

Maritime Provinces Water & Wastewater

REPOR

Volume 21 / Number 3

PM# 40064924

JULY 2014



Rob Hamilton
Chairperson of the MPWWA

With this being my first "Note from the Chair" as the newly installed Chairperson of the MPWWA, I must admit that I'm struggling putting into words all that has taken place over the past year.

The 2014 Annual Training Seminar held at the Halifax Marriott Harbourfront Hotel in May was one of the most successful and well-attended conferences that the MPWWA has put on to date. Conference Chair Craig Gerrior is to be congratulated on putting together an outstanding program featuring relevant and informative speakers, excellent workshops that touched on the conference theme of "Infrastructure Renewal" and the always popular and progressive equipment display. A tremendous amount of time and effort goes into the organization of these events and Craig should be acknowledged for his work, as should his employer for allowing him the opportunity to do it.

Newly installed Seminar Coordinator Delbert Reeves, as he has at numerous past conferences, played an integral role in coordinating the communication, organization and setup of the Supplier Equipment Show. Great job Craig, Delbert and all members of the executive, each of whom played an important role in ensuring this conference had few if any hitches.

Our 5th Annual Charity Silent Auction was held in conjunction with the training seminar with Supportive Housing for Young Mothers (SHYM) being the worthy recipient of the proceeds. More than \$5200 was raised through furious bidding on some very diverse items and turned over to benefit SHYM. Very special thanks go out to Alan Benninger, Holly MacIntosh, Jerry Villard and Tim Henman for all of their efforts in the coordination of this very successful event. The monies raised represent the largest amount that the MPWWA has turned over to a charitable organization in the Auction's 5-year history.

Continued on page 15



■ BY GARY KEAN

WESTERN STAR

Corner Brook's new water treatment plant and distribution system are on budget and on schedule to be completed this fall.

Coun. Josh Carey gave an update on the \$50-million project during Monday night's (June 9) public meeting of city council.

Construction of the water treatment plant at the western entrance to the (Newfoundland & Labrador) city on the Trans-Canada Highway continued throughout the winter. Exterior cladding of the building has been done, while work on the glazing, doors and interior lining panel is ongoing.

Interior masonry walls are being installed and the main process tanks have been filled with water for leakage testing.

Carey said the majority of process and mechanical equipment has been installed, rough plumbing is ongoing and the electrical rough-in is continuing. Civil works started up in May, with a focus on the installation of the final underground piping, including piping to the reservoirs at the rear of the plant.

Storm water pipe and retention areas are to be completed in the coming months.

 $Continued\ on\ page\ 15$

INDEX

OL 11 A 11	,
Charity Auction	
Awards	
New water act	5
Temporary equipment	
NB Strategy	
Sewer projects	11
Treatment plant upgrade	
Watershed worries	

ADDRESS LABEL HERE

Annual Charity Auction raises over \$5,600

■ BY ALAN BENNINGER & HOLLY MACINTOSH

Who knew five years ago that the decision by the MPWWA Board of Directors to host a charity auction at the Annual Training Seminar would be such a huge success? To date, the auctions have raised more than \$18,000 in total - with 100% of the money raised going to a local charity in the host province.

At this year's seminar in Halifax in April, we proudly held our 5th Annual Charity Auction in support of Supportive Housing for Young Mothers (SHYM) - operated by the YWCA Halifax. The auction was a huge success – the best ever! Greater than \$5,600 will help SHYM provide housing, as well as parenting and life skills development programs for young mothers between the age of 16-24, who are independently parenting their child(ren) and are in immediate need of housing.

SHYM Registered Social Workers, Cathy Kasper and Lee Ann MacDonald, who accepted the cheque on behalf of SHYM, shared the following with us: "We could never express enough gratitude to MPWWA for their generosity. It is such a huge act of kindness that will touch all of the current SHYM families and beyond. It was very meaningful and touching to represent SHYM and connect with a group as fine as MPWWA. We feel proud of the work SHYM is able to do and also very

fortunate to have been chosen as a recipient of your charity auction. The results of much work on the part of auction organizers and conference committee members will impact SHYM in a major way. With this significant donation, we will be able to accomplish many things in terms of purchases and programming. How

Their words nicely sum up the reason the Board plans to continue hosting a charity auction at our annual seminars!

It's important to note that the charity auctions are only possible because of the tremendous support of our members, equipment suppliers, businesses and individuals - in the form of item and cash donations and of course the auction bids and purchases. Examples of the 'generous spirit' shown in support of the auction were clearly evident this year. An operator donated a Sobeys gift card saying, "They need this more than I do." Another member donated an item he won in a prize draw at the Equipment Show, stating that he wanted to support the charity. For those in attendance at the banquet, we will not soon forget the excitement when Hettie Sacre from Atlantic Purification Systems turned over approximately \$750 for the charity auction after she won the 50/50 draw

Now, looking ahead to our 35th Annual Training Seminar in Charlottetown next year, we are pleased and excited to be supporting 'The Joyriders'. The mission for this charity is the enhancement of the physical, emotional and social well being of children and adults with disabilities through various therapeutic forms of riding horses. Their choice of name is an important clue

to the kind of people they are - people who bring joy to the lives of others, and they have been doing this for more than 35 years.

Please consider helping to make our 6th Annual Charity Auction a huge success in support of The Jovriders in 2015!



MPWWA

Board of Directors 2014

Phone: 506-726-2727 Fax: 506-726-2687

Nicolas.legere@caraguet.ca **7one 2: Trevor Douthwright**

Phone: 506-372-3243 Fax: 506-372-3225 salisburyworks@nb.aibn.com

Zone 3: Rob Hamilton Chairman

Phone: 506-649-7928 Fax: 506-658-2813 rob.hamilton@saintjohn.ca

Zone 4: Rick Larlee Webmaster

Phone: 506-460-2224 Fax: 506-460-2013 rick.larlee@fredericton.ca

Zone 5: Nancy Llewilyn Phone: 902-543-4254

Fax: 902-543-0976

nancy@bridgewater.ca Zone 6: Todd Richard Past Chairman

Phone: 902-798-8000 Fax: 902-798-5679

todd.richard@town.windsor.ns.ca Zone 7: Kevin Kelloway

Phone: 902-435-9300 Fax: 902-435-8403 kevink@halifaxwater.ca

Zone 8: Nicola Bagley Phone: 902-563-5774 Fax: 902-563-5775 nsbag@cbrm.ns.ca

Vice Chairman/Secretary Phone: 902-393-6281

Fax: 902-569-5000 jvillard@town.stratford.pe.ca

Zone 10: Tim Henman *DND WFE

Phone: 902-802-3595 Fax: 902-427-0212 timothy.henman@forces.gc.ca

Zone 11: Mark Francis *Director at Large (NB & PEI)

Phone: 506-261-4304

Mark.1978@outlook.com

Zone 12: Craig Gerrior *Director at Large (NS & NL) Phone: 902-755-2237

Fax: 902-755-3065 cgerrior@newglasgow.ca

Clara Shea **Executive Secretary**

Phone: 902-434-8874 Fax: 902-434-8859 contact@mpwwa.ca

Andrew Garnett Treasurer

Phone: 506-325-4644 Fax: 506-325-4308 andrew.garnett@town.woodstock.

Jeff Jensen **Commercial Representative**

Phone: 902-462-3807 Fax: 902-462-3407 iiensen@muellercanada.com

Phone: 902-468-7890 Fax: 902-468-3011 ian.paton@natpro.com

Paul Klaamas **Environment Canada**

Phone: 902-426-4378 Fax: 902-426-6434 paul.klaamas@ec.gc.ca

Denis Chenard NB Government

Phone: 506-453-2200 Fax: 506-453-7945 denis.chenard@gnb.ca

Alan Benninger NS Government

Phone: 902-625-4285 Fax: 902-625-3722 benninaj@gov.ns.ca

Janeen McGuigan PEI Government

Phone: 902-368-5043 Fax: 902-368-5830 jcmcguigan@gov.pe.ca

Deneen Spracklin NL Government

Phone: 709-729-1158 Fax: 709-729-0320 dspracklin@gov.nl.ca

Delbert Reeves Seminar Coordinator Phone: 902-368-2840

reevesdelbert@gmail.com



MPWWA Board member Alan Benninger (left) presents the cheque from the Charity Auction at the MPWWA Training Seminar to SHYM Registered Social Workers, Lee Ann MacDonald (centre) and Cathy Kasper. (Photo: Holly





Halifax Water wins Innovation Award at CSCE conference

Halifax Water was awarded the "CSCE-CANAM Excellence in Innovation in Civil Engineering Award" at the Canadian Society of Civil Engineering's (CSCE) annual meeting and conference.

The Nova Scotia company was one of three finalists competing for the national award presented May 30.

The winning innovation was "Advanced Pressure Management Utilizing Automated Pressure Reducing Valve Control in a Dual Supply District Metered Area."

"It is an honour to be recognized by our peers in the field of Civil Engineering," said Halifax Water General Manager Chair Carl Yates. The Honourary Conference Chair added, "Innovative thinking and effective program implementation benefits our cus $tomers, the \, environment, and \, motivates \, staff \, to \, keep$ striving for excellence."

CSCE President Reg Andres said, "Innovations

such as those seen at the CSCE conference in Halifax help make Canada a world leader in the field of Civil Engineering. I am pleased to see such a strong field of candidates this year. Congratulations to Halifax Water for being this year's award recipient."

The award recognizes Halifax Water's position as a world leader in water loss control. Since the implementation of an international best practice in 1999, it has reduced leakage in the water distribution system by 40 million litres per day that represents \$600,000 in annual savings.

Recognizing the importance of pressure management to control leakage, Halifax Water has conducted research and refined its approach to make further inroads in leakage reduction. Its latest technological breakthrough is a testament to the dedication of staff and their stewardship of water resources.



The Five Fingers Brook Watershed Committee of Saint-Quentin, New Brunswick received the Council of the Federation's Excellence in Water Stewardship Award as part of Canada Water Week. The group won the award in recognition of their work in developing and implementing a plan to improve the drinking water supply in the Five Fingers Brook. In the photo are, from left: Restigouche-la-Vallée MLA Martine Coulombe; Environment and Local Government Minister Danny Soucy; Saint-Quentin Deputy Mayor Nicole Somers and Five Fingers Brook Watershed Committee President and Vice-President Normand Levesque and Jacqueline Beaulieu. (Photo: Communications New Brunswick)

Excellence in Water Stewardship Awards

The North Rustico Sewer and Water Utility received the 2014 Council of the Federation Excellence in Water Stewardship Award.

The Prince Edward Island utility took progressive and forward-looking steps to improve its handling of waste water by increasing capacity to meet future growth within the town. Its system now surpasses new federal and provincial regulations for effluent quality. The \$2.7-million facility was relocated on higher ground to protect it from storm surges and the impacts of climate change.

Increased capacity will enable people to discontinue septic systems, which will help protect the town's well field. Assuring the quality of effluent will also protect the shellfish industry and aquaculture, and enhance enjoyment of the sce-

The Council of the Federation award is part of a larger strategy to improve stewardship of valuable water resources and foster best practices across Canada. It also presented Excellence in Water Stewardship Awards to Five Fingers **Brook Watershed Committee** in New Brunswick, Northeast Avalon Atlantic Coastal Action Program in Newfoundland and Labrador, and Groundswell Community-Based **Groundwater Monitoring Ecology Action** Centre in Nova Scotia.



AWARDS

Arthur Bell Award presented

The presentation of the Arthur Bell Award is always a highlight for me at the Annual Training Seminar. It's a great feeling to give recognition to someone who does not expect it; to someone who is truly deserving, who portrays the ideals envisioned by the award's creators.

This year's recipient is Rob Hamilton. A board member since 2005 representing Zone 3, Rob has devoted a great amount of effort towards the ideals of the MPWWA. As conference chair he has led us through two seminars in Saint John and has prepared and held numerous training workshops in his area. More recently Rob has taken on the task (along with help from others) to organize and promote our charity auction that has raised thousands of dollars for local charities.

During the past three years Rob has served as vice-chair for the association and this year has stepped up to assume the responsibilities of Chairperson. I look forward to Rob's leadership continuing for his term as Chair and congratulate him on receiving the much-deserved "Art Bell Award."

> Todd Richard Past Chair, MPWWA

Prince Edward Island Premier Robert Ghiz, along with Environment, Labour and Justice Minister Janice Sherry presented the 2014 Council of the Federation Excellence in Water Stewardship Award to North Rustico Sewer and Water Utility Chair Les Standen. (Photo: Brian Simpson, Provincial Photographer)



ph: (902)468-2777

- Meter testing and repairs (all types) in sho
- Meter reading and installation services Hydrant renairs and parts sales



DISTRIBUTOR AND REPRESENTATIVES FOR:



www.na.sensus.com/water



 Geotube Dewatering BioCord/BioFilm Reactors for

Advanced Wastewater Treatment and Lagoon Upgrades for Capacity

www.bishopsquatic.com/home.htm

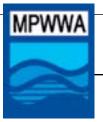


Atlantic Canada's Leader in Industrial and Municipal Cleaning

www.envirosystemsglobal.com

Sewer and Catch Basin Cleaning

- Video Inspection
- •High Pressure Water Blasting
- •Industrial Vacuum Units
- •Hydro Excavation & Mobile Wash Units
- Chemical Cleaning & Tank Cleaning
- Waste Oil Collection
- •24 Hr. Emergency Response Service
- Sewer Mains & Lateral Relining (CIPP)



MPWWR PROFILE: Kevin George

Every issue the MPWWR shines a spotlight on a MPWWA member making a difference in the industry. Kevin George is the focus of our July issue.

■ BY ANDY WALKER

When the Nova Scotia government instituted regulations in 1995 requiring every municipality to have a certified operator for its wastewater system, it left the Town of Digby scrambling.

With just over 2,000 people the small town on the south coast of the province did not have anyone to fit the bill. Kevin George, who had been working with the public works department since 1989, decided he would like to give it a try.

George, whose family moved to the fishing community from the Annapolis Valley when he was just four, headed to community college to obtain his Level 2 wastewater certification. He then became the operator for what is now known as the Digby Regional Wastewater Facility, which services just over 3000 customers in both the town and the municipality of the District of Digby.

George inherited a secondary treatment facility built in 1976 that was rapidly reaching the end of its shelf life. He explained that, as the system aged and the population of the area grew, heavy rains overtaxed the system.

Operational problems had an impact that stretched far beyond the elderly plant on Queen Street. Digby has a long connection with the fishery and, next to scallops; clams are one of the major species. Each time the wastewater system failed, it resulted in a shutdown of the clam fishery in the Annapolis Basin. That put 350 people out of work, often for periods of seven to 10 days. And it put enormous pressure on the operator and Town staff.

"You would just hate to see a heavy rain because you knew what was going to happen," George said. "The system had just gotten too old, but you don't want to see your friends and neighbours out of work—especially in a rural community like this, where jobs are hard to come by."

That's not even counting the fact clams are one of his favourite foods. The solution proved to be a state-of-the-art lagoon system and the creation of the regional wastewater facility funded by both the town and the municipality. It came on stream late last year and, while there have been a few bugs to work out, George is pleased with how things have progressed. He is hoping the fishing grounds closures are a thing of the past.

"This was a big project for a community this size and certainly the biggest undertaking of my work life," he said.

Kevin received his 20-year pin from the Maritime Provinces Water & Wastewater Association earlier this year, and he is a great believer in the organization. "Being an operator in a small town, it is just great to pick up the phone or send an email and have years of expertise at your fingertips."

George, who is single and loves to hunt and fish, now has a certified assistant operator. He said that has been a tremendous help, allowing him sick days and vacation time. "In a small system like this, you are pretty much on call all the time."

The 53 year-old hopes to complete his working life in his adopted town. "I feel fortunate because I love where I live and I like what I do."



Kevin George.

New plant fitting the bill in Digby area

■ BY ANDY WALKER

The new \$3.8 million Digby Regional Wastewater Facility will not only meet the needs of the Nova Scotia community for some time to come—it should also lead to the revival of a major industry.

Since 2008, clam harvesting in the Annapolis Basin has been shut down after every heavy rain. That's because the town's old secondary treatment plant, which dates back to May of 1976, was simply overwhelmed.

"The Queen Street plant just couldn't keep up," said Kevin George, the plant operator for the town.

As a long-time resident, George was all too aware of the impact the closures had on the local economy. Close to 350 direct and indirect jobs were impacted—usually for a period of seven to 10 days.

"You don't like to see that happen," he said.

The new plant, which is located in the adjacent community of Smiths Cove, went into production last December and the old plant was immediately decommissioned. The price of the new structure was cost shared with the federal and provincial governments

The plant is also unique as it jointly operated by the town and the Municipality of the District of Digby. The two municipalities split the costs on a 65-35 basis, with the town paying the lion's share.

George said the new facility is providing service to approximately 3,000 people, including some parts of the district including, Lighthouse Road, Mount Pleasant, Conway, Pleasant Street

and along Highway 217.

The project involved \$1 million to convert the Queen Street treatment plant into a pumping station, \$1.2 million for the pipeline to Smith's Cove, \$1.2 million for the new lagoon in Smith's Cove and \$300,000 for a backup UV treatment system.

George is confident the basin will continue to get a clean bill of health from the Department of Fisheries and Oceans and the Canadian Food Inspection Agency during this fishing season. "I am just hoping the closures are now a thing of the past."



The Maritime Provinces Water & Wastewater Report is published quarterly by TC • Media Inc. The opinions expressed in the Maritime Provinces Water & Wastewater Report are those of the authors and do not represent the official views of TC•Media Inc. or its management. The Maritime Provinces Water & Wastewater Report and its contributors can accept no legal responsibility for loss through any error in information contained herein. Contents of the Maritime Provinces Water & Wastewater Report may not be reproduced without written consent of the publisher, who accepts no responsibility for unsolicited manuscripts, transparencies and other material.

Publications Mail Reg # 7145 Return undeliverable addresses to: 211 Horseshoe Lake Drive Halifax, NS B3S 0B9

Editor: Heather Jones

Produced by: TC Media/Maritime Production Centre

Sales Manager: Ashley MacDonald Circulation: Margaret Wallace Traffic Coordination: Wayne Keddy Mailed under Canada Post Publications Mail Agreement No. 40064924

Maritime Provinces Water & Wastewater Report 211 Horseshoe Lake Drive Halifax, NS B3S 0B9 (902) 421-5888 Fax: 421-5400 tctranscontinental.com

E-mail: jonesh@tc.tc



Temporary equipment to be used to help with wastewater treatment odours

■ BY HARRY SULLIVAN

TRURO DAILY NEWS

[Truro, NS] - New equipment is being brought in to help deal with the noxious odours emanating from the wastewater treatment plant in Lower Truro

"In the last little while the odours seem to be back, or there was a period there at least where they were back, as strong as ever," Colchester County Deputy Mayor Bill Masters said, to public works director Michelle Newell, during the last committee meeting of Colchester County council.

"If we are going to get into another routine hot summer with odours we are going to have issues (with residents' complaints)," he said. "Will this help with that situation?" Masters added of the new equip-

"Ultimately this will resolve the situation," Newell said, of new centrifuge dewatering equipment designed to handle additional solids at the wastewater

Because of upgrades in recent years to the facility it is generating a higher volume of solids. There are also high-strength industrial effluents being released into the system, which when combined with low oxygen conditions and warm weather that result in "unpleasant odours at the plant and in the surrounding areas," a staff report said.

Council had earlier earmarked \$2.6 million in this vear's budget to deal with the issue.

So far, \$58,000 has been spent on a detailed design of the required equipment and the county is in the process of purchasing the equipment from Noxon North America at a cost of \$289,654.

Construction of that system is expected to begin in September but in the interim, Newell told council a mobile unit is being brought in to help deal with the odour issues. That equipment is expected to be operating in about a week's time (June 24).

"If the system works as it is supposed to there should be an improvement," Newell said, of the temporary equipment.

Residents had been assured in the past that the odour issue was being dealt with and while they have generally been "patient" with the municipality, but that can't be expected to continue if the stench isn't eliminated, Coun. Doug MacInnes suggested.

"We definitely have to do something to get this corrected," he said.

Newell said the county will also be working with the Town of Truro to begin precise monitoring of the types and volumes of industrial wastes that are being released into the sewer system in an effort to also reduce the odours.

Mother Nature delivers water woes to Woodstock

■ BY KATHY JOHNSON

Water woes were flowing down the Saint John River this spring, when an ice jam took out the power supply to the Town of Woodstock's well house for four days.

The saga began on April 16 when the swollen ice filled river washed out part of the causeway leading to the New Brunswick town's well house located on an island in the river. It knocked out the power supply including poles and transformer.

While the town has a back-up diesel pump, public works employees with the help of the Woodstock Fire Department, had to use the department's rescue boat, to transfer workers and diesel to the well house for the three days that it took town crews and workers from E. Cummings Contractors to repair the causeway. Power was restored the following day and by April 22, the six-day boil water order was lifted.

(Andrew Garnett could not be reached for comment.)

Amherst adjusting capital budget for three priorities

[Amherst, NS] - Amherst (Nova Scotia) is going to adjust its capital budget so it can take full advantage of the new Building Canada Fund.

Deputy CAO Jason MacDonald told council's June committee-of-the-whole meeting on Monday (June 16) that the provincial Municipal Affairs Department has asked all municipalities to submit up to three priorities for the application process.

"In order to do this, a motion must be passed by council to establish our priorities," MacDonald said. "Furthermore, the projects should be listed on our five-year capital budget."

MacDonald said staff is proposing the Mill Street trunk sanitary sewer, valued at \$1 million; the rehabilitation of Willow Street, valued at \$747,000; and the Station Street sanitary/storm sewer separation be the three priorities for the fund.

He said the Mill Street project is not currently on the town's capital budget and staff are suggesting it be placed on Year 2 of the five-year plan while Station Street be moved from the third to fourth to allow for proper planning.

MacDonald said when staff were looking for projects they were looking for those with a bigger price tag to take advantage of the federal and provincial funding.

He also pointed out that the Mill Street sanitary sewer is in need of replacement soon. He said it's made of century-old clay pipe that has stood the test of time but is nearing the end of its lifespan.

He said the sanitary sewer receives a lot of storm water, especially during heavy rain events and sometimes water can back up.

The Willow Street project would see the street repayed from Spring to East Pleasant Street along with replacing a culvert that will aid in stormwater management.

CumberlandNewsNow

New water act for Prince Edward Island

Work will begin immediately on a water act for Prince Edward Island to ensure sustainable management of its water resources. Environment Minister Janice Sherry said June 18.

The proposed water act will create new legislation for areas such as groundwater allocation, discharges into fresh and marine water environments, and mandate targets for water quality.

The development of a water act was one of the recommendations of the Standing Committee on Agriculture, Environment, Energy and Forestry following its consultations earlier this year on high capacity wells for agriculture irrigation purposes.

Sherry said that the act will address a wide range of matters related to the supply and quality of water, including drinking and waste water facilities, conservation and watercourse and wetland protection. She said that no consideration will be given to lifting the moratorium on high capacity wells for agriculture irrigation purposes until the water act and regulations are

The process for developing the act will involve a white paper, public consultations carried out by an arms-length group, and a review of legislation in other jurisdictions.

ENVIRONMENTAL SERVICES INC. "SERVING MUNICIPALITIES AND INDUSTRY SINCE 1993"

- CCME Municipal Strategy Assessment
- Water Quality Testing and Modeling
- Effluent Treatment Studies

#9-50 Thornhill Dr. Dartmouth. Nova Scotia

aquadata.tom@ns.aliantzinc.ca . www.aguadata.com

B3B 1S1 Tel: (902) 468-9447

- Lagoon Depth & Sludge Surveys
- Design of Treatment Plants & Outfalls
- Tracer Studies
- Mixing Zone Studies
- Assimilative Capacity Asessments
- Design of Commercial Septic Systems and Eningeered Wetlands

2492 ROUTE 640 HANWELL, NB E3E 2C2 • PHONE: (506) 455-1085 FAX: (506) 455-1088 • WEBSITE: WWW.NATECHENV.COM • EMAIL: NATECH@NBNET.NB.CA

WATER IS OUR SPECIALITY

LIST OF PROFESSIONAL SERVICES

- Water Distribution System
 Water distribution system diagnos
- Inspection, operation and analysis of watermain valves
- Leak detection Aqua Cad® software: field data collection; data priority analysis; hydraulic modeling; unidirectional flushing; flow-through times/influence zones; fire protection; system management. Unidirectional flushing program preparation and execution.

- Hydraulic assessment of the water distribution system Hazen-Williams coefficient measurements.

- Wastewater Collection System
 Initial diagnosis of wastewater systems using the Aqua Zoom tele-objective camera.
- Underground pipes and manhole localization.
 Project management on existing system.

·Well Water & Septic Inspection

Anthrafilter 4

20 SHARP ROAD, BRANTFORD, ONTARIO

·Pipeline Video Inspection

FILTER MEDIA

ANTHRACITE • QUALITY FILTER SAND & GRAVEL • CARBON • GARNET • GREENSAND • MEDIA REMOVAL & INSTALLATION •

> TEL: (519) 751-1080 FAX: (519) 751-0617 Website: www.anthrafilter.net Email: dloney@anthrafilter.net

■ BY ANDY WALKER

Talking tough for property owners in arrears on their water and sewer accounts seems to have worked for one Prince Edward Island community.

Fed up with a handful of properties that were in arrears on their accounts, the community council in Tignish served notice they were prepared to shut off water and dig up sewer lines if no arrangements were made to pay by the middle of May.

Community Administer Karen Gaudet-Gavin said the water line to one property was shut off.

Several owners made arrangements with the utility to pay their bill in installments. Gaudet-Gavin said there were also a couple of vacant properties

where the owners could not be reached or identified.

'You really hate to do it, but you have to be fair to the customers that are paying the bills," the commu-

Tignish has a population of 750 and is located near the western tip of the province. Residents are charged \$180 a year for sewer and \$320 for water service. During the May council meeting, it was revealed the water and sewer utilities were owed over \$30,000 in back payments.

"We will see what happens with those people that made arrangements to pay in installments," Gaudet-Gavin said. "If they don't follow through, we are still prepared to send in the backhoe."

Upgrades for Burin's Long Pond water supply

The provincial (Newfoundland & Labrador) government has allocated \$750,000 for infrastructure improvements to the Town of Burin's Long Pond water supply

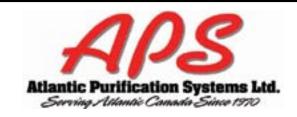
Education Minister Clyde Jackman, MHA for Burin-Placentia West, announced the funding Wednes-

"The tender will be called on that very shortly," he

Noting the infrastructure is approximately 50-years-old, Mr. Jackman indicated the project was a top priority for Burin Town Council.

The funding is 90-10 cost shared between the provincial government and the town under the Municipal Capital Works Program.

Southern Gazette



Water & Wastewater Solutions for: Municipalities · Consultants · Industry · Contractors



Laboratory & process equipment, chemicals, reagents and labware.



Water & wastewater UV disinfection systems.



AdvanTex on-site treatment systems & equipment such as AdvanTex AX20, AX100, AX20-RT, AX25-RT and AX MAX.



Rotary Lobe pumps, inline grinders and twin-shaft macerators.



Portable and real time continuous monitoring solutions for wastewater to high purity water.

ATLANTIC PURIFICATION SYSTEMS LTD.

NS Office: Dartmouth. NS: Toll Free: 1-800-265-2300: Fax: 902-463-3529: Email: sales@ans.ns.ca NB Office: Dieppe, NB; Toll Free: 1-888-863-7867; Fax: 506-853-9173; Email: luke@aps.ns.ca

Most Tignish customers pay up | All new construction, renovations now require water meters

■ BY GARY KEAN

WESTERN STAR

Cathy Peddle felt like she was doing the smart thing when she signed on to be part of the water meter pilot project in Corner Brook (Newfoundland & Labrador) in 2009.

Now that any new construction or major renovation project in the city will require the installation of a water meter — at a cost to the builder or homeowner, Peddle is even more sure she was right.

She figures it's only a matter of time before meters will be in every home and business.

Peddle was one of 110 homeowners who agreed to have meters installed to measure just how much water was being consumed in her home. The monthly updates from the city helped Peddle and her family find ways to reduce the amount of water they were using.

The project helped them realize their toilets were needlessly leaking water. They also began reducing the amount of water used for daily chores and began doing things like reusing the water from their dehu $midifier \ to \ nour ish \ plants \ in \ the \ garden.$

They even decided to buy a high-efficiency clothes washer and a water-saving dishwasher.

The pilot project is over, but the Peddles still get three or four updates a year regarding their daily water usage.

"It's good because, if you see a particular day is higher than another day, then you can try to figure out what you did or why you used more water on a particular day," she said.

At last week's (June 10) public meeting, Corner Brook city council passed a motion requiring any new construction or any major renovation projects will require the installation of a water meter at a cost of \$350. The cost will be included in residential permit fees from now on and is effective Jan. 1, 2014.

Council still has to determine whether that \$350 will be applied retroactively to building permit fees already granted so far this year.

During the discussion of the motion, Coun. Josh

Carey noted the city's current cost to treat water is between \$300,000 and \$500,000 per year. That amount is going to rise dramatically, he noted, once the city's new water treatment plant is operational within the next year.

"When we turn the valve on the water treatment plant, the operating cost of water and sewer in Corner Brook is going to go to between \$1.3 million to \$1.5 million," said Carey.

Corner Brook provides water to the neighbouring towns of Massey Drive and Mount Moriah. An agreement already in place with Massey Drive contains a clause that requires that municipality to adopt any water conservation methods implemented by the City of Corner Brook, so the decision of council to require water meters on new construction will also be enforceable in Massey Drive.

Mayor Charles Pender said during the public meeting that a similar clause will be included in the next water service agreement with Mount Moriah when it is due to be renegotiated in the next year or so.

Pender said the cost to the city will increase even more in the next six years or so as Corner Brook is expecting to have to begin also treating its sewage by around 2020.

"These meters can go a long way to helping reduce the amount of water we treat on both ends and reduce the overall costs to residents," said the mayor.

The water meters are still meant for monitoring purposes only and not for billing residents for water consumption.

Peddle, though, is sure that the cost of treating water both before and after consumption will eventually be covered through a more direct fee than how tax dollars are currently found for it.

"Somewhere in the future, we are going to have to start paying for water usage because, with the water treatment plant and a sewage treatment plant to follow, they're going to have to come up with a source of revenue from somewhere," she said. "It seems very likely that's the direction they're headed in."



- Lift Station Protection and Control Panels
- Water and Wastewater SCADA Systems
- VTS SCADA System Integration
- Control System Maintenance and Upgrades
- Instrumentation Solutions
- PLC Programming
- OmniSite™ Monitoring and Alarm Systems Sales, Installation & Programming

Ph: 506.455.1925 • Fax: 506.459.3400 • www.thepanelshop.com CSA Certified • ISO9001 Registered • Member MPWWA • APWWA • ABEA



Coagulants Stern PAC

Laboratory

Supplies/Ťraining

Government required NSF ANSI 60 Certified Products



Commodity

Chemicals

Millennium Water Management Limited POTABLE. INDUSTRIAL & WASTE WATER TREATMENT 65 Coventry Ln., Dartmouth, NS B2V 2K5 • (902) 462-3868 E-mail: millennium.water@ns.sympatico.ca

The New Brunswick Effluent Risk Assessment Strategy

■ BY JOCHEN SCHROER

The New Brunswick Department of Environment and Local Government regulates the discharge from 115 municipal wastewater treatment plants. Until 2009, all plants in the province had to meet identical effluent quality targets, regardless of their effluent quantity or their receiving water conditions. In most cases, the concentration of BOD and TSS had to be 20 and 20 mg/L or better. The effluent had to receive 1 in 8 dilution during 7-day-10-year low flow events.

In 2009, the Canada-wide Strategy for the Management of Municipal Wastewater Effluent ("the Strategy") was endorsed by the Canadian Council of Ministers of Environment (CCME). Most Canadian provinces, including New Brunswick, Nova Scotia and Prince Edward Island have endorsed the Strategy and are in the implementation process. The Strategy sets end-of-pipe National Performance Standards for CBOD5 and TSS of less than $25\,\text{mg/L}$ and total residual chlorine of less than 0.02 mg/L (non-detect level). The Strategy also calls for a site-specific calculation of new Effluent Discharge Objectives (EDOs). For each municipal plant EDOs are derived for different contaminants based on the assimilative capacity of the receiving water. The larger the effluent flow, the greater is the number of contaminants being considered. Five classes of facilities are defined, rang $ing\,from\,very\,small\,to\,very\,large, based\,on$ effluent flow.

To determine the assimilative capacity, a standardized Risk Assessment approach is applied. Environmental water quality objectives (EQOs) are assigned for a number of key indicators, for which target values have already been established. The target values are defined by the CCME Standards for the Protection of Aquatic Life. A mixing zone is allocated, within which contaminant concentrations may exceed the EQOs. At the edge of the mixing zone however, the water quality has to be safe for aquatic life and has to meet the EOOs. The values of the EQOs

are different for fresh and salt water environments.

In 2012, the Wastewater Systems Effluent Regulations were published under the Fisheries Act. The new regulations provide effluent quality compliance standards that mirror the National Performance Standards contained in the Strategy. Also, the effluent must not be acutely toxic to fish and meet unionized ammonia of less than 1.25 mg/L



Effluent Plume.

A local consulting engineering firm - NATECH Environmental – has been instrumental in developing New Brunswick's approach to Risk Assessments by providing advice to the NB Department of Environment and Local Government on their province-specific approach to implement the Strategy. The key components of the New Brunswick approach include:

1. A comprehensive characterization of the effluent over a one-year period in

terms of flow and water quality. This task is typically carried out by the plant operator.

2. A characterization of the receiving water in terms of hydrology and water quality. Documented information is typically relied on for this task.

3. Field work including a bathymetric survey of the outfall area, current velocity measurements near the outfall pipe, effluent flow measurements, and field truthing of the effluent's mixing performance using a dye tracer. Water quality upstream and downstream of the discharge and of the effluent on the day of the test is also determined.

4. Mathematical modeling of the mixing regime to predict mixing performance under pre-defined average and worst case conditions

5. Definition of the allocated mixing zone around the outfall pipe. Three criteria were selected by the province to better define the mixing zone: in terms of maximum extent (250 m), maximum allowable fraction of the receiving stream (25%), and maximum allowable dilution (1 in 100).

6. Computation of the EDOs. Three types of effluent quality targets are accepted depending on the contaminant and the characteristics of the receiving stream: pre-described minimum National Performance Standards EDOs, calculated regular EDOs, and theoretical EDOs. Where the assignment of regular EDOs is impractical due to very low dilution in the receiving environment under low-flow conditions, theoretical EDOs are used. When theoretical EDOs are applied, further water quality monitoring is automatically prescribed.

7. The findings of the risk assessment are summarized in a report, complete with graphs, tables and photographs.

Recommendations include the implementation of an annual effluent monitoring program with frequency and parameters based on the outcome of the investigation. Other recommendations derived from the risk assessment may include: the need for plant modifications, the need for controlling Inflow and Infiltration (I&I), the investigation of energy savings potentials and recommendations for modifications to the Approval to Operate. More extensive monitoring may be recommended if the proposed EDOs are difficult or impossible to meet.

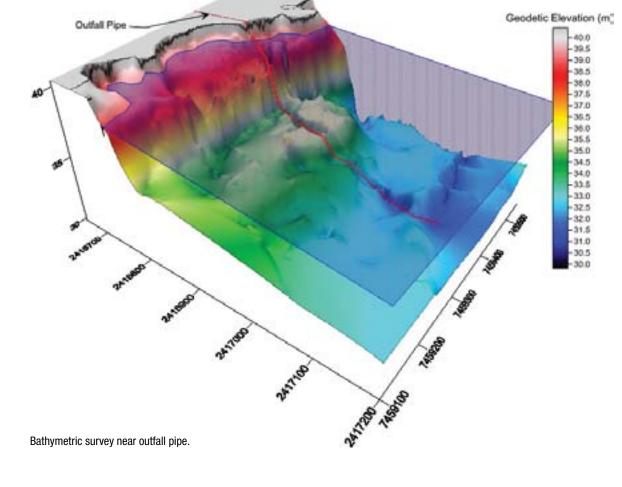
With the exception of Task 1 most of the work is being carried out by specialized consulting firms. Often the community's en-

gineering firms get involved in the work as well.

Mixing behaviour of the effluent depends on the energy gradients in the receiving environment. Mixing coefficients are affected by the bathymetry near the outfall, the density difference between the effluent and the receiving water, effluent flow and the magnitude of ambient currents. These factors are site specific, time varying and often insufficiently documented. Therefore, in addition to the minimum level of effort stipulated in the Strategy, the province expects that field verification of the predictions is provided. A number of techniques have been developed by consultants to obtain the necessarv field information:

The method of determining the bathymetry preferred by NATECH is to use a manned or remotely controlled boat equipped with GPS and echo sounders to survey the outfall area. The boat is also helpful for water quality testing and in deploying and retrieving drogues used for current measurements. If the drogues are equipped with small GPS units, the presence of eddies and other flow inconsistencies can be easily monitored and mapped.

Mixing processes are best studied using a dye tracer. The tracer study involves the following procedure: After planning and notification of the authorities, Rhodamine WT dye is continuously discharged into the effluent stream on the day of the test until steady state conditions have established. A fluorometer mounted on a boat, coupled with a GPS, is being used to detect the effluent plume in three dimensions. The plume is described and mapped in the report, relative to the environmental parameters on the day of the test. Lines of equal dilutions are shown.



 $Continued \ on \ page \ 8$

New Brunswick Effluent Risk Assessment Strategy

Continued from page 7

Since the field test results are not necessarily representative of average or worst case conditions, a mixing zone model is employed (as required by the Strategy). The mixing model results have to be calibrated or interpreted against the findings of the tracer release. Besides lending credential to the model outcome, the tracer study allows for visualization and documentation of the effluent plume.

A number of mathematical mixing zone models are available to simulate the mixing performance. CORMIX has been most widely used in New Brunswick. The model is used to define the study methodology and to predict mixing performance during average and worst case conditions. The impact of organic discharges on the dissolved oxygen regime downstream of the outfall is typically determined using the Streeter-Phelps algorithm, using a spread sheet-based model.

Some of the benefits associated with implementing the Strategy include: conducting a needs assessment for improving treatment plants, identification of under-performing treatment plants, creation of public and operator awareness, reduction in impacts on sensitive habitats such as shell fish growing areas and watersheds prone to eutrophication,

creation of a comprehensive and up-todate provincial data base on municipal wastewater treatment plants, implementation of a science-based approach to stipulating conditions in the Approvals to Operate, development of a risk assessment procedure that can be transferred to communal and industrial dischargers, identification of I&I into the system, identification of potential energy savings, upgrading of flow metering at plants, identification of malfunctioning outfall pipes, etc.

The province is providing incentives to the municipalities through financial support from an Environmental Trust Fund. Communities can apply for a \$10,000 grant toward the cost of carrying out the environmental risk assessment (ERA). A priority list has been prepared with communities receiving higher ranking if they are discharging into sensitive habitats, or planning to upgrade their facilities in the near future.

Approximately 20 communities in New Brunswick have been receiving funding every year and over 60 plants have been assessed this way since 2010. Twenty more wastewater treatment plants are scheduled for 2014. By the time the program ends in 2016, it is expected that all 115 municipal wastewater facilities will

have an ERA completed. Plants ranged in size from very small mechanical treatment facilities to very large urban treatment plants processing more than 50,000 m3 of effluent per day.

DELG is also working on a plan to address the CSO and SSO requirements of the CCME Strategy.

(Jochen Schroer is with NATECH Environmental Inc. He can be reached at Jochen.S@natechenv.com)

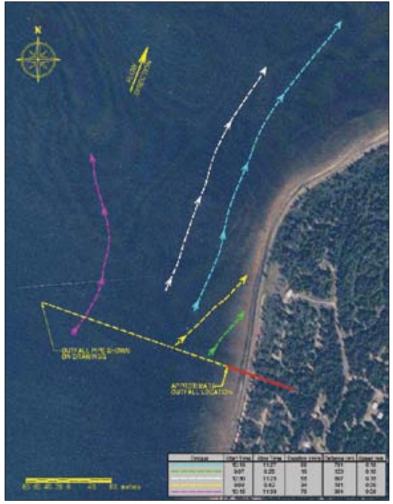
References:

Canadian Council of Ministers of the Environment. 2009. Canada-wide Strategy for the Management of Municipal Wastewater Effluent. Available online at: http://www.ccme.ca/ourwork/water. html?category_id=81

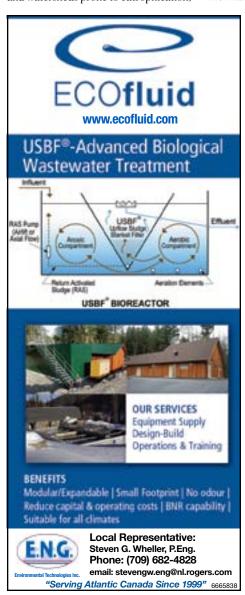
Health Canada. 2012. Guidelines for Canadian Recreational Water Quality, Third Edition. Prepared by the Federal-Provincial Territorial Working Group on Recreational Water Quality of the Federal-Provincial-Territorial Committee on Health and the Environment. Ottawa, Ontario, April 2012.

New Brunswick Water Classification Regulation 2002-13, available online at:

http://www.gnb.ca/0062/regs/2002-13.htm



Drogue paths during falling tides.





Dve Plume

Charlottetown pump house upgrades a delicate balancing act

■ BY ANDY WALKER

Replacing the windows and doors at the original Charlottetown pump house proved to a lot more complicated than it sounds.

You see the pump house encompasses a part of Prince Edward Island history within its walls since it dates back to 1889. Now used as a supplementary facility, the octagonal brick structure is a good example of a water works of the late 19th century, but what makes it unique is its covered reservoir.

Cutting down on modern heating bills with airtight windows and doors, while remaining true to the building's historic properties designation, required a delicate balancing act. Councillor Eddie Rice, who chairs the Water and Sewer Committee, found the expertise he needed at the Island's only community college.

Holland College offers a one-year course in heritage retrofit carpentry and instructor Josh Silver was excited about the opportunity to provide handson learning to his students. Raeford Waite of R.W. Woodworking helped the students reproduce exact copies of the original windows.

While they look the same, Councillor Rice said they are more airtight and will help reduce the heating bill next winter.

"I could not ask for a better learning tool. These students are learning on a true heritage building under the guidance of one of P.E.I.'s finest woodworkers," Silver said. "They took pride in their work knowing that they were, in essence, giving our past a future. I could not be more pleased with the outcome."

Neither could the water and sewer chair. Rice said the city has a long association with Holland College, but this is the first time they have worked together to restore a heritage structure. He hopes it won't be the last. In fact, the city has created a \$1000 scholarship that will be awarded annually for the next three years to a deserving student in the heritage carpentry

"By working with the City of Charlottetown and our industry partner, our students are learning the value of training in the field of heritage restoration. I'm pleased that more students will be able to participate in this important project in the future," Silver said.

The students finished restoring the doors in the building just before graduation in early May.

The Charlottetown Water Works building was the design of Boston engineer, Marshall Martain Tidd, who was involved in a number of water works projects in the United States and the Maritime provinces. W.H. Fraser built the structures.

The project included: the construction of an Island brick pumping station with an 85-foot chimney, a brick octagonal well house and 15-and-a-half miles of pipe that led into Charlottetown. Nova Scotia sandstone was brought in to line the original well, which is 25 feet in diameter and 21 feet deep. Two 120hp steam pumps and boilers were used to pump the water from the well.

The official historical designation notes: "The pump house building was built in two sections. Typical of water works of the era, the building was divided into two sections: the north section housed the en-

Thomas Industrial Sales



gine and the south side housed the boilers. Interestingly, boilers were installed after the buildings were finished and placed in the building through large arches, which are still visible on the pump house. The 85-foot smoke stack that was part of the original building was removed in 1965."

Charlottetown Water and Sewer officials Gary MacKinnon (left) and Bill Clair (right) along with Councillor Eddie Rice (second from left) examine one of the windows installed by Nick Wight and Rhonda Gallant and their fellow students in the heritage retrofit carpentry program at Holland College. (Photo: Contributed)



The staff and management of the MPWWR and the executive of the MPWWA wish to recognize these companies for their ongoing support and participation:















Blue-White



























Engineered Storage Systems



















Millennium Water **Management Limited**





New Brunswick invested \$2.65 million in two infrastructure projects in Bouctouche to help improve the municipal water system. In the photo from left are: Moncton-Riverview-Dieppe MP Robert Goguen; Premier David Alward; Bouctouche Mayor Aldeo Saulnier, and Transportation and Infrastructure Minister Claude Williams. (Photo: Communications New Brunswick)

NB invests \$2.3M in Bouctouche water system

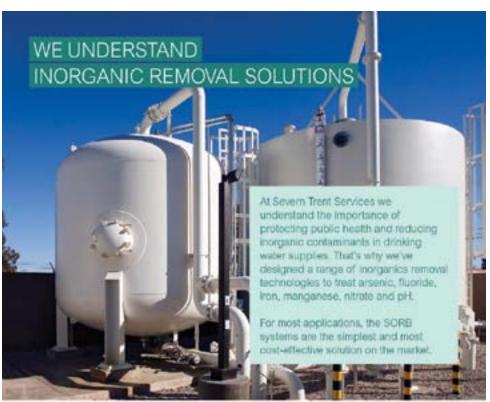
New Brunswick announced April 7 that it would invest \$2.3 million to improve the municipal water system in Bouctouche.

The funding is for a project designed to replace well No. 3 with two new water sources located in the Girouardville Road area. The commissioning of a replacement well (well No. 5) will include the construction of a pumping station and a connection to the municipal water system.

The work will be performed this year by Caraquet-

based Foulem Construction Ltd. and Beale and Inch Construction Ltd. of Sackville.

This provincial investment follows a \$3 million project under the Communities Component of the Building Canada Fund, which received equal funding from the federal, provincial, and municipal governments. The project was designed to improve the municipal water system. An additional \$740,768 from the Gas Tax Fund was also invested in recent years for waterworks projects in the municipality.



For more information on the SORB inorganic removal solutions, visit www.severntrentservices.com or contact Melanie (Oakas) MacKinnon at:

Resource Systems Inc.

51 Ballathle Crescent Fall Rivec Nova Scotia BZT 1P6

T: +1 902 861 4710 F: +1 902 861 1366

E: moakes@resourcesystemsinc.ca





Dalhousie to fix water main pipe

The old water main pipe on Barberie Street in Dalhousie, New Brunswick will be fixed this year.

According to the *Campbellton Tribune*, the New Brunswick town will borrow \$218,000 to make the necessary repairs.

One of the problems is there are no catch basins on the street so run off from heavy rains pools in a manhole

The newspaper said the manhole's brick and cement are crumbling. The rubble and sand fall in and find their way to the pump stations.

Town council debated the cost of getting the job done versus the price of a temporary fix or of not doing anything at all.

"If for any reason you had a high volume of sewage flowing in it – rain water, or whatever – and there was a miniature water break, or any kind of break, and you started syphoning in – you're syphoning raw sewage into your potable water line," Public Works Director James Jalbert stated.

Dalhousie will only borrow the amount it needs. The Municipal Capital Borrowing Board is confident the loan will be repaid.

Broken check valve causes sewage overflow

■ BY KATHY JOHNSON

A broken ball on a check valve was the cause of a sewage overflow into the Meduxnekeag River near the downtown walking bridge in the Town of Woodstock in late May.

The Town's Public Works Department was able to bypass the broken check valve, located in a well in nearby sewage lift station, until a replacement part arrived, reducing the overflow into the river.

Both the New Brunswick Department of Environment and Local Government, and the Department of Public Health have been monitoring the situation but aren't anticipating any long-term effects.

(Andrew Garnett could not be reached for comment.)



"WE'RE GOOD & YOU KNOW IT"

"Confidence in Facilities and Operations"

April 19-22, 2015 PEI Convention Center Charlottetown

Join us in Charlottetown for the 2015 Annual Conference and Training Seminar!

Come experience the PEI Convention Center attached to the Delta Prince Edward!

This new facility opened in the Fall of 2013 is located on the Charlottetown waterfront with breakout rooms having floor to ceiling view of the water and shoreline.

Natural light flows in to make it bright and fresh.

With the Ballroom space being doubled and 6 breakout rooms added you will experience the *largest Suppliers Tradeshow* ever hosted by the MPWWA to date with 100 booths available.

The guest rooms will all have been renovated by June 2014, so everything will be refreshed and waiting for you



MPWWA Members

Start booking your time at work now so you can attend this event!

Watch MPWWR Newsletter and e-mail notices for when you can book your hotel room and register for conference! Check out the MPWWA website to *register online* and see what is new for the tradeshow, entertainment and speakers

MPWWA Corporate members:

Watch our website for online registration of your booth space, "First Come gets Choice of Location"!

Be certain to check out our revised Sponsorship Program, and how you can get the most exposure!

Keep a heads up for special promotion planned for 2015.

Non-members

Check into becoming a member of the MPWWA and see the benefits that come with it.

See you in Charlottetown, PEI for the

2015 Conference and Training Seminar

"WE'RE GOOD & YOU KNOW IT"

County council focusing on three big projects this summer

[Pictou, NS] – (Pictou) County council has agreed to take the money out of its own coffers to pay for three infrastructure projects this summer.

After some debate on what projects need to be completed this summer, Warden Ron Baillie asked that council pass a motion Tuesday (April 23) that funding be approved for three large wastewater projects.

The projects include the extension of wastewater in Greenhill, sewer separation on Milne Street, as well as West Branch Road wastewater extension. The

total of all three projects will cost the (Nova Scotia) county \$6.9 million.

Council had initially said it would wait until its budget talks in the summer to discuss the approval of the projects with the hope that some joint funding would be available through the federal government's Building Canada Fund.

However, Baillie pointed out that these three projects needed to be approved sooner rather than later because it was holding up development in these areas.

"When we enter into these agreements, we have to

keep up our end of the bargain," he said.

Council's total list of infrastructure projects to be completed in the next five years includes \$14 million worth of wastewater work. The extension of the McLellans Brook/Plymouth wastewater project is still top on council's list of work to be done, but it is also one of the most expensive.

Baillie said if funding comes through this year from the Building Canada Fund, it will be used to help cover the costs of this project.

The News

Berwick boosting sewer rates

■ BY NANCY KELLY

REGISTER/ADVERTISER

At their June 10 meetings, town councillors in Berwick (Nova Scotia) gave final approval to the 2014-15 budget, which includes an across-the-board hike in sewer service rates.

Sewer rates will rise on average of 16 per cent The new rate for a single-family dwelling will be \$116.40, up from \$99.66 in the previous fiscal year.

\$116.40, up from \$99.66 in the previous fiscal year. The base cost for commercial customers will be \$152.90, up from last year's rate of \$130.91.

Finance director Greg Towne said the increase reflects higher costs for "power, treatment and

testing," associated with compliance with environmental regulations.

One year ago Berwick amended its sanitary sewer rates by replacing a formula based on tax assessment with a system of fees that are aligned with property usage. There are now 29 service categories in the town's revised sewer bylaw with fees that reflect each property's cost related to maintaining the system.

Fees charged to Berwick's main industrial customer, Eden Valley Farms, are based on effluent and usage. Towne says the poultry processor is currently footing two-thirds of the cost of operating Berwick's wastewater plant.

Funding application 'on the top of the pile'

■ BY KATHY JOHNSON

The Village of Petit-Rocher is ready to submit a funding application to the Build Canada Fund for a new water tower, as soon as the program criteria are finalized.

"We have been told our application will be on the top of the pile," said Mayor Luc Desjardins. "It's something that needs to be done."

The new tower will replace the aging concrete structure that currently services the New Brunswick community, which is located 20 km northwest of Bathurst on Nepisiguit Bay. The 40 plus year-old structure is one of the last remaining concrete water towers in the province.

It is expected the new tower will cost approximately \$1 million.

Zoning review to be conducted

■ BY HARRY SULLIVAN

TRURO DAILY NEWS

[Truro, NS] - Inquiries about the potential for future development projects in Upper Onslow (Nova Scotia) is prompting Colchester County to conduct a zoning review (June) for the area from Granville Drive to Highway 102.

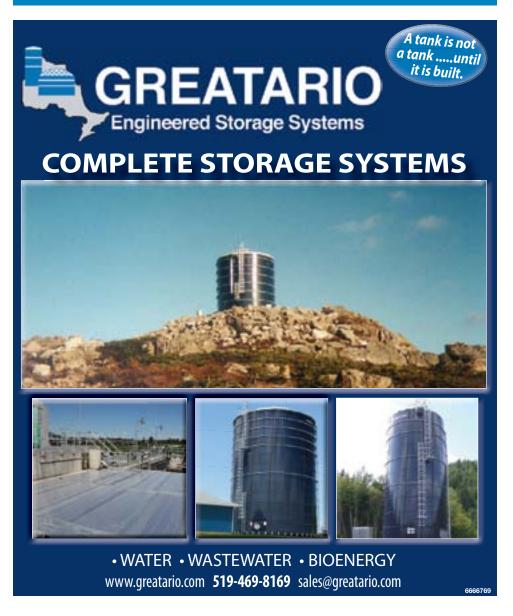
In a staff letter from development officer Colin Forsyth to community development director Crawford MacPherson, Forsyth said he has been receiving inquires regarding the development potential for lots on Granville Drive, which is in the process of being connected to the municipal sewer system.

"People are asking about the possibility of two, three and four unit buildings," he said. "I have also been asked about commercial uses as well."

For syth said in the letter that he has been "discouraging these inquiries by stating the sewer is being extended to fix a problem not to open up Granville Drive for development and that the current residents are not expecting the makeup of their neighbourhood to change."

But there is nothing in the current bylaw, he added, "to provide this protection."

Council committee voted to recommend to council that the Planning Advisory Committee be directed to review the land-use policies for the portion of Onslow affected by the Granville sewer project and that future public meetings be held to determine whether a new planning policy is required.





Halifax Water Commission to institute development charge

■ BY ANDY WALKER

The Halifax Regional Water Commission has been given the green light to institute a development charge on new home construction by the Nova Scotia Utility and Review Board (NSURB).

The new charge is designed to replace existing levies for trunk sewer, sewer redevelopment and capital costs contributions for wastewater treatment facilities. A three-day hearing on the application was held last December and the application was opposed by a number of developers. The NSURB handed down its decision April 17.

While the regulatory agency did allow the commission to impose the charge, it did reduce the amount requested. The original proposal would have resulted in an additional \$5,728 for wastewater and \$337 for water for a single-family dwelling.

The exact amount of that charge was not known as this issue went to press. Halifax Water public relations coordinator James Campbell said the NSURB had submitted the additional information requested in early May All of the developers had a chance to comment on the revised submission. The ball then went back in the water commission's court for a final round of comments.

Campbell explained that process was completed May 15 and he was expecting a final ruling within weeks. As of June 10, the NSURB had yet to render its final verdict.

The communications officer said they were expecting the decision any day. "We thought we would have a decision by the end of May and certainly now we are hoping before the end of June but that is entirely up to the board."

"The Board finds that there is a need for a Regional Development Charge (RDC) and that it should be based on the principle that growth pays for growth," the NSURB indicated in a 75-page written decision. "In the Board's view, the RDC presented in this application is not inconsistent with the proposition that the costs related to growth should be paid by those who have caused them."

The decision agreed with the NSURB's contention the charges were consistent with what is happening other Canadian municipalities. Board members said the water commission is mandated to operate the regional system "as effectively, efficiently and economically as possible. This is in the interest of ratepayers, builders and developers.

"It may come to a point, because of environmental concerns or capacity constraints, that one of the plants should be abandoned," the board decision notes. "If that is the case, then the cost of providing infrastructure to move effluent flows from one facility to another is, appropriately, a regional charge. This is based on the assumption that this is the most cost effective method of processing effluent flows from wherever they may occur."

The commission had been asking for a 30-year planning horizon for the RDC—something that was opposed by a number of developers. In the end, the NSURB reduced the horizon to 20 years, saying: "All else being equal, reducing the horizon will reduce the wastewater RDCs because it will remove large projects, which may or may not be necessary, in the outward 10 years."

The NSURB ordered the charge to be reviewed every five years, based on such variables as consumption rates, 1/1, revised capital costs, overhead and financing costs. It mandated a change if the variables increase or decrease by 15 per cent. It also approved the two-year phase-in proposed by the commission.

The CEO of the Nova Scotia Home Builders Association said single-family home construction was down 31 per cent last year and has dropped another 30 per cent so far in 2014. Paul Pettipas said the additional charges will make a bad situation even worse.

He said builders and developers will have no choice but to pass the costs on to the end consumer. Pettipas noted the average cost of a home on the Halifax peninsula is now in the range of \$587,000, putting it out of reach for many people.

This forces many people to either live in apartments or live outside HRM and commute," he said. "If there is no new homes people built, that defeats the purpose of the charge."

Pettipas predicted it will also slow down commercial development since there will be a fee of \$2.05 a square foot on non-residential buildings.

Alberton Council approves sewer work

■ BY ERIC MCCARTHY

JOURNAL PIONEER

[Alberton, PEI] -- The lower of two bidders, Curran and Briggs Ltd., has been awarded the contract for a sewer line replacement project in Alberton (Prince Edward Island).

Town Council accepted the bid during its monthly meeting on Monday (June 9).

The project, which will cost \$239,200, will replace 385 meters of sewer main along Argyle Street and Elizabeth Drive and adjacent to Central Street.

The town is responsible for one-third of the cost, or \$79,733,33, with the rest of the cost covered through the Gas Tax Community Fund.



Consulting Engineers

today's tomorrow

Engineering and Environmental **Design and Consulting**

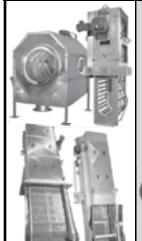


info@CBCL.ca www.CBCL.ca



Halifax • Sydney • Charlottetown • Saint John • Fredericton Moncton • St. John's • Happy Valley-Goose Bay

onsters Work Here



- Headworks screens
- MBR screens
- Storm and CSO screens
- Finescreen Monster¹
- Bandscreen Monster*
- . Chain & Rake Monster
- · Auger Monster screen
- Screenings Washer Monster
- NEW Drumscreen Monster*





MUNICIPAL

- PVC Water & Sewer Pipe
- Ductile Iron Pipe
- HDPE Pipe & Fittings
- Fire Hydrants, Gate Valves
- Septic and Drainage Products
- Geotextile HDPE Culverts
- Electrofuse Fittings for HDPE
- Water Sampling Stations
- Blow-Off Hydrants

EI✓I □ CORPORATION www.mclennansales.com

- Waterworks Tools
- Other Associated Products

INDUSTRIAL

- Glass Lined Pipe
- PVC SCH 40/80, SDR 26
- Pipe & Fittings
- PVC Valves for Industrial and Process Applications
- Storm water management

Atlantic Canada's Underground Water & Sewer Piping Specialists

Saint John, N.B. E2H 2V5 Phone: (506) 634-3112 Fax: (506) 634-0480



Burtis Hayes works on a centrifuge in the Dewatering Building at the Greater Moncton Wastewater Commission. (Photo: Contributed)



The Greater Moncton Wastewater Commission's 'Pilot Plant'. (Photo: Contributed)

Greater Moncton Wastewater Commission submits P-3 funding application for treatment plant upgrade

■ BY KATHY JOHNSON

The Greater Moncton Wastewater Commission has submitted an application to P3 Canada to help fund an estimated \$60 million upgrade to the wastewater treatment facility that services Moncton, Dieppe and Riverview.

CBCL Ltd. was awarded the \$350,000 contract earlier this year for the pre-design and costing of the biological nutrient removal treatment plant that is proposed to meet new federal effluent regulations. "We're fairly well along in the process," said Commission Chair Winston Pearce. "In fact we are to the point that there are sufficient detailed costs to submit a P3 application for funding."

Pearce said the project, which is expected to carry an estimated \$63 million price tag, will upgrade the wastewater treatment facility to a secondary treatment level. As he explained, for the past five or six years the commission has been operating a small-scale biological treatment plant as a pilot project.

"We're very pleased with how it's running in parallel with other primary treatment."

He noted test results from the pilot project operation indicate that wastewater is 97 per cent treated, as opposed to the 75 per cent treated through the conventional system.

Federal Wastewater Systems Effluent Regulations (WSER), enacted in July 2012, set in motion major capital projects for the commission, which could cost as much as \$70 million in total. "We have to meet federal regulations by 2020 and to get there we need to spend between 60 and 70 million," said Pearce.

The proposed biological nutrient removal secondary wastewater treatment facility is the major component of the Commission's Long-term Sustainable Wastewater Treatment Strategy. Pearce said the Commission continues to increase its focus on the environmental and community aspects of its activities. In May it changed its name from the Greater Moncton Sewerage Commission to the Greater

Moncton Wastewater Commission. "The word sewerage was outdated," he said. "What we treat is wastewater. Our focus is on treatment rather than the pipes."

Established in 1983 to support the wastewater collection and treatment needs of the Dieppe, Moncton and Riverview area, over the past 30 years the Commission has developed a 35-kilometre collection network and treatment facility. It has become a leader in the reuse of biosolids through the generation of type 'AA' compost (the highest grade currently achieved in Canada) as opposed to disposal in a landfill site. Prior to the formation of the commission approximately 80 sewage pipes discharged directly into the Petitcodiac River.

Candice Jonah works in the lab at the Greater Moncton Wastewater Commission. (Photo: Contributed)



Warehouse – 37 Killarney Road PO Box 7017 RPO Brookside Mall Fredericton, NB E3A 0Y7



• Toll - Free 1-866-472-6401

• Tel: (506) 472-6401

• Fax: (506) 472-1087



SPECIALIZING IN: • Soleno Solflo - Solflo Max HDPE Culvert & Storm Sewer

• PVC Pipe & Fittings • Hydrants/Gate Valves • DI Pipe & Fittings • Waterworks Brass

• Pipe Conx Couplings • Restrainers • Manhole Frames & Covers

Geotextiles • Gabion Baskets Erosion Control Blankets • Silt Fences • Drainage Pipe

Servicing Contractors and Municipalities

Water worries in New Waterford

■ BY SHARON MONTGOMERY-DUPE

CAPE BRETON POST

Public reminded that Kilkenny Lake is off-limits to boats ATVs

[New Waterford, NS] — Municipal officials want people to know it's not OK to contaminate the drinking water of New Waterford (Nova Scotia) and area residents

"We want people to know they can't play in a watershed area," said Britt Roscoe, watershed co-ordinator for the Cape Breton Regional Municipality.

"If you see boats and motorized vehicles, why would you think it's OK for them to be down there? It's not a place you go to play in the mud."

Roscoe said the public is urged to report people seen driving ATVs, cars, trucks and boats around Kilkenny Lake.

Kilkenny Lakes makes up half of the water supply for New Waterford. Waterford Lake provides the other half.

He said people think because the water is treated, they can do what they want there.

He said the CBRM doesn't test the water for gas and oil contamination.

"We don't test for it as we don't expect it to be in the water."

He said turbidity testing is done daily to show how

murky the water is. Complete testing, including on pesticides, is done every five years.

Roscoe said motorized traffic stirs up silt, which plugs up the filters at the water treatment plant and causes havoc to the chlorination process.

"It increases the cost of treatment and also raises the risk we won't get everything disinfected. There are no brooks running into the lakes, it's all springs on the side. When vehicles drive along the shore, it blocks the clean water, makes the lake dirty."

He said on one occasion the CBRM received a call from a fisherman who counted 25 all-terrain vehicles driving around the lake.

"The Department of Natural Resources was out the next day and laid about a dozen charges. Since then DNR comes out more often."

"Sadly, it's never a problem finding someone there doing something wrong."

The CBRM water treatment plant is located at Waterford Lake, which offers that lake protection from abuse.

Roscoe said members of the New Waterford and Area Fish and Game Association are a great asset to the CBRM watershed area. He said member Maynard Bates once heard a group was going there for a picnic and contacted them.

"He found them an alternative place to go and the Mud Runners Club were really co-operative."

Dan Fraser, president of the Isle Royale ATV Club, said ATV clubs work with the CBRM to spread the message, "You can't fool around in a watershed," he said.

"People of New Waterford are worried about their water being messed up. That's why it's essential to get the message out to those who understand—you can't drive into and around a water source.

"People drink this water. If any vehicles leave gasoline or oil in the water, it can't be removed at the treatment plant."

Fraser is chairman of the Kilkenny Lake and Waterford Lake source water committee.

Fraser said there are roads around Kilkenny Lake Road running from South Bar to Lingan Road. He said these are provincial roads open for public use but vehicles cannot leave the road and go into the lake area.

He said the CBRM has given the clubs a pipeline trail that can be accessed from the Summit in Scotchtown. The trail is currently six kilometres, with plans to extend it to Loch Lomond in two directions.

"We've put a lot of money into it fixing it up."

Ricky Attwood, president of the New Waterford and Area Fish and Game Association, said all the organizations are constantly spreading the word that motorized vehicles are a serious issue around the watershed areas, but people are not listening.

"We're not just dealing with kids, we're dealing with lots of adults who know better."

Bates, secretary of the New Waterford and Area Fish and Game Association, said vehicles driving in the water along the shore are also killing fish.

"The gas or oil getting in the water puts a film over the water. The fish can no longer get oxygen from the air." $\frac{1}{2} \int_{\mathbb{R}^n} \frac{1}{2} \int_$

Cape Breton Post

Call for Presentations for 35th Annual Training Seminar

The Maritime Provinces Water & Wastewater Association will be accepting submissions for workshop presentations for the MPWWA Annual Training Seminar in Charlottetown. Effective and relevant training helps us continue to protect public health and the environment in the communities we serve.

The theme for our 35th Annual Training Seminar is "We're Good & You Know It – Confidence in Facilities and Operations". MPWWA will be accepting abstract submissions for all topics related to water and wastewater that meet with the theme. Presentations shall be 1 hour in length - approximately 45 minutes for the core presentation and 15 minutes to accommodate questions from the delegates.

We are accepting abstracts until the program is full. The deadline for abstracts to be submitted is September 30, 2014.

Abstracts may be submitted electronically for consideration, along with your contact information to:

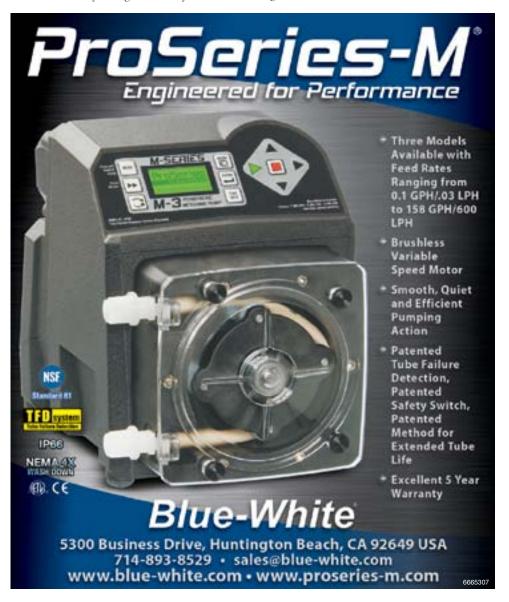
Rob Hamilton, Chairman, MPWWA

Email: rob.hamilton@saintjohn.ca

Phone: (506) 649-7928 Fax: (506) 658-2813

Mailing Address: City of Saint John PO Box 1971

Saint John, NB E2L 4L1 Attn: Rob Hamilton







Rob Hamilton
Chairperson of the MPWWA

Continued from page 1

At the Conference banquet Lifetime Membership status was awarded to Danny Lanteigne, Paul Klaamas and Rick Larlee in recognition of the time. $hard work and {\it effort they} devoted to the Association$ while serving on the executive. Congratulations, job well done gentlemen!! On a personal note, this year's conference was very memorable for me as it was my pleasure to accept the nomination of Association Chair, and at the banquet I was very humbled and grateful to be awarded the Art Bell Award for service to the MPWWA by outgoing Chair Todd Richard. In looking over the list of past recipients of this award, it is apparent to me that these ladies and gentlemen have been the driving forces that made the Association what it is today, and I am truly honored to be mentioned in the same breath.

With membership now numbering over 850, it has been a huge task to live up to the ideals with which the Association was originally formed: "To provide a forum for exchanging information, establishing training programs and communication with other sectors of the industry". Our annual training seminar is only one aspect of this. Through our Training Coordinator Tim Henman, we were able to put on 22 training workshops involving over 250 members, providing them with the knowledge needed to perform their duties in a responsible and professional manner.

Moving ahead, I would like to thank outgoing executive member Stephen Knockwood for all of his dedication and efforts during his time on the Board. I'd also like to welcome Mark Francis for stepping up as our newest member. I think that I speak for the entire executive when I say we are looking forward to working with you.

Over the past three years serving as Vice Chair, it has been my great pleasure to work with a fantastic crew of dedicated volunteers whose common goal has been to take the MPWWA to the next level. Outgoing Association Chair Todd Richard is a prime example of this timeless dedication, as he has spearheaded many initiatives (too numerous to mention) that have taken us in that direction. Thank you Todd for the outstanding job leading the Maritime Provinces Water and Wastewater Association during your 3-year term.

In closing, on the behalf of the MPWWA, I'd like to send out thoughts and prayers to the people of Moncton after the tragic events of June 4th and 5th. The Hub City played host to our 2013 Annual Conference and has been a frequent meeting place for the executive.

Enjoy the summer and be safe!

Rob Hamilton Chairperson of the MPWWA

Pumping water in St. Anthony Bight

■ BY ADAM RANDELL

NORTHERN PEN

It seems no town's water supply is safe on the Great Northern Peninsula (Newfoundland & Labrador) when it comes to the harsh weather that has been experienced this winter and spring.

Residents of St. Anthony Bight found that out recently (April), when thick ice and low water levels caused water pressure to drop drastically.

So two weeks ago they started pumping water from a nearby water supply, Big Brook Pond, some 1,400 feet away.

According to Chris Patey it's been working.

"We've been getting about 80 gallons a minute, and we've been able to raise the levels to about two-and-a-half feet," said Patey, on Tuesday (April 1). "But the intake is two feet off bottom, so



St. Anthony Bight residents Walter White, left, and Wayne Taylor take a shift pumping water from Big Brook Pond to the Newfoundland & Labrador community's water supply, some 1,400 feet away. (Photo: © Adam Randell/Northern Pen)

we'll keep pumping water."

On Wednesday (April 2), a second pump was hooked up to increase the water levels. In a mat-

ter of hours the two-and-a-half feet of water was raised another three inches.

Much like St. Anthony Bight, Flower's Cove too experienced pressure loss, but was able to address it in a different man-

Two weeks ago, the pressure dropped from 50 to 30 pounds per square inch in the span of a couple of days, creating some concern for residents.

"We have plenty of water in the reservoir, so we decided we had to increase the nnpressure, even though it might do some damage," said Mayor Keith Billard.

"So we put a second pump on and the pressure is running in the 40s. We're back up in strength."

Billard said it will stay that way, until the weather warms and the original pump can maintain the town's pressure needs.

Tower Road Dam and Water Reservoir officially opened

Residents of Moncton, Riverview and Dieppe, New Brunswick celebrated the official opening of the Tower Road Dam and Reservoir in Turtle Creek on June 25.

Built along Tower Road, the new earth-filled dam, which is 1.5 kilometers long and 20 meters high, and

the 250-hectare reservoir will provide the communities with an additional 16.5 million cubic meters of water.

The original dam and reservoir, designed to serve about 100,000 people, had outgrown its design capacity as the Greater Moncton Area has experienced

significant growth in recent years.

The provincial and federal governments each contributed up to \$9.79 million to the project. The City of Moncton provided the estimated remaining \$23.62 million.

Lamèque pumping station gets funding

New Brunswick is investing \$290,000 to support a new pumping station and an infrastructure project at Parc Ecologique de la Péninsule acadienne in Lamèque, Gloucester County.

The announcement was made June 19 by Paul Robichaud, the minister responsible for the Regional Development Corporation.

Water treatment, distribution

Continued from page 1

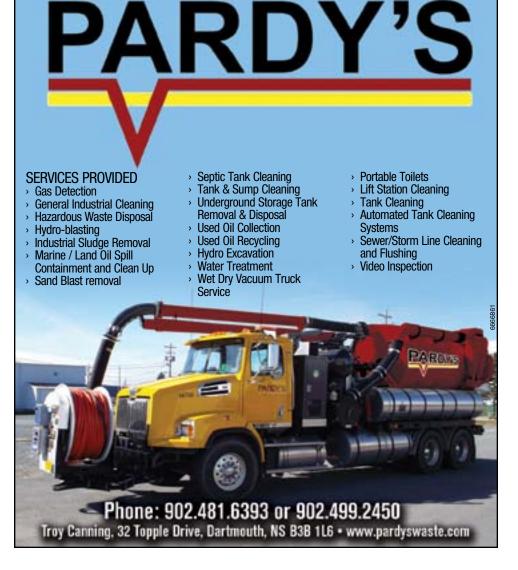
Assembly of the treated water reservoirs has begun with the supplier being on-site and building the roof structure for one of the tanks.

"If anybody has been in that area and noticed, there is a large oval area, somewhat resembling a flying saucer," said Carey. "That is the reservoir tank and it is almost nearly completed."

As for the water transmission main, that component of the project has entered its third and final phase. The contract for the work has been awarded and work is expected to begin around the end of June.

The final phase consists of installing a water main pipe from Sunnyslope Drive to Woodbine Avenue, via O'Connell Drive. It also includes the construction of a new pressure-reducing valve and chlorination station.

City council is hoping to begin testing the new water treatment and distribution system in the fall.





NOW STRENGTH, TOUGHNESS & FLEXIBILITY COMES IN THREE LARGER SIZES.

When IPEX first introduced Bionax® PVCO pressure pipe in North America in 2008, it set a new standard for municipal water distribution making everything else seem antiquated.

Now, with new 14", 16" & 18" pressure pipe sizes, municipal water transmission can benefit from the same properties that put Bionax water distribution lines and sewage force mains in a class by themselves. Call IPEX today.

REDUCE OPERATING COSTS REDUCE INSTALLATION COSTS

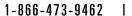


PROTECT THE ENVIRONMENT

To learn more, call us today or visit www.ipexinc.com/bionax







www.ipexinc.com/bionax