



Atlantic Canada Water Works Association



A section of the American Water Works Association

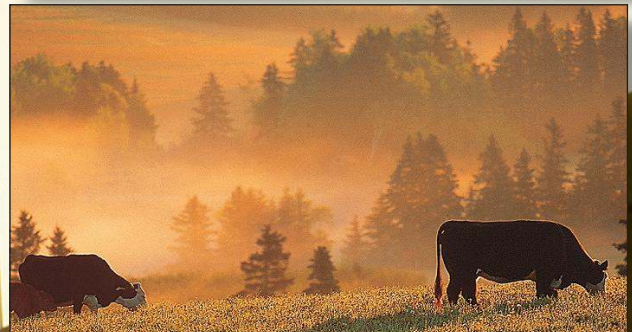
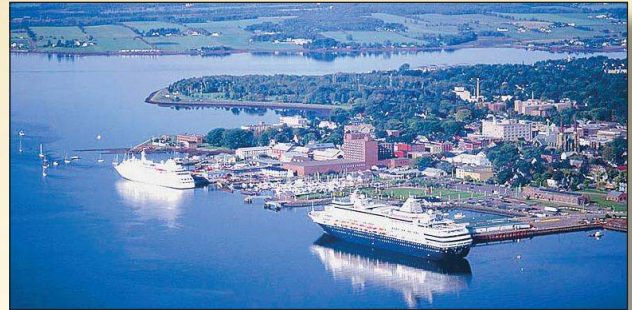
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Atlantic Canada Water Works Association Newsletter

www.acwwa.ca

61st Annual Conference

Delta Prince Edward Hotel
Charlottetown,
Prince Edward Island
October 19 – 21, 2008



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| Postage paid | | Port payé |
| Publications Mail Agreement No. 40048252 | | Poste-Publications numéro de convention 40048252 |

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Financing infrastructure the big water issue

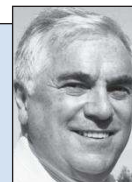
THIS will be my last article as your AWWA Director and I gave some thought to what topic would be best to end with. I thought it could be something that is an issue on both sides of the border like watershed protection, disinfection by-products, or some other universal topic. Then I thought, what subject has been foremost for AWWA in Atlantic Canada for the years I have been an AWWA member? What topic is just as relevant today as it was three decades ago?

It is the question of financing water and wastewater infrastructure for our municipalities. Being from New Brunswick it is interesting to hear the province accused of downloading more and more costs to the municipalities. That is a reversal of a trend for us old-timers. Growing up in Saint John, our city was responsible for the cost of schools, our hospital and our social services up until the 1960's. I guess you could say those costs were uploaded to the province when Medicare and the revolutionary "program of Equal Opportunity" were introduced. In one way, the pendulum is really just swinging back now.

In any case, it has been standard practice for decades for the federal and provincial governments to cost share with municipalities under some infrastructure program when a major project comes along. Few municipalities were so well off financially they could finance the major infrastructure required on their own. They needed the senior governments' assistance to build their infrastructure! Once it is built, the local taxpayers are on their own for the O&M cost so it has proven best to spend more cost shared Capital dollars to build it right and cut the ongoing O & M cost.

"Stuff" does not last forever and mu-

Outgoing Director's Report



Sandy Robertson

municipalities are faced with ever-increasing costs to maintain and replace their aging infrastructure. AWWA advocates full cost recovery but that is not always what happens. Fear of a voter backlash limits conventional wisdom. This past year has seen the first new major infrastructure cost sharing agreements in many years and the Atlantic Provinces have teamed up with the federal government to address our aging infrastructure. When there is a new infrastructure program that comes along things seem to get done. The Federal government's new Building Canada Fund for example, offers Federal money for infrastructure projects of between one third and one half of a project's cost.

While no current offer is as generous as the Province of Newfoundland's there are good deals to be had by munic-

ipalities throughout Atlantic Canada right now. (For very small communities the Province of NL will pick up as much as 90% of the cost of infrastructure projects.) Some of you will remember the days of DREE, DRIE, RAP grants, etc. and the other program agreements that slipped away, never to return. Those good deals are just a memory now!

In the early 1970's one NB community I was dealing with, received 90% funding for a new wastewater collection and treatment system (prior to this they were on wells and septic tanks). They

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Hidden infrastructure

is not sexy... Sadly, it

usually takes a scare

to prod politicians into

action on a major water

or wastewater project.

Canadian cities dropped from rotation of AWWA conference locations

THE AWWA Board met in Atlanta in June at the Annual Conference and Exposition (ACE). Although large numbers were in attendance (12,201 registered), they were less than expected, so revenue from the conference was down. Mike Leonard from Atlanta is now the President of AWWA.

I would like to commend the Halifax Water Operators Team that attended the TopOps competition in Atlanta. Although they did not come home with the championship, they represented the Section well. Good job!

On behalf of ACWWA I accepted an Award for membership retention, the highest in AWWA. Congratulations to our Membership Chair and the committee.

One of the hot issues of discussions was the rotational plan to be adopted for ACE. The new rotational plan will have six cities alternating in the US. Two cities in the east,

Financing infrastructure

From page 2
were offered the same 90% cost sharing for a water system. Unfortunately, it was not to be as the local politicians felt the sewage rates needed to fund their 10% share would be too much of a sticker shock as it was.

They felt new water bills would make it worse (and would be an unpopular re-election issue) so they passed on the offer. The present day council is now faced with much higher costs and a lot less available cost sharing to get municipal drinking water.

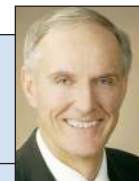
There are funds available now and everyone you talk to can tell you of a needed project but remember, hidden infrastructure is not sexy and does not garner as many votes for the politician as a rink or a stadium will. Public Buildings unfortunately, are much more visible than underground piping and receive greater favour with politicians. Can you ever remember any hype about a new water main or collector sewer?

Sadly, it usually takes a scare to prod local politicians into action on a major water or wastewater project. There is a lot of our type of work that needs doing now. That is why with this newfound money available to do these much needed water and sewer projects, we need to make politicians and the public aware of their benefits that endure long after the politician's term in office and that once fashionable rink or stadium has been demolished. We have to make sure that message gets out. Thank you for my term as your Director and all the best to ACWWA for a bright future and our new Director Bruce Buchanan!



Incoming Director's Report

Bruce Buchanan, P.Eng.



two central and two in the west. The Committee determined that presently there is no Canadian city capable to meet the space requirements for exhibit hall space. Currently 400,000 square feet of contiguous exhibit hall is required. The last ACE in Toronto had the exhibit hall in two locations which is not acceptable. It was acknowledged that if a Canadian city increased their space capacity that they would be considered in future.

The 2008 budget for AWWA was approved. The projected revenue is \$32.6 million. As of August the budget expectations were exceeded mainly due to membership. One of the priorities for the Association this year is to improve the membership numbers and it is working, AWWA has 59,189 members as of August, an increase to date of 5.9%.

Section Affiliation is being reviewed by AWWA to develop an Affiliation Agreement between AWWA and each one its sections. Although each section for the most part work under the auspicious of AWWA, a more formal agreement is desired to protect against litigation.

The Canadian Affairs Committee (CAC) will be holding a meeting October 18th in Charlottetown. The CAC is composed of the Canadian Directors of AWWA and they meet to discuss the pressing Canadian issues that will be brought forward to the national meetings.

Don Degen from Kelowna BC is a Vice President of AWWA and will be attending our Annual Conference in PEI in October. Don is running for President of AWWA this year and will serve us well if elected. If you have questions regarding AWWA, Don will be able to answer them. As we always do to visitors, please show Don a big Maritime welcome when he is here.

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Dal research indicates demand exists for eco laundromat

DALHOUSIE Environmental Engineering students Angela Alam-bets, Ted Brander, and Molly Patrick have recently completed a study into the design of an environmentally sensitive “Eco-Laundromat”. The work was completed over an 8 month period as a senior design project, a requirement of the Bachelor of Engineering Program at Dalhousie University in Halifax. The purpose of the design project was to determine the technical and economic feasibility of implementing water reuse and heat recovery systems into a small scale commercial laundromat.

Laundry water is characterized as greywater, a form of wastewater that has gained increasing attention in recent years due to its potential for reuse. Reuse initiatives have largely been a response to water scarcity around the world; however there is also potential for economic benefits from reuse. Commercial laundromats use considerable quantities of water and energy in daily operations, the bulk of which is lost to wastewater treatment plants or the environment. The environmental impact of these operations is significant. An ecological, or ‘Eco’, laundromat, which reuses water and recovers heat, provides an opportunity to significantly reduce the environmental impact of these processes and operate more economically than conventional commercial operations. The final design provided a conceptual process design for the eco-laundromat, as well as an overall feasibility analysis. The feasibility of the proposed eco-laundromat is dependent on a number of factors – namely clientele (public support), economics, and technical (implementation) issues. Public support, in terms of overall interest and market demand for the eco-laundromat, was measured by the collection of data from 91 public surveys and 6 laundromat owners’ surveys that were distributed to laundromats throughout the Halifax region.

Owners’ surveys indicated that the greatest costs in running their business were energy and water. The surveys also indicated that there is a considerable amount of interest in reducing costs re-



lated to water and energy use and many owners would consider implementing an eco-laundromat design if it were cost effective. It is particularly interesting that, although 100% of laundromat owners surveyed showed interest in learning more about making their business more environmentally friendly, only 17% had actually investigated the issue themselves. This suggests that the market may be ready for progression in the direction of practices with lower environmental impacts.

Public surveys revealed that a large majority of laundromat users feel that reducing water and energy use is an important issue in industry. In spite of this, only about 44% of those people said that they would switch to an “eco-friendly” laundromat if one were available in their neighbourhood, and only 30% would be willing to go out of their way to use one if it were less convenient than their current laundromat.

To investigate the technical feasibility of reusing water in the small scale decentralized laundromat setting, two rounds of bench-scale testing were conducted in laboratories at Dalhousie University.

Composite water samples were collected from two laundromats. In order to make a representative composite sample, wash water and rinse water from 3 different laundry loads with different temperature settings and random use of detergent (by laundromat clients) was collected. The samples were characterized prior to and subsequent to

treatment.

Based on increased use of membrane systems for grey water treatment, their advantages over biological systems in terms of foot print and sizing flexibility, and the availability of a UF membrane at Dalhousie, the water treatment technology used for the first round of testing was direct filtration through a UF membrane. A lint screen was placed prior to the membrane to remove lint, hair and large particles.

The results showed that, while there was sufficient removal of turbidity and *Escherichia coli* (E.coli), concentrations of total suspended solids (TSS) and 5 day biological oxygen demand (BOD5) were above the maximum acceptable level. The pH levels were very close to being in the acceptable range. Other observations were a significant amount of fouling, based on increases in tetramethoxypropane (TMP), increase in colour (from grey to an uncharacteristic yellow colour) and soapiness of filtrate. These results showed that some form of pre-treatment was necessary before membrane filtration.

Primary Type I discrete settling was also investigated as an alternative treatment process. Coagulation with flocculation or dissolved air flotation (DAF) were rejected due to the size requirements for DAF, and the hope to have as little environmental impact as possible by avoiding chemical use with coagulation and flocculation. Settling was measured using 20L of sample in a settling column, measured over a period of three hours. To provide more comprehensive results for direct filtration, part of the sample from the second round was also used for direct UF filtration.

The settling experiment showed a fluctuation of TSS levels for the duration of the experiment. Thus, it was concluded that laundry drainage water is not conducive to settling. This is likely due to the prevention of floc formation by the surfactants present in the water.

Overall these results showed that direct filtration with a UF membrane was not adequate as a stand-alone unit. The large removal of constituents did how-

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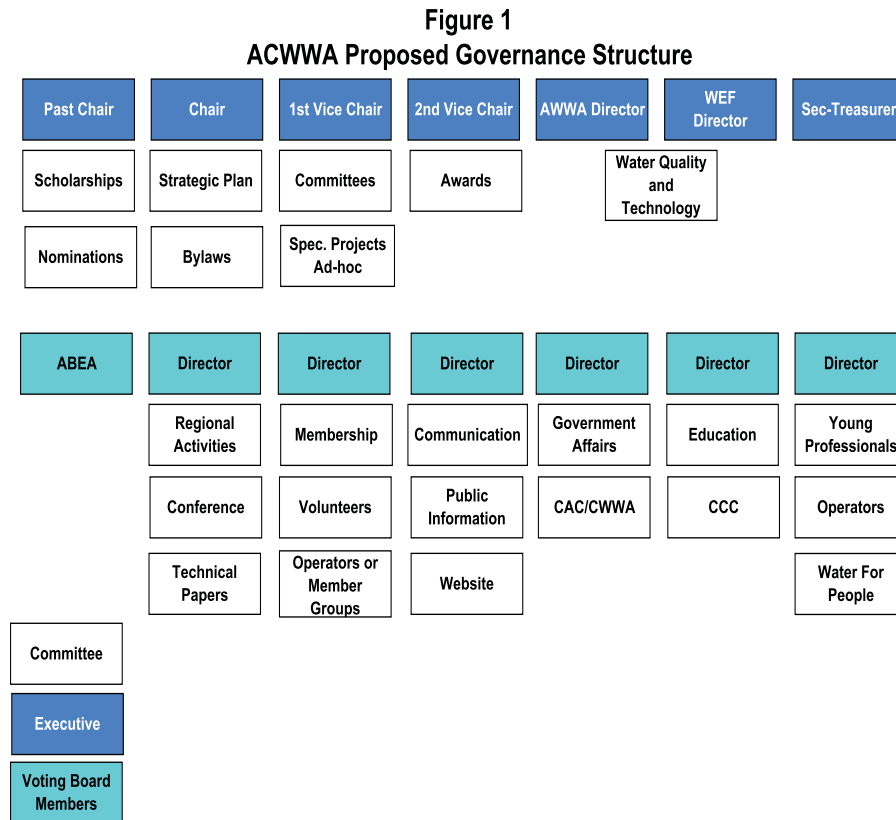
New structure would provide more options for volunteer involvement

It is hard to believe it has been a year already and that the conference is upon us. Hopefully most of you will have the opportunity to join us in Charlottetown for our annual conference. The conference committee has pulled together a strong technical program and has a full schedule of activities planned over the three days. Please make all attempts to be there as it is a great opportunity to get up to date on current activities in the water-wastewater industry as well as get together with your colleagues, clients and friends.

As I mentioned in previous newsletters, the Section is working hard at three key areas of our business: volunteers, communication, education. To try and improve in how we deliver in each of these areas the Board is proposing some changes to our governance structure will come into effect after our AGM at the annual conference. Although the proposed changes are relatively minor they are designed to distribute the committee work amongst a wider volunteer group, and will provide more options in terms of level of involvement for our volunteers. The day to day operation of the Section will be driven by the Executive and the Directors, while committee work will fall under the direction of our pool of volunteers.

An organizational chart for the proposed changes is presented in Figure 1. A few points worth noting:

- Size of the Board has not changed from how we typically operate;
- The list of committees is not all-encompassing. Additional committees may be added as required or may fall under other committees listed;
- The executive committee will:
 - deal with emergency or urgent matters
 - support governance of association
 - deal with Committee issues
- Directors will be responsible to the Board for the committees and the liaison required;
- Each Committee will have a Chairman;



- Committee chairs (non-voting position) would be welcomed to attend the Board meetings, although reporting to the Board should be normally be accomplished via the Section Directors;
- All Committee chairs will be invited to the annual Board meeting at conference;
- 1st Vice Chair will assist the Chair by following up with Section Directors throughout the year;
- success of the proposed structure will be dependant on our ability to attract, motivate, and retain volunteers; and

- the Section will have the ability to modify the number of Director positions based on the requirements of activities within the Section.

Our Board is presenting these proposed changes to the membership as we feel these changes are an important first step as we work to improve our overall approach to volunteerism within the Section. The changes will allow us to more effectively utilize our volunteers and to embrace more initiatives and special projects within ACWWA. I am confident that over the next two years the membership will notice significant improvements to the way ACWWA operates and the way ACWWA communicates to the membership.

I would like to thank the Board for the support over the past year and appreciate the opportunity to have served as Chair over the past twelve months. There are some exciting changes happening within the Section and I encourage all members to get involved.

Awards

Gary Chew Selected for the Fuller Award

THE Fuller Award was established in 1947 in memory of George Warren Fuller. In addition to being an inventive technician who was identified with several important sanitary engineering advancements during this century, Mr. Fuller devoted himself fully to the advancement

of professional associations and societies in his field. During the youthful years of sanitary engineering, it was through his efforts and guidance that American Water Works Association rose from a level of social group into its present high standing as a technical organization.

The George Warren Fuller Award is presented to a member of the American Water Works Association for distinguished service to the water supply field. In commemoration of the sound engineering skill diplomatic talent and constructive leadership of George Warren Fuller, the Section may determine if a member has made a significant contribution toward the advancement of water works practice with the Section, which has been above and beyond the expectation of Officers in fulfilling their obligations or duties. It is the AWWA's highest Section Award.

Gary Chew has been working in the water industry for over 20 years and has always been willing and able to help treatment plant operators and anyone else involved in the water industry throughout this time.

He is a past chair of the Atlantic Canada Waterworks Association, past president of the Atlantic Branch Equipment Association, past Director of the Water Environment Federation, past chair of the Canadian Stockholm Jr Water Prize Committee for Canada.

Working with Sansom Equipment, Gary has also been recognized by his peers by being presented the award for sales excellence for Canada from Prominent Fluid Controls in 2006 for service to the water industry.

He has participated in the small systems committee and put on several training courses in both chemical feed and pumping systems for ACWWA on many occasions over the years. He is a past recipient of the Ira P. McNab award.

Gary is well known around the Maritimes for his musical talents. This talent has led to him entertaining at the AWWA conference in Anaheim California for the incoming presidential bash for Marley Price.

Reid Campbell, P. Eng. selected for Ira P. MacNab Award 2008

THE winner of the Ira P. MacNab Award for 2008 is Reid Campbell of Halifax Water. While Reid, in some ways, represents the "new wave" of professionals in ACWWA, he has already developed an extensive and impressive track record in the water business.

Reid Campbell is currently the Manager of Water Services for Halifax Water. In this role, he is Operations Manager for water supply, treatment, transmission, distribution and quality management systems. Reid has been with Halifax Water in various capacities since March 1998 and assumed his current position in August of 2007. Before moving to Halifax Water, Reid worked for the consulting firm Vaughan Engineering Associates in Halifax and, before that, Proctor & Redfern Limited in Don Mills, Ontario.

While working with Proctor & Redfern, Reid had the opportunity to work under Rod Holme, who went on to become President of AWWA in 1998. Since coming to Atlantic Canada, Reid has been very active in ACWWA and other professional organizations. He has been on the ACWWA Board since 2004 and is currently the 1st vice Chair. He has also been ACWWA's representative on the Canadian Water and Wastewater Association Board since 2004. Reid has actually been a member of AWWA since 1990 and, apart from his time on the ACWWA Board, he has participated in numerous AWWA technical committees.

Reid Campbell has been on the executive of the Municipal Public Works Association of Nova Scotia since 2005

and in this role liaised with the Province of NS as new water regulations were introduced in NS. Reid has also been a member of the Water Environment Federation since 1994.

One of the many highlights of Reid's position with Halifax Water has been the role he played in establishing the partnership between Halifax Water and Dalhousie University for the development of the pilot research plant at Pockwock Treatment Plant. The pilot plant is the first permanent one in Atlantic Canada and was leveraged to obtain a NSERC Industrial Chair with Dr. Graham Gagnon.

Outside of work, Reid Campbell is a Deacon in the Bedford Presbyterian church. He is married to another engineer (Eleanor) and they have two boys David (15 years) and Daniel (12 years).

Reid has served as a basketball coach and basketball official and has recently taken up the increasingly popular sport (for ACWWA members) of running.

Reid Campbell's professionalism, dedication, perseverance, and service to his community and to ACWWA make him an excellent choice as the 2008 winner of the Ira P. MacNab Award.

Back issues

Check the website for back issues
of *Go with the Flow* from
December 1999 to the present

<http://www.acwwa.ca>



Honorary Life Membership

Career highlighted by charity in Africa

Willard D'Eon, MPH, P.Eng.

CBCL Ltd.

WILLARD graduated from the University of New Brunswick in 1974 with a B.Sc. in Civil Engineering, and from the University of Minnesota in 1979 with a Master of Public Health in Environmental Health.

His first employer was CBCL Limited

in Halifax. He joined the Nova Scotia Department of Health (Bedford Office) as a Regional Public Health Engineer in 1976. Willard was on Educational Leave at the University of Minnesota from September 1978 to June 1979, after which he returned to the Department of Health. He rejoined CBCL Limited in 1990, where he is currently a shareholder and Senior Project Manager.

Willard attended his first ACWWA

Conference in 1976, and joined the Central Section of AWWA as a student member in 1978 while at the University of Minnesota. When in Minnesota, his major research paper was on Bottled Water, while his minor research paper was on trihalomethanes, then two evolving topics, that are still making headlines today.

He has served on the Board of ACWWA as Research Chair, Small Systems Chair, Section Chair, and is currently Secretary-Treasurer. He is a recipient of both the MacNab Award and The Fuller Award.

While with the Department of Health, he was involved with the regulatory aspects of water and wastewater, including the review and approval of design plans, and the monitoring of public water supplies.

At CBCL Limited, he has been involved in international projects in Eritrea (Horn of Africa), and in the Islands of the Maldives in the Indian Ocean. On the Eritrea project he witnessed young children walking or on donkeys, up before sunrise, making their way to get water, typical of the "Water for People" stories that we hear about. The project in the Maldives was to provide wastewater facilities to islands affected by the Tsunami.

Willard resides in Halifax with his wife Linda, and their dog "Riley the Golden-doodle". Their son, Joel resides in San Jose, California, United States, and their daughter Dr. Tara, Ph.D., resides in Epsom (London), United Kingdom. Travelling is therefore in their plans for the future. Willard and Linda are appreciative of the many friends they have made through AWWA and ACWWA.

Research adopted worldwide

Eric L. Winchester, P.Eng.

ADI International

ERIC graduated from the University of New Brunswick in 1973 with a B.Sc. in Civil Engineering.

His first employer after graduation was ADI Limited in Fredericton, and he remained with the company for the rest of his career. Over the years, he held many positions, from junior engineer to Project Manager, to Manager of the Environmental Engineering Division, and finally Vice President of ADI International, Inc.

Since attending his first AWWA Conference in the '70s, Eric has been active in the Association through trade shows, conferences, participation in the AWWA Research Foundation, and publication of articles in the AWWA Journal.

In his time at ADI, Eric was involved in many important water-related projects throughout New Brunswick, and indeed around the world. He was instrumental in the design of the Fredericton water treatment plant back in the early 1980s, which was at the time the largest manganese removal plant in the world, and afterward he was involved in several similar plants in Canada and elsewhere.

One of Eric's major areas of interest has been the problem of arsenic contamination in groundwater. In recent years Eric was involved in world-leading research which resulted in a new technology for removal of arsenic effectively and at an affordable cost. This technology is now in use in New Zealand, Japan, and all across

North America. Because of these projects, tens of thousands of people have access to drinking water without risk of the devastating effects of arsenic contamination.

In his 34 years at ADI, Eric nurtured the professional development of many young engineers, and contributed to the profession as a whole through dozens of technical papers and presentations at conferences (AWWA and others). He is the holder of several patents and numerous honours and awards presented by his peers over the years.

Eric resides in Fredericton with his wife Christina. Since retiring, he has been able to devote more time to some of his favourite leisure activities, including woodworking and painting. He and Christina have also been enjoying travelling around the country in their new RV and on their motorcycles.

Eco-laundromat

From page 4
ever, result in a finished product very close to water reuse guidelines from US EPA and Victoria EPA after treatment; close enough to warrant investigation of other primary treatment processes in combination with the membrane.

A market exists for eco-laundromats and, although testing was overall unsuccessful, further investigation should be conducted to optimize the system. Such optimization would include research into appropriate coagulants, soap removal, sludge treatment and appro-

priate integration of disinfection into the treatment train. This would allow for large economic savings to Laundromat owners by diverting waste water discharge costs, and in combination with a heat recovery system, savings in water heating costs. More importantly, it would be one step toward reducing the environmental impacts that urban cities around the world have on their surroundings and putting less stress on water management infrastructure and its expansion as urban populations continue to grow.

WATER FOR PEOPLE

BOLIVIA: 80 per cent of rural inha

by Abraham Aruquipa

Country Coordinator, Water For People-Bolivia

In rural Bolivia, a toilet is seen as a beautiful thing—a fancy luxury that is much too fine to be used for its intended purpose. Instead toilets might be used to store potatoes or even live chickens. To have a toilet is a status symbol, whether or not it is operational or even outfitted with running water or pipes. These kinds of attitudes are typical of the special challenges we face in working to improve sanitation in our country.

Four out of every five rural Bolivians do not have access to improved sanitation. This statistic gives Bolivia the unfortunate distinction as one of the few Latin American countries not on track to meet the Millennium Development Goals, which aim to halve the percentage of people without access to improved sanitation by 2015.

In the Western Hemisphere, only Haiti has lower sanitation coverage. The sanitation challenges facing Bolivia, and many other countries in Africa and Asia, led to the designation of 2008 as the International Year of Sanitation (IYS), which aims to spread awareness and advocate for investment in improved sanitation worldwide. The five messages of IYS are very clear:

- Sanitation is vital to health.
- Sanitation makes economic sense.
- Sanitation improves social development.
- Sanitation helps the environment.
- Sanitation is achievable.

The International Year of Sanitation was launched in Latin America at the LatinoSan conference in Colombia at the end of 2007. Many promises and declarations were made, and now it's time to put these into action.

Not only is the coverage of sanitation extremely low in Bolivia, but construction of sanitation facilities has not led to their sustained and hygienic use. If we are to make a dent in the huge coverage shortfall, we need to understand the needs, cultural sensitivities and realities of the people we serve.

For example, we have learned that people feel that the word “latrine” means something for poor people, while a “bathroom” (whether or not the unit has run-



ning water or a bathing facility) is something to be proud of. Therefore, when we talk about sanitation work in our country, we use the word baño instead of letrina.

The challenges to improving and sustaining sanitation in Bolivia are several:

- Lack of political will to support sanitation projects. Bolivian law emphasizes decentralization of government and stresses that communities should decide how some local government funding is allocated. Many local governments interpret the law to mean that projects must serve communal needs. A water system is seen to be communal, but sanitation is seen as a personal choice, which means there is little local financing available for sanitation.
- Social and cultural contexts. Many of Bolivia's indigenous people believe that

digging and defecating in the earth is wrong. Mother Earth, or Pachamama, is to be respected, not used as a toilet. Moreover, homes are respected centers of cleanliness. A toilet, or “little house,” as it is sometimes viewed, is not to be used for defecation and urination.

- Demand. When there is demand for improved sanitation in rural areas, it often comes from families who have migrated to (and returned from) Argentina or Spain, where household water-based plumbing is common. Piped plumbing is seen as the ideal, and other environmentally, technically, and financially feasible systems are not desired. Bolivians rarely seek improved sanitation systems for perceived health benefits. It is often status and convenience that motivate them to invest in improved sanitation.
- Cost. The costs of water and sanitation services are higher in rural Bolivia than many other countries because the population is so dispersed.

Inhabitants lack adequate sanitation

■ Inappropriate technical designs. I have seen water-based sanitation systems installed in communities that have no water service. There are water-based toilets with intermittent water supplies, creating an extremely unhygienic situation. Appropriate technology is very important when designing a sanitation program in Bolivia.

Water For People–Bolivia is addressing these challenges in several ways:

■ Expansion of technical options. This year, we are offering three different sanitation options to communities: an improved pit latrine, a water-based option, and a dry/composting option. Communities can choose the solution that meets their personal preference and financial resources.

■ Regulations for water-based systems. If a community selects a water-based solution, families must pay a minimum tariff of 5 Bolivianos (US\$.67) per month to ensure they are able to sustain the system. The water system must provide water at least 12 hours each day to ensure there is enough to meet community needs, including water for sanitation.

■ Incorporation of new sanitation methodologies. People often talk of different sanitation technologies (pit latrines, pour-flush latrines, etc.), but there are also different approaches to sanitation. We participated in the first Latin American Community-Led Total Sanitation (CLTS) workshop last year, and are incorporating some of the innovative methodologies presented. CLTS promotes the idea that communities can and should solve their own sanitation issues through reflection and action. The goal is open-defecation-free communities, not just the construction of latrines. Our sanitation programming now begins with a facilitation of community reflection and leads to a discussion of multiple options.

■ Ecological sanitation. This non-water-based approach to sanitation views human waste as a resource. We have had great success with this approach in the Santa Cruz area, where eco-san toilets

were introduced eight years ago in response to constant flooding. Now we are including ecological sanitation as an option everywhere we work.

■ Partner training. The 2008 Water For People Ware Fellowship Program is focused on our Bolivian partner organizations and will provide us with the resources to provide more in-depth training on specific sanitation approaches and technologies.

We need to innovate and experiment if we are going to change from a country where 80% of rural inhabitants lack access to adequate sanitation to one where all people have the dignity and health benefits that come with improved sanitary facilities. Our goals are ambitious: We want to serve 4,845 people with improved sanitation this year—that is 30% more than our target number of people we want to serve with water access.

Join us in this important initiative and help us close the incredible and unjust gap between the sanitation haves and have-nots.

About Water For People

Founded in 1991, Water For People is a nonprofit international development organization that supports safe drinking water and sanitation projects in developing countries. Water For People partners with communities and other nongovernmental organizations to help people improve their quality of life by supporting sustainable drinking water, sanitation and health and hygiene projects. Water For People supports projects with professional development advice, financial support and volunteer technical services. Typical projects include protected spring-fed community water systems, gravity-fed systems, wells with hand pumps, latrine construction, operator training, and hygiene education. Water For People is currently working in Latin America, Africa and Asia. In 2007, Water For People supported the provision of safe and sustainable drinking water resources and/or sanitation facilities benefiting more than 108,000 people in the developing world.

More information is available at www.waterforpeople.org.

Water For People receives 4-Star rating from Charity Navigator

CHARITY Navigator, America's leading charity evaluator, has given Water For People its highest 4-star rating for sound fiscal management and the ability to effectively manage and grow its resources. This exceptional designation differentiates Water For People from other nonprofit organizations and demonstrates to supporters that the organization is transparent, accountable, and worthy of trust. The latest rating was based on 2007 financial performance.

This is the sixth consecutive year that Water For People has received this honor. Only 2% of the thousands of charities

rated by Charity Navigator have received at least six consecutive 4-star evaluations, indicating that Water For People consistently executes its mission in a fiscally responsible way and outperforms most other American charitable organizations.

One of the key metrics used in the rating process is the allocation of resources, the percent of revenues used for program expenses compared to administrative and fundraising expenses. Year after year, Water For People has improved its ranking in this area. In 2007, 84.3 percent of funds were directed to international programs, an extraordinary performance.

Greeting from the ACWWA Chair

Mark Butler

ACWWA Chair

LET me take this opportunity to welcome you to the Atlantic Canada Water Works Association's 2008 Conference. This is our chance to get together and share our professional experiences and at the same time get to know colleagues in the region who are involved with municipal drinking water or wastewater systems.

It is safe to say that work environments and the everyday stresses involved with being "on task" are becoming increasingly difficult to balance. As the demands of work continue to rise, not surprisingly so does the stress level in the work place.

I hope over the next few days that there are opportunities for you to relax and enjoy Prince Edward Island's hospitality, develop professionally and make connections through the region that will be both helpful and insightful for your future work.

The Conference committee has worked very hard to put together a conference of meetings and recreation activities that suits everyone's tastes. You will not be disappointed.

So, I encourage you to enjoy the hospitality Prince Edward Island has to offer, and thank you for taking the time to be part of this worthwhile conference.

Lastly, I encourage you to remember the Association and its value to you as a member. Enjoy!

Message from the Conference Chair

Darrell Fisher,

Conference Chair

ON behalf of the 2008 ACWWA Conference Committee, it is my pleasure to extend an invitation and welcome to everyone planning on attending this year's ACWWA Conference in Charlottetown, PE, from October 19 to 21, 2008, at the Delta Prince Edward Hotel.

I am very excited about this year's conference, the Conference Committee has put together a top notch program, with something for everyone. We start off with the traditional meet and greet on Sunday evening, and wrap up with a PEI Kitchen Party on Tuesday night with entertainment being provided by Michael Pendergast and Friends. This year's theme is "Water - The Choice is Clear", and you will find that the technical program has a very comprehensive range of topics for all backgrounds and interests. Add in tours of the recently upgraded Charlottetown Wastewater Treatment Plant and the Maritime Electric Generation Plant, throw in some Latin Dancing, and I am sure you will agree that the conference is a must attend this year!

Also, during your visit to PEI, we invite you to explore all of the things that our island has to offer; breathtaking scenery, fine dining, festivals, historic parks, and great shopping.

We look forward to seeing you.

SUNDAY, OCTOBER 19

| | |
|-------------|---|
| 11:30 | Golf at Fox Meadow Golf Course |
| 17:30-19:30 | Young Professionals' Supper |
| 19:00-21:00 | Meet & Greet in Prince Room (casual) |

MONDAY, OCTOBER 20

| | | |
|---------------------------|---|--|
| 7:00 | 5 km "Water For People" Run/Walk Gather at Delta | |
| 9:15-10:00 | Keynote Address: <i>So you're having a bad day ... Challenging for excellence in a challenging world</i> Dr. David Scott | |
| Technical Sessions | | |
| | Session A | Session B |
| 10:30-11:15 | Lead Occurrence following New Canadian Lead Guidelines for a Nova Scotian Community Joelle Gamble and Graham Gagnon | Greater Grand Sudbury Project Bryan Box; Bryan Haan |
| 11:15-12:00 | Sustaining Water Supplies for the Developing World Tony Petrucci | Choosing BNR for the New Summerside WPCC Dwayne Doucette; Phil Hardy; Frank Murphy |
| 12:30-14:00 | Luncheon/Annual General Meeting | |
| 14:00-14:45 | Common Session-Tim Lotimer Drinking Water Source Protection-The Ontario Example | |
| 15:00-15:45 | Validation and Commissioning a Drinking Water Pilot Plant Alisha Shepard, Jessica Mackay and Graham Gagnon | Monitoring GUDI sources- a case study Lawrence Peters |
| 15:45-16:30 | HRWCs Application of technology to improve meter reading and customer service Blaine Rooney | Full-Scale Evaluation of Manganese Removal During Biological Filtration Mark S. Burger; Corinne Krentz; Graham A. Gagnon |
| 18:00-19:00 | Banquet Reception | |
| 19:00-21:00 | Annual Banquet Delta Main Ballroom (Semi-Formal Dress) | |

TUESDAY, OCTOBER 21

| | | |
|---------------------------|--|---|
| 7:30-8:45 | Annual Awards Breakfast | |
| Technical Sessions | | |
| | Session A | Session B |
| 9:30-10:15 | Active Leak Detection Using District Meter Areas (DMAs) Rick Sherrard; Gerard Smith; Kingsley Blease | Tracer and Fluid Dynamic Studies of Water Treatment Plants Y.S. Vadasarukkai and G. Gagnon |
| 10:30-11:15 | Molecularly Oriented PVC Pipe John F. Houle | "Bump in the Road; adjust your thinking" - Adjustable Street Casting Applications Jeff Jensen |
| 11:15-12:00 | Pipe Joint Restraint Rick Benoit | AWWA Town Hall Meeting |
| 12:00-15:00 | Trade Show - Edward/Island Rooms | |
| 12:30-14:30 | Top Ops Competition - Elfin/Pekeha Rooms | |
| 18:00-19:00 | Waterworks Club | |
| 19:00-22:00 | Lobster Feast and Kitchen Party (Casual Dress) | |

**Still Time
to Register!**

Instructions

- All registrants must complete Parts 1 2 & 3 of this form. Complete Part 4 if you require accommodations.
- Full payment by cheque or Visa MUST accompany registration. Your request will not be processed without payment.
- Registration must be received by August 29, 2008 to be eligible for the Early Bird Draw.
- Registration must be received by September 19, 2008 to avoid a late registration fee.
- Cancellations received after October 1, will be subject to a \$100 charge
- Mail completed registration form and payment to:
2008 ACWWA Conference
P.O. Box 98
Charlottetown, PE, C1A 7K2
- For further information contact:
Bill Clair
Tel (902) 629-4091
Fax (902) 629-4076
acwwa2008@city.charlottetown.pe.ca

PART 1 – General Information

Name:
Surname Firstname

Organization:

This information will be used for your conference name tag.

Mailing Address:

Phone: Fax:

Email:

Companion/Spouse:

Membership Number:

Sector Utility Supplier Contractor Consultant
 Claiming CEUs Yes No

PART 3 – Payment options

Choose payment method. Complete as appropriate.

Cheque/Money order Visa

Please make payable to ACWWA 2008 Conference Committee

Visa
 Cardholder Name
 Card Number Expiry Date (Month/Year)
 Signature

PART 2 – Conference and Activity Fees

Complete as appropriate. If not attending a particular function, please enter '0'.

- **Registration Fee Member** @ **375.00** _____
- **Registration Fee Non-Member** @ **425.00** _____
- **Registration Fee for Companion** @ **120.00** _____
- **Student** @ **40.00** _____
- **Late Registration Additional Fee** @ **75.00** _____
 (After September 19, 2008)

MEALS AND ACTIVITIES

SUNDAY

- Sunday Meet & Greet — No Charge** Delegate
 Please indicate if attending Companion
- Young Professionals Supper — No Charge** Delegate
 Please indicate if attending Companion
- Sunday Facility Tour — No Charge** Delegate
 Please indicate if attending Companion
- Maritime Generation Plant Tour** Delegate
 Please indicate if attending Companion
- Charlottetown Wastewater Treatment Plant Tour** Delegate
 Please indicate if attending Companion

MONDAY Lunch & banquet included. Please indicate if attending

- Delegate Lunch
- Companion's Program Lunch (Mavors)
- Delegate Banquet
- Companion Banquet

TUESDAY Lunch included. Please indicate if attending

- Delegate Lunch
- Companion's Program Lunch (Culinary)
- Delegate Down East Feast Lobster Steak @ **25.00** _____
- Delegate Down East Feast Lobster Steak @ **25.00** _____
- Extra tickets/Monday night @ **50.00** _____
- Extra tickets/Tues. night Lobster Steak @ **60.00** _____

Subtotal _____

Life members: deduct \$100 (_____)

5% GST (869 924 910 RT2) _____

Water for People Fun Run @ \$25 _____

Total amount to be remitted: _____

PART 4 – Accommodation request

Delta Prince Edward Hotel, Charlottetown

- All accommodation reservations or cancellations must be made through the Conference Committee.
- Hotels and rooms are assigned on a first-come first-serve basis.
- Reservation acknowledgement will be supplied by the Conference Committee.
- Rooms will be held until 6:00 p.m. on arrival date.
- **Payment for accommodations and guaranteed reservations must be made directly to the hotel and is your responsibility.**

I will be arriving on _____ Day Oct. _____ Date

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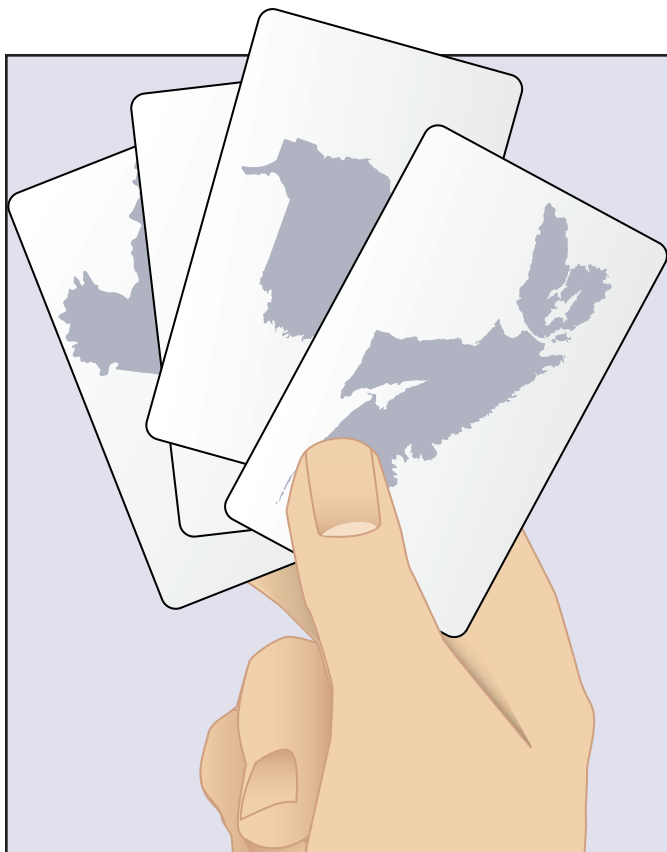
Fri. Sat. Sun. Mon. Tues. Wed.
 Oct. 17 Oct. 18 Oct. 19 Oct. 20 Oct. 21 Oct. 22

I want my reservation guaranteed: YES NO

Name on Credit Card

Card Number

Expiry Date:



Change to conference rotation

ACWWA is planning on modifying the current rotation for the annual conference. As it stands now, the ACWWA annual conference cycles through the four Atlantic Provinces, visiting each province once every four years.

With only one host City in each of Nova Scotia (Halifax), PEI (Charlottetown), and Newfoundland (St. John's), the current rotation provides each of these cities the opportunity to host the conference every four years. New Brunswick on the other hand has three regular host cities (Fredericton, Saint John, and Moncton) which only get to host the conference every twelve years due to the current provincial rotation. In an attempt to provide our New Brunswick cities with the opportunity to host the conference more frequently, ACWWA will be modifying the current rotation such that the conference moves to New Brunswick on a three year cycle instead of every four years.

How will this impact the other Cities? The remaining cities will alternate between four and five year cycles. The following table demonstrates the impact of the changes over a 15-year period.

| Year | Current Rotation | New Rotation |
|------|------------------|--------------|
| 1 | NL | NL |
| 2 | NS | NS |
| 3 | NB | NB |
| 4 | PE | PE |
| 5 | NL | NL |
| 6 | NS | NB |
| 7 | NB | NS |
| 8 | PE | PE |
| 9 | NL | NB |
| 10 | NS | NL |
| 11 | NB | NS |
| 12 | PE | NB |
| 13 | NL | PE |
| 14 | NS | NL |
| 15 | NB | NB |
| 16 | PE | NS |

| TYPE | MEMBER NAME | | ORGANIZATION | JOINED |
|--------------------|-------------|------------|---|----------|
| Individual | Reginald | Babstock | Newfoundland Design Associates | 7/11/07 |
| Oper/Admin | Danny | Bartlett | Town of St. Andrews | 12/6/07 |
| Individual | Kulvinder | Dhillon | Nova Scotia Utility and Review Board | 1/13/07 |
| Individual | Olivia | Dion | H2O Innovation (2000) Inc. | 1/31/07 |
| Individual | Kirby | Downing | | 4/6/07 |
| Individual | Hubert | Fraser | Campbell's Concrete | 8/2/07 |
| Student | Stephanie | Gora | Dalhousie University | 4/26/07 |
| Individual | David | Graham | | 3/21/07 |
| Individual | Jeremy | Howley | City of Saint John | 8/23/07 |
| Individual | Sudhir | Jha | C & GS | 4/24/07 |
| Utility | Barry | Justason | Connors Bros. | 6/20/07 |
| Individual | Mark | Kennedy | City of Corner Brook | 11/20/07 |
| Individual | Brandon | MacDonald | City of Corner Brook | 8/13/07 |
| Individual | Andrew | Niblock | | 9/25/07 |
| Additional Actives | Austin | O'Brien | City of Moncton | 1/9/07 |
| Individual | Brian | Parker | Wolseley EPG Inc. | 6/29/07 |
| Individual | Dan | Pelham | Wolseley EPG Inc. | 7/2/07 |
| Utility | Satu | Peori | The Municipality of the County of Kings | 3/20/07 |
| Individual | Pierre | Plourde | Crandall Engineering | 4/2/07 |
| Service Provider | Wendy | Richard | Stantec | 4/23/07 |
| Individual | Fred | Sawyer | New Brunswick Community College | 1/13/07 |
| Individual | Clara | Shea | ACWWA | 12/21/07 |
| Individual | Clarence | Short | Nova Scotia Community College | 3/20/07 |
| Individual | Dean | Stewart | Water Wise | 7/6/07 |
| Student | Yong | Wang | | 12/21/07 |
| Individual | Daniel | Allain | Town of Bouctouche | 2/12/08 |
| Individual | Andre | Bernard | | 1/23/08 |
| Individual | Gerard | Boulos | Stantec Consulting | 2/19/08 |
| Oper/Admin | Cliff | Boutillier | Nova Scotia Community College | 3/14/08 |
| Individual | Chris | Cochrane | | 1/26/08 |
| Individual | George | Cradic | | 3/14/08 |
| Oper/Admin | Matthew | Crowley | CH2M Hill OMI | 3/14/08 |
| Utility | Robert | Dauphinee | Municipality / County of Victoria Water Utility | 4/3/08 |
| Additional Actives | Larry | Dunn | Cape Breton Regional Municipality | 3/10/08 |
| Oper/Admin | Dionna | Ebeling | Mount Pleasant Waterworks | 4/10/08 |
| Individual | Robert | Evans | City of St. John's | 5/7/08 |
| Oper/Admin | Brian | Hazlett | Accessible Water & Wastewater Solutions | 3/20/08 |
| Individual | Mikal | Hendee | | 5/16/08 |
| Individual | Dawn | MacNeill | Nova Scotia Environment & Labour | 4/2/08 |
| Individual | Tim | McCluskey | CBCL Limited | 2/20/08 |
| Oper/Admin | Wade | McNeil | NSSC | 3/14/08 |
| Oper/Admin | David | Reid | NSSC | 3/14/08 |
| Individual | Bob | Robins | Indian & Northern Affairs Canada | 4/11/08 |
| Individual | Deneen | Spracklin | Dept of Environ and Conservation | 4/11/08 |
| Individual | Jeff | Storey | City of Campbellton | 2/11/08 |
| Individual | Stephen | Woods | City of Moncton | 3/13/08 |

If you have any questions about your membership or would like to join, please contact Damien Monk, Membership Chair: 506-856-0386 or via email: dammon@ipexinc.com

Moncton committee helps African city

(reprinted from a Moncton Times & Transcript article)

AN African priest stood 10 feet away from the glistening water fountain in the lobby of Moncton's City Hall yesterday afternoon as he thanked the city helping bring life to his impoverished community half a world away.

Father Valerien Kastinge said the people of Butembo, a burgeoning city of 600,000 in the war-torn Democratic Republic of Congo, in central Africa, have to scale five kilometres up a muddy mountain to reach their only source of fresh water.

There is no running water or electricity in the city.

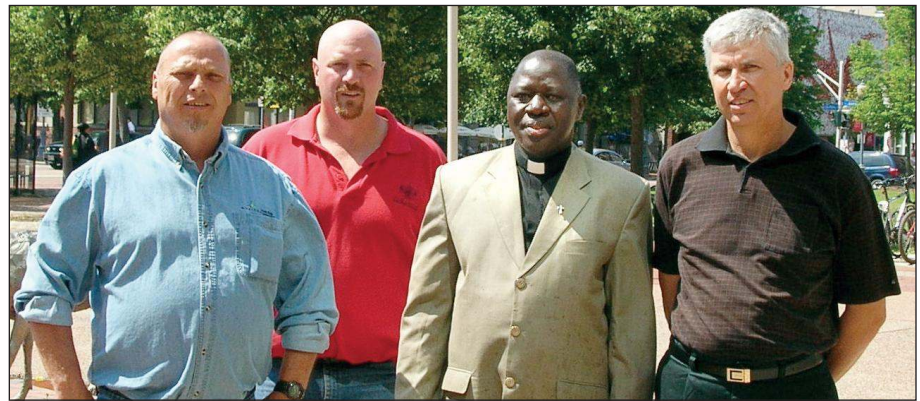
Butembo is the latest city to benefit from the City of Moncton's "Water for People" committee, which is formed by staff in the utilities department and assisted by the Canadian Union of Public Employees.

The committee has given more than \$5,000 to help develop the water supply in Butembo.

Father Kastinge said he will return to his country to tell residents there are generous people in Moncton who want to help them.

"You have given us water and water is life," the 48-year-old priest said. "Without water we cannot live."

Sister Marie Cecile LeBlanc, of Moncton, has known Father Kastinge for almost 20 years. He studied at a seminary in Ottawa, where he met LeBlanc, before returning to his homeland to set up a university and other social



Enjoying his visit to Moncton is Father Kastinge (3rd from left), along with City of Moncton staff (left to right) Jeff LeBlanc, Donnie Williams, and Ensor Nicholson.

agencies.

"The conditions are awful," she said.

"The boys and girls take a bath in



the water at night then they get up the next morning and drink the same water. The parents do the same."

"We don't know how bad things are, but (Father Kastinge) is working hard to make things better. We want to help as much as we can."

The city's "Water for People" committee started about 13 years ago. It collects money from the sale of recycled materials attained from the repairs, maintenance and operation of Moncton's water and sewer infrastructures.

It has collected more than \$35,000, which has been sent to needy communities in South America and Africa.

The priest is now raising money to buy trucks that will transport fresh water from the mountain top down to the people of Butembo.

Sister LeBlanc is organizing a concert to raise money for that effort. A similar concert in Memrambook raised \$1,800 for Butembo.

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Pharmaceuticals in our environment

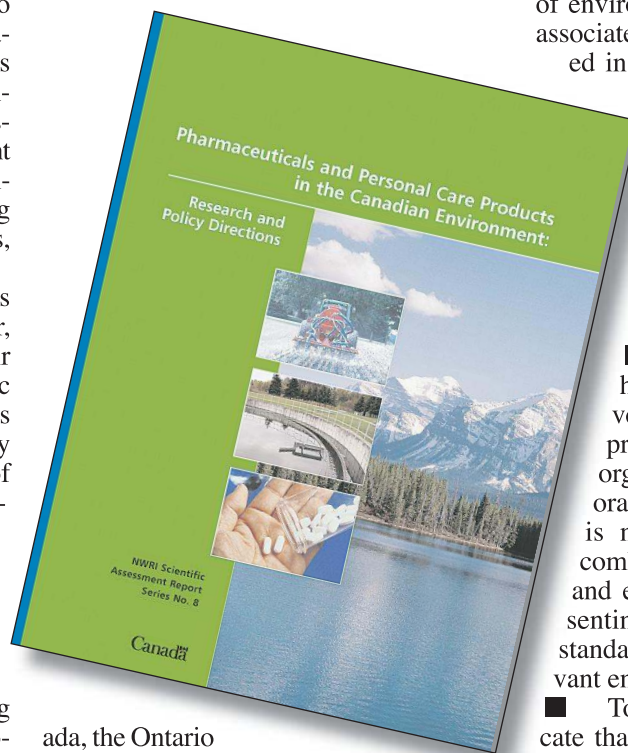
It has been known over the past two decades that residues of pharmaceuticals and personal care products (PPCPs) from personal use or the veterinary treatment of animals (e.g. drugs, cosmetics) are released into the environment via wastewater effluent and land application of biosolids and manures, ending up in agricultural soils, surface waters, groundwater, and drinking water.

Concentrations of these chemicals detected in water are minute; however, there is an increasing concern over their potential long-term impact on aquatic and terrestrial ecosystems as well as human health. For instance, laboratory studies have shown that low levels of PPCPs can accumulate in biological tissues of certain aquatic organisms adversely affecting their growth and reproduction.

Although there have been significant advances in methods to identify and quantify the presence of PPCPs in the environment, our understanding of the level of risk and the span of potential adverse effects on biota and human health remains limited.

Research and policy needs

One year ago, scientists and regulators from across Canada gathered to assess the current state of Canada's research by government, academia and industry sectors on PPCPs in the environment, and to identify key actions to guide future research and Canada's path forward on this emerging global environmental issue. The event was hosted by the Ontario Ministry of the Environment, Environment Canada, Health Canada, Agriculture and Agri-Food Can-



ada, the Ontario Ministry of Agriculture, Food, and Rural Affairs, the Canadian Water Network, and the Walkerton Clean Water Centre.

A workshop report from this event, 'Pharmaceuticals and Personal Care Products in the Canadian Environment: Research and Policy Directions', is now available at <http://www.nwri.ca/ppcp-ppsp/i-cover-e.html>.

Key messages and recommendations from the workshop presentations and discussions include the following:

- The issue of PPCPs in the environment is not yet sufficiently understood. More study and quantification

of environmental concentrations and associated observed effects are needed in order to verify the assumption that there is a risk to be managed. There is also a need to identify major sources of PPCPs to the environment and determine the cost-effectiveness of source control programs and treatment technologies.

- Individual PPCPs have been associated with adverse effects on growth and reproduction of selected aquatic organisms under controlled laboratory conditions, but research is needed to investigate their combined effect at the population and ecosystem levels, to identify sentinel species, and to establish standardized environmentally-relevant endpoints.

- Toxicity effects generally indicate that acute lethal effects are not likely to occur in the environment but that chronic or long-term effects are possible. To evaluate the potency of PPCPs and the vulnerability of ecosystems, long-term effects monitoring and whole-ecosystem studies are needed in locations where the most serious impacts have been observed or are likely to be observed.

- Workshop participants supported the need to develop a monitoring network to address the above needs, a specialized national inventory of research and monitoring information and activities, and a consistent framework for chemi-

See page 19



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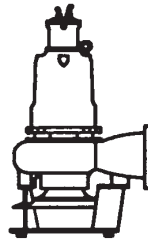
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Situational leadership

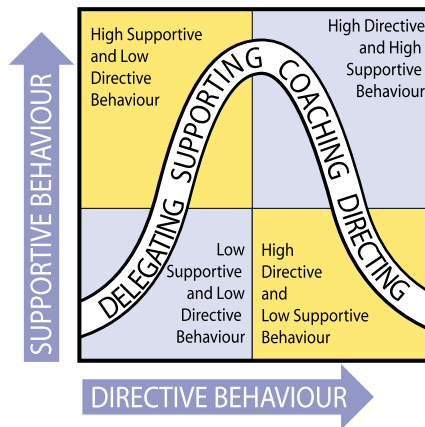
YOU have probably heard people say: “All there is to supervising is being able to DELEGATE.” Sorry, but that is just too much of a simplification. A much more correct statement might be: “A supervisor must be able to develop an employee to the point where he can accept delegation.”

In other words, few employees are able to immediately grab control of a task and do it without help or input. And it is not all related to the employee’s knowledge or ability either. As we shall see, much of it has to do with your relationship with the employee, and how it should change over the employee’s development.

Please consider the above graph (blatantly stolen from Kenneth Blanchard, the One Minute Manager guy). Please try to follow this because it is worth it. I promise that it can pay dividends. The x axis is the task oriented time you spend with an employee, while the y axis is the relationship oriented time. In truly simple terms, the x axis is a measurement of how much time you spend telling an employee exactly how to do something while the y axis is a measurement of the time you spend supporting the employees actions with support, interaction, and appropriate freedom from direction.

No, you are not ready. Read that last paragraph again, and stop just scanning-Jeez you guys! ... O.K. Now, a new employee, or even a seasoned employee with a new task will likely know less about the task than you. So you will start out by spending a lot of time giving him direction and not much else. Where is that on the graph? It isn’t often you enter a graph from the right, so we will forgive those who had to look twice. You have entered the quadrant appropriately marked “DIRECTING”.

Now, as the employee becomes proficient at the task, and the challenge of just doing it wanes, you had better keep his/her attention by explaining why the task has to be done



and possibly why it has to be done a certain way or to a certain standard. You should also contribute to the employee’s pride of workmanship (remember that term from the last newsletter?) by providing encouragement, appreciation, and recognition at every opportunity. You are now increasing your relationship-oriented time and decreasing your task-oriented time. This quadrant is also well named “COACHING”.

You continue to develop the employee by decreasing your directive behavior and allowing him/her to make more and more decisions about the task without you. Furthermore, you require the employee to provide as much input as practical about this and related work. At the same time,

you only slowly begin to decrease your supportive behavior, but always letting the employee know you rely and trust him/her. You certainly continue to facilitate the employee’s success, but you ensure that there is more and more for which only the employee can claim credit. This quadrant is called “SUPPORTING”.

Finally, you and your employee enter the last quadrant, “DELEGATING”. This is where it is all worthwhile. The employee is self-motivated; feeling trusted and relied upon, and attaining a higher level of pride of workmanship. You are still there to provide any resources, and of course, to help with the next new task or next new employee.

A little advice, however. If you try to shortcut the graph, you may cause real trouble. The employee will become frustrated, and in turn will frustrate you. Also, it takes real experience to know how fast to move along the graph. We can all think of examples where progressing too slow or too fast has caused discomfort to an employee. Some employees would like to kick the supervisor to the next quadrant with a steel boot, while others might wonder where the hell the support is when needed.

So there you have it. We gotta change our style -- for each situation!



About WEF

Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with members from varied disciplines who work toward the WEF vision of preserving and enhancing the global water environment.

WEF's vision to "preserve and enhance the global water environment" is the basis for all WEF programs and activities. The Federation is governed by an 18-member Board of Trustees acting on behalf of its membership to advance its mission of providing information, education, and resources to water quality professionals and the public.

WEF Member Associations

WEF's global network of Member Associations (MAs) provides water quality professionals around the world with education, training, and business opportunities.

WEF and its Members:

- research and publish the latest information on wastewater treatment and water quality protection;
- provide technical expertise and training on issues including non-point source pollution, hazardous waste, residuals management, groundwater, sustainability, and emerging water quality issues;
- sponsor conferences and other special events around the world;
- review, testify, and comment on environmental regulations and legislation.

Technical Training and Education

WEF offers Continuing Education Units (CEUs) for successful completion of training programs and seminars. Members can choose from self-paced and classroom courses for entry and advanced-level training; interactive CD-ROM-based training courses for operators; and a variety of self-study training materials in print and electronic format.

Technical Publications

WEF publishes more than 190 technical publications. These include peer-reviewed Manuals of Practice (MOPs) covering a range of water quality topics on design, operation, and management issues as well as Technical Practice Updates (TPUs). Developed under the auspices of WEF's Technical Practice Committee by diverse and balanced task forces using WEF's established consensus procedures, TPUs have the goal of providing timely and accurate information on evolving technical topics such as biosolids, collection systems, and microconstituents.

Magazines and Journals

- Water Environment & Technology
- Water Environment Research
- Water Practice
- World Water & Environmental Engineering

Newsletters

- Water Environment Laboratory Solutions
- Biosolids Technical Bulletin
- Industrial Wastewater Technical Bulletin
- WEF Highlights
- Utility Executive
- Water Environment Regulation Watch

WEFTEC® – The Water Quality Event

WEFTEC (WEF's Annual Technical Exhibition and Conference) is North America's largest exhibition and conference on water quality and wastewater treatment technology and the largest annual water quality exhibition in the world. WEFTEC annually hosts over 18,000 water quality experts from around the world and features more than 600 technical presentations and 1,000 exhibiting companies. www.weftec.org

Specialty Conferences

WEF's specialty conferences are held throughout the year and feature key water quality topics including collection systems, biosolids management, and odors/air emissions. WEF also addresses timely issues such as sustainability, membrane technology, nutrients, infrastructure security, asset management, pretreatment, NPDES permitting, and fats, oil and greases through seminars and special webcasts. Conference papers are available year-round on CD or in WEF's online Market Place.

Join the ABEA!

THE Atlantic Branch Equipment Association (ABEA) is an organization which represents its membership within the waterworks industry of Atlantic Canada. Membership consists of; manufacturers, suppliers, distributors, agents and contractors dedicated to serving the Atlantic Canadian municipal market. Through the direction and strong support of its members the ABEA works closely in conjunction with the Atlantic Canada Water Works Association (ACWWA) to provide technical support, representation, and resources through annual regional conferences. Together, ABEA membership provides a strong voice in our industry.

Thinking about becoming a member? Here are a couple of points to show how the ABEA can help you gain exposure in our market place:

- Advance booking and discounted rates for ACWWA/ABEA Tradeshow during the 2008 ACWWA Charlotte-town Conference.
- Excellent visibility through the ABEA buyer's guide given to all delegates annually.



- The ABEA has an active voice in the ACWWA.
- The ABEA can help your company gain exposure by participating in training programs.
- Participation @ the 1st annual ABEA Common Hospitality Suite during the 2008 ACWWA Charlottetown Conference.

The ABEA board of directors has been working hard and we wish to inform our members to be on the lookout for information regarding membership renewals and events.

Non-Members Feel free to contact any of the ABEA board members for information on how to join:

Ian Paton President
ian.paton@aps.ns.ca
Scott Smith Vice President
s.smith@urecon.com
Philippe Losier Senior VP
plosier@royalpipe.com
Trevor Power Junior Director
powert@natpro.com
Jeff Jensen Secretary/Treasurer
jjensen@muellercanada.com

Technical session in San Diego

The Canadian Affairs Committee (CAC) is again hosting a technical session at ACE09 in San Diego. We are asking for your assistance in helping us identify potential presenters for the session.

The session is scheduled for Tuesday afternoon, June 16, 2009. The theme that CAC selected is: "Water Sustainability Across Canada", which could include climate change.

Presenter information/abstracts needs to be submitted to AWWA by September 15, 2008

Ray Bilevicius and Bruce Buchanan are working together to coordinate this technical session. If have any recommendations for potential presenters either contact them to determine their interest and forward their name(s) to Ray or Bruce or just forward their name and Ray and Bruce will contact them.

Ray Bilevicius
ray.bilevicius@earthtech.ca
Bruce Buchanan
bbuchanan@touchieengineering.nb.ca

Pharmaceuticals in our environment

From page 14 cal analysis of PPCP concentrations, and provided specific advice on how to create and maintain these activities.

Moving forward: Enhancing communication and knowledge

In addition to the above recommendations, participants at the national workshop agreed on the need to enhance communication among researchers, and among sci-

ence users such as risk assessors, regulators and wastewater managers.

The proceedings provide a common understanding of the state of the science and will help researchers prioritize needs and better identify collaborative opportunities to address knowledge gaps. This report will also make funding organizations aware of the research priorities in this field, and give policy and program managers a better appreciation of exist-

ing research challenges and broader policy issues.

To maintain research momentum on this important issue and further explore the utility of a central information coordinating network, a follow-up workshop in 2009 was recommended.

For more information contact:

Karl.Schaefer@ec.gc.ca
S&T Liaison
Environment Canada

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Canadian Individual Membership Application

Complete this form by following instructions 1 through 5 Please print or type

1 Personal Information

Please furnish your preferred mailing address below Business Home
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First name Middle Name Last Name Suffix

Exact Street Address PO Box or Mail Stop

City Province Postal Code

Title

Company Name

Home Phone Business Phone Business Fax

Applicant's Signature Date

Signature of AWWA Member Endorsing Member No.
Endorsing Application (Optional)

Is your company a current member of AWWA? Yes No
Please provide your company's main address if different from above.

Company Name

Exact Street Address PO Box or Mail Stop

City Province Postal Code

Choose the appropriate member grade shown below and enter corresponding dues in **instruction 5, line A.**

- \$90 Active Grade Code 02
- \$35 Operations Grade Code 06 (Only for operator level personnel or employees of small utilities. Will *not* receive *Journal AWWA.*)
- \$25 Student Grade Code 14 (Requires Copy of Class Schedule).

2. AWWA Section Information

AWWA has 43 local organizations throughout the US, Canada and Mexico called Sections. Your preferred address determines the Section to which you are assigned. A listing of the AWWA Sections and their corresponding section codes appears in Instruction 3. Some AWWA Sections assess an additional **mandatory** annual fee to the members in their Section (assessments require a vote of the Section's members and also approval by AWWA's Board of Directors). These funds provide an additional revenue source to help improve services that are critical to the Section. An assessment is an equitable means of distributing some of the costs of services to all members in the Section.

Mandatory section assessments are required as follows: applicants with an address in the NEWWA Section (ME, NH, RI, VT, MA) add \$40.00 for 02 active or \$17.00 for 06 operations. In the Florida Section, add \$10.00 for 02 active only. In the Georgia Section add \$15.00 for 02 active only. In the Pacific Northwest add \$89.00 for 02 active only. If your section is Minnesota or South Carolina add \$10.00 for either 02 active or 056 operations. If you are located in one of these Sections which have an Assessment Fee, enter that amount in instruction 5, line B.

3. Multi-section options

You may also select a year's membership in AWWA Sections in addition to your own. These additional Sections are called Multi-Sections. Enter \$14.00 in **instruction 5, line C** for each Multi-Section selected. **However, if your Multi-Section option(s) include Georgia, enter a total of \$29.00; for Minnesota or South Carolina, enter \$24.00; for NEWWA, enter \$54.00 for 02 Active or \$31.00 for 06 Operations; for Pacific Northwest, enter a total of \$22.00.** Please indicate your choice of Multi-Section(s) below

4. Circulation figures

ALL APPLICANTS SHOULD COMPLETE THIS SECTION.

AWWA is audited semi-annually to confirm *Journal AWWA's* circulation figures. In order for us to maintain accurate circulation figures, please complete this section. Circle the descriptions below that best describe you. Circle only ONE in each group.

BUSINESS AND INDUSTRY

- A. Public Water Supply Utility – Municipally Owned
- B. Public Water Supply Utility – Investor Owned
- C. Governmental – Federal, State, Local
- D. Consultant
- E. Contractor
- F. Private Industrial Systems or Water Wholesaler
- G. Manufacturer of Equipment & Supplies including Representatives
- H. Distributors of Equipment & Supplies including Representatives
- I. Educational Institutions, Faculty and Students, Libraries and Other Related Organizations
- J. Fully Retired
- K. Research Lab
- L. Unreported.

JOB TITLE

- A. Executive-Gen'l Mgr., Commissioner, Board Member, City Mgr., Mayor, President, Vice President, Owner, Partner, Director, Etc..
- B. Management-Division Head, Section Head, Mgr., Chief Engineer, Comptroller, etc.
- C. Engineering/non-managerial-Civil Engr., Mech Engr., Envir. Engr., Planning Mgr., Field Engr., System Designer, etc.
- D. Scientific/non-managerial-Chemist, Biologist, Biophysicist, Research, Analyst, etc.
- E. Purchasing-Purchasing Agent, Procurement Specialist, Buyer, etc.
- F. Operations-Foreman, Operator, Maintenance, Crewman, Service Rep., etc.
- G. Marketing & Sales/non-managerial-Mkt. Analyst, Mkt. Rep., Salesman, Sales Rep., etc.
- H. Other (describe)

CHECK FIELD(S) SERVED:

- 5 Water Supply Only
- 7 Wastewater Only
- 9 Both
- 3 Other

Interest codes

These codes are used to help us develop programs and services that benefit our members.

Please mark all the appropriate box(es)

- Career development
- Computer/Information System
- Conservation/Efficiency
- Customer Service
- Disinfection
- Distribution System
- Emergency Planning
- Filtration
- Ground Water
- Hazardous Waste Management
- Laboratory/Testing Sample
- Local AWWA Issues
- Maintenance/Operations
- Personnel Management
- Public Information/Relations
- Regulatory/Legislative
- Resource Management/Planning
- Rates/Cost of Service
- Safety
- Surface Water
- Treatment
- Treatment Waste Disposal
- Youth Education
- Other _____

Have you been a member of AWWA before?

When?
Member No.

5. Payment

- A. Annual Dues _____ (From instruction 1)
 - B. Special Section Assessment _____ (From instruction 2)
 - C. Multi-Section Option _____ (From instruction 3)
- Add amounts, pay total: _____

If paying by check, make payable to AWWA (Canadian funds, add 30 %). Payment by credit card also accepted:

- Mastercard
- Visa
- Diner's Club
- American Express

Card Number: _____ Expiration Date: _____

Signature: _____

- Send invoice

No action can be taken on this application until payment is received.

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