



## SMALL WATER USERS ASSOCIATION OF BRITISH COLUMBIA

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### EXECUTIVE DIRECTOR'S REPORT

While your Association has continued to increase its membership base, by 47 water systems or 21% since March 2007, we still only represent a small fraction of the total number of small systems in the province. Our current membership status is as follows:

Improvement Districts:	49
Water Users' Communities:	28
Regulated Utilities:	45
Regional District systems:	11
Private systems:	<u>136</u>
	269
Affiliate members:	59

As Executive Director, I continue to be troubled by the lack of progress on a number of key issues and concerns which small water systems (SWS) have faced for many years. Chief amongst these is the lack of government financial support for infrastructure improvements. Despite bringing this inequity to the attention of various BC government ministries over the past four years, and despite a recommendation from the Provincial Health Officer in 2007 to improve access to funding support for public water supply systems that are ineligible for federal/provincial infrastructure assistance, nothing has been done to remedy this situation. Secondly, it is frustrating that nearly two years after the Drinking Water Protection Regulation was amended to allow point-of-entry (POE) and point-of-use (POU) for SWS, the government has yet to clearly set out the 'ground rules' for the use of POE or POU. Thirdly, the government has promised 'tools' to assist SWS with operational and financial planning, capacity development, treatment alternatives and other matters. While some progress has been made via support for the Sustainable Infrastructure Society, little by way of tangible assistance has reached the majority of SWS in the province. Lastly, although work began over four years ago by the lead ministries to develop a provincial strategy for small water systems, as yet no clear strategy has emerged.

On the positive side, we welcome the support our Association received from the Health Authorities, the Ministry of Environment and others in planning, promoting and delivering our workshops for small systems over the past four years. Another positive development has been the recognition by the British Columbia Water & Waste Association (BCWWA) that most SWS cannot afford to attend their four day annual conference and trade show. For the past several years they have offered a 1½ day program for SWS at a significantly reduced conference fee.

We are in the process up updating our website (should be completed by the time you receive this newsletter) in order to make it more useful and informative to our members. I have also been asked on a number of occasions for a contact list of Association members. As of January 1, 2008 we will be able to email you upon request a complete list of our members with mailing addresses, telephone numbers and email addresses (where available).

Two of our Directors, Pauline Berkmann (Royston Improvement District) and Ben Martin (Balfour Irrigation District) resigned during the year. We would like to thank both of them for their past efforts in support of the Association. At our September AGM Dan Watterson (EBA Engineering Consultants Ltd.) and Vilda Ross-Smith were elected as new Directors. Gary McDonnell (McGillivray Falls Water System) and Denny Ross-Smith (Nelson) agreed to continue to serve as Directors for the coming year.

## VIOLATION TICKETS

In May, 2006 the BC Offence Act, Violation Ticket Administration & Fines Regulation, was amended to allow Drinking Water Officers and Public Health Inspectors to issue a Violation Ticket or an Appearance Notice under various sections of the Drinking Water Protection Act or Regulation. The tickets are in the amount of either \$300.00 or \$500.00 depending on the specific section involved. Appendix 1 to this newsletter lists the appropriate sections for which tickets can be issued, and the respective ticket amounts.

We would prefer to see the government doing more to provide advice and assistance to SWS struggling to cope with the drinking water legislation rather than issuing tickets, however we recognize that the Health Authorities need to have some means to encourage compliance. Water systems that have in the past ignored conditions on their operating permits or have resisted putting in appropriate treatment should be aware that they may now be subject to tickets and subsequent fines. Our advice for such systems would be to start planning now to finance and make the necessary improvements, and to discuss these plans with your Drinking Water Officer as soon as possible.

## WORKSHOPS

In September-October 2007 we delivered 6 one day workshops in cooperation with Interior Health and Northern Health. The workshop locations were Cranbrook, Salmon Arm, Williams Lake, Fort St. John, Prince George and Terrace. The total attendance was 380, from a low of 21 in Fort St. John to a high of 132 in Salmon Arm. The primary intent of these workshops was to inform SWS of the water treatment objectives of the Health Authorities. Other topics included groundwater regulations, the 'Watersafe' course at Thompson Rivers University, operational & maintenance issues, liability insurance, etc. Approximately 100 certified operators attended the workshops, and received 0.6 continuing educational credits (CEUs) towards maintaining their certification.

Next fall we are hoping to deliver a further series of workshops on the coast in cooperation with Vancouver Island Health, Vancouver Coastal Health and/or Fraser Health. Dates and locations have yet to be determined.

## LIABILITY INSURANCE

In previous newsletters we have mentioned the liability insurance program for water systems which can be accessed via the Sustainable Infrastructure Society website at [www.sustainis.org](http://www.sustainis.org). The lowest premiums (~\$2,300.00 per year) go to water systems that have adequate treatment in place, a trained operator, an emergency response plan, and other measures to ensure the delivery of potable water. If you apply to this program and receive a quote that seems high, the broker will explain what measures you need to put in place in order to qualify for a lower premium.

## GROUNDWATER PROTECTION REGULATION

All of our members who have a groundwater source should be aware of the ongoing changes to the Groundwater Protection Regulation which is administered by the Ministry of Environment and falls under the Water Act. Phase I of the Regulation has been enacted, and phases II and III are in the works. Rather than attempting to summarize the current Regulation we suggest that you either visit the Ministry of Environment website at [www.env.gov.bc.ca](http://www.env.gov.bc.ca) or contact your local Ministry of Environment office and ask to speak to a Ground Water Protection Officer.

Please note that there are presently no ticketable offences under the Act, and that the emphasis is on voluntary compliance with the Regulation.

## GROUNDWATER ALTERNATIVE TO SURFACE WATER

If you have a surface water source and are facing very high costs to treat the water to the standards required by your Health Authority, you may wish to consider the possibility of developing a groundwater source. Generally,

groundwater requires minimal treatment compared to surface water, and a groundwater supply is commonly more sustainable and less sensitive to seasonal fluctuations in quality and quantity. The costs involved could be in the order of :

- Initial hydrogeologic evaluation \$5,000 to \$8,000
- Detailed assessment, groundwater exploration work, drilling program design, etc. : \$10,000 to \$20,000
- Well drilling & installation costs : \$10,000 to \$50,000

NB : These are extreme generalizations only, and there may be significant local issues that could significantly increase or (less likely) decrease these costs. Additional costs could include connecting to the existing system, installation of an adequate reservoir, etc.

If any of our members are interested in investigating the option of using a groundwater source, we can recommend several of our affiliate members who are well qualified to assist you in this regard.

## NEW AFFILIATE MEMBERS

We would like to welcome the following six new affiliate members to the Association :

- BC Groundwater Consulting Services Ltd. (Kamloops)
- BV Watersoft B.C. Ltd. (Winfield)
- GW Solutions Inc. (Nanaimo)
- Kärcher Canada Inc. (Mississauga)
- Sustainable Infrastructure Society (Victoria)
- Urban Systems Ltd. (Kamloops)

Our affiliate members are an important resource for water treatment equipment and technology, consulting services, laboratory analysis and other services. Information on all of our affiliates can be found on our website under 'suppliers/consultants'.

## POINT-OF-ENTRY(POE) AND POINT-OF-USE (POU)

Although never explicitly stated, we believe that the amendment to the Drinking Water Protection Regulation allowing POE or POU as an alternate means to central treatment was an attempt to provide an affordable means for *very small systems* to achieve potable water. What is happening instead is that the government is developing (slowly!) a comprehensive list of 'guidelines' for POE/POU that, if enforced, will make its application unmanageable or unaffordable for all but a few small systems. In most cases central treatment may be the best option *provided* that a water system can obtain practical advice on low or moderate cost treatment technology. Unfortunately it is often difficult to find an individual, consulting firm or equipment supplier that is well qualified to advise you on technology selection. Many of the larger consulting engineering

firms are well qualified, however their high overhead costs may preclude using them if your budget is limited.

Our best advice regarding POE/POU at this time is essentially unchanged from our last newsletter : *Discuss your plans with your Drinking Water Officer, Public Health Inspector or Public Health Engineer before spending any money on POE or POU equipment.*

## MULTI-BARRIER APPROACH AND 4-3-2-1-0 DRINKING WATER OBJECTIVES

By now many of you are aware that the Health Authorities would like to see all provincial water systems adopt a multi-barrier approach to achieve safe drinking water. Part of this approach will involve meeting what they describe as the 4-3-2-1-0 drinking water objective. The '4' refers to 4 log inactivation of viruses (i.e. the capability to inactivate 9,999 out of 10,000 viruses). Chlorine and/or UV light, properly used, may achieve this objective. The '3' refers to 3 log (9,990 out of 10,000) removal or inactivation of parasites, in particular *Giardia* and *Cryptosporidium*. The use of appropriate filtration or UV light are two possible approaches to achieve this result. The '2' implies using a minimum of 2 treatment barriers, while the '1' refers to a maximum turbidity level of 1 NTU. Lastly, the '0' refers to 0 fecal coliform or *E. Coli* bacteria. For more information on this subject it is suggested that you contact your Drinking Water Officer.

## OPERATOR TRAINING AND CERTIFICATION

Judging from questions and comments at our recent workshops there appears to be considerable confusion regarding the need for operator training and certification for small water systems.

The December 9, 2005 amendment to the Drinking Water Protection Regulation defined a small water system as :

- A water supply system that serves up to 500 individuals during any 24 hour period.

Section 4 of the amendment states that :

- All water supply systems, *except small systems*, are prescribed for purposes of section 9 of the (Drinking Water Protection) Act.

Section 9 of the Act refers to the qualification standards for persons operating water supply systems, which (under the Regulation) required that an operator be certified under the Environmental Operators Certification Program (EOCP).

The amendment, therefore, eliminated the legal requirement for a small water system to have a *certified* operator. However a Drinking Water Officer may (via the operating permit) require a person to be certified to operate, maintain or repair a small system. The Drinking Water Officer may further require that an operator take some type of training. Depending upon the complexity of the system and the type of pathogens that may be present in the inlet water, the training requirement may involve a Watersafe course from Thompson Rivers University, the two day SWS course offered by BCWWA, or other equivalent courses.

## CONSTRUCTION PERMITS

You are reminded that if you are a small water system (i.e. serving up to 500 people during any 24 hour period), you can ask your Public Health Engineer or Drinking Water Officer to waive the requirement for a construction permit. Also, for relatively simple or minor alterations to your system you may not need to have drawings prepared by a professional engineer as long as you can provide clearly drawn plans for the work being considered.

## BCWWA ANNUAL CONFERENCE & TRADE SHOW

This year the British Columbia Water & Waste Association (BCWWA) annual conference and trade show will be held in Whistler from April 26-30. A special 1½ day program on April 27-28 will be offered for small water systems (up to 100 connections) at a greatly reduced cost. BCWWA has obtained quite good rates at a number of hotels in Whistler, however these tend to book up fast. If you are interested in attending all or part of the conference we would suggest that you reserve a hotel room early. For information on the hotels and special rates please visit the BCWWA website at [www.bcwwa.org](http://www.bcwwa.org). Details on the SWS special program will be available early next year.

Each year the BCWWA gives out several awards to SWS that have been judged to have made significant improvements to their operations. Any member who is interested in applying for such an award should contact BCWWA at 1-877-433-4389 or visit [www.smallwatersystems.com](http://www.smallwatersystems.com) for more details.

## BCGWA ANNUAL TRADE SHOW & CONFERENCE

The British Columbia Groundwater Association (BCGWA) will be holding their Annual Trade Show & Convention on March 4-7, 2008, at the Grand Okanagan Lakefront Resort & Convention Centre in Kelowna. More information may be obtained by visiting their website at [www.bcgwa.org](http://www.bcgwa.org).

## INFRASTRUCTURE FINANCING FOR SWS

Nothing has changed since our last newsletter in March, 2007. While municipalities and regional districts continue to be eligible for government grants of up to 2/3 for new water treatment infrastructure (funded in part by rural taxpayer dollars), all other types of water systems remain ineligible. The February, 2007 report from the Provincial Health Officer to the Minister of Health entitled : 'Program on the Action Plan for Safe Drinking Water in British Columbia' contained the following recommendation :

*'Government should consider options to improve access to funding support for public water supply systems that are currently ineligible for federal/provincial infrastructure assistance.'*

Since the economics of water treatment favours a larger population base, it is the smaller systems that must pay a disproportionately high cost per capita to install effective treatment, yet most receive no financial assistance. This may partially explain why British Columbia currently has 540 boil advisories in place.

On a more positive note, the Sustainable Infrastructure Society ([www.sustainis.org](http://www.sustainis.org)) is developing a plan in cooperation with several financial institutions to offer long term financing for capital investments. We expect to have more information on this initiative early in 2008.

## MEMBERSHIP QUESTIONNAIRE

In order for us to improve our services to our water system members, we ask that you to take the time to fill out the enclosed questionnaire and return it to us in the envelope provided. Thanks for your assistance.

## MEMBERSHIP LIST

In our last newsletter we said we would be putting our membership list on our website. This proved to be impractical because new water systems keep joining while a few others discontinue their membership for one reason or another. Putting a contact list on the website would have involved constantly updating the information, which would be costly and impractical. Instead, we will use a duplicate of the Association mail label list as a contact list by adding telephone numbers and email addresses where available. We will be pleased to email (or surface mail) a copy to any member upon request.

*"When the water of a place is bad it is safest to drink none that has not been filtered through either the berry of a grape, or else a tub of malt. These are the most reliable filters yet invented."*

Samuel Butler

## APPENDIX 1

Order in Council 317, May 4, 2006, amended Schedule 1 of the Violation Ticket Administration and Fines Regulation (B.C. Rg. 89/97), by adding the following item :

Item 24 :

Enforcement Officer :

A medical health officer, a drinking water officer, or a public health inspector as defined in the Health Act.

Enactments for Which a Violation Ticket or Appearance Notice May Be Issued :

Sections 7, 8, 9, 11, 23, 25, and 26 of the Drinking Water Protection Act

Sections 5 and 8 of the Drinking Water Protection Regulation

Schedule 2 is amended by adding the following :

\* Drinking Water Protection Act

Violation Surcharge

Ticketed Provision *	Contravention	Fine \$	Levy \$	Amount \$
Section 7 (2) (a)	Construct water supply system without permit	500	75	575
Section 7 (2) (a)	Construct works, facilities or equipment without permit	500	75	575
Section 7 (2) (b)	Construct water supply system contrary to terms of permit or regulations	500	75	575
Section 7 (2) (b)	Construct works, facilities or equipment contrary to terms of permit or regulations	500	75	575
Section 8 (1) (a)	Operate water supply system without permit	500	75	575
Section 8 (1) (b)	Operate water supply system contrary to terms of permit	500	75	575
Section 8 (1) (c)	Operate water supply system in violation of regulations	500	75	575
Section 9 (1) (a)	Operate, repair or maintain water supply system without being qualified	300	45	345
Section 9 (1) (b)	Operate, maintain or repair water supply system without supervision of qualified person	300	45	345
Section 11	Fail to comply with water monitoring requirements established by permit or regulations	500	75	575
Section 14	Fail to comply with order to provide public notice of a drinking water threat	500	75	575
Section 23 (1)	Contaminate drinking water	500	75	575
Section 23 (2)	Tamper with water supply system	500	75	575
Section 25	Fail to comply with hazard abatement or prevention order	500	75	575
Section 26	Fail to comply with an order respecting a contravention	500	75	575

\*\* Drinking Water Protection Regulation

Violation Surcharge

Ticketed Provision **	Contravention	Fine \$	Levy \$	Amount \$
Section 5 (a)	Fail to disinfect drinking water originating from surface water	300	45	345
Section 5 (b)	Fail to disinfect drinking water originating from ground water at risk of containing pathogens	300	45	345
Section 8 (b)	Fail to monitor for total coliform bacteria or <i>Escheria Coli</i>	500	75	575



