in the project area dating prior to 1978, the assessment values of these properties as of 1988, and information on all MFA loans associated with financing the project.

Detailed Application Instructions

Please complete all the contact and project information at the top of the application.

In addition, please **indicate whether your project is eligible for provincial funding**. Qualifying for provincial funds is a necessary but not sufficient qualification for an OBWB Sewage Facilities Assistance Grant. The OBWB will not approve any Sewage Facilities Assistance Grants or retroactive payments if the application is made more one year after confirmation of eligibility for provincial funding.

- 1.) Please indicate if this project involves sewage treatment plant construction or upgrades by checking 'yes' or 'no' in the box.
 - In 1(a) indicate the proportion of the project that is for sewage treatment facility upgrades or construction as opposed to construction of community sewer or other works. Input this figure as a decimal (35% would be inputted as 0.35). Please include documentation verifying the source of this percentage value.
 - If your agency is upgrading an existing sewage treatment facility, please provide in 1(b) the percentage of plant capacity that services development built prior to 1978. This figure must be input as a decimal. Please include documentation, including maps and calculations, verifying the source of this percentage value.
 - **The plant and sewerage capacity for development constructed after 1977, or oversized to accommodate future development, is not eligible for funding under this program.**
 - If the project under consideration **does not involve** constructing or upgrading a sewage treatment plant, please enter **zero** for question 1a and leave 1b blank.

- 2.) Please indicate whether this project will upgrade neighborhoods currently on septic systems to community sewer by checking 'yes' or 'no' in the box.
 - In 2(a) indicate the proportion of the project that will upgrade or construct community sewer. This figure needs to be input as a decimal (35% would be input as 0.35). Please include documentation verifying the source of this percentage value.

- In 2(b) please provide the percentage of the proposed expanded sewer capacity that services development occurring prior to 1978. This figure needs to be input as a decimal. Please include documentation, including maps and calculations, verifying the source of this percentage value.
 - **Community sewers for development constructed after 1977 are not eligible for funding under this program.**
 - If the project under consideration will **not** be transitioning neighborhoods on septic to community sewer, please enter zero for question 2a and leave 2b blank.
- 3.) Please determine the Converted Assessment Amount as of 1988 for development within the project area that was constructed prior to 1978. Indicate this value in the appropriate box on the application form.
- 4.) OBWB Sewer Facilities Assistance Grants provide funds for debt financing; including a percentage of the principle and interest on MFA issued notes. Please list the numbers of all MFA finance notes associated with this project, their payment dates and debt repayment amounts in the table provided.
- 5.) All of the information you have inserted to the form will be used to calculate the total amount of funding for which your project is eligible. Please do not enter any numbers into these boxes, in order to retain the integrity of the formulas.

Print the completed application. The form must be signed by the Treasurer or CFO, and by the Chief Administrative Officer, certifying that the information is correct.

Attach the following to your application:

- Proof of eligibility for Provincial Infrastructure assistance
- A copy of a bylaw or a letter stating that a policy has been put in place prohibiting creation of lots less than 1.0 hectare in size not serviced by community sewers
- A schedule of costs for the project. Engineering detail is not necessary.

Fax or mail the signed copy to the Okanagan Basin Water Board and submit the digital version by email to the addresses below:

Okanagan Basin Water Board
1450 KLO Road, Kelowna BC, V1W 3Z4
P: 250-469-6323 F: 250-762-7011
grants@obwb.ca

Sewerage Assistance Grant Application

Please refer to the [Guide to the Application](#) as you complete this form.

Name of Local Government			
Name of Project Contact		Phone:	
Email		Fax:	
Project Budget \$			

Name of project	
Brief Project Description	

Is this project eligible for Provincial funding? Yes No

--	--

Sewage Treatment Plant Upgrade or Construction

1 Will this project involve sewage treatment plant upgrade or construction? Yes No

--	--

1a) What proportion of the project is for sewage treatment plant upgrades or construction? []

1b) If this project includes sewage treatment plant upgrades or construction, what proportion of wastewater treatment plant capacity services pre-1978 development?

- Please indicate this amount in the box to the right. It represents the % of plant upgrades eligible for funding

	<=% plant upgrades eligible>
--	------------------------------

Sewering of Neighborhoods

Yes	No

2 Does this project upgrade neighborhoods on septic to community sewer?

2a) What proportion of the project is for community sewer upgrades or construction?

2b) If this project includes sewerage, what proportion of the expanded capacity services pre-1978 development?

- Please indicate this amount in the box to the right. It represents the % of sewerage eligible for funding

<=% sewerage eligible>

3 Please determine the 1988 Converted Assessment Amount for all development occurring before 1978. Indicate this amount to the right.

<=Eligible assessment amount>

4 Financing

MFA Issue	MFA Expiry Date	Estimated Date - First Payment	Payment Date	MFA Debt-repayment

Total \$0.00

5 Calculations

Deduction for plant capacity oversizing	→	-	<=Total*%plant upgrades not eligible>
Deduction for sewerage post-1977 areas	→	-	<=Total*%sewerage not eligible>
Total Debt-servicing costs for eligible areas	→	-	<=Total - \$ not eligible>
First 2.5 mills converted eligible assessment	→	0	<= 0.0025*Eligible assessment amount>
Total eligible debt	→	-	<=Pre-1977 debt - First 2.5 mills>
Total OBWB grant	→	-	<=18% Total Eligible Debt>

I hereby certify that the annual debt charges and grant calculations are in accordance with the provisions of the Sewerage Assistance Program.

Treasurer or CFO	Date
Chief Administrative Officer	Date

*If a project is self-financed or on a shorted payment schedule, the OBWB grant will make payments equivalent to an MFA issue 20-year note

*The OBWB will only make payments to the municipality if MFA requires payments on their note. If the note payment is suspended, then the OBWB grant will also be suspended.

Annual Grant Reporting:

As part of changes to the Sewage Facilities Assistance Grant Program in 2010, all grant recipients are required to complete an Annual Grant Reporting form in order to facilitate budgeting/requisitioning processes of the OBWB and to ensure recipients receive Sewage Grant funds appropriately.

In the following pages, please find the Sewage Facilities Assistance Grant Program [Annual Reporting form](#). This form is provided as an example in order for recipients to review the required information and assemble the components needed to complete it successfully.

In order to *fill out and submit* the grant reporting, please email grants@obwb.ca for the digital version.

You will need to provide the most current information on all successful Sewage Facilities Assistance Grants in your jurisdiction and all MFA notes associated with those grants.

This form must be submitted to the Okanagan Basin Water Board no later than August 31st every year.

Sewage Facilities Assistance Grant Program – Annual Grant Claim Report

“How To” Guide for Completing Report

Grant recipients should complete the Sewage Facilities Assistance Grant Annual Grant Claim Report to the best of their ability. Grant claim report forms can be obtained from the Okanagan Basin Water Board office at 1450 KLO Road, Kelowna BC or electronically by emailing the Office and Grants Administrator: grants@obwb.ca.

Before submitting grant claim report:

There will be background information necessary to have on hand before completing the grant claim report. Please assemble information on all MFA loans associated with financing of all current projects prior to filling out this grant report.

Detailed Reporting Instructions

- Please complete all the contact and project information at the top of the application, including project name. For each project indicate whether the project is self financed. If the project is NOT self financed, leave the area blank.
- Please leave the area labeled “OBWB Grant Calculations” blank.
- Answer the questions regarding financing, grant retirement schedule and future grant applications.
- The form must be signed by the Chief Financial Officer or the Chief Administrative Officer, certifying that the information is correct.

Payment Schedule Information:

- Information for ALL of your current Sewage Facilities Grant Projects will be presented on this table. Please inform the OBWB (grants@obwb.ca) if you need more space than is provided in the current table –additional spaces will be provided to you.
- DO NOT attempt to insert additional rows on your own; it will disrupt integrity of the Excel formulas for the grant calculations.
- **Project Name:** typically the project name refers to the neighbourhood area that the project is focusing on, or the name of the sewage plant expansion/construction. It is helpful to use language the OBWB has seen on previous correspondence and/or grant applications.
- **MFA Issue:** the MFA loan(s) for this project are referred to by issue – please input that here for ease of cross reference with Provincial/MFA information.
- **Debt Retirement Date:** Based on the current interest rate and payment schedule with MFA, when is the predicted debt retirement.
- **Interest Rate:** Please provide the interest rate currently associated with the MFA issue.
- **Payment Date:** Please provide your payment dates associated with this MFA Issue, for the current year.



- Principle and Interest: Please indicate both the principle and interest payment amounts associated with the MFA Issue listed.
- Total MFA Payment: Do not input any information into this box; the calculation will be completed from information already provided in the table.
- Converted Assessment Amount: the Converted Assessment Amount will have been determined in the original application to the Okanagan Basin Water Board for a Sewage Facilities Assistance Grant and is specific to the project area. Please ensure you are entering the appropriate figure for Converted Assessment.
- Eligible Area: Please enter the proportion of the project area that is eligible for an OBWB Sewage Facilities Assistance Grant. The eligible area represents the percentage of project area (%) that encompasses all pre-1978 development. Please refer to your original application for this figure if necessary. You will need to **input** this percentage as **a decimal** in Excel in order to run the formulas.

Please do not hesitate to contact the Okanagan Basin Water Board if you have any questions in completing this report.

Office and Grants Administrator
Okanagan Basin Water Board
1450 K.L.O. Road
Kelowna, BC
V1W 3Z4
P: 250-469-6270
F: 250-762-7011
E: grants@obwb.ca

Sewage Facilities Grant Program - Annual Grant Claim Report

If you plan on reporting to the Okanagan Basin Water Board for a newly approved grant, the payment amounts must be included on this form.

Name of Local Government			
Name of Project Contact			
	Email		
	Phone		
	Fax		

Is this project 'self financed'?

Name of project(s)			If a project is self financed or on a shorted payment schedule, the OBWB will make payments equivalent to an MFA issue 20-year note.

OBWB Grant Calculations (using Payment Schedule - page 2)

Total Net payments:	\$0.00
18% of Total Net Payments:	\$0.00

OBWB Grant \$0.00

Do **NOT** input any information in these cells. Please fill out page 2 - the appropriate figures will transpose to determine total yearly OBWB Sewage Assistance Grant.

Have you re-financed with MFA since the submission of your last Sewage Facilities Grant Report? _____

Please attach copy of your grant retirement schedule for **EACH** MFA Issue - check to indicate you have done so. _____

Do you anticipate your local government applying for other Sewage Facilities Assistance Grants in the near future? _____

I hereby certify that all information provided in this invoice form is true and correct to the best of my knowledge. All data and calculations are in accordance with the Terms of Reference for the Sewerage Assistance Program.

_____	X	_____
Date		Chief Financial Officer or Chief Administrative Officer

Sewage Facilities Grant Program - Annual Grant Claim Report

Payment Schedule Information

Project Name	MFA Issue	Debt Retirement Date	Interest Rate	Payment Date	Principle	Interest	Total MFA Payment	Converted Assessment Amount*	Eligible Area (% expressed as decimal)	Excess (2.5 Mills x Convert Assess)	Final Total (Eligible MFA amount - Excess)
							\$0.00			\$0.00	\$0.00
							\$0.00			\$0.00	\$0.00
							\$0.00			\$0.00	\$0.00
							\$0.00			\$0.00	\$0.00
Total:										\$0.00	

*Use the converted assessment amount specific to the eligible portions of each project/project area. You may need to refer to your original application.

Grant Invoicing:

As part of changes to the Sewage Facilities Assistance Grant Program in 2010, all grant recipients will now use a standardized form provided by the OBWB, to claim payment of a Sewage Facilities Assistance Grant.

In the following pages, please find the Sewage Facilities Assistance Grant Program Invoicing form. This form is provided as an example in order for recipients to review the required information and assemble the components needed to complete it successfully.

In order to **fill out and submit** the grant reporting, please email grants@obwb.ca for the digital version.

Grant payment requests can be made at any time of year.

Sewage Facilities Assistance Grant Program – Semi-Annual Invoice Form

Grant invoice forms can be obtained from the Okanagan Basin Water Board office at 1450 KLO Road, Kelowna BC or electronically by emailing the Office and Grants Administrator: grants@obwb.ca

Before submitting invoice form:

There will be background information necessary to have on hand before completing the grant claim report. Please assemble information on MFA loans associated with financing of current projects prior to filling out this invoice.

Detailed Reporting Instructions

- Please complete all the contact and project information at the top of the application, including project name.
- The form must be signed by the Chief Financial Officer or the Chief Administrative Officer, certifying that the information is correct.

Payment Schedule Information:

- Information for your current Sewage Facilities Grant Projects will be presented on this table. Please inform the OBWB (grants@obwb.ca) if you need more space than is provided in the current table –additional spaces will be provided to you.
- DO NOT attempt to insert additional rows on your own; it will disrupt integrity of the Excel formulas for the grant calculations.
- **Project Name:** typically the project name refers to the neighbourhood area that the project is focusing on, or the name of the sewage plant expansion/construction. It is helpful to use language the OBWB has seen on previous correspondence and/or grant applications.
- **MFA Issue:** the MFA loan(s) for this project are referred to by issue – please input that here for ease of cross reference with Provincial/MFA information.
- **Debt Retirement Date:** Based on the current interest rate and payment schedule with MFA, when is the predicted debt retirement.
- **Interest Rate:** Please provide the interest rate currently associated with the MFA issue.
- **Payment Date:** Please provide your payment dates associated with this MFA Issue, for the current year.
- **Principle and Interest:** Please indicate both the principle and interest payment amounts associated with the MFA Issue listed.
- **Total MFA Payment:** Do not input any information into this box; the calculation will be completed from information already provided in the table.
- **Converted Assessment Amount:** the Converted Assessment Amount will have been determined in the original application to the Okanagan Basin Water Board for a Sewage Facilities Assistance Grant and is specific to the project area. Please ensure you are entering the appropriate figure for Converted Assessment.
- **Eligible Area:** Please enter the proportion of the project area that is eligible for an OBWB Sewage Facilities Assistance Grant. The eligible area represents the percentage of project



area (%) that encompasses all pre-1978 development. Please refer to your original application for this figure if necessary. You will need to **input** this percentage as **a decimal** in Excel in order to run the formulas.

Please do not hesitate to contact the Okanagan Basin Water Board if you have any questions in completing this form.

Office and Grants Administrator
Okanagan Basin Water Board
1450 K.L.O. Road
Kelowna, BC
V1W 3Z4
P: 250-469-6270
F: 250-762-7011
E: grants@obwb.ca

Sewage Facilities Grant Program - Semi-Annual Invoice Form

Name of Local Government			
Name of Project Contact			
Email			
Phone			
Fax			

Payment Information

Project Name	MFA Issue	Payment Date	Principle	Interest	Total MFA Payment	Converted Assessment Amount*	Eligible Area (% expressed as decimal)	Excess (2.5 Mills x Convert Assess)	Final Total (Eligible MFA payment - Excess)
					\$0.00			\$0.00	\$0.00
					\$0.00			\$0.00	\$0.00
Total Payments:									\$0.00

*Use the converted assessment amount specific to each project/project area

Total Net payments:	\$0.00
18% of Total Net Payments:	\$0.00

Do **NOT** input any information in these cells. The appropriate figures will transpose to determine total OBWB payment.

OBWB Grant \$0.00

I hereby certify that all information provided in this invoice form is true and correct to the best of my knowledge. All data and calculations are in accordance with the Terms of Reference for the Sewerage Assistance Program.	
<hr style="width: 80%; margin: 0 auto;"/> <p>Date</p>	<p style="text-align: center;"><u>X</u></p> <hr style="width: 80%; margin: 0 auto;"/> <p>Chief Financial Officer or Chief Administrative Officer</p>

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
Sept. 7, 2010
Agenda No: 6.1.2

File No. 0550.04

To: RDNO Directors
From: Anna Warwick Sears, Executive Director, Okanagan Basin Water Board
Date: August 23, 2010
Subject: **Supporting Water Resources Chair at UBC-O**

The OBWB has received a request by UBC Okanagan to support a BC Regional Innovation Chair in Water Resources. An OBWB contribution would help match \$1,250,000 from the Leading Edge Endowment Fund (LEEF). On August 12th and 19th, the RDCO and RDOS recommended that the OBWB contribute \$500,000 over 5 years (\$100,000/yr).

As the OBWB develops its budgets annually, such a multi-year commitment requires resolutions of support by all three regional boards.

Support for a Water Resources Chair is consistent with the OBWB mandate in its letters patent – “To define water problems and priorities, economic feasibility of solutions, responsibility, necessary legislation and required action;” and, “To participate financially or otherwise, in surveys, investigations or projects on behalf of Okanagan local governments.”

The OBWB likes to support initiatives that bring in large water funding from outside the valley. This opportunity leverages funds in three ways: (1) bringing in the Leading Edge Endowment Funds, (2) University research adds direct value to OBWB water studies, and (3) once established, a Water Resources Chair will bring in large new federal research grants.

The regional districts of Central Kootenay and Kootenay-Boundary have made similar contributions to support a Regional Innovation Chair at Selkirk College.

The OBWB has a legal funding ceiling of 3.6-cents/\$1000 assessment (excluding sewage grants). The regional districts may jointly approve new initiatives up to this level. The 2-cents/\$1000 for the water management program (scheduled for renewal in 2011) is included under this ceiling. This year, requisitions for the water management and milfoil control combined were about 2.5-cents/\$1000, and with this contribution would be 2.6-cents/\$1000 – an increase of about 50-cents/year for the average home.

The following shows estimated amounts from each regional district.

Total commitment	Number of years	Commitment per year	RDNO	RDCO	RDOS
		(Estimated percentage)	19.5%	58.8%	21.7%
\$500,000	5	\$100,000	\$19,499	\$58,783	\$21,718

Future Scenarios Workshop for Okanagan Water - BACKGROUNDER September 16th, 2010

Purpose

The goal of this workshop is to narrow down a list of scenarios to undertake in Phase 3 of the Okanagan Water Supply & Demand Project. The workshop participants are asked to consider which scenarios should be given highest priority, who should be involved in an advisory committee to oversee the scenario modeling process, and what constraints are present moving forward.

Background

The Okanagan Basin Water Board (OBWB) has recently completed Phase 2 of the Okanagan Water Supply and Demand Project, an assessment of water availability in the Okanagan Basin. The next phase of the Project includes additional science, information management, and policy development. We are expanding systems for gathering data on water use, stream flow, evaporation and other key factors. We are improving databases and web-interface to give better access to data and models. And, we are using the results of the study – especially future scenario modeling – to develop policy tools such as basin-wide drought plans.

Phase 2 explored a limited number of scenarios to evaluate the impact of climate change, population growth, and land use on water availability, and to test the scenario modeling process. The selected scenarios consider one of six possible global climate models and one level of carbon emissions. The scenarios also evaluated the expected rate vs. high rate of population growth; two possible agricultural conditions (existing cultivated land vs. all reasonably irrigable land); and two possible trends in water use efficiency (current trends vs. 33% improvement in efficiency by 2020). Finally, one scenario simulated the effects of a three-year drought (based on the output of the climate model).

Planning more scenarios

The OBWB is now undertaking a second round of scenario development, scheduled for completion by April 1, 2011. Running a broader range of scenarios will give a wider range of possibilities and a more accurate estimate of risks. These scenarios will influence the direction of future research and support local water management activities.

Scenarios may include the following:

- I. **Climate:** Run one or more additional climate models to give comparative outcomes. The previous climate model was chosen as a moderate, mid-range alternative. However, the most extreme values given by this model barely captured the actual historic conditions (i.e., the 1930s or 1997). It will be important make comparisons with alternative models. Another alternative is to randomly combine outputs from different models (e.g., warm and cool) to generate more climate variation (which tends to be damped by modeling).
 - **Question: What climate model or models should be considered?**

II. **Dirty Thirties**: Repeat the 3-year drought analysis to more closely replicate the precipitation patterns of the 1930s historical drought. The previous 3-year drought scenario was based on the moderate output of the chosen climate model, and we do not have the 500m climate grid for the 1930s.

- **Question**: How should this be modeled?

III. **First Nations Band Lands**: Analyzing the effect of fully irrigating Okanagan First Nations lands which are currently used for dry-land agriculture. This remains the largest potentially irrigable area that is likely to increase overall water demand in the valley, and will likely have licence precedence.

- **Question**: How does this differ as a subset from the “all reasonably irrigable lands” scenario previously modeled? ONA staff have expressed interest in sub-basin water supply & demand modeling (see below) especially with respect to environmental flows.

IV. **Smart Growth**: Developing a scenario on the impacts of urban sprawl (large irrigated lots) vs. smart growth (high density development, xeriscaping) on water demand. There is great interest in how different development patterns affect future water use.

- **Question**: Do we have enough data? Are there other demand scenarios that should be considered?

V. **Demand Management**: Evaluating how a 33% improvement in efficiency may moderate the effects of a 3-year drought. This scenario was originally planned for the first round of analysis, but was postponed for time and budget constraints. **Question**: Three year droughts may happen any time, and will have different impacts depending on the degree of demand management in place. How would we model this?

VI. **Sub-basin Supply & Demand**: Using scaled-down portions of the models to surface water hydrology in specific water use areas or sub-basins. Mission, Trout, and Vernon Creeks have been mentioned as high-priority. These scenarios would be conducted to test trial modeling approaches not possible in the model as a whole, and can answer questions about water supply and demand in problem areas.

- **Questions**: Is it feasible to use the Water Supply & Demand models on a scaled-down basis? What are the top-priority sub-basins?

VII. **Aquifer Sensitivity**: Evaluating the sensitivity of aquifers to development in specific water use areas. Although the Mike She models do not explicitly include groundwater extraction, groundwater use is included in the demand model, and the Golder report identified which aquifers are most at-risk for over-pumping. Groundwater scenarios are in high demand from local government.

- **Questions**: Do we have data of fine enough resolution to undertake groundwater scenarios? Are there one or more select groundwater scenarios that could be undertaken to test the process and pave the way for more work?

Constraints

The following are known constraints for the scenario development process. These constraints should be considered while developing the project plan.

Money: We have \$50,000 funding under RAC (joint NRCan, OBWB, MOE), and have applied for an additional \$15,000 from Environment Canada. Some external costs for information/data management and support may be absorbed by the OBWB, but the budget is limited.

Time: Work on the new scenarios – including modeling and reporting – must be completed by March 31, 2011, as this is the funding deadline established for the project under NRCan’s RAC initiative. If we are approved for the additional Environment Canada funding, it would also have a March 31, 2011 deadline.

Models: Running scenarios involves the interaction between the climate models developed by EC and AAFC; the Okanagan Water Demand Model, the Okanagan Hydrology Model, and Okanagan Water Accounting Model developed through the Okanagan Water Supply and Demand Project. These models are collectively very sophisticated, but they each have limitations and most are relatively untried. Ideally, this exercise will allow us to better test and understand the capacity of these models.

Invited Participants

In order to hit the ground running, invited participants are primarily those who were active in Phase 2 of the Water Supply & Demand Project, and other external specialists in scenario modeling.

Project Coordinators

Anna Warwick Sears, OBWB
Wenda Mason, MOE

Core Management Team

Stu Wells, OBWB
Toby Pike, OBWB
Brian Symonds, MOE
Kendall Woo, EC
Gwyn Graham, EC
Denise Neilsen, AAFC
Doug Edwards, AAFC
Howie Wright, ONA
Kim Hyatt, DFO
Bernie Bauer, UBC-O
Lorraine Bennest, BCAC
Ted van der Gulik, MAL

Technical Advisors

Alex Cannon, EC
Markus Schnorbus, PCIC
Brian Bell, AAFC
Craig Nichol, UBC-O
Mike Noseworthy, MOE
Conrad Pryce, MOE
Oleg Ivanov, MOE
Bob Hrasko, WSABC
Brian Guy, Summit Environmental Inc.
Ron Fretwell, RHF Systems Ltd.
Pat Delaney, DHI
Liam Edwards, MCD

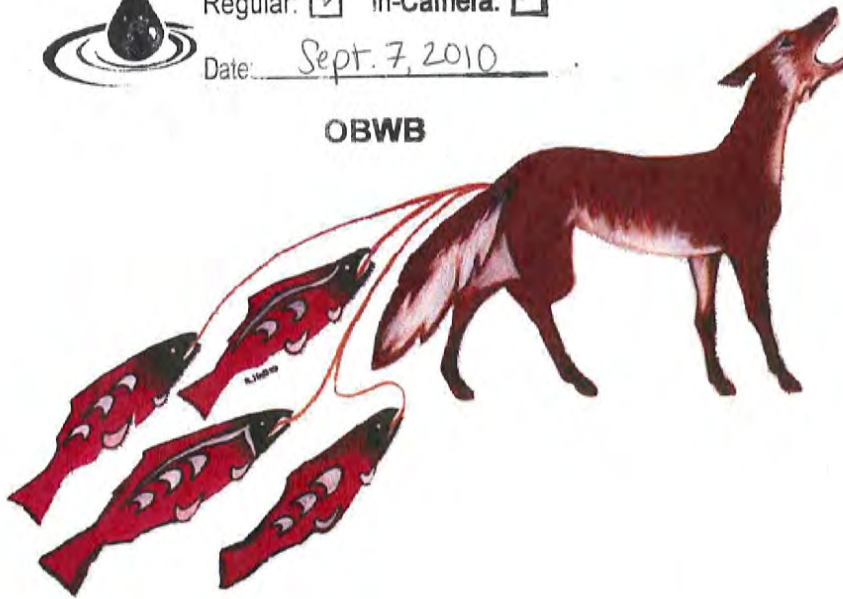
Agenda No. 6.1.4



Regular: In-Camera:

Date: Sept. 7, 2010

OBWB



snxá?l'í^wləm

OKANAGAN NATION SALMON FEAST AND CELEBRATION

September 17, 18 & 19, 2010

Okanagan Falls Provincial Park

EVERYONE WELCOME

**TO VOLUNTEER, REGISTER FOR CAMPING, OR
FOR MORE INFORMATION**

PLEASE CONTACT

Tara Montgomery Communications

tmontgomery@syilx.org

1.866.662.9609

HISTORY

This is a culturally significant site for the Okanagan people, and historically, it was an important traditional fishing camp, gathering place and trading site. The sockeye salmon is a primary food source for the Okanagan people. In the late summer, large fishing camps were set up at the Okanagan Falls where the Okanagan people celebrated the beginning of the sockeye fishing season with the First Salmon Ceremony. Led by the Chief, the Okanagan's honored the sockeye and gave thanks for its abundance, then distributed the fish to all Okanagan members

EVENTS INCLUDE:

Friday

Fisheries Presentations
Stick Game Tournament

Saturday

Canoe Paddle (Skaha Lake)
Satellite Aids Walk hosted by
Okanagan Aboriginal Aids Society

www.oaas.ca

Dinner and Entertainment

Sunday

Ceremony and Feast
Kids Activities

Camping Available (must register)
Arts and Crafts

View our Website www.syilx.org
for the Agenda of Events

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
Sept. 7, 2010
Agenda No: 6.2

File No. 0550.04

To: Board of Directors
From: Nelson R. Jatel, Water Stewardship Director
Date: August 30, 2010
Subject: **Water Stewardship Director's Report – July/August**

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

1.0 OKANAGAN WATER STEWARDSHIP COUNCIL, TECHNICAL ADVISORY COMMITTEE

The Stewardship Council took a recess for summer and did not meet in July and August.

The current term for member organizations participating on the Okanagan Water Stewardship Council ("the council") are coming to an end in September. Next term's council member organizations were appointed by the Board of Directors in July. Member organizations serve an 18 month term starting in October 2010. The council meets monthly – 10 times a year. A meeting agenda including notes from the previous meeting are circulated on the first Friday of each month.

The council provides technical support to the board and explores water issues at their request. Monthly council meetings provide members with an opportunity to communicate ongoing water management issues faced by respective organizations throughout the valley.

The next council meeting will be in Kelowna (4087 Casorso Rd.) on Sept. 9, from 12:30 p.m. to 5 p.m. Our guest speaker is Gabor Fricska from Environment Canada's Kelowna office, who will be speaking on weather and climate forecasting.

The schedule for the remaining council meetings in 2010 is:

- Thursday, September 9
- Thursday, October 14
- Tuesday, November 2 (joint council and board meeting)
- Thursday, December 9

The council has started a progress review of the Sustainable Water Strategy (2008) and will have a progress report developed for early 2011.

All board members are welcome and encouraged to attend monthly council meetings.

2.0 PROJECT UPDATES

2.1. Streamlined Water Use Reporting Tool

The Streamlined Water Use Reporting Tool (SWURT) – Okanagan Pilot project is continuing to move ahead smoothly under the direction of the steering committee, co-chaired by Dr. Wenda Mason and Mr. Nelson Jatel, and with development by our consultants, Spot Solutions Inc.

Phase II of the project started in July and consists of the implementation of a simple and user-friendly online interface for large volume water users within the Okanagan watershed to report their surface and ground water use. SWURT improves efficiency for both the water user and government agencies by standardizing data collection, organizing the information, and providing it back as a useable form.

It is expected that under the Living Water Smart program, all large water users (surface and ground) will be required to report water use by 2012. The SWURT tool will support this requirement.

This web-based reporting tool project is a partnership between the OBWB and senior levels of government. This information is critically important to support drought planning and provide improved supply and demand modeling for the Okanagan Basin.

2.2. Water usage and pricing survey project

The 2010 OBWB water pricing survey will be asking Okanagan water suppliers the water prices charged for residential, agricultural and institutional water use. The survey instrument was developed and designed by Urban Systems Ltd and Discovery Research. The survey is expected to be delivered through August and early September.

This project was identified in our Sustainable Water Strategy. The strategy found a need to implement such a survey to support water managers in making decisions about water pricing policies.

Preliminary survey results are planned to be presented at the 2010 AGM. A full survey report will be completed by early October 2010.

This project provides a useful baseline of water pricing information. OBWB staff members recommend that water pricing information be regularly tracked throughout the Okanagan to support local governments' development of informed water pricing policy.

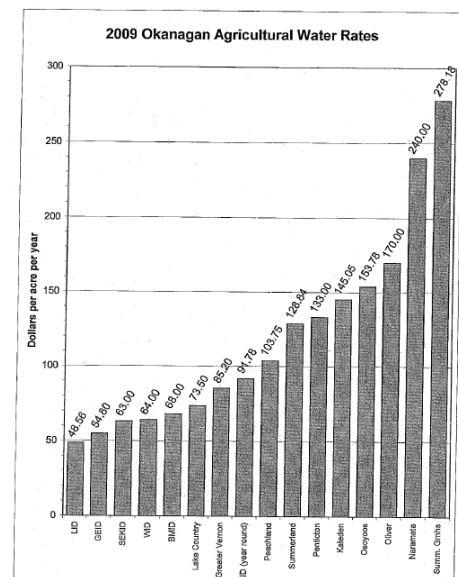


Figure 1 Previous survey of agricultural water pricing in the Okanagan

2.3. Drought Communication: Development of a drought road sign standard for the Okanagan

“Government will require all users to cut back their water use in times of drought or where stream health is threatened.” BC Living Water Smart Plan (2008)

In August 2009, the OBWB hosted the well-attended ‘Living within Our Means’ drought planning workshop that resulted in seven recommendations for drought-proofing the Okanagan. One of the recommendations was to enhance communication and “work with Okanagan regional districts to

ensure that proper communication between and among local water purveyors is carried out in a timely fashion.”

Building on this year’s water supply webinars (hosted by the OBWB, and which provided up-to-date descriptions of the Okanagan’s water supply during the spring), a committee of provincial and local water managers have been organized by OBWB staff to develop a drought sign standard for British Columbia that will be piloted throughout the Okanagan in 2011.

This initiative supports the North Okanagan Regional District’s request for a drought sign standard, resulting from the severe 2009/10 winter water shortage with historic low reservoir levels on the Aberdeen plateau. During the first project meeting, senior government and regional district staff strongly supported developing a highway sign standard that communicates drought level (defined by the B.C. government). The intent is that the signs could be used by local water utilities to communicate with the public.



Figure 2 Example of a road sign for the use of identifying forest fire conditions.

This initiative links provincial and local government communication efforts. The BC Drought Strategy defines drought levels in five categories: normal, dry, very dry, extremely dry and loss of

community water supply. Local water utilities that have developed water supply plans will have corresponding drought stages that describe local drought regulations, water conservation policies and responses.



2.4. From Rain to Resources: Managing stormwater in a changing climate workshop

The OBWB, in partnership with the BC Water and Wastewater Association, will be hosting a rainwater workshop, Oct. 28 to 29 in Kelowna.



From Rain to Resource 2010

The goal of this workshop is to share positive and innovative developments in rainwater management and to discuss how barriers to change are being overcome in communities in B.C. and beyond. The overall objective is to move municipal governments beyond conventional stormwater management, and inspire them to use rainwater as an integrated resource.

Day 1 of the workshop will be geared toward technical operational and planning staff and will focus on site-level best practices and tools to deal with various situations (e.g., steep roads and slopes, flat sites and parking lots, retrofitting, etc.). The presentations will highlight success stories and lessons learned from the Okanagan, Vancouver Island and the Lower Mainland.

Day 2 of the workshop will be of interest to technical operational and planning staff as well as to policy makers such as elected officials and municipal senior staff. The purpose of day 2 is to integrate the perspectives of the people working on the ground and those developing and adopting policy. In the morning, participants will choose from two tracks that will be focused on similar topics but with a “technical” or “policy” twist. In the afternoon, the two groups will jointly attend a keynote speaker and a plenary session to stimulate discussion and shared understanding.

This workshop will be of interest to people who put rainwater management techniques and products into practice, such as planners, engineers, and landscape architects from government and private

industry, and to those who develop policy around rainwater management, such as elected officials and municipal senior staff.

For more information or to register online visit: <http://www.bcwwa.org/seminars/RtoR.htm>

3.0 FUNDING OPPORTUNITIES

3.1. Agriculture and Agri-Food Canada Growing Forward: Innovative Approaches Program: Request for Proposal

The OBWB has been identified as a potential applicant or project collaborator for this program.

Innovative Approaches is part of AAFC's commitment to promote environmentally responsible agriculture. The program will investigate innovative mechanisms, tools and approaches, not used extensively or tested in Canada, that better enable the sector to improve its environmental performance, address agri-environmental challenges and opportunities, and enhance its competitiveness now and in the future. Outcomes will contribute to future agri-environmental policy and programming approaches. Project funding is available until March 31, 2013.

The deadline for submitting a proposal is October 1, 2010.

OBWB staff will be preparing a grant funding application soliciting funds under the Innovative Approaches Program. The funding application will focus on innovative actions that provide for practical tools for Okanagan agriculture. Approximately 55% of Okanagan water demand is for agricultural production. The management of our water supplies is a strategic and important aspect of Okanagan agricultural success and the sectors global competitiveness.

The OBWB proposal will focus on key results in the areas of competitiveness and innovation, society's priorities, and proactive risk management and will include some or all of the following objectives:

- Explore climate change impacts on agricultural water supply;
- Develop innovative drought management tools (e.g. agricultural water reserve);
- Develop innovative partnerships to groundwater monitoring wells; and/or
- Explore market based options for managing Okanagan water for the agricultural sector (common pool resource regulatory framework).

Recommended motion:

The OBWB supports and authorizes the application by staff to Agriculture and Agri-Food Canada's Innovative Approaches Program.

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
Sept. 7, 2010
Agenda No: 6.3

File No. 0550.04

To: OBWB Directors
From: Corinne Jackson
Date: August 30, 2010
Subject: **Communications and Research Coordinator Report**

Update on Okanagan WaterWise

July and August were busy months for the Okanagan WaterWise program. During the summer, there were a number of concrete items delivered, as well as some less visible, but still important, work done.

The most obvious deliverable was the launch of the OKWaterWise website. The site (www.okwaterwise.ca) is intended to be an organic project that will be updated with additional, useful information that informs and engages the residents of this valley, promotes water protection and a valley-wide message.

In addition to the website, Okanagan WaterWise has set up Facebook and Twitter pages, using new media as a method to attract young people to our vision and message, and hoping that they will help spread the word. These pages are being updated frequently. I invite you to check out the website, “like” us on Facebook, and follow us on Twitter. I also invite your feedback on these initiatives, as well as your ideas for potential postings (e.g. events, interesting YouTube videos, news stories).

Hopefully, some of you have also seen our WaterWise water bottle display banners in your community. The banners (which show images of shockingly large water bottles, indicating the average Okanagan resident uses more than two times the amount of water than the average Canadian) were set up to catch the attention of residents during tax time in the RDNO office, Lake Country, West Kelowna, Summerland and Penticton municipal halls. They have also been in recreation centres this summer in Vernon and Summerland, at the Peachland library, the farmers markets in Penticton and Naramata, and shopping centres in OK Falls and Oliver – again, trying to reach valley residents. At the time of this writing, the banners were also to appear in the lobby of Osoyoos’ recreation centre and library.

In the background, and less visible, the Okanagan WaterWise team was also busy this summer touring the valley, meeting with those working in water for local government, asking for feedback on the WaterWise Outreach Strategy and Action Plan, determining their needs and areas in which to partner.

This feedback has been extremely useful and has already been used in the development of some of the messaging on our website. As a result of feedback, however, Water Board staff members also feel it's important to take a step back, and develop an addendum to the strategy before moving ahead with some of its deliverables (e.g. posters, advertising and other materials and projects) to ensure buy-in from all parts of the valley. As such, I am looking to strike an ad hoc committee to provide feedback as we move forward. The committee would include water information officers in local government offices in the Okanagan, businesses, educators and students, residents, First Nations reps, and others.

Okanagan WaterWise will continue to be visible, especially with its website, Facebook and Twitter pages, and with a write-up in the upcoming Living Greener calendar. However, the fall provides the perfect time for this type of research to be done with the loss of our summer staff. (Amanda Cadorette's last day was July 29, as she left us to pursue other employment that would allow her to work part-time while attending school. Melissa Tesche has also needed to spend more time, recently, on learning administration duties as she prepares to step into the role of Office and Grants Administrator when Ms. Dunbar begins her maternity leave on Sept. 11.)

We look forward to working hard throughout the fall and winter, developing the materials needed to relaunch a successful campaign in the spring!

Update on other communication activities

After receiving a number of calls from the public regarding milfoil in the north end of Osoyoos Lake, the Water Board issued a news release July 26, hoping to address the issue on a larger scale and be proactive in responding to potentially more inquiries. The release noted some of the expected causes of the outbreak and measures being taken to address it.

A news release, regarding the rainwater conference being jointly hosted by the OBWB and BC Water and Waste Association in October, was disseminated Aug. 10.

Summary of Recent Media

July 21	"Harvester takes on exploding milfoil," <i>Osoyoos Times</i>
July 26	"OK Falls sewer plant approval expected soon," <i>Penticton Herald</i>
July 27	"City prepares to fine water abusers," <i>Penticton Herald</i>
July 27	"Milfoil outbreak on Osoyoos Lake worst in 20 years," <i>SunFM Penticton</i>
July 27	"Milfoil outbreak summer surprise in Osoyoos Lake," <i>Penticton Herald</i>
July 27	"People using more water," <i>Castanet</i>
July 29	"Mowers work OT to control water weed," <i>Kelowna Daily Courier</i>
July 29	"Okanagan WaterWise Website Launched," <i>District West Kelowna e-news</i>

July 29	“Project flush with funds,” <i>Penticton Western News</i>
July 30	“Milfoil outbreak in Osoyoos Lake,” <i>Castanet</i>
Aug. 4	“Wine tourism threatens water security in Okanagan,” <i>BC Business</i>
Aug. 5	“Okanagan WaterWise Website Launched,” <i>CivicInfo BC e-news</i>
Aug. 10	“Water supply concerns elicit plan for monitoring wells,” <i>Keremeos Review</i>
Aug. 13	“Research chair supported,” <i>Kelowna Capital News</i>
Aug. 14	“RDCO board meeting highlights – Research chair,” <i>Castanet</i>
Aug. 15	“Workshop on managing stormwater seeks new ideas ,” <i>Kelowna Capital News</i>
Aug. 15	“Position supported,” <i>Vernon Morning Star</i>
Aug. 18	“UBCO to host water meet,” <i>Kelowna Capital News</i>
Aug. 19	“Okanagan water use and launch of WaterWise website,” <i>AM1150-Early edition</i>
Aug. 19	“Milfoil in Osoyoos Lake,” <i>CHBC News</i>
Aug. 20	“RDOS board highlights - UBCO water research and groundwater wells,” <i>Castanet</i>
Aug. 24	“Kelowna hosts rainwater talk,” <i>Lake Country Calendar</i>
Aug. 24	“Software helping agriculturists,” <i>Vernon Morning Star</i>
Aug. 25	“Innovative water model now in use,” <i>Kelowna Capital News</i>
Aug. 25	“Modeling just a drop in the bucket,” <i>Kelowna Daily Courier</i>
Aug. 25	“Water conservation in the Okanagan,” <i>Penticton Herald</i>
Aug. 25	“Letter to Ed. - Gratitude for milfoil harvest ,” <i>Osoyoos Times</i>
Aug. 26	“Water Board funds goose program,” <i>Castanet</i>
Aug. 31	“Thinking about water – the source of all life,” <i>Similkameen Spotlight</i>
Aug. 31	“Water planning workshop a hopeful first step,” <i>Keremeos Review</i>
Aug. 31	“RDOS board supports water resource management chair,” <i>Keremeos Review</i>
Aug. 31	“Funding for monitoring wells approved by RDOS board,” <i>Keremeos Review</i>
Aug. 31	“Goose program funded,” <i>Vernon Morning Star</i>

Summary of Upcoming Presentations

Sept. 26	<u>Organic Okanagan Festival</u> (Kelowna): Water for Agriculture in the Okanagan (Dr. Warwick Sears)
Oct. 21-24	<u>Waterlution</u> : Canadian Water Innovation Lab 2010 (Nelson Jatel)

Recently Delivered Presentations

July 8	<u>District of West Kelowna Agricultural Consulting Team</u> : The importance of water in developing an Agriculture Plan (Dr. Warwick Sears)
July 15	<u>Okanagan Institute</u> : Green Grows the Valley – sustainability and water (Dr. Warwick Sears)
July 20	<u>BC Wine Grape Council – Viticulture and Enology Conference</u> : Irrigation Water Supply and Demand in the Okanagan and Similkameen Valleys (Dr. Warwick Sears)
Aug. 12	<u>Regional District of Central Okanagan</u> : delegations by UBC-O regarding OBWB support for Water Resources Chair (Dr. Warwick Sears)

- Aug. 19 Regional District of Okanagan-Similkameen: delegations by UBC-O regarding OBWB support for Water Resources Chair (Dr. Warwick Sears)
- Aug. 25 Similkameen Valley Planning Society: Water Governance mechanisms – the Okanagan experience (Dr. Warwick Sears)
- Sept. 1 Regional District of North Okanagan: delegations by UBC-O regarding OBWB support for Water Resources Chair (Dr. Warwick Sears)

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
Sept. 7, 2010
Agenda No: 7.1

File No. 0550.04

To: OBWB Directors
From: Melissa Tesche, Office and Grants Administrator
Date: September 7, 2010
Subject: **Milfoil Management Program Update**

The summer of 2010 saw denser than normal patches of milfoil throughout all of the Okanagan mainstem lakes, resulting in a high number of public reports and requests for harvesting. The situation was particularly bad in Osoyoos Lake, where weed beds appeared in previously unreported areas, and known weed beds had spread in size. A combination of environmental factors is likely responsible for the boom in weed growth. The early spring allowed milfoil to start the growing season sooner than normal, and the unusually heavy rains brought nutrient-rich run off that acted like fertilizer.

It is difficult for lakeshore residents to accurately gauge the size and density of a milfoil bed until the weeds near the surface of the lake. Most of the milfoil in Osoyoos Lake seemed to reach this point at the same time, causing an influx of calls and emails in early July. We responded quickly by increasing the number of harvesting hours spent on the lake. In addition to our regular harvesting shifts, we established a contract with Dave Caswell, who runs the Christina Lake milfoil control program. Mr. Caswell has a wealth of experience with both milfoil and aquatic machines, and was able to hit the ground running. With Mr. Caswell running the harvester on the weekends, the OBWB maintained a presence in the lake seven days a week, for three and a half weeks.

The logistics of removing such a large amount of weeds were challenging. The foreshore of Osoyoos Lake is highly developed. This made it difficult to find locations that have suitable water access for the harvester to dump the weeds on the beach, and enough land access for the dump truck to gather the weeds and cart them away. However, we were able to find suitable sites on both the west and east sides at the south end of Osoyoos Lake. Interestingly, these difficulties are common on other lakes in the Okanagan as well.

Once the harvested weeds were collected, the next challenge was finding somewhere to deposit them. Cut milfoil is a nutrient-rich mulch, but recipients must be able to take an entire load of weeds at one time; we are not able to "split" loads. We were able to deposit the weeds at the Osoyoos Landfill and provide them to an organic farmer in Oliver. We have also made contact with at least two other people who are interested in receiving weeds next summer, which will minimize the amount of material sent to the landfill.

In addition to the situation in Osoyoos, we responded to milfoil growth along portions of the downtown Kelowna foreshore and in the Vernon arm of Okanagan Lake.

The Ministry of Environment also contracted the OBWB, at the end of August, to harvest milfoil in the Okanagan River channel, just south of the outlet of Vaseux Lake. Ministry of Environment believes that the weed's growth is affecting water flows in the channel. By removing as much of the plant material as possible, they are hoping to determine if this has any effect on increasing flow through the channel.

Looking into the fall, we are working on a survey and milfoil monitoring program that would allow earlier detection of weed beds and more detailed tracking of areas controlled, both through rototilling and harvesting. Base maps have been acquired, and consultation with RDCO's GIS is ongoing to set up the grid-point monitoring system.

During the increased harvesting efforts in Osoyoos Lake, the Water Board issued a news release in an effort to inform the public about the milfoil situation and OBWB efforts to address it. The item was picked up by Penticton's Sun FM, Castanet, the Penticton Herald (and its sister paper, the Kelowna Daily Courier), as well as CHBC television, whose reporter and cameraman went out on the harvester and interviewed Gord Greer, one of the milfoil control operators, and OBWB Chair Stu Wells.

OBITUARIES

CAMPBELL, JOHN FRASER

January 5, 1929 - July 23, 2010

Last Friday, John Campbell walked into Kelowna General Hospital's emergency room sat down on a chair and quietly passed away. He was 81 years old. With him was his wife of 51 years, Joan Gordon Campbell, and while the prognosis is a heart attack, we suspect he knew he was in the right place at the right time. John lived a rich and passionate life, full of hugs, grand ideas and dreams that often came true. He was the best husband, father and granddad anyone could ever imagine. Through the years and in various neighbourhoods, John was famous for building the best swings, go-carts, winter tobogganing runs and his willingness to build and fix anything. He is survived by his wife Joan, sons Fraser (Kelowna) & Gordon (Calgary), daughter Deirdre and Sister Jean (Victoria), daughters in law Barbara McNair (Kelowna), Lisa Hauser (Calgary), and amazing grandchildren McKenzie, McGregor (Kelowna), Cooper and Haley and their mother Shane Leavitt (Canmore) and his adored dog Heidi. In lieu of flowers, please go next door and fix something for your neighbour, in his memory... whether they think it needs to be fixed or not! A private family service has taken place.

MEMORIAL CONTRIBUTIONS

If you would like to make a tribute to a charity or society in the name of your loved one, here are some choices:

CANADIAN CANCER SOCIETY

1-800-403-8222

KELOWNA:

1633 Pandosy St., V1Y 1P6

PENTICTON:

103-74 Wade Ave. E., V2A 8M4

SUMMERLAND:

PO Box 174, V0H 1Z0

HEART & STROKE FOUNDATION OF B.C. & YUKON

1-866-432-7833

#4-1551 Sutherland Avenue,

Kelowna, BC V1Y 9M9

KELOWNA GENERAL HOSPITAL FOUNDATION

2268 Pandosy Street,

Kelowna, BC V1Y 1T2

www.kghfoundation.com

Kamloops

Continued from A1

But just as residents began to fear the worst, winds pushed the flames back, helping slow the fire's growth so crews could close in.

"The winds were coming from the southwest this morning, which was actually pushing the fire back toward itself, so all the fuels had already been burned at that point," said Elise Riedlinger, an information officer at Kamloops Fire Centre.

The 53-hectare blaze was 85 per cent contained by Wednesday afternoon. The evacuees are residents of an area trailer park, along with residents of several hundred homes in neighbouring suburbs, remain on evacuation alert. That means they could be forced from their homes again at a moment's notice.

Graham Pensler, who lives in the trailer park, said he and his neighbours didn't have much time before they had to leave their homes.

"Police were up and gave us an evacuation alert," he said about his early-morning wake-up call.

"Within 20 minutes, they said get out. It was that quick."

Fire chief Andy Philpott said that crews made good progress on Wednesday afternoon, despite the occasional flare-up.

About 60 firefighters remained at the scene, along with four helicop-

SUMMERLAND

Car crash claims another life

Police say Pereira, 63, died Sunday as result of July 23 collision

Special to The Daily Courier

Revelstoke RCMP has released the names of two Summerland residents, a mother and her daughter, who died as the result of a head-on car crash about 50 kilometres east of Revelstoke last week.

Maria Pereira, 63, died at Royal Inland Hospital in Kamloops on Sunday. Her daughter, Anabela Blystone, 40, was pronounced dead at the scene when the crash occurred July 23.

The Blystone family owns Santorini's Restaurant on Henry Avenue. Blystone's business, called Bela's Reflexology and Reflections, was located in the same building as Santorini's.

Bruce Hallquist, a Summerland town councillor, was a patient of Bela's for several years.

"I stopped there on a regular basis every two weeks probably for the last 10 years," said Hallquist. "I knew her very well."

He said the tragic news has left him and many in the small community unable to express the extent of their grief.

"It's been on all of our minds here ever since I heard about it."

Both Blystone and her husband, Gerald, have been active in the Summerland community for years, said Hallquist, who called them "a great couple."

Hallquist said his final conversation with her was on July 22, the day before she was leaving for Calgary with her parents.

"I just can't imagine the family and how they're coping," he said.

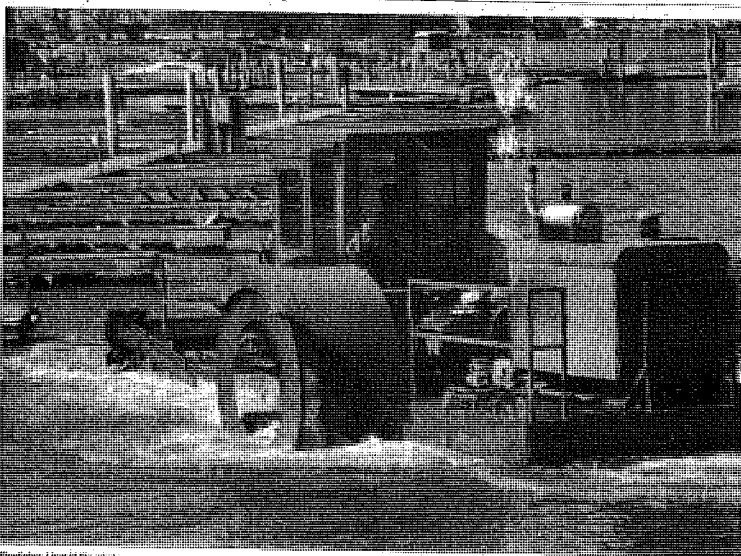
"I just know what's happening in the community and she's touched a lot of people's lives, not only through her business, but through minor hockey, through the soccer association, through the church and all that type of thing."

Four people have died as a result of the crash, which police say occurred when a westbound Ford Mustang crossed the centre line of the Trans-Canada Highway, clipping an eastbound Ford pickup and then colliding with a Jeep Liberty carrying Blystone and her parents.

The female driver of the Mustang, a 23-year-old from Calgary and her passenger, a 31-year-old male from Nigeria, were pronounced dead at the scene.

Blystone's father, who was driving the Jeep, had also been airlifted to hospital in Kamloops following the crash.

Police have not released an update on his condition at this time.



Pentiction Herald file photo.

A milfoil harvester is working the north end of Osoyoos Lake to contain a major surge of Eurasian milfoil growth. The control program is operated through the Okanagan Basin Water Board.

Mowers working OT to control water weed

Harvesting machine runs 7 days a week to gain control of milfoil

Special to The Daily Courier

A milfoil outbreak in Osoyoos Lake is receiving special attention from crews working to remove the pesky plant.

The Okanagan Basin Water Board is trying to get the milfoil at the lake's north end under control. The OBWB's Genevieve Dunbar said Wednesday it's difficult to determine what caused the milfoil to appear in the lake.

Milfoil is an invasive, non-native aquatic plant that has grown in many Okanagan lakes since the early 1970s. The milfoil control program is the longest-running program operated by the water board, Dunbar said.

"It's in all of the main stem lakes in the Valley, right from the Vernon arm of Okanagan to

Kalamalka, Wood and all the way down to Osoyoos," she said.

One possible cause is Osoyoos Lake is a controlled lake that has experienced low water levels, which can increase the water temperature, the concentration of nutrients and a multitude of other factors encouraging milfoil growth.

Another theory is that heavy rain during May and June may have something to do with it.

"There could have been some nutrient runoff," said Dunbar, although she added milfoil would have had to respond quickly to generate the amounts reported.

"We were already having people tell us that the milfoil had reached maximum growth, or reaching the surface, by end of June (and) early July," Dunbar said. "It would be quite a magnificent response if that were the case."

To manage the milfoil, the water board has trained an addition-

al operator who has experience running a milfoil harvester on Christina Lake. Similar to a floating lawn mower, the machine is currently running seven days a week.

The machine works by cutting the plant partway through its growth to a length that does not interfere with boaters and swimmers. A late winter-early spring program involves use of a bladed machine that de-roots the plant.

Although it's more effective than harvesting, Dunbar said it does not eradicate the milfoil.

Boaters can do their part to help control the spread of milfoil by keeping their motors, propellers, water toys, wakeboards and water skis free of any weeds.

"If you move from one lake to another within the span of a day or two, and you're taking a whole bunch of milfoil fragments on a prop, you can potentially recolonize new lakes that have not had the problem before."

Pentiction car show on a roll

There is only one existing two-toned silver on black, six-speed, chrome accented Chevrolet SSR with Canadian specs - and it will be in Pentiction on Saturday.

This unique vehicle's owner, Ray Lamothe of Summerland, will be showing it off at the 15th annual Pentiction Rotary Wheels Car Show.

During the four years of its production, General Motors only made 24,112 of these pickup truck-based convertibles for retail.

"When GM announced they were going to build this vehicle, I knew I had to have one," said Lamothe, 63.

The Rotary Wheels Car Show does not attract as much traffic as the Peach City Beach Cruise, which Lamothe helps organize in late June, but it has a distinctive charm that makes it special.

Rotary Wheels has more of a local flavour, said Lamothe. Not only does the show feature several local cars, but the proceeds go to local youth.

A part of the proceeds go to a bursary given to a mechanical trade student at Okanagan College.

In the past, the fundraiser has netted between \$5,000 and \$6,000. However, like many fundraisers, the Rotary Club of Pentiction-Okanagan has been debating the event's future.

"We've been talking about whether it'll continue," said Bob Coombs, committee co-chairman, "but we haven't made a decision yet."

—Daily Courier Staff

Escape

Continued from A1

The three occupants of the truck, all from Kelowna, managed to climb out through the window of the partially submerged vehicle.

The driver suffered a scrape and bruising to his arm, otherwise they were unhurt.

Driver Ron Botterill said he barely had time to react when he saw the car veering towards him.

"I hit the brakes, but the momentum just carried us," he said. "I tried to get over as much as I could."

The collision sent the truck and trailer flying off the highway and into the lake. The airbags deployed on impact.

Passenger Marian Grundy was in the back seat when the truck hit the water.

"I thought we were going to

Heartland OK to cut footloose

Regional district to allow dancing at

entertainment endorsement," which modifies the liquor licence at the Heartland Ranch

for water, sewage and safety, earn RCMP support and upgrade

MEMORANDUM

Okanagan Basin Water Board
Regular meeting
Sept. 7, 2010
Agenda No: 7.2

File No. 0550.04

To: OBWB Directors
From: Anna Warwick Sears
Date: August 30th, 2010
Subject: **Milfoil Program Succession Plan**

Purpose of Plan

The Milfoil Control Program is a core function of the OBWB. The goal of the program is to keep Okanagan beaches and boating areas clear of weeds, with minimal disruption to lake activities.

A strong program includes healthy working conditions, environmental protection, and well-maintained machines. Operators must work independently and safely, under a variety of conditions – often alone on the lakes. Milfoil control requires a team that has experience with lake conditions and geography, as well as heavy equipment operations and maintenance. Operators must learn the location of drop-offs and hazards and how to identify and avoid water intakes, sewer pipes, telecommunications lines and other in-lake obstacles. The OBWB is liable for any damage to in-lake structures. As a result, new operators require extensive training in all aspects of the program.

To maintain productivity into the future, we must prepare for staff retirement transitions. The OBWB is likely to lose one or more milfoil staff in the next two to three years. This report explores options to hire, train, and retain new staff without significant disruptions to operations.

Current Situation

The milfoil control program has three full-time staff working year-round: harvesting in summer, rototilling in winter, and maintaining equipment in the shoulder seasons. The current staff members have each been with the OBWB for 20 years or more. Two employees are eligible for retirement, as of October 2010. There are no trained alternates available if a job vacancy arises, since our back-up operator passed away in 2009 from cancer. Any vacancies will reduce our ability to control weeds as a replacement is hired and trained. The greatest risk is if two employees retired in one year.

There is no mandatory retirement in B.C., and employees may continue to work as long as they can perform their assigned tasks. The employer must make every effort to accommodate the employee's needs with coaching, training, and counselling. I met with each of our milfoil employees, and while none have immediate retirement plans, their estimates range from one to five years, and any could leave at the time of their choosing.

In addition, all milfoil employees have significant banked vacation time (more than nine months for the three employees added together), which is carried forward each year. At the recommendation of our accountant and auditors, I would like to limit the vacation time that may be carried forward. However, it is not feasible for our operators to take extended vacation time, because they are needed on the job.

We are likely to have a very busy winter rototilling season in 2010-11, working at full capacity to control the vigorous weed growth around the valley. Because of fewer hours of daylight in winter and safety concerns, we can only run the rototillers six to eight hours each day. It may be necessary to have an operator work weekends to fully rototill the milfoil in Osoyoos Lake. Winter rototilling reduces summer harvesting work that can interfere with lake recreation. Summer harvesting is a stop-gap measure.

Solution

I recommend that OBWB hire a seasonal employee, and formally train them for a permanent, full-time position. We are currently budgeted to hire a seasonal employee for 4 ½ months to run the shallow-water cultivator (Morooka). I recommend that we extend this seasonal employment to 6 ½ months per year, until there is an opening for full employment (likely within three years). The trainee would work through the winter rototilling season from November 1st to May 1st, and occasional days in the summer. The longer employment season and additional training will help attract a more qualified employee, as they will be eligible for benefits in their second year.

In addition to assisting with shallow-water de-rooting, the trainee will rotate through workshop and yard responsibilities, and run the large rototillers and harvesters under supervision, learning the lake conditions. When sufficiently trained, the trainee can fill in while employees use their accumulated vacation time (over a period of two or more years).

Required action and budget implications

Hiring a seasonal employee beginning November 1st will require more wage and benefits than currently budgeted. We have about \$17,000 (wages + benefits) remaining in our seasonal employees budget for 2010-11, and will likely require an additional \$6,000 this fiscal to retain a longer-season trainee. However, these additional costs can probably be absorbed elsewhere in the milfoil budget. For example, we are likely to earn this amount from our contract work for the Ministry of Environment in Vaseaux Lake and the Okanagan River.

Future Program Changes

Along with new employees, we are anticipating other changes in the milfoil control program.

- Melissa Tesche has been developing methods for operators to track their daily progress using GPS methods. This will be displayed on a digital mapping system and allow us to calculate efforts each year. Better mapping of treated areas will help the field supervisor manage the work load and schedule control operations. It will also provide continuity, capturing essential information from the long-time milfoil employees, before they retire.
- Although we have established call-in procedures, we will be re-evaluating whether changes should be made during the field season to increase staff safety.

- Another lesson learned in Osoyoos this year was the need to improve our communication protocols, for greater public information and to improve our access to disposal sites.
- In the past, we have contracted out to surrounding areas outside of the basin, for harvesting or rototilling work. However, we are re-evaluating this policy because of the wear and tear on machines.

Recommended Motion

That the Okanagan Basin Water Board train a new milfoil employee to allow a smooth succession for anticipated staff retirements, by increasing the length of the seasonal employee contract to six-and-a-half months per year.



OBWB Milfoil Control employees (L to R: Gordon Greer, Patrick Field, Ian Horner)